REFINITIV

DATASCOPE SELECT

SOAP API PROGRAMMER GUIDE - WSDL

DOCUMENT VERSION 1.0

Date of Issue: October 2020 (Timeseries EOL Update Only)

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About this Guide

In this Chapter:

DataScope Select SOAP API is a request-and-retrieve web service that provides entitled users access to a wide range of DataScope Select content. It consists of multiple web methods for searching and validating instruments and legal entities, accessing data dictionaries, and executing extractions. The DataScope Select API is both language and platform independent and provides flexibility and easy integration of Refinitiv data into your own internal systems.

This guide is one of a three-volume set for programming with the DataScope Select SOAP API. It provides detailed information specific to DataScope Select Web Services Description Language (WSDL), including Message Structure, the Extraction Service, WSDL Operations, and Common Data Types for working with the WSDL.

Further information on working with the API in your development environment is provided in the following two guides:

- **DataScope Select SOAP API Programmer Guide Overview**

  This guide introduces the DataScope Select API and describes the content and features that you can access with it. Instructions for downloading and installing the DataScope Select API Sample Code for Microsoft Visual C# are also provided, along with a best use scenario for requesting and retrieving content via the API.

- **DataScope Select SOAP API Programmer Guide for the C# Environment**

  This guide provides detailed information specific to programming with DataScope Select in a C# environment, including Construction of C# Clients, Creating the C# Project, Objects and Methods, Programming Considerations and Handling Errors.

The guides can be used alone or in combination, depending on your level experience and programming needs. If you are new to the DataScope Select API, you are encouraged to review the **DataScope Select SOAP API Programmer Guide Overview** to learn about DataScope Select content and the API's capabilities for requesting and retrieving it. If you are an experienced API user, you may choose to start with the **DataScope Select SOAP API Programmer Guide for the C# Environment** as well.

Note: You are encouraged to explore the REST API as a replacement for the SOAP API. Introduced in DataScope Select 10.1 as the next-generation web service API, the REST API offers expanded content and functionality over the SOAP API. Since the launch of the REST API, all new API functionality in DataScope Select has since been designed around REST.

How to Use this Guide

This guide provides advanced descriptions of DataScope Select API Web Services Description Language (WSDL). It is organized as follows:

- Chapter 1: About the DataScope Select SOAP API
- Chapter 2: DataScope Select API Programming Considerations
- Chapter 3: DataScope Select API Message Structure
- Chapter 4: DataScope Select API Error Messages

Service and Support

The Refinitiv Statement of Service is available on MyRefinitiv. MyRefinitiv is the Refinitiv portal that provides a single access point for timesaving support services, along with billing, user management, and information. For support using DataScope Select, please raise a query by accessing Help & Support at MyRefinitiv.

You are encouraged to subscribe to the following support channels to keep informed of changes to products and data, and to be notified of any service issues or changes:

- **Change Notifications**
  - **Product** change notifications detail new, enhanced, or changed functionality, which may require your action, in products that you use.
  - **Content** change notifications alert you to upcoming changes to real-time and historical data across all asset classes that are relevant to you.
  - **RIC** change notifications inform you of planned changes to RICs.
- **Service Alerts**

  You can subscribe to alerts about planned maintenance and unplanned service issues affecting your products and services, and be notified via SMS or email.

Feedback

We invite your comments, corrections, and suggestions about this document: access the Feedback option under Help & Support at MyRefinitiv. Your feedback helps us continue to improve our user assistance.

Your Personal Information

Refinitiv is committed to the responsible handling and protection of personal information. We invite you to review our Privacy Statement, which describes how we collect, use, disclose, transfer, and store personal information when needed to provide our services and for our operational and business purposes.

About the DataScope Select SOAP API

In this Chapter:

This chapter introduces DataScope Select SOAP API and describes the content and features that you can access with it. The basic concepts of the API are covered, along with the best use scenarios..

DataScope Select SOAP API Overview

The SOAP API provides platform-independent integration with DataScope Select content and services based on web services technology and XML-based messaging and content. It consists of multiple web methods for searching and validating instruments and legal entities, accessing data dictionaries, and executing extractions, ensuring a reliable and managed replication of Refinitiv pricing and reference content into your own database applications.

Most, although not all, of the content and functionality available in DataScope Select Web Application is available in the SOAP API.

Clients can be written in a desired programming language, for example, C++, C#, Visual Basic, Java, Cocoa. However, Refinitiv supports only C#.

Refinitiv provides a sample client Visual C# solution -- the DataScope Select API Samples (see the **DataScope Select SOAP API Programmer Guide Overview**) that illustrates the use of all the methods in the API. Sample API client code is available for use in testing and developing your own client programs. The API Samples can be run from the provided console or GUI program. The code for the API Samples can be debugged to help in creating your client program or used in your client program.

Usage Scenarios

The SOAP API offers programmatic access to Refinitiv content in a way that is more flexible than the browser- and FTP-based data access solutions currently available via DataScope Select. It can be used to create an infinite number of client applications and is ideally suited for the following uses:

- **Forward Feed for a Client Data Store**

  Clients who are interested in Refinitiv pricing and reference content may want to replicate DataScope Select data into their own data stores (database, spreadsheet, files). The SOAP API can support this on a security-by-security basis or in client-based lists (portfolios, indexes, funds, etc.).

- **Application Data Source**

  Desktop applications in the securities business need a data source to populate data fields and graphs. Given the breadth of the reference and pricing data available via DataScope Select, the API is an ideal choice to fit this requirement. The API can be used to look-up and display security data in a Windows or web application.

- **Embedded DataScope Select**

  The API will facilitate a high level of control and automation. If you want to fully automate your interaction with DataScope Select, the API is perfectly suited to this requirement. For example, if a fund manager buys a new security, he can use an API-based program to look-up the security and obtain the required pricing and reference data, and then store that information in a database spreadsheet or in-house application within seconds of making the decision. For clients with overnight processing requirements, the API can facilitate automated data retrieval, error processing, and alerting.

ExtractionServiceClient Web Methods

The following table identifies the web methods that are available via the SOAP API. See the remaining chapters in this document for information on programming with the API, as well as the **DataScope Select SOAP API Programmer Guide Overview** and the **DataScope Select SOAP API Programmer Guide for the C# Environment** for further information.

WEB METHOD	DESCRIPTION
Define	Request a list of available data fields for a specified extraction type. You can request all fields or only the fields for a specified asset type. The response returns field names, asset types, and descriptions for all supported fields.
Extract	Request pricing and reference or legal entity data based on a specified extraction type and the required inputs for that type. Returns output for each requested data field, including data field name, data type (integer, string or date), and output value. The total number of rows is also returned.
GetBondScheduleTypes	Request a list of possible supported bond schedule types. The response returns a list of supported codes and their descriptions.
GetCmoAbsAssetStatusTypes	Returns a list of asset types for collaterized mortgage and asset backed securities.
GetCmoAbsSubGroupTypes	Returns a list of subgroup types for collaterized mortgage and asset backed securities.
GetComparisonOperators	Returns a list of comparison operators to use in comparisons that restrict searches.
GetCoraxShareTypes	Request a list of supported corporate event share types. The response returns a list of supported codes and their descriptions.
GetCoraxEvents	Request a list of supported corporate actions events. The response returns a list of supported codes and their descriptions.
GetCounterpartyExtractionTypes	Obsolete. Use **GetLegalEntityExtractionTypes** instead.
GetCounterpartyIdentifierTypes	Obsolete. Use **GetLegalEntityIdentifierTypes** instead.
GetEquitiesAssetCategoryTypes	Returns a list of asset category types for equities.

WEB METHOD	DESCRIPTION
GetEquitiesCurrencyTypes	Request a list of codes for allowable currency types for searching for equities.
GetEquitiesDomicileTypes	Request a list of codes for allowable domicile types for searching for equities.
GetEquitiesExchangeType	Request a list of codes for allowable exchange types for searching for equities.
GetEquitiesFairValueIndicatorTypes	Request a list of codes for allowable fair value indicator types for searching for equities.
GetEquitiesGicsIndustryTypes	Request a list of codes for allowable GICS industry types for searching for equities.
GetEquitiesInstrumentSubTypes	Request a list of codes for allowable instrument sub types for searching for equities.
GetEquitiesStatusTypes	Request a list of codes for allowable status types for searching for equities.
GetEstimateDeltaDaysValues	Returns codes for specifying a time period in days.
GetEstimateFutureRelativeFiscalYearValues	Returns codes for specifying a number of fiscal years in the future.
GetEstimateFutureRelativeQuarterValues	Returns codes for specifying a number of quarters in the future.
GetEstimateFutureRelativeSemiAnnualValues	Returns codes for specifying a number of semiannual periods in the future.
GetEstimateHistoricalRelativeFiscalYearValues	Returns codes for specifying a number of fiscal years in the past.
GetEstimateHistoricalRelativeQuarterValues	Returns codes for specifying a number of quarters in the past.
GetEstimateHistoricalRelativeSemiAnnualValues	Returns codes for specifying a number of semiannual periods in the past.
GetEstimateTypes	Returns a table of estimate types and estimate extraction types.
GetFundAllocationTypes	Returns a list of allocation types for fund allocation extractions (Full Holding not supported via the APi).

WEB METHOD	DESCRIPTION
GetFundsCurrencyTypes	Request a list of codes for allowable currency types for searching for funds.
GetFundsDomicileTypes	Request a list of codes for allowable domicile types for searching for funds.
GetFuturesAndOptionsCurrencyTypes	Request a list of codes for allowable currency types for searching for futures and options.
GetFuturesAndOptionsExchangeTypes	Request a list of codes for allowable exchange types for searching for futures and options.
GetFuturesAndOptionsExerciseStylesTypes	Request a list of codes for allowable exercise style types for searching for futures and options.
GetFuturesAndOptionsPutCallTypes	Request a list of codes for allowable put/call types for searching for futures and options.
GetFuturesAndOptionsStatusTypes	Request a list of codes for allowable status types for searching for futures and options.
GetFuturesAndOptionsTypes	Request a list of codes for allowable types for searching for futures and options.
GetGovCorpAssetStatusTypes	Request a list of codes for allowable asset status types for searching for government and corporate bonds.
GetGovCorpContributorTypes	Request a list of codes for allowable contributor types for searching for government and corporate bonds.
GetGovCorpCountryTypes	Request a list of codes for allowable country types for searching for government and corporate bonds.
GetGovCorpCurrencyTypes	Request a list of codes for allowable currency types for searching for government and corporate bonds.
GetGovCorpIndustryTypes	Request a list of codes for allowable contributor types for searching for government and corporate bonds.
GetGovCorpMoodyTypes	Request a list of codes for allowable Moody types for searching for government and corporate bonds.
GetGovCorpStandardPoorsTypes	Request a list of codes for allowable Standard and Poors types for searching for government and corporate bonds.

WEB METHOD	DESCRIPTION
GetGovCorpSubGroupTypes	Request a list of codes for allowable sub group types for searching for government and corporate bonds.
GetInstrumentExtractionTypes	Request a list of supported instrument extraction types. The response returns a list of supported codes, their descriptions, and associated asset types. It also returns the maximum number of instruments that can be requested in an extraction.
GetInstrumentIdentifierTypes	Request a list of supported instrument identifier types. The response returns a list of supported codes and their descriptions.
GetInstrumentSearchTypes	Returns a list of instrument search types.
GetInstrumentTypes	Returns a list of instrument types
GetLegalEntityExtractionTypes	Request a list of supported legal entity extraction types. The response returns a list of supported codes and their descriptions. It also returns the maximum number of legal entity records that can be requested in an extraction.
GetLegalEntityIdentifierTypes	Request a list of supported legal entity identifier types. The response returns a list of supported codes and their descriptions.
GetMbsAgencyTypes	Returns a list of agency types for mortgage backed securities.
GetMbsAmortizationTypes	Returns a list of amortization types for mortgage backed securities.
GetMbsAssetStatusTypes	Returns a list of asset status types for mortgage backed securities.
GetMbsPoolTypes	Returns a list of pool types for mortgage backed securities.
GetMbsSecurityGroupTypes	Returns a list of security group types for mortgage backed securities.
GetMbsSettleMonthTypes	Returns codes for indicating the month in which a mortgage backed security pool settles.
GetNewsItemsLanguages	Returns a list of supported Language Codes and their descriptions for News Items extractions.
GetNewsItemsSourceValues	Returns a list of sources from which news content is

WEB METHOD	DESCRIPTION
	retrieved.
GetNewsItemsTopicCodes	Returns a list of supported Topic Codes and their descriptions for News Items extractions
GetPremiumPricingTypes	Returns a list of premium pricing region/cycle codes.
GetRatingsSourceValues	Returns a list of sources from which ratings content is retrieved.
GetSymbolCrossReferenceTypes	Returns a list of identifier types that are used to identify financial instruments.
GetTimeseriesLookbackPeriodTypesRequest	Obsolete. Please use the Price History report, available via the REST API only.
GetUSMunicipalsAssetStatusTypes	Returns a list of asset status types for municipal bonds issued by municipalities in the United States.
GetUSMunicipalsMoodyTypes	Returns a list of Moody's rankings for municipal bonds issued by municipalities in the United States.
GetUSMunicipalsStandardPoorsTypes	Returns a list of Standard and Poor's rankings for municipal bonds issued by municipalities in the United States.
GetUSMunicipalsStateTypes	Returns a list of codes identifying states and territories of the United States.
GetVersion	Request the API and DataScope Select versions.
ReportUsage	Request a summary of extraction usage associated with the specified DataScope Select username and password.
SearchCounterparties	Obsolete. Use **SearchLegalEntities** instead.
SearchLegalEntities	Request one or more legal entities identified by their identifiers and identifier types. You can specify all or part of the identifier with a wildcard character. Returns validated legal entity matching your input. Validated legal entities are identified by their identifiers and identifier types.
SearchInstruments	Request one or more instruments identified by their identifiers and identifier types. You can specify all or part of the identifier with a wildcard character. Returns validated instruments matching your input. Validated instruments are identified by their identifiers and

WEB METHOD	DESCRIPTION
	identifier types, asset identifiers, segment, object type, RIC, and file code.
ValidateCounterparties	Obsolete. Use **ValidateLegalEntities** instead.
ValidateInstruments	Request one or more instruments identified by their identifiers, identifier types, and optional pricing source. Returns a list of fully validated instruments with descriptive information about each instrument, including asset ID file code, object type, quote ID, RIC, and segment.
ValidateLegalEntities	Request one or more legal entity records identified by their identifiers and identifier types. Returns a list of fully validated legal entities with descriptive information about each record.

SOAP API Access & Authentication

To access the API, new clients are required to login to the DataScope Select user interface and set their user preferences. Failure to do so can result in the following error message:

```
User with ID XXXXX has not yet activated their account
```

To access your user preferences, click on your user name, and then select **Preferences**. Once you save your preferences, you will be able to access the API. See the Validation section to learn about preference settings and their effect on Validation and Extraction processes in the API.

The API is available over the public Internet and via a Refinitiv approved private network, providing access to a Web Service Description Language (WSDL) document and associated web methods.

URLs to access the DataScope Select server through the public Internet:

Endpoint URL	https://hosted.datascopeapi.reuters.com/datascopeapi/v1/extractionservice.asmx
WSDL URL	https://hosted.datascopeapi.reuters.com/datascopeapi/v1/extractionservice.asmx?wsdl
Host Name	hosted.datascopeapi.reuters.com

URLs to access the DataScope Select server over a Refinitiv approved private network:

Endpoint URL	https://select.datascopeapi.extranet.reuters.biz/datascopeapi/v1/extractionservice.asmx
WSDL URL	https://select.datascopeapi.extranet.reuters.biz/datascopeapi/v1/extractionservice.asmx?wsdl
Host Name	select.datascopeapi.extranet.reuters.biz

Note:	Resilience plans do not support DataScope Select access via IP addresses. In the event of a data center failure and failover, Domain Name System (DNS) changes will begin to direct traffic to servers with different IP addresses. To avoid loss of access under this scenario, please ensure that you access DataScope Select using the published URLs.

If you still require IP addresses (to configure your firewall, for example), please note that DataScope Select uses several IP addresses to maintain connectivity and resilience over the Internet or over a Refinitiv approved private network. This connectivity allows for outbound and inbound traffic to our servers via public or private networks. In order to maintain required connectivity, we ask clients to ensure that firewalls are allowing two-way traffic for HTTPS, SFTP and FTP against the IP addresses available in PCN 6101.

Note:	In order to protect against the potential for network connectivity issues, it is strongly recommended that retries are coded into your processing logic. The “RetrySample” sample program demonstrates how to code for retries when a call to the service is unsuccessful. See “About the API Samples” in the **DataScope Select SOAP API Programmer Guide Overview**.

The WSDL is an XML document that defines the DataScope Select SOAP API service (‘**ExtractionService**’). It specifies the location of the ExtractionService and exposes the operations that can be performed (‘methods’). Data requests and responses are formatted as XML and are exchanged using Simple Object Access Protocol (SOAP).

By default, Refinitiv supports client development on Microsoft Windows using Microsoft’s Visual C# 2010 or later. Access to DataScope ExtractionService requires user authentication to verify that you are a valid DataScope Select user with API permissions. Your DataScope Select user name and password are used to access the API. This is the same information that you use to login to the DataScope Select user interface.

Authentication Handling

Authentication is handled in Microsoft Visual C# 2010 or later as follows:

- For each call to the API, an instance of the **CredentialsHeader** class is created and populated with your DataScope Select user ID and password (this is the same user ID and password that you use to access the DataScope Select GUI) and, after the first call, with an **AuthenticationToken** value, which is valid for 24 hours. This passes authentication information to the API via a special SOAP header.
- When the first web method call returns, the referenced **CredentialsHeader** object will be populated with an **AuthenticationToken** value. This token is used to authenticate the client on successive calls referencing the same instance of **CredentialsHeader**. Each call returns a potentially new credential header, which should be used for subsequent calls. After 24 hours a token will expire, but a new token will be issued and returned with the call.

SOAP API Programming Considerations

In this Chapter:

This chapter describes how to use the DataScope Select SOAP API to construct a client program

Proxy Object for ExtractionServiceClient

For maintenance of the proxy object for the **ExtractionServiceClient** class, it is a recommended best practice to create the object as the entry point into the API and store as a local variable for subsequent calls to the **ExtractionServiceClient** class. Note that the DataScope Select Samples Code does not handle this the same way. See **About the DataScope Select Samples** in the **DataScope Select API Programmer Guide Overview** for a discussion of this issue. It is also recommended you use separate proxy objects for simultaneous calls to an **ExtractionServiceClient** method. Due to the structural constraints of Windows Communication Foundation (WCF), simultaneous calls to an **ExtractionServiceClient** method, as can occur in a multithreaded program, may fail if the same proxy object is used.

Validation

DataScope Select API Validation methods retrieve the key identifiers used in performing an extraction of data. The methods **ValidateInstruments** and **ValidateLegalEntities** of the **ExtractionServiceClient** class are used to perform validations. The key identifiers include the **AssetId** of the **ValidatedInstrument** class and the **EntityId** of the **ValidatedLegalEntity** class. DataScope Select API must validate identifiers prior to executing an extraction. The time for Validation is added to what is required for the extraction. To reduce the time needed for the extraction it is recommended you create, locally store and use your list of validated instruments and legal entities instead of having to revalidate them.

The preferences settings in the DataScope Select GUI are applicable to the API and determine what data may be returned in an extraction. There are no settings in the API to override the settings in the GUI. The following summarizes the settings in the GUI and their effect on Validation and Extraction processes in the API.

The following preferences have an effect on the API Instrument Validation process:

- Allow Import of Inactive Instruments into Instrument Lists
- Allow Import of Open Access Instruments from Real-Time Feed
- Allow Import of Duplicate Items into Instrument Lists
- Allow Import of Duplicate Items into Legal Entity Lists
- Exclude FINR as Pricing Source for Bonds
- Use Exchange Code Instead of Lipper as Mutual Fund Default Source
- Use U.S. Quote when Importing Dual-Listed Instruments
- USA - Use consolidated quote source rather than primary quote source
- Canada - Use consolidated quote source rather than primary quote source

The following preferences have an effect on the API Extraction process:

- Return Null Code Values in Extraction Pricing Fields
- Exclude Null Codes For Universal Close Price
- Expand File Codes on Extraction to Include Delisted RICs
- Return Fixed Income Global Snapshot (FIGS) Prices in US 3 & 4 PM Premium Pricing Extractions

The following preferences have NO effect on the API Validation and/or Extraction process:

- Allow Import of Unsupported Instruments into Instrument Lists (no unfound instrument gets past the validation process)
- Enable RIC Maintenance Reports (not supported via API)
- Enable Early Partial Delivery of Embargoed Reports (not supported via API)

Instrument List

The **SearchInstruments** and **SearchLegalEntities** methods of the **ExtractionServiceClient** class retrieve lists of instruments or legal entities using wildcard characters in the supplied identifiers. No facility is provided for creating and storing instrument or legal entity lists on the DataScope Select API server. It is recommended you use and edit your locally stored instrument lists for quick retrieval so that you do not have to repeat requests with each extraction from the DataScope Select API.

Validation Limitation

When the number of File Codes that are returned in a call to **ValidateInstruments** with the **PerformExpansion** member of the **InstrumentValidationRequest** class set to *true*, it is currently limited to 70000 expanded instruments (File Codes). If you are requesting these File Codes, we recommend that you limit the number of instruments that you validate on each call, and instead make multiple calls. When the 70000-instrument limit is reached, no other instruments in your request will be validated and one or more error messages will be generated in the **UnmappedIdentifierErrors** array in the **InstrumentValidationResponse** object.

Extraction Limitation

There are limits to the number of instruments and legal entities that can be requested in an extraction, the rate at which data for instruments and legal entities may be extracted, and the rate at which extractions are made. Refinitiv reserves the right to adjust these limits at any time.

The limits vary by extraction type. The discoverability methods, **GetInstrumentExtractionTypes** and **GetLegalEntityExtractionTypes** return lists of the instrument extraction types and legal entity extraction types, as well as the limits on the number of extractions that can be requested. The members **MaximumInstrumentsAllowed** and **MaximumLegalEntitiesAllowed** of the classes **InstrumentExtractionTypeInfo** and **LegalEntityExtractionTypeInfo** contain these limits. The inherited member Value of these classes indicates the extraction type that is used to select the correct **ExtractionRequest** object for the extraction.

The rates at which instruments can be extracted are indicated by the following members:

- **TimePeriodForLimits** indicates the number of seconds in the time-period.
- **MaximumInstrumentsAllowedPerTimePeriod** indicates the number of instruments that can be extracted in that time-period.
- **MaximumExtractionsAllowedPerTimePeriod** indicates the number of extractions of instrument data that can be made during the time-periods.

A value of -1 in **MaximumInstrumentsAllowedPerTimePeriod** indicates that there are no rate limits for instruments or extractions.

There is a 1000 instrument limit in any extraction, with the exception of Intraday Pricing, News Items, , Estimates, Legal Entity Audit and Legal Entity Hierarchy extractions. If your instrument or legal entity list contains more identifiers than the maximum allowed for the indicated extraction type, you can loop through the list, requesting the maximum number of instruments or legal entities.

For Intraday Pricing extractions, you are limited to either 300 extractions or 32000 instruments in a 15-minute period. This means that you must balance the number of instruments in an extraction with the number of extractions. For example, if you extract data for one instrument per extraction, you will only be able to extract data for 300 instruments in a 15-minute period. If you extract data for 1000 instruments in an extraction, you will use only 32 extractions before you reach the 32000 limit.

Limits for instruments per extraction request are 100 for Bond Schedules, MBS - Factor History, Corporate Actions Standard Events and Legal Entity Audit extractions, 1 for Legal Entity Hierarchy extractions, and 10 for Estimates and News Items extractions. News Items extraction responses are also limited to 15,000 rows of data per instrument that, if exceeded, will be returned and reported as truncated in your extraction notes file.

The following members indicate the rates at which data for legal entities can be extracted:

- **TimePeriodForLimits** indicates the number of seconds in the time-period.
- **MaximumLegalEntitiesAllowedPerTimePeriod** indicates the number of legal entities that can be extracted during that time-period.

- **MaximumExtractionsAllowedPerTimePeriod** indicates the number of legal entity extractions that can be made during the time-periods.

A value of -1 **MaximumLegalEntitiesAllowedPerTimePeriod** indicates that there are no rate limits for legal entities or extractions.

Extract Method & the EmptyValue Class

The Extract method returns an object with an array of ExtractionColumn objects. Each ExtractionColumn object contains an array of objects, Values, of the type object. Each ExtractionColumn object also has a member DataType that normally indicates the data type of the objects in the Values array. However, if there is no data available for a particular member of the Values array, the data type of the element will be EmptyValue and the data type indicated by DataType will not be applicable. The program can check for this situation by using the C# "is" operator.

The following code snippet illustrates the usage. "**Response**" is an ExtractionResponse object:

```
for(int i = 0; i < response.RowCount; i++)
{
  foreach (ExtractionColumn ec in response.Columns)
  {
       if (ec.Values[i] is EmptyValue)
       {
           //empty value
           Console.WriteLine(ec.Name + " is null");
       }
       else
       {
           //non-empty value
           switch (ec.DataType)
            {
               case "Double":
                  double d;
                  d = (double)ec.Values[i];
                  Console.WriteLine(ec.Name + " double: " +
                      d.ToString());
               break;
               case "String":
                  string s;
                  s = (string)ec.Values[i];
                  Console.WriteLine(ec.Name + " string: " +
                      s.ToString());
               break;
               case "Integer":
                  Int32 i1;
                  i1 = (Int32)ec.Values[i];
                  Console.WriteLine(ec.Name + " integer: " +
                      i1.ToString());
               break;
               case "Long":
                  Int64 i2;
                  i2 = (Int64)ec.Values[i];
                  Console.WriteLine(ec.Name + " long: " +
```

```
                    i2.ToString());
                break;

                case "DateOnly":
                   DateTime dd;
                   dd = (DateTime)ec.Values[i]
                   Console.WriteLine(ec.Name + " DateOnly: " +
                       dd.ToString());
                break;
                case "DateTime":
                   DateTime dt;
                   dt = (DateTime)ec.Values[i];
                   Console.WriteLine(ec.Name + " DateTime: " +
                       dt.ToString());
                break;
                default:
                   Console.WriteLine(" Unrecognized Type ");
                break;
            }
        }
    }
```

Wild Cards

There are several conventions governing the behavior of searches when the search string is not specified. This lack of specificity occurs in three ways:

- no string is specified for the search element,
- the search element is specified to be null,
- the search element is specified as "*".

The behavior of the search depends also on whether the member requires a valid non-null value and/or whether there is a discoverability method that provides a list of valid values and/or whether the object is of type Array. The following table lists the combinations and the result. "blank" means that no value is specified for the object. The following table covers the case where the object is not an array.

REQUIRES VALUE	DISCOVERABLITY METHOD AVAILABLE	REQUIRES NON-NULL VALUE	WILD CARD VALUES	EFFECT
Yes	Yes	Yes	"*", null, blank.	SOAP Client Error thrown
Yes	No	Yes	"*"	default search

REQUIRES VALUE	DISCOVERABLITY METHOD AVAILABLE	REQUIRES NON-NULL VALUE	WILD CARD VALUES	EFFECT
No	No	No	null, blank	default search
No	No	No	“*”	unpredictable results
No	Yes	No	null, blank	default search
No	Yes	No	“*”	SOAP Client Error thrown

If the object is an array, the following table indicates the effect of wild card values on the search. The wild card can be either a value for the array, null, or blank, or the element(s) of the array, “*”, null or blank. The column Array Element indicates whether the value is for the array or element of the array.

REQUIRES VALUE	DISCOVERABLITY METHOD AVAILABLE	REQUIRES NON-NULL VALUE	ARRAY ELEMENT	WILD CARD VALUES	EFFECT
Yes	Yes	Yes	No	“*”, null, blank.	SOAP Client Error thrown
Yes	Yes	Yes	Yes	“*”, null, blank.	SOAP Client Error thrown
Yes	No	Yes	Yes	“*”	default search
Yes	No	Yes	Yes	null, blank	SOAP Client Error thrown
No	No	No	No	null, blank	default search.
No	Yes	No	No	null, blank	default search.
No	Yes	No	Yes	“*”, null, blank	SOAP Client Error thrown

DataScope Select API Message Structure

In this Chapter:

This chapter describes the DataScope Select API message structure and provides a detailed explanation of the Web Service Definition Language (WSDL) document that governs those messages. The WSDL has Bindings to SOAP version 1.1 and SOAP version 1.2 protocols.

DataScope Select API ExtractionService Message Structure

The DataScope Select API ExtractServices being bound through the WSDL to SOAP implies that the XML messages sent contain the following elements:

- A required Envelope element that defines the XML document as a SOAP message.
- A required Header element that authenticates your DataScope Select API user credentials.
- A required Body element that defines the DataScope Select API request and response (the ExtractServices WSDL operation and its messages).
- Fault element that defines error messages that occurred while processing the SOAP request.

Envelope Element

The required Envelope element defines the XML document as a SOAP message. It is uniquely identified with the namespace: http://schemas.xmlsoap.org/soap/envelope. The Envelop element is a SOAP standard, as in this sample:

```
<?xml version="1.0" encoding="utf-8"?>
<soap: Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">

<soap:Header>
  ...
  ...
</soap:Header>

<soap:Body>
  ...
  ...
</soap:Body>

</soap:Envelope>
```

Header Element

All DataScope Select API ExtractService operations require a Header element that is the first child element of the Envelope element, as in this sample:

```
<soap:Header>
    <CredentialsHeader xmlns=" http://reuters.com/datascopeselect/ExtractionService/v1">
            <Username>string</Username>
            <Password>string</Password>
             <AuthenticationToken>string</AuthenticationToken>
   </CredentialsHeader>
 </soap:Header>
```

The **Header** element contains a **CredentialsHeader** element that is namespace qualified with:

http://reuters.com/datascopeselect/ExtractionService/v1.

When programming with the DataScope Select SOAP API, you should replace the **string** placeholders with your actual DataScope Select user name and password. Use the same username and password that you use to login to the DataScope Select GUI.

The Authentication Token is generated automatically and is returned with the response. It is not required as part of the Header request.

Your user credentials get carried along the ExtractService operations. When the login timeout period expires, a new authentication occurs without user intervention.

Note:	Every call made has the potential to return a new token, so you should update your locally cached CredentialsHeader with the return of each call. See **Authentication** Handling on page 15 for more information.

Body Element

The required **Body** element contains the ExtractionServices operation and messages that constitute the actual SOAP Request and Response. The elements contained in this section are DataScope Select API specific. Their construction is governed by the WSDL. Most of this chapter is devoted to explicating these rules.

ExtractionService Request & Response

The ExtractionService request identifies the instruments, data dictionaries, and extractions to retrieve. All XML requests must conform to the DataScope Select SOAP API WSDL that identifies where the ExtractService web methods are defined. The URL of the WSDL is:

https://hosted.datascopeapi.reuters.com/datascopeapi/v1/extractionservice.asmx?wsdl

Sample SOAP 1.2 requests and responses for the ExtractService web methods are provided in the next section. Note that only the body elements are shown.

ValidateInstruments

This sample shows a request for an equity instrument identified by its Identifier and IdentifierType and Source. Your request can include multiple instruments.

```
<soap12:Body>
  <ValidateInstruments xmlns="http://reuters.com/datascopeselect/ExtractionService/">
    <request>
      <identifiers>
        <InstrumentIdentifier>
          <Identifier>.BKCLT</Identifier>
          <IdentifierType>RIC</IdentifierType>
          <Source>CBT</Source>
        </InstrumentIdentifier>
      </identifiers>
    </request>
  </ValidateInstruments>
</soap12:Body>
```

This sample shows the response for the ValidateIdentifier operation. For each validated instrument, the **QuoteID**, **Asset ID**, **Segment**, **ObjectType**, **RIC** and **FileCode** are returned.

```
<soap12:Body>
  <ValidateInstumentsResponse xmlns=" http://reuters.com/datascopeselect/ExtractionService/">
    <ValidateInstrumentsResult>
      <ValidatedInstrument>
        <Identifier>
          <Identifier>.BKCLT</Identifier>
          <IdentifierType>RIC</IdentifierType>
```

```
        <Source>CBT</Source>
      </Identifier>
      <QuoteID>0x0003dc00314a2185</QuoteID>
      <AssetId>0x0003dd001f275cba</AssetId>
      <Segment>E</Segment>
      <ObjectType>EQQU</ObjectType>
      <RIC>.BKCLT </RIC>
      <FileCode>790</FileCode>
    </ValidatedInstrument>
  </ValidateInstrumentsResult>
 </ValidateInstrumentsResponse>
</soap12:Body>
```

ExtractionService WSDL

This section presents the Extraction Service Web Service Description Language (WSDL) document in a human-readable form. It clarifies the construction of the messages, elements and complex types of the WSDL messages.

Messages consist of elements. Web Service Definition Language (WSDL) elements are of a specific type. Complex types may be constructed of elements, sequences of elements and sequences of series of elements of other types. Complex type can also be extensions of other complex types. Complex types may be abstract, indicating that elements of this type must be completed by elements of other types that are extensions.

In the following, **Element:** introduces the name of an element usually of a message. **Type:** introduces the name of a complex type. These are followed by one or more of the terms: **Abstract:**, **Extension:**, **Element Attributes:,** and **Element Type:**. **Abstract:** will be followed by **true**, indicating that the complex type is abstract. **Extension:** will be followed by **base =** … where…" is filled in with the name of a complex type. This indicates that the complex type is an extension of the type indicated by **base =**. **Element Attributes:** define the attributes of the elements in the complex type. Generally, the **type =** attribute indicates the type of the element.

Many of the complex types contain only one element of another complex type in the same namespace. In these cases, the type of that element is indicated with **Element Type:** Generally, the next complex type to be described will be this element type. In the case of elements, **Element Type:** indicates the type of element.

Most of the complex types are associated with one WSDL operation. These complex types will be described immediately after and in conjunction with the description of the operation. A few other complex types are used with multiple WSDL operations. These complex types will be discussed in a separate section.

In the previous chapter, the descriptions of the types of data being passed are associated with C# classes and their members. In this chapter, the descriptions of the types of data being passed will be associated with the XML elements and complex types.

Namespaces

The following namespaces are identified in the DataScope Select SOAP API WSDL document:

xmlns:soap=http://schemas.xmlsoap.org/wsdl/soap/
xmlns:tm=http://microsoft.com/wsdl/mime/textMatching/
xmlns:soapenc=http://schemas.xmlsoap.org/soap/encoding/
xmlns:mime=http://schemas.xmlsoap.org/wsdl/mime/
xmlns:tns=http://reuters.com/datascopeselect/ExtractionService/v1/
xmlns:s=http://www.w3.org/2001/XMLSchema
xmlns:soap12=http://schemas.xmlsoap.org/wsdl/soap12/
xmlns:http=http://schemas.xmlsoap.org/wsdl/http/
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">

All unqualified complex types are defined in the WSDL document. The only qualifier used in the following is "s", that is the http://www.w3.org/2001/XMLSchema, for the identification of the "simple" types.

WSDL: Operations

This section describes the WSDL operations and the XML elements supporting the operations.

Operation: Define

Use the **Define** operation to request data fields for a specified extraction type. You can request all fields or only the fields for a specified asset type.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/Define

Binding style: document

Input Message: DefineSoapIn

element Define

Element: Define

Element Attributes: name=request; minOccurs=0; maxOccurs=1

Element Type: DataDictionaryRequest

Type: DataDictionaryRequest

Abstract: true

Type: DataDictionaryRequestBondSchedule

Extension: base = DataDictionaryRequest

Element Attributes: name = AssetTypes; minOccurs = 0; maxOccurs = 1; type = ArrayOfString

Element Attributes: name = BondScheduleTypes; minOccurs = 0; maxOccurs = 1;type = ArrayOfString

Type: DataDictionaryRequestCorax

Extension: base = DataDictionaryRequest

Element Attributes: name = CoraxEvents;minOccurs = 0 maxOccurs = 1;type = ArrayOfString

Type: DataDictionaryRequestInstrument

Extension: base = DataDictionaryRequest

Element Attributes: name = InstrumentExtractionType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = AssetTypes; minOccurs = 0 maxOccurs = 1; type = ArrayOfString

Type: DataDcitionaryRequestLegalEntity

Extension: base = DataDictionaryRequest

Element Attributes: name = LegalEntityExtractionType; minOccurs = 0; maxOccurs = 1; type = s:string

Type: DataDictionaryRequestEstimate

Extension: base = DataDictionaryRequest

Element Attributes: name = EstimateExtractionType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = EstimateTypes; minOccurs = 0; maxOccurs = 1; type = tns:ArrayOfString.

Output Message: DefineSoapOut

element DefineResponse

Element: DefineResponse

Element Attributes: name = DefineResult; minOccurs = 0 maxOccurs = 1

Element Type: DataDictionaryResponse

Type: DataDictionaryResponse

Element Attributes: name = Fields; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfDataDictionaryField

Type: ArrayOfDataDictionaryField

Element Attributes: name = DataDictionaryField; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: DataDictionaryField

Type: DataDictionaryField

Element Attributes: name = Name; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = AssetTypes; minOccurs = 0; maxOccurs = 1; type = ArrayOfString

Element Attributes: name = CoraxEvents; minOccurs = 0; maxOccurs = 1; type = ArrayOfString

Element Attributes: name = BondScheduleTypes; minOccurs = 0; maxOccurs = 1; type = ArrayOfString

Soap Header Message: DefineOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap:header message DefineCredentialsHeader

part CredentialsHeader

soap:body use literal

Output:

soap:header message DefineCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message

soap: header message DefineOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

Each **DataDictionaryField** element contains an element, **Name**, with the name of a field, an element, **Description**, with the definition of the field. It also contains three elements of type **ArrayOfString**: **AssetTypes** (the supported asset types for the field), **BondScheduleTypes** (the supported bond schedule types for the field) and **CoraxEvents** (the supported corporate actions events for the field). The value of these elements depends on type of request, e.g., if a **DataDictionaryRequestBondSchedule** is requested, **BondScheduleTypes** will have data.

Operation: GetVersion

The output message of this operation contains the version of the DataScope Select API available at the current URI and the version DataScope Select that is displayed at the bottom of each web page.

The format of the API version is major.minor (for example, 1.2). Major revisions are not backward compatible (for example, version 2.x will not support version 1.x clients). However, minor revisions are backward compatible (for example, version 1.1 will support 1.0 clients).

The format of the DataScope Select version is the same as the version number displayed by the DataScope Select website: major.minor.ebf.revision. For example: 4.0.0.1234.

This is the only operation in the web service that does not require authentication. Its purpose is to provide a version and it also indicates if the service is running or not. Unlike the other discoverability web methods, **GetVersion** exists solely for information. It does not provide input information for other web methods in the DataScope Select SOAP API.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/GetVersion

Binding style: document

Input Message: GetVersionSoapIn

element: GetVersion -- A null element

Output Message: GetVersionSoapOut

element: GetVersionResponse

Element: GetVersionResponse

Element Attributes: name = GetVersionResult; minOccurs = 0; maxOccurs = 1

Element Type: VersionInfo

Type: VersionInfo

Element Attributes: name = ApiVersion; minOccurs=0; maxOccurs = 1; type = s:string

Element Attributes: name = DssVersion; minOccurs=0; maxOccurs = 1; type = s:string

Soap Header Message: GetVersionOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap:body use literal

Output:

soap:header message GetVersionOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The return message contains **GetVersionResponse** element of type **VersionInfo**. The **VersionInfo** type contains two string elements: **APIVersion** and **DSSVersion**. **APIVersion** identifies the version of the DataScope Select API. **DSSVersion** identifies the current version of DataScope Select.

Operation: GetEstimateCompanyTypeValues

The return message for this operation lists codes for specifying the **CompanyCode** subelement in the estimate request elements: **InstrumentExtractionRequestEstimateActual, InstrumentExtractionRequestEstimateDetail**, **InstrumentExtractionRequestEstimateFootnoteDetail**, and **InstrumentExtractionRequestEstimateSummary** elements as input for the **Extract** operation.

Binding: SoapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateCompanyTypeValues

Binding style: document

Input Message GetTypeValuesSoapIn

element GetEstimateCompanyTypeValues – a null element

Output Message GetEstimateCompanyTypeValuesSoapOut

element GetEstimateCompanyTypeValuesResponse

Element: GetEstimateCompanyTypeValuesResponse

Element Attributes: name = GetEstimateCompanyTypeValuesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateCompanyTypeValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap:header message GetEstimateCompanyTypeValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateCompanyTypeValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateCompanyTypeValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateCompanyTypeValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating the company type. **Description** holds a description of the company type.

Operation: GetEstimateDeltaDaysValues

The return message for this operation lists codes for specifying the number of days in an **EstimateQueryConstraintDaysAgoDelta** element. This element can be used as a value for the **EstimateQueryConstraint** subelement, **QueryConstraint**, in the extraction elements **InstrumentExtractionRequestEstimateActual**, **InstrumentExtractionRequestEstimateSummary**, and **InstrumentExtractionRequestEstimateDetail**. The announcement or change date is within delta days of the current date.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateDeltaDaysValues.

Binding style: document

Input Message GetEstimateDeltaDaysValuesSoapIn

element GetEstimateDeltaDaysValues – a null element

Output Message GetEstimateDeltaDaysValuesSoapOut

element GetEstimateDeltaDaysValuesResponse

Element: GetEstimateDeltaDaysValuesResponse

Element Attributes: name = GetEstimateDeltaDaysValuesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateDeltaDaysValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap:header message GetEstimateDeltaDaysValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateDeltaDaysValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateDeltaDaysValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateDeltaDaysValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a number of days. **Description** holds a description of the number of days. The values range from 0 to 31. 0 is defined as today.

Operation: GetEstimateFutureRelativeFiscalYearValues

The return message for this operation lists codes for specifying a number of fiscal years in the future relative to the current fiscal year. These codes are values for the **FiscalYearFrom** and **FiscalYearTo** subelements of the **EstimateTimePeriodConstraintRelative** element. These elements *with values from this operation* are valid content for the **EstimateTimePeriodConstraint** element, **TimePeriodConstraint**, of the **InstrumentExtractionRequestEstimateSummary**, **InstrumentExtractionRequestEstimateDetail**, and **InstrumentExtractionRequestEstimateFoot**

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateFutureRelativeFiscalYearValues.

Binding style: document

Input Message GetEstimateFutureRelativeFiscalYearValuesSoapIn

element GetEstimateFutureRelativeFiscalYearValues – a null element

Output Message GetEstimateFutureRelativeFiscalYearValuesSoapOut

element GetEstimateFutureRelativeFiscalYearValuesResponse

Element: GetEstimateFutureRelativeFiscalYearValuesResponse

Element Attributes: name = GetEstimateFutureRelativeFiscalYearValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateFutureRelativeFiscalYearValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetEstimateFutureRelativeFiscalYearValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateFutureRelativeFiscalYearValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateFutureRelativeFiscalYearValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateFutureRelativeFiscalYearValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a fiscal year. **Description** indicates the number of fiscal years the indicated fiscal year is from the current fiscal year.

The following table lists the values and descriptions.

VALUE	DESCRIPTION
FY1	+1
FY2	+2
FY3	+3
FY4	+4
FY5	+5

Operation: GetEstimateFutureRelativeQuarterValues

The return message for this operation lists codes for specifying a number of quarters in the future relative to the current quarter. These codes are values for the **QuarterFrom** and **QuarterTo** subelements of the **EstimateTimePeriodConstraintRelative** element. These elements *with values from this operation* are valid content for the **EstimateTimePeriodConstraint** element, **TimePeriodConstraint**, of the **InstrumentExtractionRequestEstimateSummary**, **InstrumentExtractionRequestEstimateDetail**, and **InstrumentExtractionRequestEstimateFootnoteDetail** elements.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateFutureRelativeQuarterValues.

Binding style: document

Input Message GetEstimateFutureRelativeQuarterValuesSoapIn

element GetEstimateFutureRelativeQuarterValues – a null element

Output Message GetEstimateFutureRelativeQuarterValuesSoapOut

element GetEstimateFutureRelativeQuarterValuesResponse

Element: GetEstimateFutureRelativeQuarterValuesResponse

Element Attributes: name = GetEstimateFutureRelativeQuarterValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateFutureRelativeQuarterValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetEstimateFutureRelativeQuarterValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateFutureRelativeQuarterValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateFutureRelativeQuarterValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateFutureRelativeQuarterValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a particular quarter. **Description** indicates the quarter by the number of quarters from the current quarter.

The following table lists the values and descriptions.

VALUE	DESCRIPTION
Q1	+1
Q2	+2
Q3	+3
Q4	+4
Q5	+5
Q6	+6
Q7	+7
Q8	+8

Operation: GetEstimateFutureRelativeSemiAnnualValues

The return message for this operation lists codes for specifying a number of semiannual periods in the future relative to the current semiannual period. These codes are values for the **SemiAnnualFrom** and **SemiAnnualTo** subelements of the **EstimateTimePeriodConstraintRelative** element. These elements *with values from this operation* are valid content for the **EstimateTimePeriodConstraint** element, **TimePeriodConstraint**, of the **InstrumentExtractionRequestEstimateSummary**, **InstrumentExtractionRequestEstimateDetail**, and **InstrumentExtractionRequestEstimateFootnoteDetail** elements.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateFutureRelativeSemiAnnualValues.

Binding style: document

Input Message GetEstimateFutureRelativeSemiAnnualValuesSoapIn

element GetEstimateFutureRelativeSemiAnnualValues – a null element

Output Message GetEstimateFutureRelativeSemiAnnualValuesSoapOut

element GetEstimateFutureRelativeSemiAnnualValuesResponse

Element: GetEstimateFutureRelativeSemiAnnualValuesResponse

Element Attributes: name = GetEstimateFutureRelativeSemiAnnualValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateFutureRelativeSemiAnnualValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetEstimateFutureRelativeSemiAnnualValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateFutureRelativeSemiAnnualValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateFutureRelativeSemiAnnualValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateFutureRelativeSemiAnnualValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a semiannual period. **Description** holds a number indicating the number of semiannual periods the indicated period is from the current semiannual period.

The following table lists the values and descriptions.

VALUE	DESCRIPTION
S1	+1
S2	+2
S3	+3
S4	+4

Operation: GetEstimateHistoricalRelativeFiscalYearValues

The return message for this operation lists codes for specifying a number of fiscal years in the past relative to the current fiscal year. These codes are values for the **FiscalYearFrom** and **FiscalYearTo** subelements of the **EstimateTimePeriodConstraintRelative** element. These elements *with values from this operation* are valid content for the **EstimateTimePeriodConstraint** element, **TimePeriodConstraint**, of the **InstrumentExtractionRequestEstimateActual** element.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateHistoricalRelativeFiscalYearValues.

Binding style: document

Input Message GetEstimateHistoricalRelativeFiscalYearValuesSoapIn

element GetEstimateHistoricalRelativeFiscalYearValues – a null element

Output Message GetEstimateHistoricalRelativeFiscalYearValuesSoapOut

element GetEstimateHistoricalRelativeFiscalYearValuesResponse

Element: GetEstimateFutureRelativeSemiAnnualValuesResponse

Element Attributes: name = GetEstimateHistoricalRelativeFiscalYearValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateHistoricalRelativeFiscalYearValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetEstimateHistoricalRelativeFiscalYearValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateHistoricalRelativeFiscalYearValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateHistoricalRelativeFiscalYearValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateHistoricalRelativeFiscalYearValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a number of years. **Description** holds a description of the number of years.

The following table lists the values and descriptions.

VALUE	DESCRIPTION
FY-1	-1
FY-2	-2
FY-3	-3
FY-4	-4
FY-5	-5

Operation: GetEstimateHistoricalRelativeQuarterValues

The return message for this operation lists codes for specifying a number of quarters in the past relative to the current quarter. These codes are values for the **QuarterFrom** and **QuarterTo** subelements of the **EstimateTimePeriodConstraintRelative** element. These elements *with values from this operation* are valid content for the **EstimateTimePeriodConstraint** element, **TimePeriodConstraint**, of the **InstrumentExtractionRequestEstimateActual** element.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateHistoricalRelativeQuarterValues.

Binding style: document

Input Message GetEstimateHistoricalRelativeQuarterValuesSoapIn

element GetEstimateHistoricalRelativeQuarterValues – a null element

Output Message GetEstimateHistoricalRelativeQuarterValuesSoapOut

element GetEstimateHistoricalRelativeQuarterValuesResponse

Element: GetEstimateHistoricalRelativeQuarterValuesResponse

Element Attributes: name = GetEstimateHistoricalRelativeQuarterValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateHistoricalRelativeQuarterValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetEstimateHistoricalRelativeQuarterValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateHistoricalRelativeQuarterValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateHistoricalRelativeQuarterValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateHistoricalRelativeQuarterValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a number of quarters. **Description** holds a description of the number of quarters.

The following table lists the values and descriptions.

VALUE	DESCRIPTION
Q-1	-1
Q-2	-2
Q-3	-3
Q-4	-4
Q-5	-5
Q-6	-6
Q-7	-7
Q-8	-8

Operation: GetEstimateHistoricalRelativeSemiAnnualValues

The return message for this operation lists codes for specifying a number of semiannual periods in the past relative to the current semiannual period. These codes are values for the **SemiAnnualFrom** and **SemiAnnualTo** subelements of the **EstimateTimePeriodConstraintRelative** element. These elements *with values from this operation* are valid content for the **EstimateTimePeriodConstraint** element, **TimePeriodConstraint**, of the **InstrumentExtractionRequestEstimateActual** element.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetEstimateHistoricalRelativeSemiAnnualValues.

Binding style: document

Input Message GetEstimateHistoricalRelativeSemiAnnualValuesSoapIn

element GetEstimateHistoricalRelativeSemiAnnualValues – a null element

Output Message GetEstimateHistoricalRelativeSemiAnnualValuesSoapOut

element GetEstimateHistoricalRelativeSemiAnnualValuesResponse

Element: GetEstimateHistoricalRelativeSemiAnnualValuesResponse

Element Attributes: name = GetEstimateHistoricalRelativeSemiAnnualValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEstimateHistoricalRelativeSemiAnnualValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetEstimateHistoricalRelativeSemiAnnualValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateHistoricalRelativeSemiAnnualValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateHistoricalRelativeSemiAnnualValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateHistoricalRelativeSemiAnnualValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a number of semiannual periods. **Description** holds a description of the number of semiannual periods.

The following table lists the values and descriptions.

VALUE	DESCRIPTION
S-1	-1
S-2	-2
S-3	-3
S-4	-4

Operation: GetEstimateTypes

The return message for this operation lists codes indicating the allowable estimate extraction types and estimate types. These types are content for the **EstimateExtractionType** and **EstimateType** subelements of the **DataDictionaryRequestEstimate** element that is used in the input message to the **Define** operation to retrieve valid output fields for extractions.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetEstimateTypes.

Binding style: document

Input Message GetEstimateTypesSoapIn

element GetEstimateTypes – a null element

Output Message GetEstimateTypesSoapOut

element GetEstimateTypesResponse

Element: GetEstimateTypesResponse

Element Attributes: name = GetEstimateTypesResult; minOccurs = 0; maxOccurs=1.

Element Type: ArrayOfEstimateTypeInfo

Element: ArrayOfEstimateTypeInfo

Element Attributes: name = EstimateTypeInfo; minOccurs = 0; maxOccurs = unbounded; nillable = true.

Element Type: EstimateTypeInfo

Element: EstimateTypeInfo

Extension: base = ValueInfo

Element Attributes: name = ExtractionTypes; minOccurs = 0; maxOccurs = 1.

Element Type: ArrayOfString

Soap Header Message: GetEstimateTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetEstimateTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEstimateTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEstimateTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateTypesResult** element of type **ArrayOfEstimateTypeInfo**. Each **EstimateTypeInfo** element has a **ValueInfo** element as an extension base and a subelement **ExtractionTypes** of type **ArrayOfString**. Each **ValueInfo** element has two string elements, **Description** and **Value**. The two string members, **Description** and **Value** of the **ValueInfo** base class hold and estimates type and the string array **ExtractionType** holds the allowable extraction types for each estimate type. . **Value** holds a code for the estimate type. **Description** holds a description of the estimate type.

The following table lists the possible values and their descriptions. See the description of the data class **DataDictionaryRequestEstimate** for a presentation of the data that switches the dependencies, i.e., the estimate types are listed for each extraction type rather than listing the extraction types for each estimate type.

ESTIMATE TYPE	EXTRACTION TYPE	DEFINITION
BPS	ESA	Book value per share
	ESD	
	ESF	
	EST	
	ESC	
CPS	ESA	Cash flow per share
	ESD	
	ESF	
	EST	
	ESC	
CPX	ESA	Capital Expenditures
	ESD	
	ESF	
	EST	
	ESC	
CSH	ESA	Cash Earnings Per Share
	ESD	
	ESF	
	EST	
	EST	
	ESC	

ESTIMATE TYPE	EXTRACTION TYPE	DEFINITION
DPS	ESA	Dividend per share
	ESD	
	ESF	
	EST	
	ESC	
EBG	ESA	Earnings before Goodwill
	ESD	
	ESF	
	EST	
	ESC	
EBI	ESA	Earnings Before Interest and Taxes
	ESD	
	ESF	
	EST	
EBS	ESA	EBITDA per Share
	ESD	
	ESF	
	EST	
	ESC	
EBT	ESA	Earnings Before Interest Taxes Depreciation and Amortization
	ESD	
	ESF	
	EST	
	ESC	
ENT	ESA	Enterprise Value
	ESD	

ESTIMATE TYPE	EXTRACTION TYPE	DEFINITION
	ESF	
	EST	
	ESC	
EPS	ESA	Earnings per share
	ESD	
	ESF	
	EST	
	ESC	
EPX	ESA	Alternate Earnings per share estimate
	ESD	
	ESF	
	EST	
	ESC	
FFO	ESA	Funds from Operations
	ESD	
	ESF	
	EST	
	ESC	
GPS	ESA	GAAP / Fully Reported EPS
	ESD	
	ESF	
	EST	
	ESC	
GRM	ESA	Gross Margin
	ESD	
	ESF	
	EST	

ESTIMATE TYPE	EXTRACTION TYPE	DEFINITION
	ESC	
NAV	ESA	Net asset value
	ESD	
	ESF	
	EST	
	ESC	
NDT	ESA	Net debt
	ESD	
	ESF	
	EST	
	ESC	
NET	ESA	Net income
	ESD	
	ESF	
	EST	
	ESC	
OPR	ESA	Operating profit
	ESD	
	ESF	
	EST	
	ESC	
PRE	ESA	Pre tax profit
	ESD	
	ESF	
	EST	
	ESC	
PTG	ESA	Price Target

ESTIMATE TYPE	EXTRACTION TYPE	DEFINITION
	ESD	
	ESC	
	ESF	
	EST	
	ESC	
REC	ESA	Recommendation
	ESC	
	ESD	
	ESF	
	EST	
	ESC	
ROA	ESA	Return on asset
	ESD	
	ESF	
	EST	
	ESC	
ROE	ESA	Return on equity
	ESD	
	ESF	
	EST	
	ESC	
SAL	ESA	Sales
	ESD	
	ESF	
	EST	
	ESC	

Operation: GetBondScheduleTypes

The output message of this operation contains a list of possible bond schedule types. The bond schedule types are possible values for the **BondScheduleTypes** element in **DataDictionaryRequestBondSchedule** type.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/GetBondScheduleTypes

Binding style: document

Input Message GetBondScheduleTypesSoapIn

element GetBondScheduleTypes – a null element

Output Message GetBondScheduleTypesSoapOut

element GetBondScheduleTypesResponse

Element: GetBondScheduleTypesResponse

Element Attribute: name = GetBondScheduleTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetBondScheduleTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetBondScheduleTypesCredentialsHeader

part CredentialsHeader use literal

soap: body use literal

Output:

soap: header message GetBondScheduleTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetBondScheduleTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message element is of type **ArrayOfValueInfo**. It has a **ValueInfo** element with two elements, **Description** and **Value**. **Value** holds a code indicating the asset type. It is a possible value for the BondScheduleTypes subelements in **DataDictionaryRequestBondSchedule** element. **Description** holds a fuller description of the asset type.

The following table is a list of bond schedule types along with their descriptions.

VALUE	DESCRIPTION
ACCR	Accretion Schedule
AMTO	Amount Outstanding Schedule
CALS	Call Schedule
CAPS	Capitalization Schedule
CCAL	Convertible Call Schedule
CDIV	Convertible Dividend Schedule
CGLH	Collateral Group Loan History
COCO	Contingent Conversion Schedule
CONV	Conversion Schedule
COUP	Coupon Schedule
CRAT	Convertible Ratchet Schedule
CRFX	Convertible Refix Schedule
CUNA	Convertible Underlying Asset Schedule
EXTN	Extend Schedule
FAAM	Facility Amendment Schedule
FLO	Flip Option Schedule
HURD	Convertible Hurdle Schedule
ISSR	Convertible Issue Range Schedule
PUTS	Put Schedule
LORE	Loan Repayment Schedule
PAAM	Package Amendment Schedule
PAPA	Partly Paid Scedule
PRAD	Price Adjustment Schedule
SNKS	Sink Schedule
TAH	Tranche Accrual History
TCSH	Tranche Credit Support History
TSH	Tranche Service History

Operation: GetCmoAbsAssetStatusTypes

The output message of this operation contains a list of asset status types for collaterized mortgage obligations and asset back securities. Asset status types are used in the **InstrumentSearchRequestCmoAbs** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetCmoAbsAssetStatusTypes

Binding style: document

Input Message GetCmoAbsAssetStatusTypesSoapIn

element GetCmoAbsAssetStatusTypes –a null element

Output Message GetCmoAbsAssetStatusTypesSoapOut

element GetCmoAbsAssetStatusTypesResponse

Element: GetCmoAbsAssetStatusTypesResponse

Element Attributes: name = GetCmoAbsAssetStatusTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetCmoAbsAssetStatusTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetCmoAbsAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetCmoAbsAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns:GetCmoAbsAssetStatusTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetCmoAbsAssetStatusTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating an asset status type. **Description** holds a fuller description of the asset status type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
ISS	Issued
MAT	Expired/Matured

Operation: GetCmoAbsSubGroupTypes

The output message of this operation contains a list of subgroup types for collaterized mortgage obligations and asset back securities. Subgroup types are used in the **InstrumentSearchRequestCmoAbs** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetCmoAbsSubGroupTypes

Binding style: document

Input Message GetCmoAbsSubGroupTypesSoapIn

element GetCmoAbsSubGroupTypes –a null element

Output Message GetCmoAbsSubGroupTypesSoapOut

element GetCmoAbsSubGroupTypesResponse

Element: GetCmoAbsSubGroupTypesResponse

Element Attributes: name = GetCmoAbsSubGroupTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetCmoAbsSubGroupTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetCmoAbsSubGroupTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetCmoAbsSubGroupTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetCmoAbsSubGroupTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetCmoAbsSubGroupTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a subgroup type. **Description** holds a fuller description of the subgroup type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
AFLP	Auto Floorplan/Wholesale Loans
ALEA	Auto Lease Loans
AUTO	Auto/Installment Loans
BOAT	Marine Loans
CARD	Credit Card Receivables
CBO	Collateralized Bond Obligation
CDO	Collateralized Debt Obligation
CFO	Collateralized Fund Obligation
CLO	Collateralized Loan Obligation
CMBS	Commercial Mortgage-Backed Security
EQIP	Equipment Backed Loan
EXIM	Export/Import Bank Loan
HLOC	Home Equity Lines of Credit
HOME	Home Equity Loans
MANU	Manufactured Housing Loan
OTHR	ABS Other
RECR	Recreational Vehicle Loan
STUD	Student Loan
SYN	Synthetic CDO
TRAN	CMO Tranches
WHLN	CMO Whole Loan

Operation: GetCmoAbsSubGroupExtTypes

The output message of this operation contains a list of subgroup types for collaterized mortgage obligations and asset back securities. The array returned has objects that contain values for the **SubGroupTypeCode** member in **InstrumentSearchRequestCmoAbs** objects together with their description and a general classification. Subgroup types are used in the **InstrumentSearchRequestCmoAbs** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetCmoAbsSubGroupTypes

Binding style: document

Input Message GetCmoAbsSubGroupExtTypesSoapIn

element GetCmoAbsSubGroupExtTypes –a null element

Output Message GetCmoAbsSubGroupExtTypesSoapOut

element GetCmoAbsSubGroupExtTypesResponse

Element: GetCmoAbsSubGroupExtTypesResponse

Element Attributes: name = GetCmoAbsSubGroupExtTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetCmoAbsSubGroupExtTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetCmoAbsSubGroupExtTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetCmoAbsSubGroupExtTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetCmoAbsSubGroupExtTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an array of the type **ArrayOfValueInfoSubValue**, GetCmoAbsSubGroupExtTypesResult. The **ValueInfoSubValue** type is derived from the **ValueInfo** type. Its subelement **SubValue** contains a general classification code for the subgroup types. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a subgroup type. **Description** holds a fuller description of the subgroup type.

The following table lists the possible values and their definitions:

CLASSIFICATION CODE	CLASSIFICATION	VALUE	DESCRIPTION
ABSY	Asset-Backed	AFLP	Auto Floorplan/Wholesale Loans
ABSY	Asset-Backed	ALEA	Auto Lease Loans
ABSY	Asset-Backed	AUTO	Auto/Installment Loans
ABSY	Asset-Backed	BOAT	Marine Loans
ABSY	Asset-Backed	CARD	Credit Card Receivables
ABSY	Asset-Backed	EQIP	Equipment Backed Loan
ABSY	Asset-Backed	EXIM	Export/Import Bank Loan
ABSY	Asset-Backed	HLOC	Home Equity Lines of Credit
ABSY	Asset-Backed	HOME	Home Equity Loans
ABSY	Asset-Backed	MANU	Manufactured Housing Loan
ABSY	Asset-Backed	OTHR	ABS Other
ABSY	Asset-Backed	RECR	Recreational Vehicle Loan
ABSY	Asset-Backed	STUD	Student Loan
CDO	Collateralized Bond Obligation	CBO	Collateralized Bond Obligation
CDO	Collateralized Bond Obligation	CDO	Collateralized Debt Obligation
CDO	Collateralized Bond Obligation	CFO	Collateralized Fund Obligation
CDO	Collateralized Bond Obligation	CLO	Collateralized Loan Obligation
CDO	Collateralized Bond Obligation	SYN	Synthetic CDO
CMBS	Collateralized Mortgage Backed Security	CMBS	Commercial Mortgage-Backed Security
TRAN	Agency	TRAN	CMO Tranches
WHLN	Whole Loan	WHLN	CMO Whole Loan

Operation: GetCounterpartyExtractionTypes

This operation is obsolete. The equivalent in this release is GetLegalEntityExtractionTypes.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetCounterpartyExtractionTypes

Binding style: document

Input Message GetCounterpartyExtractionTypesSoapIn

element GetCounterpartyExtractionTypes –a null element

Output Message GetCounterpartyExtractionTypesSoapOut

element GetCounterpartyExtractionTypesResponse

Element: GetCounterpartyExtractionTypesResponse

Element Attributes: name = GetCounterpartyExtractionTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfCounterpartyExtractionTypeInfo

Type: CounterpartyExtractionTypeInfo

Extension: base = tns: ValueInfo

Element Attribute: name = MaximumCounterpartiesAllowed; minOccurs = 1; maxOccurs= 1; type = s: int

Element Attribute: name = TimePeriodForLimits; minOccurs = 1; maxOccurs = 1; type = s: int

Element Attributes: name = MaximumExtractionsAllowedPerTimePeriod; minOccurs = 1; maxOccurs = 1; type = s: int

Element Attributes: name = MaximumCounterpartiesAllowedPerTimePeriod; minOccurs = 1; maxOccurs = 1; type = s: int

Soap Header Message: GetCounterpartyExtractionTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetCounterpartyExtractionTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetCounterpartyExtractionTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetInstrumentExtractionTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type array of **ArrayOfCounterpartyExtractionTypeInfo**. The element **CounterpartyExtractionTypeInfo** is derived from the **ValueInfo** element. The **ValueInfo** type has two string elements, **Description** and **Value**. **Value** holds a code indicating a counterparty extraction type. **Description** holds a fuller description of the counterparty extraction type.

The element **CounterpartyExtractionTypeInfo** has a subelement **MaximumCounterpartiesAllowed** that indicates the maximum number of counterparties for which data can be extracted in a single call to **Extract**. To extract data for additional counterparties, multiple calls to the operation **Extract** can be made.

The rate at which counterparties can be extracted may also be limited. The element **CounterpartyExtractionTypeInfo** has subelements **TimePeriodForLimits**, **MaximumCounterpartiesAllowedPerTimePeriod**, and **MaximumExtractionsAllowedPerTimePeriod** that determine this limitation.

- **TimePeriodForLimits** indicates the number of seconds in the time period.
- **MaximumCounterpartiesAllowedPerTimePeriod** indicates the number of counterparties for which data can be extracted by your program during that time period.
- **MaximumExtractionsAllowedPerTimePeriod** indicates the number of extractions of counterparty data that can be made during the time periods.

A -1 in **MaximumCounterpartiesAllowedPerTimePeriod** indicates that there are no rate limits for counterparties or extractions.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
CPA	Counterparty Audit
CPD	Counterparty Detail
CPH	Counterparty Hierarchy

Operation: GetCounterpartyIdentifierTypes

This operation is obsolete. The equivalent in this release is GetLegalEntityIdentifierTypes

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetCounterpartyIdentifierTypes

Binding style: document

Input Message GetCounterpartyIdentifierTypesSoapIn

element GetCounterpartyIdentifierTypes –a null element

Output Message GetCounterpartyIdentifierTypesSoapOut

element GetCounterpartyIdentifierTypesResponse

Element: GetCounterpartyIdentifierTypesResponse

Element Attributes: name = GetCounterpartyIdentifierTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetCounterpartyIdentifierTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetCounterpartyIdentifierTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetCounterpartyIdentifierTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetInstrumentIdentifierTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message is of type **ArrayOfValueInfo**. Its elements are of type of **ValueInfo**. The **ValueInfo** element has two elements, **Description** and **Value**. **Value** holds a code indicating a counterparty identifier type. **Description** holds a fuller description of the counterparty identifier type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
ORG	Organization Id
RCP	Counterparty Id

Operation: GetCoraxEvents

The output message of this operation contains an array of elements of type **ArrayOfCoraxEventInfo**.

Each element of the array is of type **CoraxEventInfo** that has a base of type **ValueInfo**. The type **CoraxEventInfo** has an element, **Constraints**, of the type **ArrayOfString** besides the **Description** and **Value** elements of the base element of type **ValueInfo**.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetCoraxEvents

Binding style: document

Input Message GetCoraxEventsSoapIn

element GetCoraxEvents – a null element

Output Message GetCoraxEventsSoapOut

element GetCoraxEventsResponse

Element: GetCoraxEventsResponse

Element Attributes: name = GetCoraxEventResult; minOccurs = 0; maxOccurs = 1

Reference Type: ArrayOfCoraxEventInfo

Type: ArrayOfCoraxEventInfo

Element Attributes: minOccurs = 0; maxOccurs = unbounded; nillable = true.

Reference Type: CoraxEventInfo

Type: CoraxEventInfo

Extension: base = ValueInfo

Element Attributes: name = Constraints; minOccurs = 0; maxOccurs = 1;

Reference Type: ArrayOfString

Soap Header Message: GetCoraxEventsOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetCoraxEventsCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetCoraxEventsCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetCoraxEventsOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The type **CoraxEventInfo** has the type ValueInfo as a base. In addition the type **CoraxEventInfo** has an element, **Constraints**, of type **ArrayOfString**.

The following table lists the possible values of the elements **Value** and **Description** in the type **ValueInfo** that is the base of the type **CoraxEventInfo**:

VALUE	DESCRIPTION
CAP	Cap Change
DIV	Dividend
EAR	Earnings
MNA	Mergers and Acquisitions
NOM	Nominal Value
PEO	Public Equity Offerings
SHO	Shares Outstanding
VOT	Voting Rights

For each value, there are multiple values of the Constraints member. The following table shows the dependencies.

VALUE	CONSTRAINT
CAP	Capital Change Announcement Date
	Capital Change Deal Date
	Capital Change Ex Date
	Effective Date
	Record Date
DIV	Dividend Announcement Date
	Dividend Pay Date
	Dividend Ex Date
	Period End Date
	Dividend Record Date
EAR	Earnings Announcement Date

VALUE	CONSTRAINT
	Period End Date
MNA	Deal Announcement Date
	Deal Cancel Date
	Deal Close Date
	Deal Effective Date
	Deal Revised Proposal Date
	Tender Offer Expiration Date
NOM	Nominal Value
	Nominal Value Date
PEO	All Pending Deals
	First Trade Date
SHO	Shares Outstanding
VOT	Voting Rights

Operation: GetCoraxShareTypes

The output message of this operation has a list of share types. These types indicate what types of shares are counted to produce the value of the amount of share.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/GetCoraxShareTypes

Binding style: document

Input Message GetCoraxShareTypesSoapIn

element GetCoraxShareTypes –a null element

Output Message GetCoraxShareTypesSoapOut

element GetCoraxShareTypesResponse

Element: GetCoraxShareTypesResponse

Element Attributes: name = GetCoraxShareTypesResult; minOccurs = 0; maxOccurs = 1.

Element Type: ArrayOfValueInfo

Soap Header Message: GetCoraxShareTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetCoraxShareTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetCoraxShareTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetCoraxShareTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an element that is of type **ArrayOfValueInfo**. Its elements are of type **ValueInfo**. The type **ValueInfo** contains two elements, **Description** and **Value**. **Value** holds a code indicating a corporate action share type. **Description** holds a fuller description of the corporate action share type.

The following table is a list of corporate action share types along with their descriptions:

VALUE	DESCRIPTION
ALL	DEFAULT
AUT	Authorized
CLH	Closely Held
FFL	Free Float
ISS	Issued
LIS	Listed
OUT	Outstanding
TRE	Treasure
UNC	Unclassified

Operation: GetComparisonOperators

The output message of this operation consists of a list of comparison operators. The comparison operators are used to limit the search for government and corporate bonds, and futures and options using the elements **InstrumentSearchRequestGovCorp** and **InstrumentSearchRequestFuturesAndOptions** as parameters for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetComparisonOperators

Binding style: document

Input Message GetComparisonOperatorsSoapIn

element GetComparisonOperators - a null element

Output Message GetComparisonOperatorsSoapOut

element GetComparisonOperatorsResponse

Element: GetComparisonOperatorsResponse

Element Attributes: name = GetComparisonOperatorsResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetComparisonOperatorsOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetComparisonOperatorsResult

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns:GetComparisonOperatorsResult

part CredentialsHeader

soap: body use literal

soap: header message GetComparisonOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating the comparison operator.

The codes are possible values for the **CouponComparisonOperator**, **IssueDateComparisonOperator**, **MaturityDateComparisonOperator**, and **NextPayDateComparisonOperator** subelements in **InstrumentSearchRequestGovCorp** element. The codes are also possible values for the **ExpirationDateComparisonOperator**, and the **StrikePriceComparisonOperator** subelements in the **InstrumentSearchRequestFuturesAndOptions** element.

Description holds a fuller description of the comparison operator.

The following table is a list of comparison operators along with their descriptions.

VALUE	DESCRIPTION
=	=
!=	NOT =
<	<
<=	<=
>	>
>=	>=
FROM	From

Operation: GetEquitiesAssetCategoryTypes

The output message of this operation consists of a list of codes and definitions for asset category types. The asset category type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The currency types are values for the **AssetCategoryType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesAssetCategoryTypes

Binding style: document

Input Message GetEquitiesAssetCategoryTypesSoapIn

element GetEquitiesAssetCategoryTypes - a null element

Output Message GetEquitiesAssetCategoryTypesSoapOut

element GetEquitiesAssetCategoryTypesResponse

Element: GetEquitiesAssetCategoryTypesResponse

Element Attributes: name = GetEquitiesAssetCategoryTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesAssetCategoryTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetEquitiesAssetCategoryTypesCredentialsHeader

part= CredentialsHeader

soap: body use literal

Output:

soap: header message tns:GetEquitiesAssetCategoryTypesCredentialsHeader

part CredentialsHeader

soap: header message tns:GetEquitiesAssetCategoryTypesOperationInfoHeader

part OperationInfoHeader

soap: body use=literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements, GetEquitiesAssetCategoryTypesResult. Each **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating an Asset Category type. **Description** holds a fuller description of the Asset Category type.

The following table is a sample of the possible values and their description:

VALUE	DESCRIPTION
CIN	Currency Index

VALUE	DESCRIPTION
CIX	Commodity Index
CMF	Commodity Future
CNI	Convertible Index
CON	Convertible
CMF	Commodity Future
CPI	Corp Index
CPR	Convertible Preference
DIB	Deferred Interest Bond
DRC	Depository Receipt
ECL	Equity Closed Fund
EIF	Equity/Index Future
EIO	Equity/Index Option
EIW	Equity/Index Warrant
EMS	Equity Market Statistics
ENI	Energy Index
EQI	Equity Index
EQU	Equity
ETF	Exchange Traded Fund
FIN	Fixed Income
FLT	Floater
FMS	Fixed Income Market Statistics
FNI	Fund Index
FRB	Fixed Rate Bond
GIN	Govt Index
HDF	Hedge Fund
ILB	Index Linked Bond
ILF	Index Linked Floater

VALUE	DESCRIPTION
INF	Insurance Fund
IRS	Interest Rate Swap
MCB	Multi Coupon Bond
MMT	Money Market
OPF	Open-End Fund
ORD	Ordinary
PAR	Participation
PFA	Pfandbriefe
PNF	Preference
RTS	Rights
TIN	Transportation Index
UNC	Unclassified
UNT	Units
YCT	Yield Curve Constituent
ZCB	Zero Coupon Bond

Operation: GetEquitiesCurrencyTypes

The output message of this operation consists of a list of currency types. The currency type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The currency types are values for the **CurrencyType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesCurrencyTypes

Binding style: document

Input Message GetEquitiesCurrencyTypesSoapIn

element GetEquitiesCurrencyTypes - a null element

Output Message GetEquitiesCurrencyTypesSoapOut

element GetEquitiesCurrencyTypesResponse

Element: GetEquitiesCurrencyTypesResponse

Element Attributes: name = GetEquitiesCurrencyTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesCurrencyTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetEquitiesCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns:GetEquitiesCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesCurrencyTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a currency type. **Description** holds a fuller description of the currency type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their description:

VALUE	DESCRIPTION
AED	UAE Dirham
ALL	Albanian Lek

Operation: GetEquitiesDomicileTypes

The output message of this operation consists of a list of domicile types. The domicile type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the **SearchInstrumentsSoapIn** input message for the **SearchInstruments** operation. The currency types are values for the **DomicileType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesDomicileTypes

Binding style: document

Input Message GetEquitiesDomicileTypesSoapIn

element GetEquitiesDomicileTypes - a null element

Output Message GetEquitiesDomicileTypesSoapOut

element GetEquitiesDomicileTypesResponse

Element: GetEquitiesDomicileTypesResponse

Element Attributes: name = GetEquitiesDomicileTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesDomicileTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetEquitiesDomicileTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns:GetEquitiesDomicileTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesDomicileTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a domicile type. **Description** holds a fuller description of the domicile type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
AD	Andorra (AD)
AE	United Arab Emirates (AE)

Operation: GetEquitiesExchangeTypes

The output message of this operation consists of a list of exchange types. The exchange type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the **SearchInstrumentsSoapIn** input message for the **SearchInstruments** operation. The exchange types are values for the **ExchangeType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesExchange Types

Binding style: document

Input Message GetEquitiesExchangeTypesSoapIn

element GetEquitiesExchangeTypes - a null element

Output Message GetEquitiesExchangeTypesSoapOut

element GetEquitiesExchangeTypesResponse

Element: GetEquitiesExchangeTypesResponse

Element Attributes: name = GetEquitiesExchangeTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesExchangeTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetEquitiesExchangeTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns:GetEquitiesExchangeTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesExchangeTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating an exchange type. **Description** holds a fuller description of the exchange type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
ABD	Abu Dhabi Stock Exchange (ABD)
ABJ	Abidjan Stock Exchange (ABJ)

Operation: GetEquitiesFairValueIndicatorTypes

The output message of this operation consists of a list of fair value indicator types. The fair value indicator type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the SearchInstrumentsSoapIn input message for the **SearchInstruments** operation. The fair value indicator types are values for the **FairValueIndicatorType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesFairValueIndicatorTypes

Binding style: document

Input Message GetEquitiesFairValueIndicatorTypesSoapIn

element GetEquitiesFairValueIndicatorTypes - a null element

Output Message GetEquitiesFairValueIndicatorTypesSoapOut

element GetEquitiesFairValueIndicatorTypesResponse

Element: GetEquitiesFairValueIndicatorTypesResponse

Element Attributes: name = GetEquitiesFairValueIndicatorTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesFairValueIndicatorTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetEquitiesFairValueIndicatorTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetEquitiesFairValueIndicatorTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesFairValueIndicatorTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

An array of **ValueInfo** elements. The **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a fair value indicator type. **Description** holds a fuller description of the fair value indicator type.

The following table lists the possible values and their descriptions:

VALUE	DESCRIPTION
Y	Yes
N	No

Operation: GetEquitiesGicsIndustryTypes

The output message of this operation consists of a list of Global Industry Classification Standard (GICS) industry types. The GICS industry type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The GICS industry types are values for the **GicsTypes** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesCurrencyTypes

Binding style: document

Input Message GetEquitiesGicsIndustryTypesSoapIn

element GetEquitiesGicsIndustryTypes - a null element

Output Message GetEquitiesGicsIndustryTypesSoapOut

element GetEquitiesGicsIndustryTypesResponse

Element: GetEquitiesGicsIndustryTypesResponse

Element Attributes: name = GetEquitiesGicsIndustryTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesGicsIndustryTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetEquitiesGicsIndustryTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns: GetEquitiesGicsIndustryTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesGicsIndustryTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a GICS industry type. **Description** holds a fuller description of the GICS industry type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their description:

VALUE	DESCRIPTION
10101010	10101010 - Oil & Gas Drilling
10101020	10101020 - Oil & Gas Equipment & Services

Operation: GetEquitiesInstrumentSubTypes

The output message of this operation consists of a list of instrument sub types. The instrument sub type is used to limit the search for equities using the **InstrumentSearchRequestEquities** class as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The instrument sub types are values for the **InstrumentSubTypeType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitesInstrumentSubTypes

Binding style: document

Input Message GetEquitiesInstrumentSubTypesSoapIn

element GetEquitiesInstrumentSubTypes - a null element

Output Message GetEquitiesInstrumentSubTypesSoapOut

element GetEquitiesInstrumentSubTypesResponse

Element: GetEquitiesInstrumentSubTypesResponse

Element Attributes: name = GetEquitiesInstrumentSubTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesInstrumentSubTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns: GetEquitiesInstrumentSubTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns: GetEquitiesInstrumentSubTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesInstrumentSubTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating an instrument sub type. **Description** holds a fuller description of the instrument sub type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
CVPR	Convertible Preference
DPRC	Depository Receipts
FIDX	Financial Index
HYBD	Hybrid
ODSH	Ordinary shares
OPFN	Open Fund
PART	Participation
PFSH	Preference shares
RGHT	Rights
UNIT	Units
WRNT	Warrants

Operation: GetEquitiesStatusTypes

The output message of this operation consists of a list of equities status types. The status type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The equities status types are values for the **StatusType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesStatusTypes

Binding style: document

Input Message GetEquitiesStatusTypesSoapIn

element GetEquitiesStatusTypes - a null element

Output Message GetEquitiesStatusTypesSoapOut

element GetEquitiesStatusTypesResponse

Element: GetEquitiesStatusTypesResponse

Element Attributes: name = GetEquitiesStatusTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesStatusTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetEquitiesStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns:GetEquitiesStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesStatusTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a status type. **Description** holds a fuller description of the status type.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
ISS	Active
NAC	Inactive

Operation: GetEquitiesStatusTypes

The output message of this operation consists of a list of equities status types. The status type is used to limit the search for equities using the **InstrumentSearchRequestEquities** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The equities status types are values for the **StatusType** subelement of an **InstrumentSearchRequestEquities** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetEquitiesStatusTypes

Binding style: document

Input Message GetEquitiesStatusTypesSoapIn

element GetEquitiesStatusTypes - a null element

Output Message GetEquitiesStatusTypesSoapOut

element GetEquitiesStatusTypesResponse

Element: GetEquitiesStatusTypesResponse

Element Attributes: name = GetEquitiesStatusTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetEquitiesStatusTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns:GetEquitiesStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns:GetEquitiesStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetEquitiesStatusTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a status type. **Description** holds a fuller description of the status type.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
ISS	Active
NAC	Inactive

Operation: GetFundAllocationTypes

The output message of this operation consists of a list of allocation types for Lipper Fund instruments.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetFundAllocationTypes

Binding style: document

Input Message GetFundAllocationTypesSoapIn

element GetFundAllocationTypes - a null element

Output Message GetFundAllocationTypesSoapOut

element GetFundAllocationTypesResponse

Element: GetFundAllocationTypesResponse

Element Attributes: name = GetFundAllocationTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFundAllocationTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns: GetFundAllocationTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns: GetFundAllocationTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFundAllocationTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating an allocation type. **Description** holds a fuller description of the allocation type.

The following table is a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
ASSET	Asset
CNTRY	Investment Country
CURR	Currency Value
HLD10	Holdings Top 10
INDUS	Industry Sector

Note:	Full Holdings content is not supported in the SOAP API.

Operation: GetFundsCurrencyTypes

The output message of this operation consists of a list of funds currency types. The funds currency type is used to limit the search for funds using the **InstrumentSearchRequestFunds** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The funds currency types are values for the **CurrencyType** subelement of an **InstrumentSearchRequestFunds** element.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetFundsCurrencyTypes

Binding style: document

Input Message GetFundsCurrencyTypesSoapIn

element GetFundsCurrencyTypes - a null element

Output Message GetFundsCurrencyTypesSoapOut

element GetFundsCurrencyTypesResponse

Element: GetFundsCurrencyTypesResponse

Element Attributes: name = GetFundsCurrencyTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFundsCurrencyTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message tns: GetFundsCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns: GetFundsCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFundsCurrencyTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a currency type. **Description** holds a fuller description of the currency type.

The data returned from this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
AED	UAE Dirham
ARS	Argentine Peso

Operation: GetFundsDomicileTypes

The output message of this operation consists of a list of funds domicile types. The funds domicile type is used to limit the search for funds using the **InstrumentSearchRequestFunds** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The funds domicile types are values for the **DomicileType** subelement of an **InstrumentSearchRequestFunds** element.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetFundsDomicileTypes

Binding style: document

Input Message GetFundsDomicileTypesSoapIn

element GetFundsDomicileTypes - a null element

Output Message GetFundsDomicileTypesSoapOut

element GetFundsDomicileTypesResponse

Element: GetFundsDomicileTypesResponse

Element Attributes: name = GetFundsDomicileTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFundsDomicileTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetFundsDomicileTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message tns: GetFundsDomicileTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFundsDomicileTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a domicile type. **Description** holds a fuller description of the domicile type.

The data returned from this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
AD	Andorra (AD)
AI	Anguilla (AI)

Operation: GetFuturesAndOptionsCurrencyTypes

The output message of this operation consists of a list of futures and options currency types. The currency type is used to limit the search for futures and options using the **InstrumentSearchRequestFuturesAndOptions** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The currency types are values for the **CurrencyType** subelement of an **InstrumentSearchRequestFuturesAndOptions** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/

GetFuturesAndOptionsCurrencyTypes

Binding style: document

Input Message GetFuturesAndOptionsCurrencyTypesSoapIn

element GetFuturesAndOptionsCurrencyTypes - a null element

Output Message GetFuturesAndOptionsCurrencyTypesSoapOut

element GetFuturesAndOptionsCurrencyTypesResponse

Element: GetFuturesAndOptionsCurrencyTypesResponse

Element Attributes: name = GetFuturesAndOptionsCurrencyTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFuturesAndOptionsCurrencyTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetFuturesAndOptionsCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetFuturesAndOptionsCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFuturesAndOptionsCurrencyTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a currency type. **Description** holds a fuller description of the currency type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their description:

VALUE	DESCRIPTION
AED	UAE Dirham
ARS	Argentine Peso

Operation: GetFuturesAndOptionsExchangeTypes

The output message of this operation consists of a list of futures and options exchange types. The exchange type is used to limit the search for equities using the **InstrumentSearchRequestFuturesAndOptions** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The exchange types are values for the **ExchangeTypes** subelement of an **InstrumentSearchRequestFuturesAndOptions** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetFuturesAndOptionsExchangeTypes

Binding style: document

Input Message GetFuturesAndOptionsExchangeTypesSoapIn

element GetFuturesAndOptionsExchangeTypes - a null element

Output Message GetFuturesAndOptionsExchangeTypesSoapOut

element GetFuturesAndOptionsExchangeTypesResponse

Element: GetFuturesAndOptionsExchangeTypesResponse

Element Attributes: name = GetFuturesAndOptionsExchangeTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFuturesAndOptionsExchangeTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetFuturesAndOptionsExchangeTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetFuturesAndOptionsExchangeTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFuturesAndOptionsExchangeTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating an exchange type. **Description** holds a fuller description of the exchange type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their description:

VALUE	DESCRIPTION
AAS	ARGENTINA AGRICULTURE SECRETARIAT (AAS)
ADE	Athens Derivatives Exchange (ADE)

Operation: GetFuturesAndOptionsExerciseStylesTypes

The output message of this operation consists of a list of futures and options exercise style types. The exercise style type is used to limit the search for futures and options using the **InstrumentSearchRequestFuturesAndOptions** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The exercise style types are values for the **ExerciseStyleType** subelement of an **InstrumentSearchRequestFuturesAndOptions** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetFuturesAndOptionsExerciseStylesTypes

Binding style: document

Input Message GetFuturesAndOptionsExerciseStylesTypesSoapIn

element GetFuturesAndOptionsExerciseStylesTypes- a null element

Output Message GetFuturesAndOptionsExerciseStylesTypesSoapOut

element GetFuturesAndOptionsExerciseStylesTypesResponse

Element: GetFuturesAndOptionsExerciseStylesTypesResponse

Element Attributes: name = GetFuturesAndOptionsExerciseStylesTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFuturesAndOptionsExerciseStylesTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetFuturesAndOptionsExerciseStylesTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetFuturesAndOptionsExerciseStylesTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFuturesAndOptionsExerciseStylesTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating an exercise style type. **Description** holds a fuller description of the exercise style type.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
A	American
E	European

Operation: GetFuturesAndOptionsPutCallTypes

The output message of this operation consists of a list of futures and options put/call types. The put/call type is used to limit the search for futures and options using the **InstrumentSearchRequestFuturesAndOptions** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The put/call types are values for the **PutCallType** subelement of an **InstrumentSearchRequestFuturesAndOptions** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetFuturesAndOptionsPutCallTypes

Binding style: document

Input Message GetFuturesAndOptionsPutCallTypesSoapIn

element GetFuturesAndOptionsPutCallTypes - a null element

Output Message GetFuturesAndOptionsPutCallTypesSoapOut

element GetFuturesAndOptionsPutCallTypesResponse

Element: GetFuturesAndOptionsPutCallTypesResponse

Element Attributes: name = GetFuturesAndOptionsPutCallTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFuturesAndOptionsPutCallTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetFuturesAndOptionsPutCallTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetFuturesAndOptionsPutCallTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFuturesAndOptionsPutCallTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a put/call type. **Description** holds a fuller description of the put/call type.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
C	Call
P	Put

Operation: GetFuturesAndOptionsStatusTypes

The output message of this operation consists of a list of futures and options status types. The status type is used to limit the search for futures and options using the **InstrumentSearchRequestFuturesAndOptions** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The status types are values for the **StatusType** subelement of an **InstrumentSearchRequestFuturesAndOptions** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetFuturesAndOptionsStatusTypes

Binding style: document

Input Message GetFuturesAndOptionsStatusTypesSoapIn

element GetFuturesAndOptionsStatusTypes- a null element

Output Message GetFuturesAndOptionsStatusTypesSoapOut

element GetFuturesAndOptionsStatusTypesResponse

Element: GetFuturesAndOptionsStatusTypesResponse

Element Attributes: name = GetFuturesAndOptionsStatusTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFuturesAndOptionsStatusTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetFuturesAndOptionsStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetFuturesAndOptionsStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFuturesAndOptionsStatusTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a status type. **Description** holds a fuller description of the status type.

The following table lists the possible values and their descriptions:

VALUE	DESCRIPTION
0	Inactive
1	Active

Operation: GetFuturesAndOptionsTypes

The output message of this operation consists of a list of futures and options types. The futures and options type is used to limit the search for futures and options using the **InstrumentSearchRequestFuturesAndOptions** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operations. The futures and options types are values for the **FuturesAndOptionsType** subelement of an **InstrumentSearchRequestFuturesAndOptions** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetFuturesAndOptionsTypes

Binding style: document

Input Message GetFuturesAndOptionsTypesSoapIn

element GetFuturesAndOptionsTypes - a null element

Output Message GetFuturesAndOptionsTypesSoapOut

element GetFuturesAndOptionsTypesResponse

Element: GetFuturesAndOptionsTypesResponse

Element Attributes: name = GetFuturesAndOptionsTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetFuturesAndOptionsTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetFuturesAndOptionsTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetFuturesAndOptionsTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetFuturesAndOptionsTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a futures and options type. **Description** holds a fuller description of the futures and options type.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
FOP	Futures on Options
FUT	Futures
OPT	Options

Operation: GetGovCorpAssetStatusTypes

The output message of this operation consists of a list of government and corporate bond asset status types. The asset status type is used to limit the search for government and corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The asset status types are values for the **AssetStatusTypes** subelement of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpAssetStatusTypes

Binding style: document

Input Message GetGovCorpAssetStatusTypesSoapIn

element GetGovCorpAssetStatusTypes - a null element

Output Message GetGovCorpAssetStatusTypesSoapOut

element GetGovCorpAssetStatusTypesResponse

Element: GetGovCorpAssetStatusTypesResponse

Element Attributes: name = GetGovCorpAssetStatusTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpAssetStatusTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpAssetStatusTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a government and corporate bond asset type. **Description** holds a fuller description of the government and corporate bond asset status type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
CAN	Cancelled
CLD	Called
DEF	In Default
DFS	Defeased
EXC	Exchanged/Converted
FNG	Funged
ISS	Issued
LIQ	Liquidated
MAT	Expired/Matured
NAC	Not Active
PUT	Put
RBM	Repaid before Maturity
RDM	Redenominated
REF	Refinancing Transaction
RES	Restructured
RMK	Remarketed
RPN	Re-Opening
TBC	To Be Called
TBE	To Be Exchanged/Converted
TBI	To Be Issued
TBP	To Be Priced
TEN	Tendered
WHN	When Issued

Operation: GetGovCorpContributorTypes

This method returns a list of government and corporate bond contributor types. The contributor type is used to limit the search for government and corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The contributor types are values for the **ContributorType** subelement of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpContributorTypes

Binding style: document

Input Message GetGovCorpContributorTypesSoapIn

element GetGovCorpContributorTypes - a null element

Output Message GetGovCorpContributorTypesSoapOut

element GetGovCorpContributorTypesResponse

Element: GetGovCorpContributorTypesResponse

Element Attributes: name = GetGovCorpContributorTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpContributorTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpContributorTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpContributorTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpContributorTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string members: **Description** and **Value**. **Value** holds a code indicating a contributor type. **Description** holds a fuller description of the contributor type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their description:

VALUE	DESCRIPTION
A	American Stock Exchange (A)
AAB	Aljba Alliance Bank (AAB)
ACH	Bank of China (ACH) Agricultural Bank of China (ACH)
GTO	Credit Suisse (GTO)
IAU	Banco Itau (IAU)
NB	National Australia Bank (NB)
RUL	Refinitiv Composite Display (RUL)

Operation: GetGovCorpCountryTypes

The output message of this operation consists of a list of government and corporate bond country types. The country type is used to limit the search for government or corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The country types are values for the **CountryType** subelements of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpCountryTypes

Binding style: document

Input Message GetGovCorpCountryTypesSoapIn

element GetGovCorpCountryTypes - a null element

Output Message GetGovCorpCountryTypesSoapOut

element GetGovCorpCountryTypesResponse

Element: GetGovCorpCountryTypesResponse

Element Attributes: name = GetGovCorpCountryTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpCountryTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpCountryTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpCountryTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpCountryTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a country type. **Description** holds a fuller description of the country type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their description:

VALUE	DESCRIPTION
AE	United Arab Emirates (AE)
AL	Albania (AL)

Operation: GetGovCorpCurrencyTypes

The output message of this operation consists of a list of government and corporate bond currency types. The currency type is used to limit the search for government and corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The currency types are values for the **CurrencyType** subelement of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpCurrencyTypes

Binding style: document

Input Message GetGovCorpCurrencyTypesSoapIn

element GetGovCorpCurrencyTypes - a null element

Output Message GetGovCorpCurrencyTypesSoapOut

element GetGovCorpCurrencyTypesResponse

Element: GetGovCorpCurrencyTypesResponse

Element Attributes: name = GetGovCorpCurrencyTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpCurrencyTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpCurrencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpCurrencyTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a currency type. **Description** holds a fuller description of the currency type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table is a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
AE	American Stock Exchange (A)
AAB	Aljba Alliance Bank (AAB)

Operation: GetGovCorpIndustryTypes

The output message of this operation consists of a list of government and corporate bond industry types. The industry type is used to limit the search for government and corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The industry types are values for the **IndustryType** subelement of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpIndustryTypes

Binding style: document

Input Message GetGovCorpIndustryTypesSoapIn

element GetGovCorpIndustryTypes - a null element

Output Message GetGovCorpIndustryTypesSoapOut

element GetGovCorpIndustryTypesResponse

Element: GetGovCorpIndustryTypesResponse

Element Attributes: name = GetGovCorpIndustryTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpIndustryTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpIndustryTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpIndustryTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpIndustryTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating an industry type. **Description** holds a fuller description of the industry type.

The following table is a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
AGENCY	Agency
BANKS	Banks
CONSUMGD	Consumer Goods
ELECTRIC	Electric Power
ENERGY	Energy Company
GASDISTR	Gas Distribution
INDFINCL	Independent Finance
MANUFACT	Manufacturing
OFFMUNI	Official and Muni
OTHFINCL	Other Financial
SERVICE	Service Company
SOVERGRN	Sovereign
SPRA	Supranational
TELEPHON	Telephone
TRANSPORT	Transportation

Operation: GetGovCorpMoodyTypes

This method returns a list of government and corporate bond Moody types. The Moody type is used to limit the search for government and corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The Moody types are values for the **MoodyTypes** subelement of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpMoodyTypes

Binding style: document

Input Message GetGovCorpMoodyTypesSoapIn

element GetGovCorpMoodyTypes - a null element

Output Message GetGovCorpMoodyTypesSoapOut

element GetGovCorpMoodyTypesResponse

Element: GetGovCorpMoodyTypesResponse

Element Attributes: name = GetGovCorpMoodyTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpMoodyTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpMoodyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpMoodyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpMoodyTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a Moody type. **Description** holds a fuller description of the Moody type.

The following table lists the possible values and their descriptions:

VALUE	DESCRIPTION
A	A
A1	A1
A2	A2
A3	A3
Aa	Aa
Aa1	Aa1
Aa2	Aa2
Aa3	Aa3
Aaa	Aaa
B	B
B1	B1
B2	B2
B3	B3
Ba	Ba
Ba1	Ba1
Ba2	Ba2
Ba3	Ba3
Baa	Baa
Baa1	Baa1
Baa2	Baa2
Baa3	Baa3
C	C
Ca	Ca
Caa	Caa
Caa1	Caa1
Caa2	Caa2

VALUE	DESCRIPTION
Caa3	Caa3
N/A	N/A
NR	NR
WR	WR

Operation: GetGovCorpStandardPoorsTypes

The output message of this operation consists of a list of government and corporate bond Standard and Poor's types. The Standard and Poor's type is used to limit the search for government and corporate bonds using the **InstrumentSearchRequestGovCorp** class as a parameter for the **SearchInstrumentsSoapIn** input message of the **SearchInstruments** operation. The Standard and Poor's types are values for the **StandardPoorsTypes** subelements of an **InstrumentSearchRequestFuturesAndOptions** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpStandardPoorsTypes

Binding style: document

Input Message GetGovCorpStandardPoorsTypesSoapIn

element GetGovCorpStandardPoorsTypes - a null element

Output Message GetGovCorpStandardPoorsTypesSoapOut

element GetGovCorpStandardPoorsTypesResponse

Element: GetGovCorpStandardPoorsTypesResponse

Element Attributes: name = GetGovCorpStandardPoorsTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpStandardPoorsTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpStandardPoorsTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpStandardPoorsTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpStandardPoorsTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a Standard and Poor's type. **Description** holds a fuller description of the Standard and Poor's type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
A	A
A-	A-
A+	A+
AA	AA
AA-	AA-
AA+	AA+
AAA	AAA
AAAr	AAAr
B	B
B-	B-
B+	B+
BB	BB
BB-	BB-
BB+	BB+
BBB	BBB
BBB-	BBB-
BBB+	BBB+
C	C
CC	CC
CCC	CCC
CCC-	CCC-
CCC+	CCC+
D	D
N/A	N/A
NR	NR
R	R

VALUE	DESCRIPTION
SD	SD

Operation: GetGovCorpSubGroupTypes

The output message of this operation consists of a list of government and corporate bond subgroup types. The subgroup type is used to limit the search for the **SearchInstrumentsSoapIn** input message of government and corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstruments** operation. The subgroup types are values for the **SubGroupType** subelement of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpSubGroupTypes

Binding style: document

Input Message GetGovCorpSubGroupTypesSoapIn

element GetGovCorpSubGroupTypes - a null element

Output Message GetGovCorpSubGroupTypesSoapOut

element GetGovCorpSubGroupTypesResponse

Element: GetGovCorpSubGroupTypesResponse

Element Attributes: name = GetGovCorpSubGroupTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetGovCorpSubGroupTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpSubGroupTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpSubGroupTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpSubGroupTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating a subgroup type. **Description** holds a fuller description of the subgroup type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
ABND	Notes/Bonds Agency
ADIS	Discount Notes
ASTR	Strips Agency
CFIN	Financials
CIND	Industrials
COTH	Other Corp
CSVC	Services
CUTL	Utilities
GBIL	Bills
GBND	Notes/Bonds Govt
GBOBL	Bundesobligationen
GBONOS	Bonos del Estado
GBOT	Buoni Ordinari Tesor
GBRADY	Brady Bond
GBTAN	Ctf Bons du Tresor Fixe
GBTF	Ctf Bons du Taux Fixe
GBTP	Buoni Poliennali
GBUBL	Bubill
GBUND	Bundesanleihen
GCCT	Ctf Certificati Credito
GCTE	Ctf Tesoro in ECU
GCTO	Ctf Credito Opzione
GCTZ	Ctf Tesoro Zero
GDGB	Danish Govt Bond
GDSL	Dutch State Loan
GIGB	Irish Govt Bond

VALUE	DESCRIPTION
GJGB	Japanese Govt Bond
GOAT	Ctf Oblig Assim Tresor
GOBLIGAC	Obligaciones del Estado
GOLO	Obligation Lineaire
GOT	Obrigacoes do Tesouro
GSCHATZE	Schatze
GSTR	Strips Govt
OMUN	Non-US Munis
OPRV	Provincials
OSUP	Supranationals
OTHR	Other Govt/Supra

Operation: GetGovCorpSubGroupExtTypes

The output message of this operation consists of a list of government and corporate bond subgroup types and the classification of the subgroup types. The output message contains an array of type **ArrayOfValueInfoSubvalue, GetGovCorpSubGroupExtTypesResult**. The subgroup type is used to limit the search for the **SearchInstrumentsSoapIn** input message of government and corporate bonds using the **InstrumentSearchRequestGovCorp** element as a parameter for the **SearchInstruments** operation. The subgroup types are values for the **SubGroupType** subelement of an **InstrumentSearchRequestGovCorp** element.

Binding: soapAction= http://reuters.com/datascopeselect/ExtractionService/v1/GetGovCorpSubGroupTypes

Binding style: document

Input Message GetGovCorpSubGroupExtTypesSoapIn

element GetGovCorpSubGroupExtTypes - a null element

Output Message GetGovCorpSubGroupExtTypesSoapOut

element GetGovCorpSubGroupExtTypesResponse

Element: GetGovCorpSubGroupExtTypesResponse

Element Attributes: name = GetGovCorpSubGroupExtTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfoSubvalue

Soap Header Message: GetGovCorpSubGroupExtTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Bindings:

Input:

soap: header message GetGovCorpSubGroupExtTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetGovCorpSubGroupExtTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetGovCorpSubGroupExtTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfoSubvalue** elements. The type **ValueInfoSubvalue** is derived from the type **ValueInfo**. The subelement of **ValueInfoSubvalue**, **Subvalue**, has a general classification of the subgroup types. The **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating a subgroup type. **Description** holds a fuller description of the subgroup type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table lists the possible values and their description:

CLASSIFICATION CODE	CLASSIFICATION	VALUE	DESCRIPTION
AGNC	Agency	ABND	Notes/Bonds Agency
AGNC	Agency	ADIS	Discount Notes
AGNC	Agency	ASTR	Strips Agency
CORP	Corporate	CFIN	Financials
CORP	Corporate	CIND	Industrials
CORP	Corporate	COTH	Other Corp
CORP	Corporate	CSVC	Services
CORP	Corporate	CUTL	Utilities
GOVT	Government	GBIL	Bills
GOVT	Government	GBND	Notes/Bonds Govt
GOVT	Government	GBOBL	Bundesobligationen
GOVT	Government	GBONOS	Bonos del Estado
GOVT	Government	GBOT	Buoni Ordinari Tesor
GOVT	Government	GBRADY	Brady Bond
GOVT	Government	GBTAN	Ctf Bons du Tresor Fixe
GOVT	Government	GBTF	Ctf Bons du Taux Fixe
GOVT	Government	GBTP	Buoni Poliennali
GOVT	Government	GBUBL	Bubill
GOVT	Government	GBUND	Bundesanleihen
GOVT	Government	GCCT	Ctf Certificati Credito
GOVT	Government	GCTE	Ctf Tesoro in ECU
GOVT	Government	GCTO	Ctf Credito Opzione
GOVT	Government	GCTZ	Ctf Tesoro Zero
GOVT	Government	GDGB	Danish Govt Bond
GOVT	Government	GDSL	Dutch State Loan
GOVT	Government	GIGB	Irish Govt Bond

CLASSIFICATION CODE	CLASSIFICATION	VALUE	DESCRIPTION
GOVT	Government	GJGB	Japanese Govt Bond
GOVT	Government	GOAT	Ctf Oblig Assim Tresor
GOVT	Government	GOBLIGAC	Obligaciones del Estado
GOVT	Government	GOLO	Obligation Lineaire
GOVT	Government	GOT	Obrigacoes do Tesouro
GOVT	Government	GSCHATZE	Schatze
GOVT	Government	GSTR	Strips Govt
OMUN	Municipal	OMUN	Non-US Munis
OTHR	Other	OPRV	Provincials
OTHR	Other	OSUP	Supranationals
OTHR	Other	OTHR	Other Govt/Supra

Operation: GetInstrumentExtractionTypes

The return message for this operation contains a list of instrument extraction type codes and their associated asset types. An instrument extraction type code is used for the **InstrumentExtractionType** string in the **DataDictionaryRequestInstrument** type. An element of the **DataDictionaryRequestInstrument** type is part of the input message for the **Define** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/GetInstrumentExtractionTypes

Binding style: document

Input Message GetInstrumentExtractionTypesSoapIn

element GetInstrumentExtractionTypes – a null element

Output Message GetInstrumentExtractionTypesSoapOut

element GetInstrumentExtractionTypesResponse

Element: GetInstrumentExtractionTypesResponse

Element Attributes: name = GetInstrumentExtractionTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfInstrumentExtractionTypeInfo

Type: ArrayOfInstrumentExtractionTypeInfo

Element Attributes: name = InstrumentExtractionTypeInfo; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: InstrumentExtractionTypeInfo

Type: InstrumentExtractionTypeInfo

Extension: base = ValueInfo

Element Attributes: name = AssetTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Element Attributes: name = MaximumInstrumentsAllowed; minOccurs = 1; maxOccurs = 1; type = s: int

Element Attributes: name = TimePeriodForLimits; minOccurs = 1; maxOccurs = 1; type = s: int

Element Attributes: name = MaximumExtractionsAllowedPerTimePeriod; minOccurs = 1; maxOccurs = 1; type = s: int

Element Attributes: name = MaximumInstrumentsAllowedPerTimePeriod; minOccurs = 1; maxOccurs = 1; type = s: int

Soap Header Message: GetInstrumentExtractionTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetInstrumentExtractionTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetInstrumentExtractionTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetInstrumentExtractionTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an **InstrumentExtractionTypeInfo** element of type **ArrayOfInstrumentExtractionTypeInfo**. The **InstrumentExtractionTypeInfo** element has a **ValueInfo** element as a base. The **ValueInfo** element contains has two string elements, **Description** and **Value**. **Value** holds a code indicating an instrument extraction type. **Description** holds a fuller description of the instrument extraction type. In addition, the **InstrumentExtractionTyp**eInfo element contains an element **AssetTypes** of type **ArrayOfValueInfo** that hold the list of asset types that are associated with each instrument extraction type. It also has an element **MaximumInstrumentsAllowed** that indicates the maximum number of instruments for which data can be extracted in a single call to the **Extract** operation. To extract data for more instruments, multiple calls to the **Extract** operation can be made.

The rate at which data for instruments that can be extracted may also be limited. This rate can be determined from the following subelements of the **InstrumentExtractionTypeInfo** element.

- The element **TimePeriodForLimits** indicates the number of seconds in the time period.
- The element **MaximumInstrumentsAllowedPerTimePeriod** indicates the number of instruments that can be extracted in that time period.
- The element **MaximumExtractionsAllowedPerTimePeriod** indicates the number of extractions of instrument data that can be made during the time periods.

A -1 value in the element **MaximumInstrumentsAllowedPerTimePeriod** indicates that there are no rate limits for instrument or extractions.

The following table lists the instrument extraction types:

VALUE	DESCRIPTION
CLC	Fixed Income Analytics
CMP	Composite
COR	Corporate Actions
EOD	EOD Pricing
ESA	Estimate Actuals
ESC	Estimate Company Footnote
ESD	Estimate Detail
ESF	Estimate Footnote
EST	Estimate Summary
FAL	Fund Allocation

VALUE	DESCRIPTION
IDP	Intraday Pricing
LOAN	Loans
MFH	MBS Factor History
MORT	MBS
PPX	Premium Pricing
PPXA4	Premium Pricing - ASIA 4PM JST
PPXA6	Premium Pricing - ASIA 6PM JST
PPXE4	Premium Pricing - EMEA 4PM GMT/BST
PPXE6	Premium Pricing - EMEA 6PM GMT/BST
PPXU3	Premium Pricing - US 3PM EST/EDT
PPXU4	Premium Pricing - US 4PM EST/EDT
RTG	Ratings
SCH	Bond Schedules
TFH	Tranche Factor History
TIN	Technical Indicators
TNC	Terms and Conditions
TPX	Time series pricing
XRF	Symbol Cross Reference

The following table lists the asset (or estimate) types associated with each instrument extraction type:

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
Bond Schedules	CONV	Convertible
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	LOAN	Loans
	MORT	MBS

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
	MUNI	Municipal
	TRNC	CMO/ABS
Composite	BMK	Benchmarks
	CE	Commodities
	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	EQTY	Equity
	FOPT	Futures & Options
	FVP	Fair Value Pricing
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	LOAN	Loans
	MMKT	Money Market
	MORT	MBS
	MUNI	Municipal
	MUTL	Mutual Funds
	OTC	OTC Equity Options
	TRNC	CMO/ABS
Corporate Action	EQTY	Equity
EOD Pricing	BMK	Benchmarks
	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	EQTY	Equity
	FOPT	Futures & Options

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
	FVP	Fair Value Pricing
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	LOAN	Loans
	MMKT	Money Market
	MORT	MBS
	MUNI	Municipal
	MUTL	Mutual Funds
	OTC	OTC Equity Options
	TRNC	CMO/ABS
Estimate Actuals	EQTY	Equity
Estimate Company Footnote	EQTY	Equity
Estimate Detail	EQTY	Equity
Estimate Detail Footnote	EQTY	Equity
Estimate Summary	EQTY	Equity
Fixed Income Analytics	CONV	Convertible
	CORP	Corporate (Investment Grade)
	GORP	Government/Agency
	HYD	Corporate (High Yield)
	MORT	MBS
	MUNI	Mujnicipal
	TRNC	CMO/ABS
Fund Allocation	MUTL	Mutual Funds
Intraday Pricing	BMK	Benchmarks
	CE	Commodities

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	CDS	Credit Default Swap
	EQTY	Equity
	FOPT	Futures & Options
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	MMKT	Money Market
	MORT	MBS
	MUNI	Municipal
	MUTL	Mutual Funds
	TRNC	CMO/ABS
MBS Factor History	MORT	MBS
Premium Pricing	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	MORT	MBS
	MUNI	Municipal
	TRNC	CMO/ABS
Premium Pricing – ASIA 4PM JST	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	MORT	MBS
	MUNI	Municipal
	TRNC	CMO/ABS
Premium Pricing – ASIA 6PM JST	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	MORT	MBS
	MUNI	Municipal
	TRNC	CMO/ABS
Premium Pricing – EMEA 4PM GMT/BST	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	MORT	MBS
	MUNI	Municipal
	TRNC	CMO/ABS
Premium Pricing – EMEA 6PM GMT/BST	CDS	Credit Default Swap
	CONV	Convertible

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	MORT	MBS
	MUNI	Municipal
	TRNC	CMO/ABS
Premium Pricing – US 3PM EST/EDT	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	MORT	MBS
	MUNI	Municipal
	TRNC	CMO/ABS
Premium Pricing – US 4PM EST/EDT	CDS	Credit Default Swap
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	IRS	Interest Rate Swap
	MORT	MBS
	MUNI	Municipal
	TRNC	CMO/ABS
Ratings	CONV	Convertible

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
	CORP	Corporate (Invest Grade)
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	LOAN	Loans
	MUNI	Municipal
	TRNC	CMO/ABS
Technical Indicators	EQT	Equity
Terms and Conditions	BMK	Benchmarks
	CE	Commodities
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	EQTY	Equity
	FOPT	Futures & Options
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	LOAN	Loans
	MiFID Sub-Class	SUBC
	MMKT	Money Market
	MORT	MBS
	MUNI	Municipal
	MUTL	Mutual Funds
	Sub-Class	SUBC
	TRNC	CMO/ABS
Timeseries Pricing Obsolete. Please use the Price History report, available via the REST API only.	BMK	Benchmarks

INSTRUMENT EXTRACTION TYPE	VALUE	DEFINITION
	CE	Commodities
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	EQTY	Equity
	FOPT	Futures & Options
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	MMKT	Money Market
	MORT	MBS
	MUNI	Municipal
	MUTL	Mutual Funds
	TRNC	CMO/ABS
Tranche Factor History	TRNC	CMO/ABS
Symbol Cross Reference	CE	Commodities
	CONV	Convertible
	CORP	Corporate (Invest Grade)
	EQTY	Equity
	FOPT	Futures & Options
	GORP	Gov't/Agency
	HIYD	Corporate (High Yield)
	MMKT	Money Market
	MORT	MBS
	MUNI	Municipal
	MUTL	Mutual Funds
	TRNC	CMO/ABS

Operation: GetInstrumentIdentifierTypes

The output message of this operation has a list of instrument identifier types. The instrument identifier type is used for the **IdentifierType** element in the **InstrumentIdentifier**, **ValidatedInstrument** and **InstrumentSearchRequestAll** types and the **PreferredIdentifierType** in the **InstrumentSearchRequest** type.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/GetInstrumentIdentifierTypes

Binding style: document

Input message GetInstrumentIdentifierTypesSoapIn

element GetInstrumentIdentifierTypes – a null element

Output Message GetInstrumentIdentifierTypesSoapOut

element GetInstrumentIdentifierTypesResponse

Element: GetInstrumentIdentifierTypesResponse

Element Attributes: name = GetInstrumentIdentifierTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetInstrumentIdentifierTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetInstrumentIdentifierTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetInstrumentIdentifierTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetInstrumentIdentifierTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description

Output Message:

The output message is an element of type **ArrayOfValueInfo**. Its elements are of type **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating an instrument identifier type. **Description** holds a fuller description of the instrument identifier type.

The following table lists the possible values and their descriptions.

VALUE	DESCRIPTION
AF	AFIP
CHR	Chain RIC
CIN	CUSIP International Number
COM	Common Code
CSP	CUSIP
FLI	Fund Lipper ID
IPC	FileCode
ISM	ISMA
ISN	ISIN
LIN	Loan Identification Number
LIP	LipperID
LOC	LocalCode
MIC	MIC
OCC	OCC Code
ORGID	Orgid
PPN	PPN
RIC	RIC
RRT	RIC Root
SED	Sedol
SIC	SICC
SVM	Sicovam
SYM	Trading Symbol
TICKER	Ticker
VAL	Valoren
WPK	Wertpapier

Operation: GetInstrumentSearchTypes

The output message of this operation has a list of **InstrumentSearchTypeInfo** elements that identify the instrument search request elements and the instrument type codes allowed for each type of instrument search request.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetInstrumentSearchTypes

Binding style: document

Input message GetInstrumentSearchTypesSoapIn

element GetInstrumentSearchTypes – a null element

Output Message GetInstrumentSearchTypesSoapOut

element GetInstrumentSearchTypesResponse

Element: GetInstrumentSearchTypesResponse

Element Attributes: name = GetInstrumentSearchTypeResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfInstrumentSearchTypeInfo

Element Type: ArrayOfInstrumentSearchTypeInfo

Element Attributes: name = InstrumentSearchTypeInfo; minOccurs= 0; maxOccurs =unbounded; nillable=true; type=tns:InstrumentSearchTypeInfo

Element Type: InstrumentSearchTypeInfo

Element Type: InstrumentSearchTypeInfo

Element Base: TypeInfo

Element Attributes: name = SupportedIdentifierTypes; minOccurs = 0; maxOccurs =1; type=tns:InstrumentSearchTypeInfo

Element Type: ArrayOfValueInfo

Complex Type: TypeInfo

Type Attribute: name = Type; minOccurs = 0; maxOccurs = 1;

Type: s:string

Soap Header Message: GetInstrumentSearchTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetInstrumentSearchTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetInstrumentSearchTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetInstrumentSearchTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message is an array of **InstrumentSearchTypeInfo** elements. The **InstrumentSearchTypeInfo** is derived from the **TypeInfo** element. The **TypeInfo** element has a string subelement **Type** that identifies the instrument search request element. The **InstrumentSearchTypeInfo** element has an array **SupportedIdentifierTypes** of **ValueInfo** elements. The **ValueInfo** element has two string elements: **Description** and **Value**. **Value** holds a code indicating a search type code. **Description** holds a description of the instrument search type code. The search type codes are possible values for the **IdentifierType** element of the elements derived from the **InstrumentSearchRequest** element.

The following table lists the possible values and their descriptions:

INSTRUMENTSEARCHREQUEST ELEMENT	SEARCH TYPE CODE	DESCRIPTION
InstrumentSearchRequestAll	COM	CommonCode
	CIN	CUSIP International Number
	CSP	CUSIP
	FLI	Fund Lipper ID
	ISM	ISMA
	ISN	ISIN
	LIP	LipperID
	LOC	LocalCode
	MIC	MIC
	ORGID	OrgID
	RIC	RIC
	SED	Sedol
	SIC	SICC
	SVM	Sicovam
	SYM	Trading Symbol
	TICKER	Ticker
	VAL	Valoren
	WPK	Wertpapier
InstrumentSearchRequestCmoAbs	CIN	CUSIP International Number
	COM	CommonCode

INSTRUMENTSEARCHREQUEST ELEMENT	SEARCH TYPE CODE	DESCRIPTION
	CSP	CUSIP
	ISN	ISIN
	RIC	RIC
	SED	Sedol
	SVM	Sicovam
	VAL	Valoren
	WPK	Wertpapier
InstrumentSearchRequestEquities	CIN	CUSIP International Number
	COM	CommonCode
	CSP	CUSIP
	ISN	ISIN
	MIC	MIC
	RIC	RIC
	SED	Sedol
	SIC	SICC
	SVM	Sicovam
	SYM	Trading Symbol
	VAL	Valoren
	WPK	Wertpapier
InstrumentSearchRequestFuturesAndOptions	ISN	ISIN
	OCC	OCC Code
	RIC	RIC
	RRT	RIC Root
	SYM	Trading Symbol
InstrumentSearchRequestGovCorp	CIN	CUSIP International Number
	COM	CommonCode
	CSP	CUSIP
	ISM	ISMA
	ISN	ISIN

INSTRUMENTSEARCHREQUEST ELEMENT	SEARCH TYPE CODE	DESCRIPTION
	LOC	LocalCode
	RIC	RIC
	SED	Sedol
	SIC	SICC
	SVM	Sicovam
	VAL	Valoren
	WPK	Wertpapier
InstrumentSearchRequestMortPassThru	CSP	CUSIP
	ISN	ISIN
InstrumentSearchRequestUSMunicipals	CSP	CUSIP
	RIC	RIC

Operation: GetInstrumentTypes

The output message of this operation has a list of instrument types covered by DataScope Select.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetInstrumentTypes

Binding style: document

Input message GetInstrumentTypesSoapIn

element GetInstrumentTypes – a null element

Output Message GetInstrumentTypesSoapIn

element GetInstrumentTypesResponse

Element: GetInstrumentTypesResponse

Element Attributes: name = GetInstrumentTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetInstrumentTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetInstrumentTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetInstrumentTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetInstrumentTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message is an array of **ValueInfo** elements. The **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating an instrument type. **Description** holds a fuller description of the instrument type.

The following table lists the possible values and their descriptions:

VALUE	DESCRIPTION
CE	Commodoties
CM	CMO/ABS
EQ	Equities
FD	Funds
FT	Futures & Options
GC	Gov/Corp
MB	MBS
MN	Money
MP	US Municipals

Operation: GetLegalEntityExtractionTypes

The output message of this operation contains a list of legal entity extraction types. Extraction types are used in the **DataDictionaryRequestLegalEntity** element that is an element in the input message for the **Define** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetLegalEntityExtractionTypes

Binding style: document

Input Message GetLegalEntityExtractionTypesSoapIn

element GetLegalEntityExtractionTypes –a null element

Output Message GetLegalEntityExtractionTypesSoapOut

element GetLegalEntityExtractionTypesResponse

Element: GetLegalEntityExtractionTypesResponse

Element Attributes: name = GetLegalEntityExtractionTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfLegalEntityExtractionTypeInfo

Type: LegalEntityExtractionTypeInfo

Extension: base = tns: ValueInfo

Element Attribute: name = MaximumLegalEntitiesAllowed; minOccurs = 1; maxOccurs= 1; type = s: int

Element Attribute: name = TimePeriodForLimits; minOccurs = 1; maxOccurs = 1; type = s: int

Element Attributes: name = MaximumExtractionsAllowedPerTimePeriod; minOccurs = 1; maxOccurs = 1; type = s: int

Element Attributes: name = MaximumLegalEntitiesAllowedPerTimePeriod; minOccurs = 1; maxOccurs = 1; type = s: int

Soap Header Message: GetLegalEntityExtractionTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetLegalEntityExtractionTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetLegalEntityExtractionTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetLegalEntityExtractionTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type array of **ArrayOfLegalEntityExtractionTypeInfo**. The element **LegalEntityExtractionTypeInfo** is derived from the **ValueInfo** element. The **ValueInfo** type has two string elements, **Description** and **Value**. **Value** holds a code indicating a counterparty extraction type. **Description** holds a fuller description of the counterparty extraction type.

The element **LegalEntityExtractionTypeInfo** has a subelement **MaximumLegalEntitiesAllowed** that indicates the maximum number of legal entities for which data can be extracted in a single call to **Extract**. To extract data for additional legal entities, multiple calls to the operation **Extract** can be made.

The rate at which legal entities can be extracted may also be limited. The element **LegalEntityExtractionTypeInfo** has subelements **TimePeriodForLimits**, **MaximumLegalEntitiesAllowedPerTimePeriod**, and **MaximumExtractionsAllowedPerTimePeriod** that determine this limitation.

- **TimePeriodForLimits** indicates the number of seconds in the time period.
- **MaximumLegalEntitiesAllowedPerTimePeriod** indicates the number of legal entities for which data can be extracted by your program during that time period.
- **MaximumExtractionsAllowedPerTimePeriod** indicates the number of extractions of legal entity data that can be made during the time periods.

A -1 in **MaximumLegalEntitiesAllowedPerTimePeriod** indicates that there are no rate limits for legal entities or extractions.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
LEA	Legal Entity Audit
LED	Legal Entity Detail
LEH	Legal Entity Hierarchy
RTG	Ratings
TNC	Terms and Conditions

Operation: GetLegalEntityIdentifierTypes

The output message of this operation has a list of legal entity identifier types. The legal entity identifier type is used for the **IdentifierType** element in the **LegalEntityIdentifier**, **ValidatedLegalEntity** and **LegalEntitySearchRequestAll** types.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetLegalEntityIdentifierTypes

Binding style: document

Input Message GetLegalEntityIdentifierTypesSoapIn

element GetLegalEntityIdentifierTypes –a null element

Output Message GetLegalEntityIdentifierTypesSoapOut

element GetLegalEntityIdentifierTypesResponse

Element: GetLegalEntityIdentifierTypesResponse

Element Attributes: name = GetLegalEntityIdentifierTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetLegalEntityIdentifierTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetLegalEntityIdentifierTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetLegalEntityIdentifierTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetLegalEntityIdentifierTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message is of type **ArrayOfValueInfo**. Its elements are of type of **ValueInfo**. The **ValueInfo** element has two elements, **Description** and **Value**. **Value** holds a code indicating a legal entity identifier type. **Description** holds a fuller description of the legal entity identifier type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
BIC	Busines Identifier Code
ORG	Organization Id
RCP	Counterparty Id

Operation: GetMbsAgencyTypes

The output message of this operation contains a list of agency types for mortgage back securities. Agency types are used in the **InstrumentSearchRequestMortPassThru** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetMbsAgencyTypes

Binding style: document

Input Message GetMbsAgencyTypesSoapIn

element GetMbsAgencyTypes –a null element

Output Message GetMbsAgencyTypesSoapOut

element GetMbsAgencyTypesResponse

Element: GetMbsAgencyTypesResponse

Element Attributes: name = GetMbsAgencyTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Message: GetMbsAgencyTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetMbsAgencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetMbsAgencyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetMbsAgencyTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetMbsAgencyTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a mortgage backed security agency type. **Description** holds a fuller description of the agency type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
0x00000b000a1e7669	NONE
0x000019000050642d	FHLMC
0x000019000050662f	FNMA
0x000019000051f1b9	SBA
0x00001900005282c9	GNMA1
0x00001900005283c8	GNMA2

Operation: GetMbsAmortizationTypes

The output message of this operation contains a list of amortization types for mortgage back securities. Amortization types are used in the **InstrumentSearchRequestMortPassThru** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetMbsAmortizationTypes

Binding style: document

Input Message GetMbsAmortizationTypesSoapIn

element GetMbsAmortizationTypes –a null element

Output Message GetMbsAmortizationTypesSoapOut

element GetMbsAmortizationTypesResponse

Element: GetMbsAmortizationTypesResponse

Element Attributes: name = GetMbsAmortizationTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetMbsAmortizationTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetMbsAmortizationTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetMbsAmortizationTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetMbsAmortizationTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetMbsAmortizationTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a mortgage backed security amortization type. **Description** holds a fuller description of the amortization type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
A	Arm
B	Balloon
G	Gpm
H	Gem
L	Level Pay
T	Tpm
W	Biweekly

Operation: GetMbsAssetStatusTypes

The output message of this operation contains a list of asset status types for mortgage back securities. Asset status types are used in the **InstrumentSearchRequestMortPassThru** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetMbsAssetStatusTypes

Binding style: document

Input Message GetMbsAssetStatusTypesSoapIn

element GetMbsAssetStatusTypes –a null element

Output Message GetMbsAssetStatusTypesSoapOut

element GetMbsAssetStatusTypesResponse

Element: GetMbsAssetStatusTypesResponse

Element Attributes: name = GetMbsAssetStatusTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Message: GetMbsAssetStatusTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetMbsAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetMbsAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetMbsAssetStatusTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetMbsAssetStatusTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a mortgage backed security asset status type. **Description** holds a fuller description of the asset status type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
ISS	Issued
MAT	Expired/Matured
NAC	Not Active

Operation: GetMbsPoolTypes

The output message of this operation contains a list of pool types for mortgage back securities. Pool types are used in the **InstrumentSearchRequestMortPassThru** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetMbsPoolTypes

Binding style: document

Input Message GetMbsPoolTypesSoapIn

element GetMbsPoolTypes –a null element

Output Message GetMbsPoolTypesSoapOut

element GetMbsPoolTypesResponse

Element: GetMbsPoolTypesResponse

Element Attributes: name = GetMbsPoolTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetMbsPoolTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetMbsPoolTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetMbsPoolTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetMbsPoolTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetMbsPoolTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a mortgage backed security pool type. **Description** holds a fuller description of the pool type.

The following table lists a sample of the possible values and their definitions:

VALUE	DEFINITION
FG00	FHLMC SECURITY
FGB3	FH 30yr GOLD (MINI)
FGV6	FH 15yr CASH ISS. GOLD,:
FGV7	FH 20yr CASH ISS. GOLD:
FGV8	FH 30yr CASH ISS. GOLD
FGZ5	FH 15yr REV REMIC GIANT
FNHN	FN ACT/360 MF 10YR
FNJI	FN 15yr >15% spec. OR JUMBO
FNJL	FN 30yr >15% spec. OR JUMBO

Operation: GetMbsSecurityGroupTypes

The output message of this operation contains a list of security group types for mortgage back securities. Security group types are used in the **InstrumentSearchRequestMortPassThru** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetMbsSecurityGroupTypes

Binding style: document

Input Message GetMbsSecurityGroupTypesSoapIn

element GetMbsSecurityGroupTypes –a null element

Output Message GetMbsSecurityGroupTypesSoapOut

element GetMbsSecurityGroupTypesResponse

Element: GetMbsSecurityGroupTypesResponse

Element Attributes: name = GetMbsSecurityGroupTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetMbsSecurityGroupTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetMbsSecurityGroupTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetMbsSecurityGroupTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetMbsSecurityGroupTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetMbsSecurityGroupTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a mortgage backed security group type. **Description** holds a fuller description of the security group type.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
M	Generics
P	Agency Pools
TBA	TBAs

Operation: GetMbsSettleMonthTypes

The output message of this operation contains a list of numeric codes for the months in which a mortgage back security can settle. The settle month codes are used in the **InstrumentSearchRequestMortPassThru** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetMbsSettleMonthTypes

Binding style: document

Input Message GetMbsSettleMonthTypesSoapIn

element GetMbsSettleMonthTypes –a null element

Output Message GetMbsSettleMonthTypesSoapOut

element GetMbsSettleMonthTypesResponse

Element: GetMbsSettleMonthTypesResponse

Element Attributes: name = GetMbsSettleMonthTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetMbsSettleMonthTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetMbsSettleMonthTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetMbsSettleMonthTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns: GetMbsSettleMonthTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, GetMbsSettleMonthTypesResult. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating a month in which a mortgage back security can settle. **Description** holds the full name of the month.

The following table lists the possible values and their definitions:

VALUE	DEFINITION
1	January
2	February
3	March
4	April
5	May
6	June
7	July
8	December
9	September
10	October
11	November
12	December

Operation: GetPremiumPricingTypes

This method returns a list of codes for premium pricing region/cycles.

Values from this operation are valid parameters for the **PremiumPricingType** element of the **InstrumentExtractionRequestPremiumPricing**.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetPremiumPricingTypes

Binding style: document

Input Message GetPremiumPricingTypesSoapIn

element GetPremiumPricingTypes – a null element

Output Message GetPremiumPricingTypesSoapOut

element GetPremiumPricingTypesResponse

Element: Get PremiumPricingTypes**Response**

Element Attributes: name = GetPremiumPricingRegionCycleResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetPremiumPricingTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetPremiumPricingTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetPremiumPricingTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetPremiumPricingTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating a region/pricing cycle. **Description** holds a fuller description of the source type.

The following table lists the values and descriptions.

Value	Description
AS15	Premium Pricing Asia 3:00 PM JST
AS16	Premium Pricing Asia 4:00 PM JST
AS18	Premium Pricing Asia 6:00 PM JST
EM12	Premium Pricing EMEA 12:00 PM GMT/BST
EM14	Premium Pricing EMEA 2:00 PM GMT/BST
EM16	Premium Pricing EMEA 4:00 PM GMT/BST
EM18	Premium Pricing EMEA 6:00 PM GMT/BST
US15	Premium Pricing US 3:00 PM EST/EDT
US16	Premium Pricing US 4:00 PM EST/EDT

Operation: GetNewsItemsLanguages

This method returns a list of codes for languages from which news items content is retrieved.

These values are for the **Languages** subelement of the **NewsItemsFieldConstraint** element. This element and values from this operation are valid parameters for the **NewsItemsFieldConstraint** element of the **InstrumentExtractionRequestNewsItems**.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetNewsItemsLanguages

Binding style: document

Input Message GetNewsItemsLanguagesSoapIn

element GetNewsItemsLanguages – a null element

Output Message GetNewsItemsLanguagesSoapOut

element GetNewsItemsLanguagesResponse

Element: GetNewsItemsLanguagesResponse

Element Attributes: name = GetNewsItemsLanguagesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetNewsItemsLanguagesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetNewsItemsLanguagesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetNewsItemsLanguagesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetNewsItemsLanguagesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating a language code type. **Description** holds a fuller description of the language code.

For a list of Languages, refer to:
Appendix G of the DataScope Select Data Content Guide for release 5.2. For a list of Languages, refer to: **Appendix G** of the **DataScope Select Data Content Guide for release 5.2.**

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

This table below is a sample of the News Items Languages.

VALUE	DESCRIPTION
AR	Arabic
BG	Bulgarian
CS	Czech

Operation: GetNewsItemsTopicCodes

This method returns a list of codes for sources from which news content is retrieved.

These values are for the **TopicCodes** subelement of the **NewsItemsFieldConstraint** element. This element and values from this operation are valid parameters for the **NewsItemsFieldConstraint** element of the **InstrumentExtractionRequestNewsItems**.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetNewsItemsTopicCodes

Binding style: document

Input Message GetNewsItemsTopicCodesSoapIn

element GetNewsItemsTopicCodes – a null element

Output Message GetNewsItemsTopicCodesSoapOut

element GetNewsItemsTopicCodesResponse

Element: GetNewsItemsTopicCodesResponse

Element Attributes: name = GetNewsItemsTopicCodesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetNewsItemsTopicCodesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetNewsItemsTopicCodesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetNewsItemsTopicCodesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetNewsItemsTopicCodesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating a topic type. **Description** holds a fuller description of the topic type.

For a list of Topic Codes, refer to:
Appendix G of the DataScope Select Data Content Guide for release 5.2. For a list of Topic Codes, refer to: **Appendix G** of the **DataScope Select Data Content Guide for release 5.2.**

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

This table below is a sample of the News Items Topic Codes.

VALUE	DESCRIPTION
AAA	Credit / Debt Ratings
ABS	Asset-Backed Securities
ACB	Anti-competitive Behaviour / Price Fixing

Operation: GetNewsItemsSourceValues

This method returns a list of codes for sources from which news content is retrieved.

These values are the **Sources** subelement of the **NewsItemsFieldConstraint** element. This element and values from this operation are valid parameters for the **NewsItemsFieldConstraint** element of the **InstrumentExtractionRequestNewsItems**.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetNewsItemsSourceValues

Binding style: document

Input Message GetNewsItemsSourceValuesSoapIn

element GetNewsItemsSourceValues – a null element

Output Message GetNewsItemsSourceValuesSoapOut

element GetNewsItemsSourceValuesResponse

Element: GetNewsItemsSourceValuesResponse

Element Attributes: name = GetNewsItemsSourceValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetNewsItemsSourceValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetNewsItemsSourceValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetNewsItemsSourceValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetNewsItemsSourceValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating a source type. **Description** holds a fuller description of the source type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table lists the values and descriptions.

CODE	DESCRIPTION
ACN	Asian Corporate Newswire
ACT	Actus News
ASX	Australian Stock Exchange
AWP	Aktiengesellschaft für Wirtschaftspublikationen
BIA	Borsa Italia
BMYS	Bursa Malaysia Securities
BNM	Bank Negara Malaysia
BSE	Bombay Stock Exchange
BSW	Business Wire
CIS	Cision
CNI	Shenzen Securities Information Co. Ltd.
CNMV	Comisión Nacional del Mercado de Valores
DGP	DGAP
DIR	Direkt News
DWE	DealWatch Equity
EANS	News Aktuell
ECRI	Economic Cycle Research Institute
EDLY	eDaily News
EDM	eDaily Market Plus
EPW	Europower News
EQS	Equity Story
FCT	4Cast
FSC	Filing Services Canada Newswire
GNW	Globe Newswire
HGN	Hugin News Service
HIIS	Hong Kong Stock Exchange IIS

CODE	DESCRIPTION
JCN	Japan Corporate News
JSE	Johannesburg Stock Exchange
KLSE	Kuala Lumpur Stock Exchange
MKW	Market Wire
MTD	Money Today (Korean)
NBD -	National Bank of Denmark
NUMM	Nordpool
NZXR	New Zealand Stock Exchange
OBI	Oslo Stock Exchange
OMSS	NASDAQ OMX Saxess System Messages
ONE	Thomson Reuters ONE
PHSE	Philippines Stock Exchange
PNW	Prime Newswire
PRN	PR Newswire
RNS	Regulatory News Service
ROM	Romeike
RSE	Riga Stock Exchange
SEHK	Hong Kong Stock Exchange
SET	Thailand Stock Exchange
SGX	Singapore Stock Exchange
SHSE	Shanghai Stock Exchange
TBMA	Thai Bond Market Association
TDB	Teikoku Databank
TEN	Tensid
TIJD	Tijd Nieuwslijn (Dutch)
TLSE	Tallinn Stock Exchange
VMN	Market News Publishing Inc.

CODE	DESCRIPTION
VSE	Vilnius Stock Exchange
WSC	Weather Services Corporation

Operation: GetRatingsSourceValues

This method returns a list of codes for sources from which ratings content is retrieved.

These values are the **Sources** subelement of the **RatingsFieldConstraint** element. This element and values from this operation are valid parameters for the **RatingsFieldConstraint** element of the **InstrumentExtractionRequestRatings**.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetRatingsSourceValues

Binding style: document

Input Message GetRatingsSourceValuesSoapIn

element GetRatingsSourceValues – a null element

Output Message GetRatingsSourceValuesSoapOut

element GetRatingsSourceValuesResponse

Element: GetRatingsSourceValuesResponse

Element Attributes: name = GetRatingsSourceValuesResult; minOccurs = 0 maxOccurs=1

Element Type: ArrayOfValueInfo

Soap Header Message: GetRatingsSourceValuesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetRatingsSourceValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetRatingsSourceValuesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetRatingsSourceValuesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements. The **ValueInfo** element has two string members, **Description** and **Value**. **Value** holds a code indicating a source type. **Description** holds a fuller description of the source type.

The data in the output message of this discoverability operation can change day to day and therefore should not be hardcoded.

The following table lists the values and descriptions.

CODE	DESCRIPTION
ACG	Austin National Scale Corporate Governance Rating
AGS	Austin Long-term Global Scale Issuer Rating
AKI	AK&M Long-Term Issuer Rating
AKM	AK&M Long-Term Issue Credit Rating
AMQ	Austin National Scale Asset Management Quality Rating
ASI	Austin Long-term National Scale Issuer Rating
ASS	Austin Short-term National Scale Issuer Rating
AST	Austin Short-term National Scale Issue Rating
AUS	Austin Long-term National Scale Issue Rating
CAF	Class & Asociados Financial Strength Rating
CAI	Class & Asociados Long-Term Issuer National Scale Rating
CAQ	Class & Asociados Local And Regional Government Quality Rating
CAR	Credit Analysis & Research Ltd
CAS	Credit Analysis & Research Ltd - Short-term
CCI	China Credit Long-term Issuer Credit Rating
CCR	China Credit Long-term Issue Credit Rating
CCS	China Credit Short-term Issue Credit Rating
CCX	China Chengxin International Credit Rating Co Ltd - Commercial Paper & Short-Term Debt
CHI	China Chengxin International Credit Rating Co Ltd
CHX	China Chengxin International Credit Rating Co Ltd
CLA	Class & Asociados Long-Term National Scale Rating
CLC	China Lianhe Credit Rating Co Ltd - Commercial Paper & Short-Term Debt
CLI	China Lianhe Credit Rating Co Ltd
CLR	China Lianhe Credit Rating Co Ltd
COM	Comision Clasificadora
CRL	CRISIL Long-term Issue Credit Rating

CODE	DESCRIPTION
CRS	CRISIL Short-term Issue Credit Rating
CSI	China Chengxin Securities Rating Co Ltd
CSN	Class & Asociados Short-Term National Scale Rating
CSR	China Chengxin Securities Rating Co Ltd
DGC	Dagong Short-term Issue Credit Rating
DGI	Dagong Long-term Issuer Credit Rating
DGR	Dagong Long-term Issue Credit Rating
DIC	Dominion Bond Rating Service (DBRS) - Claims Paying Ability
DIF	Dominion Bond Rating Service (DBRS) - Income Fund Stability
DIS	Dominion Bond Rating Service (DBRS) - Long-term Issuer
DOM	Dominion Bond Rating Service (DBRS) - Bond
DPF	Dominion Bond Rating Service (DBRS) - Preferred Share
DSS	Dominion Bond Rating Service (DBRS) - Short-term Issuer
DST	Dominion Bond Rating Service (DBRS) - Commercial Paper & Short-Term Debt
EHI	EULER HERMES LONG-TERM ISSUER RATING
EHR	EULER HERMES LONG-TERM ISSUE RATING
ELA	Evaluadora Latinoamericana National Scale Issue Rating
ELI	Evaluadora Latinoamericana National Scale Issuer Rating
FBD	Fitch's Subordinated
FBN	Fitch's Subordinated Secured Note
FBP	Fitch's Backed Commercial Paper
FBS	Fitch's Bank Support
FBV	Fitch's Viability Rating
FCP	Fitch's Commercial Paper
FDL	Fitch's Long-term Issuer Default Rating
FDR	Fitch's Issue Distressed Recovery Rating
FDS	Fitch's Short-term Issuer Default Rating

CODE	DESCRIPTION
FFN	Fitch's National Insurer Financial Strength
FIF	Fitch's Insurer Financial Strength
FIN	Fitch's Long-term Issuer National Scale Rating
FIS	Fitch's Long-term Issuer Rating
FIV	Fitch's Issuer Volatility Rating
FJB	Fitch's Junior Subordinated
FLN	Fitch's Long-term National Scale Rating
FLR	Feller-Rate Long-term Issuer National Scale Rating
FRL	Feller-Rate Long-term National Scale Rating
FRM	Feller-Rate Master Servicer Rating
FRO	Feller-Rate Originators Rating
FRP	Feller-Rate Primary Servicer Rating
FRR	Fitch's Issue Recovery Rating
FRS	Feller-Rate Short-term National Scale Rating
FSB	Fitch's Senior Subordinated
FSC	Fitch's Sovereign Country Ceiling Rating
FSE	Fitch's Senior Secured
FSN	Fitch's Short-term National Scale Rating
FSR	Fitch's Secured
FSS	Fitch's Short-term Issuer Rating
FST	Fitch's Short-term Issue Credit Rating
FSU	Fitch's Senior Unsecured
FTC	Fitch's Long-term Issue Credit Rating
FTN	Fitch's Short-term Issuer National Scale Rating
FUN	Fitch's Long-term Unenhanced Rating
FUS	Fitch's Short-term Unenhanced Rating
FVR	Fitch's Issue Volatility Rating

CODE	DESCRIPTION
GCI	Golden Credit Long-term Issuer Credit Rating
GCR	Golden Credit Long-term Issue Credit Rating
GCS	Golden Credit Short-term Issue Credit Rating
HCP	HR's Commercial Paper
HLR	HR's Long-term Issue Rating
HLT	HR's Long-term Issuer Rating
HQE	HR's Special Servicer Quality
HQM	HR's Master Servicer Quality
HQP	HR's Primary Servicer Quality
HSR	HR's Short-term Issue Rating
HST	HR's Short-term Issuer Rating
HUC	Humphreys Long-Term Commercial Paper Rating
HUL	Humphreys Long-Term National Scale Rating
HUM	Humphreys Long-Term Issuer National Scale Rating
HUQ	Humphreys Service Quality Rating
HUS	Humphreys Short-Term Commercial Paper Rating
ICR	Investment Info & Rtng of India
JCI	JCR Long Term Issuer Rating
JCP	JCR Commercial Paper Rating
JCR	JCR Long Term Issue Credit Rating
JPA	JCR Insurance Claims Paying Ability Rating
JSD	JCR Short Term Issuer Rating
JSV	JCR Servicer Rating
KIS	Korea Investors Service, Inc
KMC	Korea Ratings
KMS	Korea Ratings - Electronic Short-Term Bond
KSS	Korea Investors Service, Inc - Electronic Short-Term Bond

CODE	DESCRIPTION
LFB	LFRating Brokers National Scale Rating
LFC	LFRating Credit Cooperatives National Scale Rating
LFL	LFRating Long-Term Issuer National Scale Rating
LFR	LFRating Long-Term National Scale Rating
LFS	LFRating Short-Term National Scale Rating
MAR	Malaysia Rating Corporation Bhd
MAS	Malaysia Rating Corporation Bhd - Short-Term
MBD	Moody's Subordinated
MBF	Moody's Bank Financial Strength
MBP	Moody's Backed Commercial Paper
MCD	Moody's Long-term Bank Deposit
MCF	Moody's Corporate Family Rating
MCI	Moody's Short-term Issuer Counterparty Instrument Rating
MCP	Moody's Commercial Paper
MDL	Moody's Derived Long-term Issuer Rating
MDY	Moody's Long-term Issue Credit Rating
MES	Moody's Estimated Senior Rating
MIF	Moody's Insurer Financial Strength
MIN	Moody's Long-term Issuer National Scale Rating
MIS	Moody's Long-term Issuer Rating
MJB	Moody's Junior Subordinated
MLH	Moody's Long-term Enhanced Rating
MLI	Moody's Long-term Insured Rating
MLN	Moody's Long-term National Scale Rating
MLP	Moody's Long-term Issuer Counterparty Rating
MMQ	Moody's Management Quality
MPD	Moody's Probability of Default Rating

CODE	DESCRIPTION
MPI	Moody's Long-term Issuer Counterparty Instrument Rating
MQM	Moody's Master Servicer Quality
MQP	Moody's Primary Servicer Quality
MQS	Moody's Special Servicer Quality
MRS	Moody's Most Recent Short-term Rating
MSB	Moody's Senior Subordinated
MSD	Moody's Short-term Bank Deposit
MSE	Moody's Senior Secured
MSF	Moody's Short-term Insurer Financial Strength
MSH	Moody's Short-term Enhanced Rating
MSI	Moody's Short-term Insured Rating
MSL	Moody's Speculative Grade Liquidity
MSN	Moody's Short-term National Scale Rating
MSP	Moody's Short-term Issuer Counterparty Rating
MSS	Moody's Short-term Issuer Rating
MST	Moody's Short-term Issue Credit Rating
MSU	Moody's Senior Unsecured
MSY	Moody's Lloyd's Syndicate Performance
MTB	Moody's Short-Term Country Ceiling Bank Deposit Rating
MTC	Moody's Short-Term Country Ceiling Rating
MTN	Moody's Short-term Issuer National Scale Rating
MUN	Moody's Long-term Underlying Rating
MUS	Moody's Short-term Underlying Rating
MVB	Moody's Long-Term Country Ceiling Bank Deposit Rating
MVC	Moody's Long-Term Country Ceiling Rating
NCS	NICE Investors Service Co., Ltd. - Electronic Short-Term Bond
NIC	NICE Investors Service Co., Ltd.

CODE	DESCRIPTION
PBC	People's Bank of China Long-term Issue Credit Rating
PBI	People's Bank of China Long-term Issuer Credit Rating
PBS	People's Bank of China Short-term Issue Credit Rating
PEF	Pefindo, Indonesia Rating Agency
PEP	Pefindo, Indonesia Rating Agency
PRP	Philippine Rating Services Corp - Short-Term Issue Rating
PRS	Philippine Rating Services Corp - Long Term Issue Rating
PRT	Philippine Rating Services Corp - Long Term Issuer Rating
PYC	Pengyuan Credit Rating Co Ltd - Commercial Paper & Short-Term Debt
PYI	Pengyuan Credit Rating Co Ltd
PYR	Pengyuan Credit Rating Co Ltd
R&I	R&I Long Term Issue Credit Rating
RAI	RA Expert Long-term Issuer Rating
RAM	Rating Agency Malaysia Berhad
RAS	Rating Agency Malaysia Berhad - Short-Term
RAX	RA Expert Long-term Issue Credit Rating
RCP	R&I Commercial Paper
RII	R&I Long Term Issuer Rating
RIL	NRA Long-term Issuer International Scale Rating
RIR	NRA Long-term Issuer National Scale Rating
RNL	NRA Long-term Issue International Scale Credit Rating
RNR	NRA Long-term Issue National Scale Credit Rating
RPA	R&I Insurance Claims Paying Ability
RRI	RusRating Long-term Issuer International Scale Rating
RRL	RusRating Long-term Issuer National Scale Rating
RSD	R&I Short Term Senior Debts Rating
RSV	R&I Servicer Rating

CODE	DESCRIPTION
RUI	RusRating Long-term Issue International Scale Credit Rating
RUR	RusRating Long-term Issue National Scale Credit Rating
S&P	Standard & Poor's
SAB	S&P's Servicer Rankings: Asset Backed Servicer
SAL	S&P's Servicer Rankings: Aircraft Leasing
SAM	S&P's Servicer Rankings: Residential Subordinate Lien Mortgage Servicer
SAU	S&P's Servicer Rankings: Auto Loans/Leases
SBA	S&P's Servicer Rankings: Small Balance Commercial Mortgage Special Servicer
SBC	Shanghai Brilliance Credit Rating & Investors Service Co Ltd - Commercial Paper & Short-Term Debt
SBD	S&P's Subordinated
SBF	S&P's Bank Fundamental Strength Ratings
SBI	Shanghai Brilliance Credit Rating & Investors Service Co Ltd
SBL	S&P's Long-term Bank Loan Recovery Scale
SBM	Asset Backed Master Servicer
SBP	S&P's Backed Commercial Paper
SBR	Shanghai Brilliance Credit Rating & Investors Service Co Ltd
SBS	S&P's Bank Survivability Assessment
SCC	S&P's Servicer Rankings: Credit Cards
SCF	S&P's Servicer Rankings: Commercial Finance Servicer
SCI	Seoul Credit Rating & Information Inc
SCL	S&P's Servicer Rankings: Commercial Construction Loan Servicer
SCN	S&P's Servicer Rankings: Commercial Construction Loan Special Servicer
SCP	S&P's Commercial Paper
SCR	SCRiesgo Long-term National Scale Rating
SDR	S&P's Dual-term Underlying Rating

CODE	DESCRIPTION
SDU	S&P's Dual-term Ratings
SEQ	S&P's Servicer Rankings: Equipment Leasing
SES	Seoul Credit Rating & Information Inc - Electronic Short-Term Bond
SFA	S&P's Servicer Rankings: Commercial Finance Special Servicer
SFC	Shanghai Far East Credit Rating Co Ltd - Commercial Paper & Short-Term Debt
SFE	S&P's Long-term Financial Enhancement
SFI	Shanghai Far East Credit Rating Co Ltd
SFN	S&P's Servicer Rankings: Franchise
SFP	S&P's Long-term Financial Program
SFR	Shanghai Far East Credit Rating Co Ltd
SFS	S&P's Long-term Insurer Financial Strength
SIN	S&P's Long-term Issuer National Scale Rating
SIS	S&P's Short-term Issuer Credit Rating
SJB	S&P's Junior Subordinated
SLC	S&P's Servicer Rankings: Consumer Finance Special Servicer
SLN	S&P's Long-term National Scale Rating
SLR	S&P's Long-term Underlying Rating
SLS	S&P's Servicer Rankings: Commercial Loan Servicer
SMB	S&P's Servicer Rankings: Multifamily Housing Revenue Bond Servicer
SMH	S&P's Servicer Rankings: Manufactured Housing
SMR	S&P's Servicer Rankings: Residential Reverse Mortgage Servicer
SMS	S&P's Servicer Rankings: Commercial Master Servicer
SPI	S&P's Long-term Issuer Rating
SRI	SCRiesgo Insurance Co Issuer National Scale Rating
SRL	S&P's Servicer Rankings: Residential Loan Servicer
SRM	S&P's Servicer Rankings: Residential Master Servicer
SRN	SCRiesgo Long-Term Issuer National Scale Rating

CODE	DESCRIPTION
SRP	SCRiesgo PFM Issuer National Scale Rating
SRS	S&P's Servicer Rankings: Residential Special Servicer
SRT	SCRiesgo Short-term National Scale Rating
SSB	S&P's Servicer Rankings: Small Balance Commercial Mortgage Servicer
SSC	S&P's School ICR Rating
SSD	S&P's Secured Subordinated Debt
SSE	S&P's Senior Secured
SSL	S&P's Servicer Rankings: Student Loan
SSN	S&P's Short-term National Scale Rating
SSP	S&P's Servicer Rankings: Subprime Loan Servicer
SSR	S&P's Short-term Underlying Rating
SSS	S&P's Servicer Rankings: Commercial Special Servicer
SST	Standard & Poor's Short-term
SSU	S&P's Senior Unsecured
STL	S&P's Servicer Rankings: Tax Lien Servicer
STN	S&P's Short-term Issuer National Scale Rating
STS	S&P's Servicer Rankings: Time Share
TRC	Taiwan Rating Corporation
TRI	TRIS Rating Co Ltd - Issuer
TRS	TRIS Rating Co Ltd - Bond
TWI	Taiwan Rating Corporation Issuer

Operation: GetSymbolCrossReferenceTypes

The output message of this operation contains a list of symbol cross reference types. The symbol cross reference types are used in the **InstrumentExtractionRequestSymbolCrossReference** element that is an element in the input message for the **Extract** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetSymbolCrossReferenceTypes

Binding style: document

Input Message GetSymbolCrossReferenceTypesSoapIn

element GetSymbolCrossReferenceTypes –a null element

Output Message GetSymbolCrossReferenceTypesSoapOut

element GetSymbolCrossReferenceTypesResponse

Element: GetSymbolCrossReferenceTypesResponse

Element Attributes: name = GetSymbolCrossReferenceTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetSymbolCrossReferenceTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetSymbolCrossReferenceTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetSymbolCrossReferenceTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message GetSymbolCrossReferenceTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Descriptions:

Output Message:

The output message has an element of the type **ArrayOfValueInfo**, **GetSymbolCrossReferenceTypesResult**. Each **ValueInfo** object has two string elements, **Description** and **Value**. **Value** holds a code indicating symbol cross reference type. **Description** holds the full description of the code.

The following table lists the possible values and their definitions:

VALUE	DESCRIPTION
COM	Common Code
CSP	CUSIP
ISM	ISMA
ISN	ISIN
LIP	Lipper
LOC	Local Code
MIC	Market Identifier Code
OPL	OPOL
RIC	RIC
SED	Sedol
SIC	SICC
SVM	Sicovam
VAL	Valoren
WPK	Wertpapier
ZPG	ZPage

Operation: GetTimeseriesLookbackPeriodTypes

Obsolete. Please use the Price History report, available via the REST API only.

This method returns a list of period types that are used for the lookback period for historical timeseries pricing. The array returned has objects that contain values for the **LookbackPeriod** subelement in the timeseries request element, **InstrumentExtractionRequestTimeSeriesPricing**.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/TimeseriesLookbackPeriodTypes.

Binding style: document

Input Message TimeseriesLookbackPeriodTypesSoapIn

element TimeseriesLookbackPeriodTypes – a null element

Output Message TimeseriesLookbackPeriodTypesSoapOut

element TimeseriesLookbackPeriodTypesResponse

Element: TimeseriesLookbackPeriodTypesResponse

Element Attributes: name = TimeseriesLookbackPeriodTypesResult; minOccurs = 0 maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: TimeseriesLookbackPeriodTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap:header message TimeseriesLookbackPeriodTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message TimeseriesLookbackPeriodTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message TimeseriesLookbackPeriodTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains a **GetEstimateDeltaDaysValuesResult** element of type **ArrayOfValueInfo**. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a time period indicating the number of months to look back. **Description** holds a description of the number of months to look back.. The values range from 1 to 12 months.

The following table lists the possible values and their description:

VALUE	DESCRIPTION
1 Month	1 Month
3 Months	3 Months
4 Months	4 Months
6 Months	6 Months
12 Months	12 Months

Operation: GetUSMunicipalsAssetStatusTypes

The output message of this operation has a list of asset status types for United States municipal bonds covered by DataScope Select. Asset status types are used in the **InstrumentSearchRequestUSMunicipals** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetUSMunicipalsAssetStatusTypes

Binding style: document

Input message GetUSMunicipalsAssetStatusTypesSoapIn

element GetUSMunicipalsAssetStatusTypes – a null element

Output Message GetUSMunicipalsAssetStatusTypesSoapIn

element GetUSMunicipalsAssetStatusTypesResponse

Element: GetInstrumentTypesResponse

Element Attributes: name = GetUSMunicipalsAssetStatusTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetUSMunicipalsAssetStatusTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetUSMunicipalsAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message GetUSMunicipalsAssetStatusTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns:GetUSMunicipalsAssetStatusTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements, GetUSMunicipalsAssetStatusTypesResult. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating an asset status type. **Description** holds a fuller description of the asset status type.

The following table lists the possible values and their descriptions:

VALUE	DESCRIPTION
CLD	Called
DEF	In Default
ISS	Issued
MAT	Expired/Matured
TBC	To Be Called

Operation: GetUSMunicipalsMoodyTypes

The output message of this operation has a list of Moody rating codes for United States municipal bonds covered by DataScope Select. Moody rating codes are used in the **InstrumentSearchRequestUSMunicipals** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetUSMunicipalsMoodyTypes

Binding style: document

Input message GetUSMunicipalsMoodyTypesSoapIn

element GetUSMunicipalsMoodyTypes – a null element

Output Message GetUSMunicipalsMoodyTypesSoapIn

element GetUSMunicipalsMoodyTypesResponse

Element: GetUSMunicipalsMoodyTypesResponse

Element Attributes: name = GetUSMunicipalsMoodyTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetUSMunicipalsMoodyTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetUSMunicipalsMoodyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: body use literal

soap: header message GetUSMunicipalsMoodyTypesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message tns:GetUSMunicipalsMoodyTypesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements, GetUSMunicipalsMoodyTypesResult. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a Moody rating code. **Description** holds a fuller description of the Moody rating code.

The following table lists a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
A	A
A-	A-

Operation: GetUSMunicipalsStandardPoorsTypes

The output message of this operation has a list of Standard & Poor's rating codes for United States municipal bonds covered by DataScope Select. Standard & Poor's rating codes are used in the **InstrumentSearchRequestUSMunicipals** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/GetUSMunicipalsStandardPoorsTypes

Binding style: document

Input message GetUSMunicipalsStandardPoorsTypesSoapIn

element GetUSMunicipalsStandardPoorsTypes – a null element

Output Message GetUSMunicipalsStandardPoorsTypesSoapIn

element GetUSMunicipalsStandardPoorsTypesResponse

Element: GetUSMunicipalsStandardPoorsTypesResponse

Element Attributes: name = GetUSMunicipalsStandardPoorsTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetUSMunicipalsStandardPoorsTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetUSMunicipalsStandardPoorsTypesCredentialsHeader
part CredentialsHeader
soap: body use literal

Output:

soap: header message GetUSMunicipalsStandardPoorsTypesCredentialsHeader
part CredentialsHeader
soap: body use literal

soap: header message tns:GetUSMunicipalsStandardPoorsTypesOperationInfoHeader
part OperationInfoHeader
soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements, GetUSMunicipalsStandardPoorsTypesResult. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a Standard & Poor's rating code. **Description** holds a fuller description of the Standard & Poor's rating code.

The following table lists a sample of the possible values and their descriptions:

VALUE	DESCRIPTION
A	A
A-	A-

Operation: GetUSMunicipalsStateTypes

The output message of this operation has a list of codes for the states of United States of America covered by DataScope Select. Codes for the states are used in the **InstrumentSearchRequestUSMunicipals** element that is an element in the input message for the **SearchInstruments** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ExtractionService/v1/ GetUSMunicipalsStateTypes

Binding style: document

Input message GetUSMunicipalsStateTypesSoapIn

element GetUSMunicipalsStateTypes – a null element

Output Message GetUSMunicipalsStateTypesSoapIn

element GetUSMunicipalsStateTypesResponse

Element: GetUSMunicipalsStateTypesResponse

Element Attributes: name = GetUSMunicipalsStateTypesResult; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValueInfo

Soap Header Message: GetUSMunicipalsStateTypesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message GetUSMunicipalsStateTypesCredentialsHeader
part CredentialsHeader
soap: body use literal

Output:

soap: header message GetUSMunicipalsStateTypesCredentialsHeader
part CredentialsHeader
soap: body use literal

soap: header message GetUSMunicipalsStateTypesOperationInfoHeader
part OperationInfoHeader
soap: body use literal

Element Description:

Output Message:

The output message contains an array of **ValueInfo** elements, GetUSMunicipalsStateTypesResult. Each **ValueInfo** element has two string elements, **Description** and **Value**. **Value** holds a code indicating a state of the United States of America. **Description** holds the name of state.

The following table lists the possible values and their descriptions:

VALUE	DESCRIPTION
AK	Alaska
AL	Alabama
AR	Arkansas
AZ	Arizona
CA	California
CO	Colorado
CT	Connecticut
DC	District Of Columbia
DE	Delaware
FL	Florida
GA	Georgia
GU	Guam
HI	Hawaii
IA	Iowa
ID	Idaho
IL	Illinois
IN	Indiana
KS	Kansas
KY	Kentucky
LA	Louisiana
MA	Massachusetts
MD	Maryland
ME	Maine
MI	Michigan
MN	Minnesota
MO	Missouri
MS	Mississippi
MT	Montana
NC	North Carolina

VALUE	DESCRIPTION
ND	North Dakota
NE	Nebraska
NH	New Hampshire
NJ	New Jersey
NM	New Mexico
NV	Nevada
NY	New York
OH	Ohio
OK	Oklahoma
OR	Oregon
PA	Pennsylvania
PR	Puerto Rico
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TN	Tennessee
TX	Texas
UT	Utah
VA	Virginia
VI	Virgin Islands
VT	Vermont
WA	Washington
WI	Wisconsin
WV	West Virginia
WY	Wyoming

Operation: ValidateCounterparties

This operation is obsolete. The equivalent in this release is ValidateLegalEntities.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/ValidateCounterparties

Binding style: document

Input Message ValidateCounterpartiesSoapIn

element ValidateCounterparties

Element: ValidateCounterparties

Element Attributes: name = request;minOccurs = 0; maxOccurs = 1;

Element Type: CounterpartyValidationRequest

Type: CounterpartyValidationRequest

Element Attributes: name = Identifiers; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfCounterpartyIdentifier

Type: ArrayOfCounterpartyIdentifier

Element Attributes: name = CounterpartyIdentifier; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: CounterpartyIdentifier

Type: CounterpartyIdentifier

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Output Message ValidateCounterpartiesSoapOut

element ValidateCounterpartiesResponse

Element: ValidateCounterpartiesResponse

Element Attributes: name = ValidateCounterpartiesResult; minOccurs = 0; maxOccurs = 1

Element Type: CounterpartyValidationResponse

Type: CounterpartyValidationResponse

Element Attributes: name = Counterparties; minOccurs = 0; maxOccurs = 1; type = ArrayOfValidatedCounterparty

Element Attributes: name = UnmappedIdentifiers; minOccurs = 0; maxOccurs = 1; type = ArrayOfCounterpartyIdentifier

Type: ArrayOfValidatedCounterparty

Element Attributes: name = ValidatedCounterparty; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: ValidatedCounterparty

Type: ValidatedCounterparty

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = CounterpartyId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = RcpId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1; type = s:string

Type: ArrayOfCounterpartyIdentifier

Element Attributes: name = CounterpartyIdentifier; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: CounterpartyIdentifier

Type: CounterpartyIdentifier

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Soap Header Message: ValidateCounterpartiesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message ValidateCounterpartiesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message ValidateCounterpartiesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message ValidateCounterpartiesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The input message of this operation is an element of type **CounterpartyValidationRequest**. The **CounterpartyValidationRequest** type has an element of type **ArrayOfCounterpartyIdentifier**. Its elements are of type **CounterpartyIdentifier**. The **CounterpartyIdentifier** type has two elements: **IdentifierType** and **IdentifierValue**. The **IdentifierValue** is a code that identifies the counterparty and the **IdentifierType** indicates the kind of code for the IdentifierValue value. The possible identifier types are returned from the **GetCounterpartyIdentifierTypes** operation. The following table lists these values.

VALUE	DEFINITION
ORG	Organization ID
RCP	Counterparty ID

Output Message:

The output message of this operation is an element of type **CounterpartyValidationResponse**. The **CounterpartyValidationResponse** type has an element, **Counterparties**, of type **ArrayOfValidatedCounterparty**. It has elements of type **ValidatedCounterparty**. The **ValidatedCounterparty** type has five elements: **CounterpartyId**, **Description**, **IdentifierType**, **IdentifierValue**, and **RcpId**. The **CounterpartyId** is a hexadecimal key identifier for Refinitiv database similar to the asset id for instruments. **Description** contains the name of the counterparty. **IdentifierType** is one of the two values listed above. **IdentifierValue** is an identifier for the counterparty of the type **IdentifierType**. **RcpId** is Reuters counterparty id a 9 digit integer identifier.

The **CounterpartyValidationResponse** element has an element, **UnmappedIdentifiers**, of type **ArrayOfCounterpartyIdentifier**. It has elements of type **CounterpartyIdentifier** identifying counterparties not found in Refinitiv database.

Operation: ValidateInstruments

The input message of this operation has a simple list of instrument identifiers. The output message of this operation has a list of fully validated instrument identifiers. The identifier for an instrument in a request for information can be of several different types, for example, RIC, CUSIP, and ISIN. The **Extract** operation works most efficiently if the identifier is a fully validated identifier. Validation retrieves a set of information on the instrument including the asset id which can then be used in the **Extract** operation. The efficiency is fully achieved when the program stores the validated instrument identifiers for multiple extraction requests.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/ValidateInstruments

Binding style: document

Input Message ValidateInstrumentsSoapIn

element ValidateInstruments

Element: ValidateInstruments

Element Attributes: name = request; minOccurs = 0; maxOccurs = 1

Element Type: InstrumentValidationRequest

Type: InstrumentValidationRequest

Element Attributes: name = PerformExpansion; minOccurs=1; maxOccurs=1; type = s:boolean

Element Attributes: name = Identifiers; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfInstrumentIdentifier

Element Attributes: name = IncludeDetails; minOccurs = 1; maxOccurs = 1; type = s:boolean

Type: ArrayOfInstrumentIdentifier

Element Attributes: name = InstrumentIdentifier; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: InstrumentIdentifier

Type: InstrumentIdentifier

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Output Message ValidateInstrumentsSoapOut

element ValidateInstrumentsResponse

Element: ValidateInstrumentsResponse

Element Attributes: name = ValidateInstrumentsResult; minOccurs = 0; maxOccurs = 1

Element Type: InstrumentValidationResponse

Type: InstrumentValidationResponse

Element Attributes: name = Instruments; minOccurs = 0; maxOccurs = 1; type = ArrayOfValidatedInstrument

Element Attributes: name = UnmappedIdentifiers; minOccurs = 0; maxOccurs = 1; type = ArrayOfInstrumentIdentifier

Element Attributes: name = UnmappedIdentifierErrors; minOccurs = 0; maxOccurs = 1; type = ArrayOfStrings

Element Attributes: name = Details, minOccurs = 0; maxOccurs = 1; type = ArrayOfInstrumentDetail

Type: ArrayOfValidatedInstrument

Element Attributes: name = ValidatedInstrument; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: ValidatedInstrument

Type: ValidatedInstrument

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Source; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = AssetId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = QuoteId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Segment; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = ObjectType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Ric; minOccurs = 0; maxOccurs = 1; type = s:string

Type: ArrayOfInstrumentIdentifier

Element Attributes: name = InstrumentIdentifier; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: InstrumentIdentifier

Type: InstrumentIdentifier

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Type: ArrayOfInstrumentDetail

Element Attributes: name = ArrayOfInstrumentDetail; minOccurs = 0; maxOccurs = unbounded

Element Type: InstrumentDetail

Type: InstrumentDetail

Element Attributes: name = IdentifierValue; minOccurs = 1; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 1; maxOccurs = 1; type = s:string

Element Attributes: name = Source; minOccurs = 1; maxOccurs = 1; type = s:string

Element Attributes: name = AssetType; minOccurs = 1; maxOccurs = 1; type = s:string

Element Attributes: name = FileCode; minOccurs = 1; maxOccurs = 1; type = s:int

Soap Header Message: ValidateInstrumentsOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message ValidateInstrumentsCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message ValidateInstrumentsCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message ValidateInstrumentsOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The input message is an element of type **InstrumentValidationRequest**.

The type **InstrumentValidationRequest** has an element **PerformExpansion** of type Boolean. A true value for the **PerformExpansion** element indicates that the output for the **ValidateInstruments** operation has identifiers for all assets in a File Code identified by a File Code identifier (IPC). Identifiers for assets identified by a chain RIC will not be returned on validation, but will be returned in an extraction.

The **IncludeDetails** subelement of the **InstrumentValidationRequest** element is a Boolean indicating that asset type information is being requested. The information is returned in the **InstrumentDetail** element of the **InstrumentValidationResponse** element.

The type **InstrumentValidationRequest** also has an element **Identifiers** of type **ArrayOfInstrumentIdentifier**. Its elements are of type **InstrumentIdentifier**. The **InstrumentIdentifier** type has three elements: **IdentifierType**, **IdentifierValue**, and **Source**.

The **IdentifierValue** is a code that identifies the instrument and the **IdentifierType** indicates the kind of code for the **IdentifierValue** value. Source is a code identifying the pricing source. It is optional. If it is not set, a default pricing source is returned. The output message of the **GetInstrumentIdentifierTypes** operation has the possible identifier types.

Note:	The identifier types Market Identification Code (MIC), OCC Code (OCC), RIC Root (RRT), and Ticker (TICKER) are exceptions. They cannot be used for validating an instrument.

The following table lists these values:

VALUE	DESCRIPTION
AF	AFIP
CHR	Chain RIC
COM	Common Code
CSP	CUSIP
IPC	FileCode
ISM	ISMA
ISN	ISIN
LIN	Loan Identification Number
LIP	LipperID
LOC	LocalCode
ORGID	Orgid
PPN	PPN
RIC	RIC
SED	Sedol

VALUE	DESCRIPTION
SIC	SICC
SVM	Sicovam
VAL	Valoren
WPK	Wertpapier

Output Message:

The output message of this operation is of type **InstrumentValidationResponse**.

The **InstrumentValidationResponse** type has an element, **Instruments**, of type **ArrayOfValidatedInstrument**. Its elements are of type **ValidatedInstrument**. **ValidatedInstrument** has nine elements: **AssetId**, **FileCode**, **IdentifierType**, **IdentifierValue**, **ObjectType**, **QuoteId**, **Ric**, **Segment**, and **Source**.

The **InstrumentValidationResponse** type also has an element, **UnmappedIdentifiers**, of type **ArrayOfInstrumentIdentifier** listing the user-supplied instrument identifiers that were not found in Refinitiv database.

The **InstrumentDetail** element of the **InstrumentValidationResponse** has the following subelements: **IdentifierValue**, **IdentifierType**, and **Source**, **AssetType**. **IdentifierType** and **IdentifierValue** are the identifiers used to request the validation of the instrument. **AssetType** indicates the asset type of the instrument. **Source** indicates the pricing source associated with the identifier.

Operation: ValidateLegalEntities

The input message for this operation has a list of simple legal entity identifiers. The output message has a list of fully validated legal entity identifiers. The identifier for a legal entity can either be RCP, CSP, ISN, RIC, or ORG. The **Extract** operation works most efficiently if the identifier is a fully validated legal entity identifier. Validation retrieves a set of information on the legal entity which can then be used in the **Extract** operation.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/ValidateLegalEntities

Binding style: document

Input Message ValidateLegalEntitiesSoapIn

element ValidateLegalEntities

Element: ValidateLegalEntities

Element Attributes: name = request;minOccurs = 0; maxOccurs = 1;

Element Type: LegalEntityValidationRequest

Type: LegalEntityValidationRequest

Element Attributes: name = Identifiers; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfLegalEntityIdentifier

Type: ArrayOfLegalEntityIdentifier

Element Attributes: name = LegalEntityIdentifier; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: LegalEntityIdentifier

Type: LegalEntityIdentifier

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Output Message ValidateLegalEntitiesSoapOut

element ValidateLegalEntitiesResponse

Element: ValidateLegalEntitiesResponse

Element Attributes: name = ValidateLegalEntitiesResult; minOccurs = 0; maxOccurs = 1

Element Type: LegalEntitiesValidationResponse

Type: LegalEntityValidationResponse

Element Attributes: name = LegalEntities; minOccurs = 0; maxOccurs = 1; type = ArrayOfValidatedLegalEntity

Element Attributes: name = UnmappedIdentifiers; minOccurs = 0; maxOccurs = 1; type = ArrayOfLegalEntityIdentifier

Type: ArrayOfValidatedLegalEntity

Element Attributes: name = ValidatedLegalEntity; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: ValidateLegalEntity

Type: ValidatedLegalEntity

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = EntityId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = OrgId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1; type = s:string

Type: ArrayOfLegalEntityIdentifier

Element Attributes: name = LegalEntityIdentifier; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: LegalEntityIdentifier

Type: LegalEntityIdentifier

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Soap Header Message: ValidateLegalEntitiesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message ValidateLegalEntitiesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message ValidateLegalEntitiesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message ValidateLegalEntitiesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The input message of this operation is an element of type **LegalEntityValidationRequest**. The **LegaleEntityValidationRequest** type has an element of type **ArrayOfLegalEntityIdentifier**. Its elements are of type **LegalEntityIdentifier**. The **LegalEntityIdentifier** type has two elements: **IdentifierType** and **IdentifierValue**. The **IdentifierValue** is a code that identifies the legal entity and the **IdentifierType** indicates the kind of code for the IdentifierValue value. The possible identifier types are RCP, CSP, ISN, RIC, BIC, and ORG.

Output Message:

The output message of this operation is an element of type **LegalEntityValidationResponse**. The **LegalEntityValidationResponse** type has an element, **LegalEntities**, of type **ArrayOfValidatedLegalEntity**. It has elements of type **ValidatedLegalEntity**. The **ValidatedLegalEntity** type has five elements: **Description**, **EntityId, IdentifierType**, **IdentifierValue**, and **OrgId**. The **EntityId** is a hexadecimal key identifier for Refinitiv database similar to the asset id for instruments. **Description** contains the name of the legal entity. **IdentifierType** is one of the following: RCP, CSP, ISN, RIC, or ORG. **IdentifierValue** is an identifier for the legal entity of the type **IdentifierType**. **OrgId** is organization id, a 9 digit integer identifier.

The **LegalEntityValidationResponse** element has an element, **UnmappedIdentifiers**, of type **ArrayOfLegalEntityIdentifier**. It has elements of type **LegalEntityIdentifier** identifying legal entities not found in Refinitiv database.

Operation: SearchCounterparties

This operation is obsolete. The equivalent in this release is SearchLegalEntities

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/SearchCounterparties

Binding style: document

Input Message SearchCounterpartiesSoapIn

element SearchCounterparties

Element: SearchCounterparties

Element Attributes: name = request; minOccurs = 0; maxOccurs = 1;

Element Type: CounterpartySearchRequest

Type: CounterpartySearchRequest

Abstract: true

Type: CounterpartySearchRequestAll

Extension: base = CounterpartySearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Output Message SearchCounterpartiesSoapOut

element SearchCounterpartiesResponse

Element: SearchCounterpartiesResponse

Element Attributes: name = SearchCounterpartiesResult; minOccurs = 0; maxOccurs = 1;

Element Type: CounterpartySearchResponse

Type: CounterpartySearchResponse

Element Attributes: name = Counterparties; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValidatedCounterparty

Type: ArrayOfValidatedCounterparty

Element Attributes: name = ValidatedCounterparty; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: ValidatedCounterparty

Type: ValidatedCounterparty

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = CounterpartyId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = RcpId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1; type = s:string

Soap Header Message: SearchCounterpartiesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message SearchCounterpartiesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message SearchCounterpartiesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message SearchCounterpartiesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The input message of this operation is of type **CounterpartySearchRequest**. Currently there is only one non-abstract type, **CounterpartySearchRequestAll,** with the base **CounterpartySearchRequest**. An element of this type is the input message for this operation. The **CounterpartySearchRequestAl**l type has two elements: **IdentifierSearchValue** and **IdentifierType**. **IdentifierSearchValue** identifies the counterparty the search is for and IdentifierType identifies the type of identifier used to identify the counterparty.

The possible identifier types are in the output message of the GetCounterpartyIdentifierTypes operation.

The following table lists these values:

VALUE	DEFINITION
ORG	Organization ID
RCP	Counterparty ID

Output Message:

The output message of this operation is an element of type **CounterpartySearchResponse**. The **CounterpartySearchResponse** type has an element of type **ArrayOfValidatedCounterparty**. It has elements of type **ValidatedCounterparty**. The **ValidatedCounterparty** type has five elements: **CounterpartyId**, **Description**, **IdentifierType**, **IdentifierValue**, and **RcpId**. The **CounterpartyId** is a hexadecimal key identifier for Refinitiv database similar to the asset id for instruments. **Description** contains the name of the counterparty. **IdentifierType** is one of the two values listed below. **IdentifierValue** is an identifier for the counterparty of the type IdentifierType.

Operation: SearchInstruments

The input message of this operation has an element with a base type of **InstrumentSearchRequest**. The output message of this operation has an element **ArrayOfValidatedSearchInstrument**. It contains elements of type **ValidatedSearchInstrument** for the specified instruments. The type **ValidatedSearchInstrument** has the type **ValidatedInstrument** as a base. One difference between this operation and the **ValidateInstruments** operation is the number of identifiers returned. Also, not all instrument types that are valid for **ValidateInstruments** are valid for **SearchInstruments**, for example, LIN. Instrument types that are valid for a search are on the list of possible preferred identifier types below. **SearchInstruments** returns an identifier list for the instrument for each pricing source. It also returns information on the counterparty issuing the instrument. **ValidateInstruments** returns the identifier list for the instrument for the specified or default pricing source.

Binding: soapAction http://reuters.com/datascopeselect/ ExtractionService/v1/SearchInstruments

Binding style: document

Input Message SearchInstrumentsSoapIn

element SearchInstruments

Element: SearchInstruments

Element Attributes: minOccurs = 0 maxOccurs = 1

Element Type: InstrumentSearchRequest

Type: InstrumentSearchRequest

Abstract: true

Element Attributes: name = PreferredIdentifierType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Type: InstrumentSearchRequestAll

Extension: base = InstrumentSearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = InstrumentTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Type: InstrumentSearchRequestEquities

Extension: base = InstrumentSearchRequest

Element Attributes: name = AssetCategoryType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = InstrumentSubTypeType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = Ticker; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = CompanyName; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = DomicileType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = OrgId; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = CurrencyType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = FileCodes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = FairValueIndicatorType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = StatusType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = GicsTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = ExchangeTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Type: InstrumentSearchRequestFunds

Extension: base = InstrumentSearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = DomicileType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = CurrencyType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = FundName; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = FundAdministrator; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = PortfolioManager; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = TassFundsOnly; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Type: InstrumentSearchRequestFuturesAndOptions

Extension: base = InstrumentSearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = FuturesAndOptionsType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = PutCallType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = FileCode; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = StrikePriceComparisonOperator; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = StrikePricePrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:decimal

Element Attributes: name = StrikePriceSecondaryValue; minOccurs = 0; maxOccurs = 1; nillable = true

Element Type: s:decimal

Element Attributes: name = ExerciseStyleType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = CurrencyType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = ExchangeTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = ExpirationDateComparisonOperator; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = ExpirationDatePrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = ExpirationDateSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = StatusType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Type: InstrumentSearchRequestGovCorp

Extension: base = InstrumentSearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Type: s:string

Element Attributes: name = IsGovernmentGroup; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = IsCorporateGroup; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = IsSupraGroup; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = IsAgencyGroup; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = SubGroupType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = MoodyTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = StandardPoorsTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = Ticker; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = Issuer; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = OrgId; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = AssetStatusTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = CountryType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = IndustryType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = CurrencyType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = ContributorType; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = CouponComparisonOperator; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = CouponPrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:decimal

Element Attributes: name = CouponSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:decimal

Element Attributes: name = MaturityDateComparisonOperator; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = MaturityDatePrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = MaturityDateSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = IssueDateComparisonOperator; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = IssueDatePrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = IssueDateSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = NextPayDateComparisonOperator; minOccurs = 0; maxOccurs = 1

Element Type: s:string

Element Attributes: name = NextPayDatePrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = NextPayDateSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:date

Element Attributes: name = IsCallable; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = IsPutable; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = IsConvertible; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = IsSinkable; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Element Attributes: name = IsExtend; minOccurs = 1; maxOccurs = 1

Element Type: s:boolean

Type InstrumentSearchRequestUSMunicipals

Extension: base = tns:InstrumentSearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = MoodyTypes; minOccurs = 0; maxOccurs = 1;

Element Type tns:ArrayOfString

Element Attributes: name = StandardPoorsTypes; minOccurs = 0; maxOccurs = 1; ‘

Element Type: tns:ArrayOfString

Element Attributes: name = AssetStatusTypes; minOccurs = 0; maxOccurs = 1;

Element Type: tns:ArrayOfString

Element Attributes: name = MaturityDateComparisonOperator; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = MaturityDatePrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true;

Element Type: s:date

Element Attribute: name = MaturityDateSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true;

Element Type: s:date

Element Attributes: name="CouponComparisonOperator ; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attribute: name = CouponPrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true;

Element Type: s:decimal

Element Attributes: name = CouponSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true

Element Type: s:decimal

Element Attributes: name = StateType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = IssuerDescription ; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attribute: name = IsCallable; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Element Attributes: name = IsPutable; minOccurs = 1; maxOccurs = 1;

Element Type s:boolean

Element Attribute: name = IsSinkable; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Type: InstrumentSearchRequestMortPassThru

Extension: base = tns:InstrumentSearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = AssetStatusTypes; minOccurs = 0; maxOccurs = 1;

Element Type: tns:ArrayOfString

Element Attributes: name = NetCouponComparisonOperator; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = NetCouponPrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true;

Element Type: s:decimal

Element Attributes: name="NetCouponSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true;

Element Type: s:decimal

Element Attributes: name = AgencyType; minOccurs = 0; maxOccurs =1;

Element Type: s:string

Element Attribute: name = AmortizationType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = PoolNumber; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = PoolType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = SettleMonth; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = SecurityGroup; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Type: InstrumentSearchRequestCmoAbs

Extension: base = tns:InstrumentSearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = AssetStatusTypes; minOccurs = 0; maxOccurs = 1;

Element Type: tns:ArrayOfString

Element Attributes: name = Issue; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = Tranche; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = Series; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = NetCouponComparisonOperator; minOccurs = 0; maxOccurs = 1;

Element Type: s:string

Element Attributes: name = NetCouponPrimaryValue; minOccurs = 1; maxOccurs = 1; nillable = true;

Element Type: s:decimal

Element Attributes: name = NetCouponSecondaryValue; minOccurs = 1; maxOccurs = 1; nillable = true;

Element Type: s:decimal

Element Attributes: name = IsWholeLoanSecurityGroup; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Element Attributes: name = IsCdoSecurityGroup; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Element Attributes: name = IsCmbsSecurityGroup; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Element Attributes: name = IsAssetBackedSecurityGroup; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Element Attributes: name = IsAgencySecurityGroup; minOccurs = 1; maxOccurs = 1;

Element Type: s:boolean

Element Attributes: name = SubGroupTypeCode; minOccurs = 1; maxOccurs = 1;

Element Type: s:string

Output Message SearchInstrumentsSoapOut

element SearchInstrumentsResponse

Element: SearchInstrumentsResponse

Element Attributes: name = SearchInstrumentsResult; minOccurs = 0 maxOccurs = 1

Element Type: InstrumentSearchResponse

Type: InstrumentSearchResponse

Element Attributes: name = Instruments; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValidatedSearchInstrument

Type: ArrayOfValidatedSearchInstrument

Element Attributes: name = ValidatedSearchInstrument; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: ValidatedSearchInstrument

Type: ValidatedSearchInstrument

Extension: base = ValidatedInstrument

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = ValidatedCounterparty; minOccurs = 0; maxOccurs = 1;type = ValidatedCounterparty

Soap Header Message: SearchInstrumentsOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message = SearchInstrumentsCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message SearchInstrumentsCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message SearchInstrumentsOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The input message for this operation is an element of a type that has the type **InstrumentSearchRequest** as a base. The **InstrumentSearchRequest** type element **PreferredIdentifierType** indicates the type of identifier that will be returned. The possible values of the **PreferredIdentifierType** depend on the non-

abstract type derived from the **InstrumentSearchRequest** type. They are listed in the output message of the operation **GetInstrumentSearchTypes** and are listed in its description.

Currently there are eight non-abstract types, **InstrumentSearchRequestAll**, **InstrumentSearchRequestCmoAbs**, **InstrumentSearchRequestEquities**, **InstrumentSearchRequestFunds**, **InstrumentSearchRequestFuturesAndOptions**, **InstrumentSearchRequestGovCorp**, **InstrumentSearchRequestMortPassThru**, and **InstrumentSearchRequestUSMunicipals.** All of these non-abstract types have the base **InstrumentSearchRequest**. An element of any of these types is the input message for this operation.

All the non-abstract types have two elements in common: **IdentifierSearchValue** and **IdentifierType**. **IdentifierSearchValue** identifies the instruments being searched for and **IdentifierType** indicates the type, for example, RIC, of identifier used to identify the instruments. The possible values of the **IdentifierType** are in the output message of the operation **GetInstrumentSearchTypes** and are listed in its description.

The **IdentifierSearchValue** element may be a partial identifier with wildcard characters.

The following tables list the elements of the non-abstract types along with the discoverability operation that retrieves the possible content. Possible content is listed in the descriptions of the discoverability operations where appropriate.

INSTRUMENTSEARCHREQUEST CLASS	CLASS MEMBER	DISCOVERABILITY METHOD
InstrumentSearchRequestAll	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	InstrumentTypes	GetInstrumentTypes
InstrumentSearchRequestCmo Abs	AssetStatusTypes	GetCmoAbsAssetStatusTypes
	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	IsAgencySecurityGroup	N/A
	IsAssetBackedSecurityGroup	N/A
	IsCmbsSecurityGroup	N/A
	Issue	N/A
	IsWholeLoanSecurityGroup	N/A
	NetCouponComparisonOperat or	GetComparisonOperators
	NetCouponPrimaryValue	N/A
	NetCouponSecondaryValue	N/A
	Series	N/A
	SubGroupTypeCode	GetCmoAbsSubGroupTypes
	Tranche	N/A
InstrumentSearchRequest Equities	AssetCategoryType	GetEquitiesAssetCategoryTypes

INSTRUMENTSEARCHREQUEST CLASS	CLASS MEMBER	DISCOVERABILITY METHOD
	CompanyName	N/A
	CurrencyType	GetEquitiesCurrencyTypes
	Description	N/A
	DomicileType	GetEquitiesDomicileTypes
	ExchangeTypes	GetEquitiesExchangeTypes
	FairValueIndicatorType	GetEquitiesFairValueIndicatorTypes
	FileCodes	N/A
	GicsTypes	GetEquitiesGicsIndustryTypes
	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	InstrumentSubTypeType	GetEquitiesInstrumentSubTypes
	OrgId	N/A
	StatusType	GetEquitiesStatusTypes
	Ticker	N/A
InstrumentSearchRequestFunds	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	DomicileType	GetFundsDomicileTypes
	CurrencyType	GetFundsCurrencyTypes
	FundName	N/A
	FundAdministrator	N/A
	PortfolioManager	N/A
	TassFundsOnly	N/A
InstrumentSearchRequestFuturesAndOptions	CurrencyType	GetFuturesAndOptionsCurrencyTypes
	Description	N/A
	ExchangeTypes	GetFuturesAndOptionsExchangeTypes
	ExerciseStyleType	GetFuturesAndOptionsExerciseStylesTypes
	ExpirationDateComparisonOperator	GetComparisonOperators

INSTRUMENTSEARCHREQUEST CLASS	CLASS MEMBER	DISCOVERABILITY METHOD
	ExpirationDatePrimaryValue	N/A
	ExpirationDateSecondaryValue	N/A
	FileCode	N/A
	FuturesAndOptionsType	GetFuturesAndOptionsTypes
	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	PutCallType	GetFuturesAndOptionsPutCallTypes
	StatusType	GetFuturesAndOptionsStatusTypes
	StrikePriceComparisonOperator	GetComparisonOperators
	StrikePricePrimaryValue	N/A
	StrikePriceSecondaryValue	N/A
InstrumentSearchRequestGovCorp	AssetStatusTypes	GetGovCorpAssetStatusTypes
	ContributorType	GetGovCorpContributorTypes
	CountryType	GetGovCorpCountryTypes
	CouponComparisonOperator	GetComparisonOperators
	CouponPrimaryValue	N/A
	CouponSecondaryValue	N/A
	CurrencyType	GetGovCorpCurrencyTypes
	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	IndustryType	GetGovCorpIndustryTypes
	IsAgencyGroup	N/A
	IsCallable	N/A
	IsConvertible	N/A
	IsCorporateGroup	N/A
	IsExtend	N/A
	IsGovernmentGroup	N/A

INSTRUMENTSEARCHREQUEST CLASS	CLASS MEMBER	DISCOVERABILITY METHOD
	IsPutable	N/A
	IsSinkable	N/A
	IssueDateComparison Operator	GetComparisonOperators
	IssueDatePrimaryValue	N/A
	IssueDateSecondaryValue	N/A
	Issuer	N/A
	IsSupraGroup	N/A
	MaturityDateComparisonOper ator	GetComparisonOperators
	MaturityDatePrimaryValue	N/A
	MaturityDateSecondaryValue	N/A
	MoodyTypes	GetGovCorpMoodyTypes
	NextPayDateComparisonOper ator	GetComparisonOperators
	NextPayDatePrimaryValue	N/A
	NextPayDateSecondaryValue	N/A
	OrgId	N/A
	StandardPoorsTypes	GetGovCorpStandardPoorsType s
	SubGroupType	GetGovCorpSubGroupTypes
	Ticker	N/A
InstrumentSearchRequestMort PassThru	.AgencyType	GetMbsAgencyTypes
	AmortizationType	GetMbsAmortizationTypes
	AssetStatusTypes	GetMbsAssetStatusTypes
	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	NetCouponComparisonOperat or	GetComparisonOperators
	NetCouponPrimaryValue	N/A
	NetCouponSecondaryValue	N/A

INSTRUMENTSEARCHREQUEST CLASS	CLASS MEMBER	DISCOVERABILITY METHOD
	PoolNumber	N/A
	PoolType	GetMbsPoolTypes
	SecurityGroup	GetMbsSecurityGroupTypes
	SettleMonth	GetMbsSettleMonthTypes
InstrumentSearchRequestUS Municipals	AssetStatusTypes	GetUSMunicipalsAssetStatusTypes
	CouponComparisonOperator	GetComparisonOperators
	CouponPrimaryValue	N/A
	CouponSecondaryValue	N/A
	IdentifierSearchValue	N/A
	IdentifierType	GetInstrumentSearchTypes
	IsCallable	N/A
	IsPutable	N/A
	IsSinkable	N/A
	IssuerDescription	N/A
	MaturityDateComparisonOperator	GetComparisonOperators
	MaturityDatePrimaryValue	N/A
	MaturityDateSecondaryValue	N/A
	MoodyTypes	GetUSMunicipalsMoodyTypes
	StandardPoorsTypes	GetUSMunicipalsStandardPoorsTypes
	StateType	GetUSMunicipalsStateTypes

Output Message:

The output message for this operation is an element of type **InstrumentSearchResponse**. The **InstrumentSearchResponse** type has an element of type **ArrayOfValidatedInstrument**. It has elements of type **ValidatedInstrument**. The **ValidatedInstrument** type has nine string members: **AssetId**, **FileCode**, **IdentifierType**, **IdentifierValue**, **ObjectType**, **QuoteId**, **Ric**, **Segment**, and **Source**.

The identifier type in the element **IdentifierType** for **IdentifierValue** is the one specified in the **PreferredIdentifierType** in the request. AssetId is the key identifier in Refinitiv database. **FileCode** is a 4 digit number identifying a class of instruments. **Source** is the pricing source linked with the RIC.

Operation: SearchLegalEntities

This operation retrieves an array of validated legal entity identifiers for the specified search criteria for legal entities. Incomplete identifiers with wildcard characters can be used with this method.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/SearchLegalEntities

Binding style: document

Input Message SearchLegalEntitiesSoapIn

element SearchLegalEntities

Element: SearchLegalEntities

Element Attributes: name = request; minOccurs = 0; maxOccurs = 1;

Element Type: LegalEntitySearchReqeust

Type: LegalEntitySearchRequest

Abstract: true

Type: LegalEntitySearchRequestAll

Extension: base = LegalEntitySearchRequest

Element Attributes: name = IdentifierSearchValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Output Message SearchLegalEntitiesSoapOut

element SearchLegalEntitiesResponse

Element: SearchLegalEntitiesResponse

Element Attributes: name = SearchLegalEntitiesResult; minOccurs = 0; maxOccurs = 1;

Element Type: LegalEntitySearchResponse

Type: LegalEntitySearchResponse

Element Attributes: name = LeganEntities; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValidatedLegalEntity

Type: ArrayOfValidatedLegalEntity

Element Attributes: name = ValidatedLegalEntity; minOccurs = 0; maxOccurs = unbounded; nillable = true

Element Type: ValidatedLegalEntity

Type: ValidatedCounterparty

Element Attributes: name = IdentifierValue; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = EntityId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = OrgId; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1; type = s:string

Soap Header Message: SearchLegalEntitiesOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message SearchLegalEntitiesCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message SearchLegalEntitiesCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message SearchLegalEntitiesOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The input message of this operation is of type **LegalEntitySearchRequest**. Currently there is only one non-abstract type, **LegalEntitySearchRequestAll,** with the base **LegalEntitySearchRequest**. An element of this type is the input message for this operation. The **LegalEntitySearchRequestAl**l type has two elements: **IdentifierSearchValue** and **IdentifierType**. **IdentifierSearchValue** identifies the legal entity the search is for and IdentifierType identifies the type of identifier used to identify the legal entity.

The possible identifier types are in the output message of the GetLegalEntityIdentifierTypes operation.

The following table lists these values:

VALUE	DEFINITION
BIC	Business Identifier Code
ORG	Organization ID
RCP	Counterparty ID

Output Message:

The output message of this operation is an element of type **LegalEntitySearchResponse**. The **LegalEntitySearchResponse** type has an element of type **ArrayOfValidatedLegalEntity**. It has elements of type **ValidatedLegalEntity**. The **ValidatedLegalEntity** type has five elements: **Description**, **EntityId, IdentifierType**, **IdentifierValue**, and **OrgId**. The **EntityId** is a hexadecimal key identifier for Refinitiv database similar to the asset id for instruments. **Description** contains the name of the legal entity. **IdentifierType** is one of the two values listed above. **IdentifierValue** is an identifier for the legal entity of the type IdentifierType. **OrgId** is organization id a 9 digit integer identifier.

Operation: Extract

The Extract operation is used to request specific data items for both instruments and legal entities.

Binding: soapAction = http://reuters.com/datascopeselect/ ExtractionService/v1/Extract

Binding style: document

Input Message ExtractSoapIn

element Extract

Element: Extract

Element Attributes: name = request; minOccurs = 0; maxOccurs = 1

Element Type: ExtractionRequest

Type: ExtractionRequest

Abstract: true

Element Attributes: name = OutputFields; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Type: InstrumentExtractionRequest

Abstract: true

Extension: base = ExtractionRequest

Element Attributes: name = Instruments; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfValidatedInstrument

Type: InstrumentExtractionRequestBondSchedule

Extension: base = InstrumentExtractionRequest

Element Attributes: name = BondScheduleTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Type: InstrumentExtractionRequestEstimateActual

Extension: base = InstrumentExtractionRequest

Element Attributes: name = EstimateTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = TimePeriodConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateTimePeriodConstraint

Element Attributes: name = QueryConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateQueryConstraint

Abstract: Yes

Element Type: name = CompanyType; minOccurs = 0; maxOccurs = 1; type = s:string

Type: InstrumentExtractionRequestEstimateActual

Extension: base = InstrumentExtractionRequest

Element Attributes: name = EstimateTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = TimePeriodConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateTimePeriodConstraint

Element Attributes: name = QueryConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateQueryConstraint

Abstract: Yes

Element Type: name = CompanyType; minOccurs = 0; maxOccurs = 1; type = s:string

Type: InstrumentExtractionRequestEstimateSummary

Extension: base = InstrumentExtractionRequest

Element Attributes: name = EstimateTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = TimePeriodConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateTimePeriodConstraint

Element Attributes: name = QueryConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateQueryConstraint

Abstract: Yes

Element Attributes: name = CompanyType; minOccurs = 0; maxOccurs = 1; type = s:string

Type: InstrumentExtractionRequestEstimateDetail

Extension: base = InstrumentExtractionRequest

Element Attributes: name = EstimateTypes; minOccurs = 0; maxOccurs = 1

Element Type: ArrayOfString

Element Attributes: name = TimePeriodConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateTimePeriodConstraint

Element Attributes: name = QueryConstraint; minOccurs = 0; maxOccurs = 1

Element Type: EstimateQueryConstraint

Abstract: Yes

Element Attributes: name = CompanyType; minOccurs = 0; maxOccurs = 1; type = s:string

Type: EstimateTimePeriodConstraint

Abstract: Yes

Type: EstimateTimePeriodConstraintRelative

Extension: base = EstimateTimePeriodConstraint

Element Attributes: name = FiscalYearFrom; minOccurs = 1; maxOccurs = 1.

Type: s:string

Element Attributes: name = FiscalYearTo; minOccurs = 1; maxOccurs = 1.

Type: = s:string

Element Attributes: name = QuarterFrom; minOccurs = 1; maxOccurs = 1.

Type: s:string

Element Attributes: name = QuarterTo; minOccurs = 1; maxOccurs = 1.

Type: s:string

Element Attributes: name = SemiAnnualFrom; minOccurs = 1; maxOccurs = 1.

Type: s:string

Element Attributes: name = SemiAnnualTo; minOccurs = 1; maxOccurs = 1.

Type: s:string

Element: EstimateQueryConstraint

Abstract: Yes.

Element: EstimateQueryConstraintDaysAgoDelta

Extension: base **=** EstimateQueryConstraint

Element Attributes: name = Days; minOccurs = 1; maxOccurs = 1;

Type: s:int

Element: EstimateQueryConstraintRange

Extension: base **=** EstimateQueryConstraint

Type: s:Boolean

Type: InstrumentExtractionRequestEstimateFootnoteCompany

Extension: base= tns:InstrumentExtractionRequest

Element Attributes: name = QueryConstraint; minOccurs = 1; maxOccurs = 1;

Type: EstimateQueryConstraint

Type: InstrumentExtractionRequestEstimateFootnoteDetail

Extension: base= tns:InstrumentExtractionRequest

Element Attributes: name = EstimateTypes ; minOccurs = 1; maxOccurs = 1; type = tns:ArrayOfString

Element Attributes: name = TimePeriodConstraint; minOccurs = 1; maxOccurs = 1;

Type: tns:EstimateTimePeriodConstraint

Element Attributes: name = QueryConstraint; minOccurs = 1; maxOccurs = 1;

Type::EstimateQueryConstraint

Element Attributes: name = CompanyType; minOccurs = 0; maxOccurs = 1; type = s:string

Type: InstrumentExtractionRequestEndOfDay

Extension: base = InstrumentExtractionRequest

Element Attributes: name = PerformCurrencyScaling; minOccurs = 1; maxOccurs = 1; type = s:boolean

Type: InstrumentExtractionRequestFundAllocation

Extension: base = InstrumentExtractionRequest

Element Attribute: name = PerformCurrencyScaling; minOccurs = 1; maxOccurs= 1; type = s:Boolean

Type: InstrumentExtractionRequestIntradayPricing

Extension: base = InstrumentExtractionRequest

Element Attribute: name = PerformCurrencyScaling; minOccurs = 1; maxOccurs= 1; type = s:Boolean

Type: InstrumentExtractionRequestTechnicalIndicators

Extension: base = InstrumentExtractionRequest

Element Attribute: name = PerformCurrencyScaling; minOccurs = 1; maxOccurs= 1; type = s:boolean

Type: InstrumentExtractionRequestTermsAndConditions

Extension: base = InstrumentExtractionRequest

Type: InstrumentExtractionRequestCoraxStandardEvents

Abstract: false

Extension: base = InstrumentExtractionRequest

Element Attribute: name = Events; minOccurs = 0; maxOccurs = 1; type = tns:ArrayOfCoraxEventConstraint

Element Attribute: name = ShareTypes; minOccurs = 0; maxOccurs = 1; type = tns:ArrayOfString

Element Attribute: name = DateConstraint; minOccurs = 0; maxOccurs = 1; type = tns:CoraxDateConstraint

Type: CoraxEventConstraint

Extension:

Element Attribute: name = Event; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attribute: name = Constraint; minOccurs = 0; maxOccurs = 1; type = s:string

Type: CoraxDateConstraint

Abstract: true

Type: CoraxDateConstraintLastUpdate

Extension: CoraxEventConstraint

Element Attribute: name = AllowEmptyEvents; minOccurs = 1; maxOccurs = 1; type = s:boolean

Type: CoraxDateConstraintDaysDelta

Extension: CoraxEventConstraint

Element Attribute: name = DaysAgo; minOccurs = 1; maxOccurs = 1; type = s:int

Type: CoraxDateConstraintHoursDelta

Extension: CoraxEventConstraint

Element Attribute: name = HoursAgo; minOccurs = 1; maxOccurs = 1; type = s:int

Type: CoraxDateConstraintRange

Extension: CoraxEventConstraint

Element Attribute: name = Start; minOccurs = 0; maxOccurs = 1; type = tns:CoraxStartDateConstraint

Element Attribute: name = End; minOccurs = 0; maxOccurs = 1; type = tns:CoraxEndDateConstraint

Element Attribute: name = AllowEmptyEvents; minOccurs = 0; maxOccurs = 1; type = s:boolean

Type: CoraxStartDateConstraint

Abstract: true

Type: CoraxStartDateConstraintStartDate

Extension: CoraxStartDateConstraint

Element Attribute: name = Date; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: CoraxStartDateConstraintPreviousDays

Extension: CoraxStartDateConstraint

Element Attribute: name = Days; minOccurs = 1; maxOccurs = 1; type = s:int

Type: CoraxStartDateConstrainAllHistory

Extension: CoraxStartDateConstraint

Element Attribute: name = AllowNullDates; minOccurs = 1; maxOccurs = 1; type = s:boolean

Type: CoraxEndDateConstraint

Abstract: true

Type: CoraxStartDateConstraintEndDate

Extension: CoraxEndDateConstraint

Element Attribute: name = Date; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: CoraxEndDateConstraintNextDays

Extension: CoraxEndDateConstraint

Element Attribute: name = Days; minOccurs = 1; maxOccurs = 1; type = s:int

Type: CoraxStartDateConstrainAllFuture

Extension: CoraxStartDateConstraint

Type: InstrumentExtractionRequestPremiumPricing

Extension: base = InstrumentExtractionRequest

Element Attribute: name = PremiumPricingType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = QueryConstraint; minOccurs = 0; maxOccurs = 1

Element Type: PremiumPricingQueryConstraint

Type: InstrumentExtractionRequestPremiumPricingEMEA6PM

Extension: base = InstrumentExtractionRequest

Type: InstrumentExtractionRequestPremiumPricingASIA4PM

Extension: base = InstrumentExtractionRequest

Type: InstrumentExtractionRequestPremiumPricingEMEA4PM

Extension: base = InstrumentExtractionRequest

Type: InstrumentExtractionRequestPremiumPricingASIA6PM

Extension: base = InstrumentExtractionRequest

Type: InstrumentExtractionRequestPremiumPricingUS4PM

Extension: base = InstrumentExtractionRequest

Element Attributes: name = QueryConstraint; minOccurs = 0; maxOccurs = 1

Element Type: PremiumPricingQueryConstraint

Type: InstrumentExtractionRequestPremiumPricingUS3PM

Extension: base = InstrumentExtractionRequest

Element Attributes: name = QueryConstraint; minOccurs = 0; maxOccurs = 1

Element Type: PremiumPricingQueryConstraint

Type: InstrumentExtractionRequestTimeSeriesPricing

Extension: base = InstrumentExtractionRequest

Element Attribute: name = StartDate minOccurs= 1 maxOccurs= 1 type = s:date

Element Attribute: name = EndDate minOccurs = 1 maxOccurs = 1 type = s:date

Type: InstrumentExtractionRequestSymbolCrossReference

Extension: base = InstrumentExtractionRequest

Element Attribute: name = IdentifierTypes; minOccurs= 1 maxOccurs= 1 type = ArrayOfString

Element Attribute: name = DateConstraint minOccurs = 1 maxOccurs = 1

Type: SymbolCrossReferenceQueryConstraint

Type: InstrumentExtractionRequestTechnical Indicators

Extension: base = InstrumentExtractionRequest

Element Attribute: name = IdentifierTypes; minOccurs= 1 maxOccurs= 1 type = ArrayOfString

Element Attribute: name = DateConstraint minOccurs = 1 maxOccurs = 1

Type: SymbolCrossReferenceQueryConstraint

Type: SymbolCrossReferenceQueryConstraint

Abstract: Yes

Type: SymbolCrossReferenceQueryConstraintDaysAgoDelta

extension base: SymbolCrossReferenceQueryConstraint

Element Attribute: name = Days; minOccurs = 1; maxOccurs = 1; type = s:int

Type: SymbolCrossReferenceQueryConstraintSpecificDateDelta

extension base: SymbolCrossReferenceQueryConstraint

Element Attribute: name = SpecificDate; minOccurs = 1; maxOccurs = 1; type = s:date

Type: InstrumentExtractionRequestMbsFactor

Extension: base = InstrumentExtractionRequest

Type: InstrumentExtractionRequestNewsItems

Extension: base = InstrumentExtractionRequest

Element Attributes: name = QueryConstraint; minOccurs = 1; maxOccurs = 1;

Type: tns:NewsItemsQueryConstraint

Element Attributes: name = FieldConstraint; minOccurs = 0; maxOccurs = 1;

Type: tns:NewsItemsFieldConstraint

Type: NewsItemsQueryConstraint

Abstract: true

Extension: base = None

Type: NewsItems=sQueryConstraintDaysAgoDelta

Extension: base = NewsItemsQueryConstraint

Element Attributes: name = Days; minOccurs = 1; maxOccurs = 1; type = s:int

Type: NewsItemsQueryConstraintHoursMinutesAgoDelta

Extension: base = NewsItemsQueryConstraint

Element Attributes: name = Hours; minOccurs = 1; maxOccurs = 1; type = s:int

Element Attributes: name = Minutes; minOccurs = 1; maxOccurs = 1; type = s:int

Type: NewsItemsQueryConstraintRange

Extension: base = NewsItemsQueryConstraint

Element Attributes: name = StartDate; minOccurs = 1; maxOccurs = 1; type = s:date

Element Attributes: name = EndDate; minOccurs = 1; maxOccurs = 1; type = s:date

Type: NewsItemsFieldConstraint

Extension: base = None

Element Attributes: name = TopicCodes; minOccurs = 0; maxOccurs = 1; type = s:ArrayOfString

Element Attributes: name = Languages; minOccurs = 0; maxOccurs = 1; type = s:ArrayOfString

Type: InstrumentExtractionRequestRatings

Extension: base = InstrumentExtractionRequest

Element Attributes: name = QueryConstraint; minOccurs = 1; maxOccurs = 1;

Type: tns:RatingsQueryConstraint

Element Attributes: name = FieldConstraint; minOccurs = 0; maxOccurs = 1;

Type: tns:RatingsFieldConstraint

Type: RatingsQueryConstraint

Abstract: true

Extension: base = None

Type: Ratings=sQueryConstraintDaysAgoDelta

Extension: base = RatingsQueryConstraint

Element Attributes: name = Days; minOccurs = 1; maxOccurs = 1; type = s:int

Type: RatingsQueryConstraintLastUpdated

Extension: base = RatingsQueryConstraint

Element Attributes: name = IncludeInstrumentsWithNoRatings; minOccurs = 1; maxOccurs = 1; type = s:boolean

Type: RatingsQueryConstraintRange

Extension: base = RatingsQueryConstraint

Element Attributes: name = StartDate; minOccurs = 1; maxOccurs = 1; type = s:date

Element Attributes: name = EndDate; minOccurs = 1; maxOccurs = 1; type = s:date

Type: RatingsFieldConstraint

Extension: base = None

Element Attributes: name = Sorces; minOccurs = 0; maxOccurs = 1; type = s:ArrayOfString

Element Attributes: name = IncludeIssueRatingLevel; minOccurs = 1; maxOccurs = 1; type = s:Boolean

Element Attributes: name = IncludeIssuerRatingLevel; minOccurs = 1; maxOccurs = 1; type = s:boolean

Type: InstrumentExtractionRequestTrancheFactor

Extension: base = InstrumentExtractionRequest

Type: InstrumentExtractionRequestPrepayment

Extension: base = InstrumentExtractionRequest

Type: CounterpartyExtractionRequest (this object is obsolete)

Abstract: true

Extension: base = ExtractionRequest

Element Attributes: name = Counterparties; minOccurs = 0; maxOccurs = 1;

Element Type: ArrayOfValidatedCounterparty

Type: CounterpartyExtractionRequestAudit (this object is obsolete)

Extension: base = CounterpartyExtractionRequest

Type: CounterpartyExtractionRequestDetail (this object is obsolete)

Extension: base = CounterpartyExtractionRequest

Type: CounterpartyExtractionRequestHierarchy (this object is obsolete)

Extension: base = CounterpartyExtractionRequest

Element Attributes: name = Constraint; minOccurs = 0; maxOccurs = 1;

type = tns:CounterpartyHierarchyConstraint

Type:CounterpartyHierarchyConstraint (this object is obsolete)

Abstract = true

Extension: base = none

Type:CounterpartyHierarchyConstraintDaysAgoDelta (this object is obsolete)

Extension: base = CounterpartyHierarchyConstraint

Element Attributes: name = DaysAgo; minOccurs = 1; maxOccurs = 1; type = s:int

Type: CounterpartyExtractionRequestHolders (this object is obsolete)

Extension: base = CounterpartyExtractionRequest

Type: LegalEntityExtractionRequest

Abstract: true

Extension: base = ExtractionRequest

Element Attributes: name = LegalEntities; minOccurs = 0; maxOccurs = 1;

Element Type: ArrayOfValidatedLegalEntity

Type: LegalEntityExtractionRequestAudit

Extension: base = LegalEntityExtractionRequest

Type: LegalEntityExtractionRequestDetail

Extension: base = LegalEntityExtractionRequest

Element Attributes: name = Constraint; minOccurs = 0; maxOccurs = 1;

type = tns:LegalEntityDetailConstraint

Type:LegalEntityDetailConstraint

Abstract = true

Extension: base = none

Type:LegalEntityDetailConstraintDaysAgoDelta

Extension: base = LegalEntityDetailConstraint

Element Attributes: name = DaysAgo; minOccurs = 1; maxOccurs = 1; type = s:int

Type: LegalEntityExtractionRequestHierarchy

Extension: base = LegalEntityExtractionRequest

Element Attributes: name = Constraint; minOccurs = 0; maxOccurs = 1;

type = tns:LegalEntityHierarchyConstraint

Type:LegalEntityHierarchyConstraint

Abstract = true

Extension: base = none

Type:LegalEntityHierarchyConstraintDaysAgoDelta

Extension: base = LegalEntityHierarchyConstraint

Element Attributes: name = DaysAgo; minOccurs = 1; maxOccurs = 1; type = s:int

Type: LegalEntityExtractionRequestRatings

Extension: base = LegalEntityExtractionRequest

Element Attributes: name = QueryConstraint; minOccurs = 1; maxOccurs = 1;

type = tns:RatingsQueryConstraint

Element Attributes: name = Sources; minOccurs = 0; maxOccurs = 1;

type = s:ArrayOfString

Output Message ExtractSoapOut

element ExtractResponse

Element: ExtractResponse

Element Attributes: name = ExtractResult; minOccurs = 0; maxOccurs = 1;

Element Type: ExtractionResponse

Type: ExtractionResponse

Element Attribute: name = RowCount; minOccurs = 1; maxOccurs = 1; type = s:int

Element Attribute: name = Columns; minOccurs = 0; maxOccurs = 1; type = ArrayOfExtractionColumn

Element Attribute: name = Messages; minOccurs = 0; maxOccurs = 1; type = ArrayOfString

Type: ArrayOfExtractionColumn

Element Attributes: name = ExtractionColumn; minOccurs = 0; maxOccurs = unbounded;

Element Type: ExtractionColumn

Type: ExtractionColumn

Element Attributes: name = Name; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = DataType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Values; minOccurs = 0; maxOccurs = 1; type = ArrayOfChoice1

Element Attributes: name = FromInvalidOutputField; minOccurs = 0; maxOccurs = 1; type = s:boolean

Type: ArrayOfChoice1

Choice: minOccurs = 0 maxOccurs = unbounded

Element Attribute: name = int; minOccurs = 1; maxOccurs = 1; type = s:int

Element Attribute: name = empty; minOccurs = 0 maxOccurs = 1; type = EmptyValue

Element Attribute: name = date; minOccurs = 1; maxOccurs = 1; type = s:date

Element Attribute: name = double; minOccurs = 1; maxOccurs = 1; type = s:string

Element Attribute: name = string; minOccurs = 0; maxOccurs = 1; type = s:string

Type: EmptyValue

Soap Header Message: ExtractOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message ExtractCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message ExtractCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message ExtractOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The input message for the **Extract** operation is an element of type **ExtractionRequest**. It is an abstract type. It has one element, **OutputColumns,** of type **ArrayOfString**. The elements of **OutputColumns** are field identifiers for the desired data. Lists of valid field can be obtained using the **Define** method. These fields are also listed in**DataScope Select Data Content Guide**. Since the type **ExtractionRequest** is an abstract type, a non-abstract type with it as a base is required for the input message element. There are chains of types derived from **ExtractionRequest**.

The non-abstract elements that can be used as a parameter for the **Extract** operation are:

NON-ABSTRACT ELEMENTS	DESCRIPTION
CounterpartyExtractionRequestAudit	This object is obsolete.
CounterpartyExtractionRequestDetail	This object is obsolete.
CounterpartyExtractionRequestHierarchy	This object is obsolete.
InstrumentExtractionRequestBondSchedule	Extract bond schedules.
InstrumentExtractionRequestCoraxStandardEvents	Extract corporate action standard events.
InstrumentExtractionRequestEndOfDay	Extract end of day pricing information.
InstrumentExtractionRequestEstimateActual	Extract actuals.
InstrumentExtractionRequestEstimateDetail	Extract details of estimates.
InstrumentExtractionRequestEstimateFootnoteCompany	Extract company footnotes of estimates
InstrumentExtractionRequestEstimateFootnoteDetail	Extract details of footnotes.
InstrumentExtractionRequestEstimateSummary	Extract estimates.
InstrumentExtractionRequestFixedIncomeAnalytics	Extract fixed income analytics.
InstrumentExtractionRequestFundAllocation	Extract fund allocation schemes for Lipper Fund instruments.
InstrumentExtractionRequestIntraday	Extract pricing during the trading day.
InstrumentExtractionRequestMbsFactor	Extract mortgage backed security factors.
InstrumentExtractionRequestNewsItems	Extract financial news items.
InstrumentExtractionRequestPremiumPricing	Extract premium pricing using unified template. This is a premium service.
InstrumentExtractionRequestPremiumPricingASIA4PM	Extract Asian 4 pm pricing. This is a premium service.
InstrumentExtractionRequestPremiumPricingASIA6PM	Extract Asian 6 pm pricing. This is a premium service.
InstrumentExtractionRequestPremiumPricingEMEA4PM	Extract EMEA 4 pm pricing. This is a premium service.
InstrumentExtractionRequestPremiumPricingEMEA6PM	Extract EMEA 6 pm pricing. This is a premium service.
InstrumentExtractionRequestPremiumPricingUS3PM	Extract American 3 pm pricing. This is a premium service.
InstrumentExtractionRequestPremiumPricingUS4PM	Extract American 4 pm pricing. This is a premium service.

NON-ABSTRACT ELEMENTS	DESCRIPTION
InstrumentExtractionRequestRatings	Extract ratings data.
InstrumentExtractionRequestSymbolCrossReference	Extract symbol cross reference data.
InstrumentExtractionRequestTechnicalIndicators	Extract technical analytical data based on End of Day prices.
InstrumentExtractionRequestTermsAndConditions	Extract term and conditions.
InstrumentExtractionRequestTimeSeriesPricing	Obsolete. Please use the Price History report, available via the REST API only.
InstrumentExtractionRequestTrancheFactor	Extract tranche factor history.
LegalEntityExtractionRequestAudit	Extract legal entity audit information.
LegalEntityExtractionRequestDetail	Extract legal entity detail information.
LegalEntityExtractionRequestHierarchy	Extract legal entity hierarchy information.
LegalEntityExtractionRequestRatings	Extract issuer-level ratings content for the linked entities.
LegalEntityExtractionRequestTermsandConditions	Extract terms and conditions content for the linked entities.

The following are descriptions of the elements involved in the construction of the input messages for the extract operation:

The abstract type **InstrumentExtractionRequest** is intermediate between the base type **ExtractionRequest** and a non-abstract type that is a type of the input message for the operation **Extract**.

An element of the type **InstrumentExtractionRequestBondSchedule** is an input message for the operation **Extract**. The element is used to request bond schedules. It is a non-abstract type that is a type of input message for the operation **Extract**.

The type **InstrumentExtractionRequestCoraxStandardEvents** type is an input message for the operation **Extract**. It is derived from **InstrumentExtractionRequest**. It has elements: **CoraxDateConstraint DateConstraint**, **CoraxEventConstraint[] Events** , **string[] ShareTypes** and **string[] ExcludeDeletedEvents**. The **ShareTypes** element is used only if the content of the **Event** element is SHO. The **ExcludeDeletedEvents** element takes a true or false value to indicate whether deleted records are excluded from the extraction results.

The **Events** elements in the array have string members: **Constraint** and **Event**.

The **DateConstraint** element is used to specify the date range for the corporate action event information being extracted. Its value can be an element of one of four types: **CoraxDateConstraintDaysDelta**, **CoraxDateConstraintHoursDelta**, **CoraxDateConstraintLastUpdated**, or **CoraxDateConstraintRange** each of which is derived from the **CoraxDateConstraint**. These types permit the specification of the time interval in different ways.

Possible values of the **Event** element are in the **Value** element of the **ValueInfo** parents of the **CoraxEventsInfo** elements returned by the **GetCoraxEvents** operation.

The values in the **Value** and **Description** elements of the **ValueInfo** parent element are listed in the following table.

VALUE	DESCRIPTION
CAP	Cap Change
DIV	Dividend
EAR	Earnings
MNA	Mergers and Acquisitions
NOM	Nominal Value
PEO	Public Equity Offerings
SHO	Shares Outstanding

For each value, there are multiple values of the **Constraints** element. The following table shows the dependencies.

VALUE	CONSTRAINT
CAP	Capital Change Announcement Date
	Capital Change Deal Date
	Capital Change Ex Date
	Effective Date
	Record Date
DIV	Dividend Announcement Date
	Dividend Pay Date
	Dividend Ex Date
	Period End Date
	Dividend Record Date
EAR	Earnings Announcement Date
	Period End Date
MNA	Deal Announcement Date
	Deal Cancel Date
	Deal Close Date
	Deal Effective Date
	Deal Revised Proposal Date
	Tender Offer Expiration Date
NOM	Nominal Value
	Nominal Value Date
PEO	All Pending Deals
	First Trade Date
SHO	Shares Amount Date
VOT	Voting Rights Date

Although the **Events** element is an array, there are some limitations on its use. The specification of multiple events of the same event type, that is, the same value for the **Event** element, and different constraints will result in an error. However, one constraint is required. Generally, if data for events of one

type but different constraints is desired, the different constraints can be specified in the array **OutputFields** that is an element of the base type **ExtractionRequest** of **InstrumentExtractionRequest**. This specification is independent of the constraint specified in the **Events** element, that is, any of the possible constraints may be specified.

With a few exceptions, the constraints returned by the **GetCoraxEvents()** operation for a specific event type are the relevant output fields for an extraction for that event type. One exception is the constraint "All Pending Deals" for the PEO (Public Equity Offerings) event type. Another exception is the SHO (Shares Outstanding). The relevant fields, "Shares Amount", "Shares Amount in Thousands" are not constraints.

The element **ShareType** is used only when the event type is SHO (Shares Outstanding). Possible content for this element can be obtained using the **GetCoraxShareTypes()** operation.

An element of the type **InstrumentExtractionRequestEndOfDay** is an input message for the operation **Extract**. The element is used to request the end of day prices for the specified instruments.

An element of the type **InstrumentExtractionRequestEstimateActual** is an input message for the operation **Extract**. The element is used to request the reported earnings of companies. Allowable content for the subelements can be obtained from the **GetEstimateDeltaDaysValues**, **GetEstimateHistoricalRelativeFiscalYearValues**, **GetEstimateHistoricalRelativeQuarterValues**, **GetEstimateHistoricalRelativeSemiAnnualValues**, and **GetEstimateTypes** operations.

An element of the type **InstrumentExtractionRequestEstimateDetail** is an input message for the operation **Extract**. The element is used to request the reported earnings of companies. Allowable content for the subelements can be obtained from the **GetEstimateTypes, GetEstimateDeltaDaysValues**, **GetEstimateFutureRelativeFiscalYearValues**, **GetEstimateHistoricalRelativeQuarterValues**, and **GetEstimateFuturelRelativeSemiAnnualValues** operations. It is not supported in this release.

An element of the type **InstrumentExtractionRequestFootnoteCompany** is an input message for the operation **Extract**. The element is used to request the footnote date for companies.

An element of the type **InstrumentExtractionRequestFootnoteDetail** is an input message for the operation **Extract**. The element is used to request footnotes on the estimate detail extractions.. It is not supported in this release.

An element of the type **InstrumentExtractionRequestEstimateSummary** is an input message for the operation **Extract**. The element is used to request the estimated earnings of companies. Allowable content for the subelements can be obtained from the **GetEstimateTypes, GetEstimateDeltaDaysValues**, **GetEstimateFutureRelativeFiscalYearValues**, **GetEstimateFutureRelativeQuarterValues**, and **GetEstimateFutureRelativeSemiAnnualValues** operations.

An element of the type **InstrumentExtractionRequestIntradayPricing** is an input message for the operation **Extract**. The element is used to request the prices during the trading day for the specified instruments.

An element of the type **InstrumentExtractionRequestMbsFactor** is an input message for the operation **Extract**. The element is used to request the monthly factors for mortgage backed securities.

An element of the type **InstrumentExtractionRequestNewsItems** is an input message for the operation **Extract**. The element is used to request the financial news items.

An element of the type **InstrumentExtractionRequestPremiumPricing** is an input message for the operation **Extraction.** This element is used to request premium pricing using a unified object. A request using this element returns valid data only if you have premium pricing entitlements.

An element of type **InstrumentExtractionRequestPremiumPricingASIA4PM** is an input message for the operation **Extract**. The element is used to request the 4 pm JST prices from the Asian region for the specified instruments. A request using this element returns valid data only if you have premium pricing entitlements.

An element of the type **InstrumentExtractionRequestPremiumPricingASIA6PM** is an input message for the operation Extract. The element is used to request the 6 pm JST prices from the Asian region for the specified instruments. A request using this element returns valid data only if you have premium pricing entitlements.

An element of the type **InstrumentExtractionRequestPremiumPricingEMEA4PM** is an input message for the operation **Extract**. The element is used to request the 4 pm GMT/BST prices from the EMEA

region for the specified instruments. A request using this element returns valid data only if you have premium pricing entitlements.

An element of the type **InstrumentExtractionRequestPremiumPricingEMEA6PM** is an input message for the operation **Extract**. The element is used to request the 6 pm GMT/BST prices from the EMEA region for the specified instruments. A request using this element returns valid data only if you have premium pricing entitlements.

An element of the type **InstrumentExtractionRequestPremiumPricingUS3PM** is an input message for the operation **Extract**. The element is used to request the 3 pm EST/EDT prices from the US region for the specified instruments. A request using this element returns valid data only if you have premium pricing entitlements.

An element of the type **InstrumentExtractionRequestPremiumPricingUS4PM** is an input message for the operation **Extract**. The element is used to request the 4 pm EST/EDT prices from the US region for the specified instruments. A request using this element returns valid data only if you have premium pricing entitlements.

An element of the type **InstrumentExtractionRequestRatings** is an input message for the operation **Extract**. The element is used to request the current and historical ratings data.

An element of the type **InstrumentExtractionRequestSymbolCrossReference** is an input message for the operation **Extract**. The element is used to request the cross reference data for the specified instruments including RICs indicating the pricing sources of the data. Allowable content for the subelement **IdentifierTypes** can be retrieved using the operation **GetSymbolCrossReferenceTypes**.

An element of the type **InstrumentExtractionRequestTermsAndConditions** is an input message for the operation **Extract**. The element is used to request the terms and conditions of the specified instruments.

An element of the type **InstrumentExtractionRequest TrancheFactor** is an input message for the operation **Extract**. The element is used to request factor history for the tranches.

Output Message:

The output message of this operation is an element of type **ExtractionResponse**. An element of type **ExtractionResponse** has an integer element, the number of rows, **RowCount**, of data returned, an element, Messages, of type **ArrayOfString** and an element of type **ArrayOfExtractionColumn**, **OutputColumns**. Each element of the element **OutputColumns** is of the type ExtractionColumn.

The ExtractionColumn type has three elements: **DataType**, **Name** and **FromInvalidOutputField**, of the type string and a general element Values of the type **ArrayOfChoice1**. **DataType** indicates the type of data in **Values**. **FromInvalidOutputField** has the value true if the output field has been deleted from the public form or is invalid for some other reason. For valid fields it has the value false. If the value of **FromInvalidOutputField** is true, you can get further information on the problem by checking the **Messages** sub-element of the **ExtractionResponse** element of which the **ExtractionColumn** element is a sub-element.

The element in **Values**, will be of type **EmptyValue** if no data exists for the field. The following table lists the possible values of **DataType** and the type of element from the type **ArrayOfChoice1**.

DATATYPE VALUE	S TYPE OF DATA IN VALUES
“String”	s:string
“Double”	s:double
“Integer”	s:int
“Long”	s:long
“DateOnly”	s:date
“DateTime”	xsd:dateTime

Operation: ReportUsage

This operation retrieves a summary of the customer's usage of the complete DataScope Select product (website, FTP, and API. The usage is associated with each login id. The usage indicates the data that has been extracted or the instruments or legal entities that have been rented. Note, the information retrieved can be 2 or 3 minutes delayed and thus, may not contain very recent usage.

Binding: soapAction http://reuters.com/datascopeselect/ ExtractionService/v1/ReportUsage

Binding style: document

Input Message ReportUsageSoapIn

element ReportUsage

Element: ReportUsage

Element Attributes: name = request; minOccurs = 0; maxOccurs = 1

Element Type: UsageRequest

Type: UsageRequest

Abstract: true

Type: ExtractionUsageRequest

Abstract: true

Extension: base = UsageRequest

Type: ExtractionUsageCounterpartySummaryRequest (this object is now obsolete)

Extension: base = ExtractionUsageRequest

Element Attribute: name = StartDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Element Attribute: name = EndDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: ExtractionUsageInstrumentSummaryRequest

Extension: base = ExtractionUsageRequest

Element Attribute: name = StartDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Element Attribute: name = EndDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: ExtractionUsageLegalEntitySummaryRequest

Extension: base = ExtractionUsageRequest

Element Attribute: name = StartDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Element Attribute: name = EndDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: RentalUsageRequest

Abstract: true

Extension: base = UsageRequest

Type: RentalUsageInstrumentAsOfDateSummaryRequest

Extension: base = RentalUsageRequest

Element Attributes: name = AsOfDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: RentalUsageCounterpartyAsOfDateSummaryRequest (this object is now obsolete)

Extension: base = RentalUsageRequest

Element Attributes: name = AsOfDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: RentalUsageLegalEntityAsOfDateSummaryRequest

Extension: base = RentalUsageRequest

Element Attributes: name = AsOfDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: RentalUsageInstrumentNewDuringPeriodSummaryRequest

Extension: base = RentalUsageDateTimeRangeRequest

Element Attributes: name = StartDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Element Attributes: name = EndDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: RentalUsageCounterpartyNewDuringPeriodSummaryRequest (this object is now obsolete)

Extension: base = RentalUsageDateTimeRangeRequest

Element Attributes: name = StartDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Element Attributes: name = EndDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Type: RentalUsageLegalEntityNewDuringPeriodSummaryRequest

Extension: base = RentalUsageDateTimeRangeRequest

Element Attributes: name = StartDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Element Attributes: name = EndDateTime; minOccurs = 1; maxOccurs = 1; type = s:dateTime

Output Message ReportUsageSoapOut

element ReportUsageResponse

Element: ReportUsageResponse

Element Attributes: name = ReportUsageResult; minOccurs = 0; maxOccurs = 1;

Element Type: UsageResponse

Type: UsageResponse

Element Attributes: name = RowCount; minOccurs = 1; maxOccurs = 1; type = s:int

Element Attributes: name = Columns; minOccurs = 0; maxOccurs = 1; type = ArrayOfUsageColumn

Type: ArrayOfUsageColumn

Element Attribute: name = UsageColumn; minOccurs = 0 maxOccurs = unbounded; nillable = true; type = UsageColumn

Type: UsageColumn

Element Attribute: name = Name; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attribute: name = DataType; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attribute: name = Values; minOccurs = 0; maxOccurs = 1; type = ArrayOfAnyType

Type: ArrayOfAnyType

Element Attributes: name = anyType; minOccurs = 0; maxOccurs = unbounded; nillable = true;

Element Type: not specified.

Soap Header Message: ReportUsageOperationInfoHeader

part: name = OperationInfoHeader; element = OperationInfoHeader

Message Binding:

Input:

soap: header message ReportUsageCredentialsHeader

part CredentialsHeader

soap: body use literal

Output:

soap: header message ReportUsageCredentialsHeader

part CredentialsHeader

soap: body use literal

soap: header message ReportUsageOperationInfoHeader

part OperationInfoHeader

soap: body use literal

Element Description:

Input Message:

The abstract base type **UsageRequest** for elements specifying the type of usage requested. An element whose type is derived from this type is the input message for the operation **ReportUsage**.

The abstract base type **ExtractionUsageRequest** is intermediate between the base type **UsageRequest** and the types of the elements that are input messages for the operation **ReportUsage**.

The non-abstract type **ExtractionUsageLegalEntitySummaryRequest** has **UsageRequest** as a base type. An element of this type is an input message for the operation **ReportUsage**. This element is used to retrieve usage information about the extraction of legal entity data.

The non-abstract type **ExtractionUsageInstrumentSummaryRequest** has **UsageRequest** as a base type. An element of this type is an input message for the operation **ReportUsage**. This element is used to retrieve usage information about the extraction of instrument data.

The abstract type **RentalUsageRequest** is an intermediate class derived from the base type **UsageRequest**. An element of a non-abstract type derived from this type is an input message for the operation **ReportUsage**.

The abstract type **RentalUsageAsOfDateTimeRequest** has **UsageRequest** as a base type. An element of a type derived from this type is an input message for the operation **ReportUsage**. This type indicates that **ReportUsage** is to return the rental usage as of the date and time specified in the element **AsOfDateTime**.

The type **RentalUsageInstrumentAsOfDateSummaryRequest** has **RentalUsageAsOfDateTimeRequest** and **UsageRequest** as base types. An element of this type is an input message for the operation **ReportUsage**. This type indicates that **ReportUsage** is to return the rental usage of instrument data as of the date and time specified in the member **AsOfDateTime** of the base type.

The type **RentalUsageLegalEntityAsOfDateSummaryRequest** has **RentalUsageAsOfDateTimeRequest** and **UsageRequest** as base types. An element of this type is a parameter for the method **ReportUsage**. This type indicates that **ReportUsage** is to return the rental usage of legal entity data as of the date and time specified in the member **AsOfDateTime** of the base type.

The abstract type **RentalUsageDateTimeRangeRequest** is an intermediate type that has **UsageRequest** as a base class. An element of a type derived from this type is an input message for the operation

ReportUsage. This type indicates that **ReportUsage** is to return the rental usage in the date range specified by the elements **StartDateTime** and **EndDateTime**.

The non-abstract type **RentalUsageInstrumentNewDuringPeriodSummaryRequest** has **RentalUsageDateTimeRangeRequest** and **UsageRequest** as base types. An element of this type is an input message for the operation **ReportUsage**. This type indicates that **ReportUsage** is to return the rental usage of instrument data during the period specified in the elements **StartDateTime** and **EndDateTime** of the base type.

The non-abstract type **RentalUsageLegalEntityNewDuringPeriodSummaryRequest** has **RentalUsageDateTimeRangeRequest** and **UsageRequest** as base types. An element of this type is an input message for the operation **ReportUsage**. This type indicates that **ReportUsage** is to return the rental usage of legal entity data during the period specified in the elements **StartDateTime** and **EndDateTime** of the base type.

Output Message:

An element of the type **UsageResponse** is the output message of the operation **ReportUsage**. The member **RowCount** indicates the number of elements in the **ArrayofUsageColumn** element. The string array **Message** contains information about the report.

An element of the type **UsageColumn** contains the information on the usage of the DataScope Select API. The element **Name** identifies the data. The element **Values** is an element of type **ArrayOfAnyType** containing the data. The element **DataType** indicates the type of elements **Values** contains. The data is retrieved by casting the data to the type indicated by the member **DataType**.

The following table lists the possible values of **DataType** and the data type indicated by each value.

DATATYPE VALUE	XSD TYPE OF DATA IN VALUES	.NET TYPE OF DATA IN VALUES
“String”	xsd:string	System.String
“Double”	xsd:double	System.Double
“Integer”	xsd:int	System.Int32
“Long”	xsd:long	System.Int64
“DateOnly”	xsd:date	System.DateTime
“DateTime”	xsd:dateTime	System.DateTime

Common Complex Types

This section details several common types of elements that are used in other elements for multiple operations.

Type: CredentialsHeader

Element Attributes: name = Username; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Password; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = AuthenticationToken; minOccurs = 0; maxOccurs = 1;

type = s:string

Element Attributes: type = s:anyAttribute;

Type Description:

An element of the type **CredentialsHeader** is in the SOAP header for almost all operations. The **Username** and **Password** elements must have valid data for any of the methods, except **GetVersion**, to work. The **Username** and **Password** are the same as the username and password for the DataScope Select hosted web application. Data for the **AuthenticationToken** element is returned by the API. When the AuthenticationToken element has valid data, the efficiency of the extraction is enhanced because the API does not need to use the less efficient Refinitiv user validation methods.

Note:	Every call made has the potential to return a new token, so you should update your locally cached CredentialsHeader with the return of each call. See **Authentication** Handling on page 15 for more information.

Type: OperationInfoHeader

Element Attributes: name = Host; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = ProcessingTime; minOccurs = 0; maxOccurs = 1; type = s:duration

Type Description:

An element of the type **OperationInfoHeader** is in the SOAP header for returned in the response object by extraction operations. It is primarily used for debugging purposes. The **Host** element identifies the server the request was processed on. The **ProcessingTime** element indicates the amount of time required for the extraction.

Type: ValueInfo

Element Attributes: name = Value; minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = Description; minOccurs = 0; maxOccurs = 1;

Type Description:

Collections of elements of the ValueInfo type are returned by most of the discoverability methods. The items in the Value element are used as element in input messages for extraction requests. The items in the Description element are for your information.

Type: ArrayOfValueInfo

Element Attributes: name = ValueInfo; minOccurs = 0 maxOccurs = unbounded

Type Description:

A collection of ValueInfo elements.

Type: ValidatedInstrument

Element Attributes: name = AssetId;minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = FileCode;minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = IdentifierType;minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = IdentifierValue;minOccurs = 0; maxOccurs = 1; type = s:string

Element Attributes: name = ObjectType;minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = QuoteId;minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = Ric;minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = RrpsRic;minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = Segment;minOccurs = 0; maxOccurs = 1;type = s:string

Element Attributes: name = Source; minOccurs = 0; maxOccurs = 1; type = s:string

Type Description:

Elements of the type **ValidatedInstrument** contains the validated identifiers returned by the operations **ValidateInstruments** and **SearchInstruments**. The member **AssetId** is the identifier that produces the efficiencies in the extractions. **AssetId** is an internal Refinitiv identifier. Refinitiv databases are optimized for searches using this id. **IdentifierValue** is an instrument identifier of type IdentifierType. It can be the user-supplied identifier or identifier of a type. **Source** is the user-supplied pricing source for the instrument. Some of the instrument identifiers linked to a particular pricing source. The **File Code** for an instrument is a 4 digit number that identifies a class to which the instrument belongs. **QuoteId**, **Segment,** and **ObjectType** are identifiers used to classify the instrument in Refinitiv database.

The table below lists the possible values for the IdentifierType:

VALUE	DESCRIPTION
CHR	Chain RIC
CIN	CUSIP International Number
COM	Common Code
CSP	CUSIP
IPC	FileCode
ISM	ISMA
ISN	ISIN
LIN	Loan Identification Number
LIP	LipperID
LOC	LocalCode
ORGID	Orgid
RIC	RIC
SED	Sedol
SIC	SICC

VALUE	DESCRIPTION
SVM	Sicovam
SYM	Trading Symbol
VAL	Valoren
WPK	Wertpapier

DataScope Select SOAP API Error Messages

Errors from DataScope SOAP API are returned through the SOAP fault mechanism. All SOAP faults returned by the web methods of the API can be divided up into two categories: those caused by client and those caused by the server. A successful web method call will result in an HTTP status code of 200. A web method call that result in a SOAP fault will return an HTTP status code of 500. Other HTTP status codes can be returned (like 400 Bad Request) if the request does not even represent a valid SOAP or HTTP request.

Client Errors

Errors caused by the client will result in a SOAP fault. It is the responsibility of the client to correct the data that caused the error before attempting to send the data again, otherwise the request will continue to fail.

There are three distinct causes of a client error. They are:

- **Security Error** – occurs when the CredentialsHeader SOAP header object was missing, an invalid username and/or password were sent in the SOAP header, or the user doesn't have sufficient privileges to access the API.
- **Validation Error** – occurs due to one or more of the following reasons:
  - the web method that was called required an object as a parameter and none was passed
  - a required property in the parameter (or one of its contained objects) was not populated
  - a property in the parameter was populated with an unsupported value
  - an obosolete method was called.
- **Processing Error** – a client-caused processing error. A common cause of this error is when a client attempts to perform an extraction against an extraction type for which they don't have permission

When a SOAP fault is returned due to a client error, it will have a SOAP fault code of Client (SOAP 1.1) or Sender (SOAP 1.2). The SOAP fault string (or reason) will contain a message describing what kind of client error occurred. The SOAP fault detail will contain XML that can be deserialized into a ClientError object containing the details of the error.

The following is a sample of the information returned by an error due to invalid login information:

```
HTTP/1.1 500 Internal Server Error
Date: Thu, 27 Mar 2011 12:41:42 GMT
Server: Microsoft-IIS/7.0
X-Powered-By: ASP.NET
X-AspNet-Version: 2.0.50727
Cache-Control: private
Content-Type: text/xml; charset=utf-8
Content-Length: 768

<?xml version="1.0" encoding="utf-8"?>
   <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xmlns:xsd="http://www.w3.org/2001/XMLSchema">
      <soap:Body>
         <soap:Fault>
            <faultcode>soap:Client</faultcode>
            <faultstring>A security error has occurred.</faultstring>
            <faultactor>http://
            hosted.datascopeapi.reuters.com/datascopeapi/v1/extractionservice.asmx
            </faultactor>
            <detail>
               <ClientError xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                    xmlns="http://reuters.com/datascopeselect/ExtractionService/v
                    1/">
                  <Messages>
                     <string>Bad username/password combination for username
                     'xxxx'.</string>
                  </Messages>
               </ClientError>
            </detail>
         </soap:Fault>
      </soap:Body>
</soap:Envelope>
```

Server Errors

Errors caused by the server will also result in a SOAP fault. When a server-caused SOAP fault is returned, it can be assumed that no amount of correction of the client request will result in a successful call. Instead, something needs to be corrected on the server side either by operations or the development team. The customer should report the error, along with the Error Instance ID (see the ServerError object description), so that a resolution can be quickly achieved.

There are many things that can cause a server error. Some of them include:

- The backend extraction service is too busy servicing other requests. Multiple attempts have been made to perform the extraction, but the maximum number of retries has been exceeded.
- The connection to a required backend resource like a database server or the backend extraction service is down.
- Any other unanticipated error.

When a SOAP fault is returned due to a server error, it will have a SOAP fault code of **Server** (SOAP 1.1) or **Receiver** (SOAP 1.2). The SOAP fault string (or reason) will contain a message that reads something like:

An unexpected error occurred on the server.

The SOAP fault detail will contain XML that can be deserialized into a **ServerError** object containing the details of the error.

ServerError object

- ErrorInstanceId: A value that uniquely identifies the error instance on the server. This ID can be used by operations to look up the error details in the error logs on the server.
- ErrorDetails: This member is not used.
    - Host: A comma separated list of IP address for the specific host computers.

```
HTTP/1.1 500 Internal Server Error
Date: Fri, 28 Mar 2011 12:08:04 GMT
Server: Microsoft-IIS/7.0
X-Powered-By: ASP.NET
X-AspNet-Version: 2.0.50727
Cache-Control: private
Content-Type: text/xml; charset=utf-8
Content-Length: 1548

<?xml version="1.0" encoding="utf-8"?>
   <soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns:xsd="http://www.w3.org/2001/XMLSchema">
      <soap:Body>
         <soap:Fault>
            <faultcode>soap:Server</faultcode>
            <faultstring>An unexpected error occurred on the
            server.</faultstring>
            <faultactor>http://
            hosted.datascopeapi.reuters.com/datascopeapi/v1/extractionservice.asm
            x</faultactor>
```

```
            <detail>
               <ServerError xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                    xmlns:xsd="http://www.w3.org/2001/XMLSchema"
                    xmlns="http://reuters.com/datascopeselect/ExtractionService/v1
                    /">
                  <ErrorInstanceId>1ad15579-b401-4489-883b-
                  0b2cfe39b10b</ErrorInstanceId>
                     <ErrorDetail></ErrorDetail>
               </ServerError>
            </detail>
         </soap:Fault>
     </soap:Body>
</soap:Envelope>
```


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