The StreetApps Challenge

Developer's Guide

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A Quick Overview

The StreetApps Challenge Developer's Guide is intended to provide you with guidance when working with the Thomson Reuters Knowledge Direct API. The API is a SOAP-based web service that we have exposed through a **POST-based proxy** service – meaning that it architecturally conforms to **REST** with modified headers and content. For more information on the architecture and sequence, please see the first section. If you have any issues using the proxy services, please email api-support@streetappschallenge.com.

For additional resources, such as sample codes for iPhone, Android and Blackberry operating systems and request templates, please see the Resources Section at www.streetappschallenge.com.

Request & Response Sequence

- 1) Client code on mobile device loads XML of the request from resource file
- 2) Client code specifies the input parameters
- 3) Client code manually constructs HTTPRequest and sends it using POST method.
- 4) Server, RKD API Proxy reads XML, transforms it to RKD SOAP request
- 5) RKD API Proxy sends the request to RKD API
- 6) RKD API returns the response
- 7) RKD API proxy modifies the response by removing headers and other unnecessary mark-up
- 8) RKD API proxy sends the response to device
- 9) Device manually parses the response, reads XML file & displays on device screen

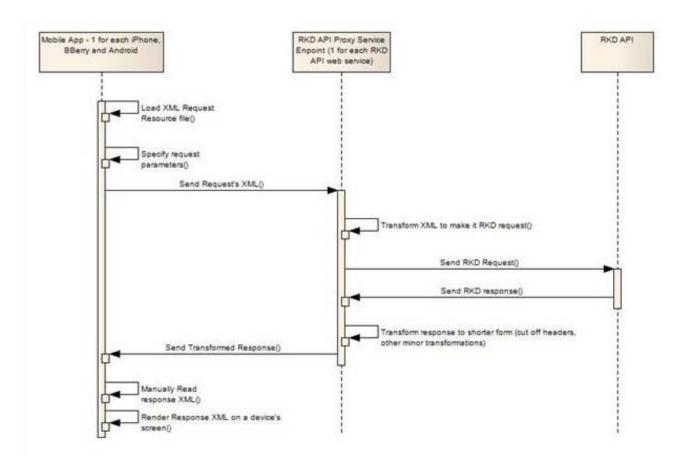




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Authentication & Authorization

Log In Credentials

When you choose to have an API Key, you should receive your log in credentials that have **three components**: a user name, app ID and password. You will use the log in credentials in your token request.

Application Identification String

An application identification string (appid) is a short descriptive string that uniquely identifies your application for tracking and entitlement purposes. For all requests, you must include the appid in the header. You will receive an appid when you request an API Key from the Resources page at www.streetappschallenge.com.

Token Requests

Thomson Reuters Knowledge Direct API (TRKD API) uses an encrypted, expiring token to authenticate each request. To create this token, your application submits credentials to the Token Management service.

Service & Impersonation Authentication Tokens

An authentication token is an encrypted, expiring string that securely identifies you. Your application must pass an authentication token in each web service request. It can be retrieved by sending GET request with base64-encoded *serviceUserName:password* in authorization header.

You can use a single credential to create a **service token** that represents all users of your application or support individual user credentials by creating an **impersonation token** representing each users.

Both of these operations will return TRKD Token Management XML responses containing binary tokens. When Authorization header is not present, GetSessionID method returns 401 'Unauthorized' code. If request is sent from browser credentials, a dialog will appear automatically. Errors raised by TRKD (including credentials verification errors) will be reported as HTTP 400 status description.

You should not request a new token every time you make a request. It takes less time to get actual data than to get a new token.

Token Expiration

Service and impersonation tokens expire after 90 minutes. You should code your application to reuse the token until it expires.

Token Management Endpoint

http://prod.mobileapp.thomsononeqa.com/TokenManagement/TokenManagement.svc/GetSessionID/ApplicationID

Required HTTP Headers

Service Token Header:

GET https://hostname:port/path/TokenManagement.svc/GetSessionID/applicationID HTTP/1.1 Authorization: Basic c2VydmljZWxvZ2luQGV4YWlwbGUuY29tOnBhc3N3b3Jk Host: hostname:port



Impersonation Token Header:

```
GET
https://hostname:port/path/TokenManagement.svc/CreateImpersonationToken2/applicationID/effectiveUserName http://
eUserName http://
Authorization: Basic c2VydmljZWxvZ2luQGV4YWlwbGUuY29tOnBhc3N3b3Jk
Host: hostname:port
```

iPhone XML Sample Request – Creating an Authorization Token

```
// Set user credentials
NSError *error;
NSURLResponse* response;
NSString* auth = USER_AUTH;
NSString* url = AUTH_URL;

NSMutableURLRequest* request = [NSMutableURLRequest requestWithURL:[NSURL URLWithString:url]];
[request setValue:auth forHTTPHeaderField:@"Authorization"];

NSData* data = [NSURLConnection sendSynchronousRequest:request returningResponse:&response error:&error];
```

Android XML Sample Request - Creating an Authorization Token

Blackberry XML Sample Request – Creating an Authorization Token

```
public class AuthorizeRequest extends RKDProxyRequest {
     private String strAuthorizationDataBase64 = null;
     public AuthorizeRequest(String userName, String password) {
             super("AuthorizeRequest");
             strAuthorizationDataBase64 = StringEditor.GetStringAsBase64(userName
                            + ":" + password);
     public void setupConnectionProperties(HttpConnection objHttpConnection)
                     throws IOException {
             objHttpConnection.setRequestProperty("Authorization", "Basic "
                            + strAuthorizationDataBase64);
             super.setupConnectionProperties(objHttpConnection);
public class RKDProxyAccessor {
     public String AuthorizeOnServer() throws Exception {
             RKDProxyResponse objRKDProxyResponse = internalExecuteRequest(
                            this.proxyAppBaseAuthorizationURL, new AuthorizeRequest(
                                           this.userName, this.password));
             AuthorizeWrapper objAuthorizeWrapper = new AuthorizeWrapper(
                            objRKDProxyResponse);
             return objAuthorizeWrapper.getAuthorizationToken();
      }
```



Data Service Requests

In order to obtain data from Thomson Reuters Knowledge Direct API, you need to make a HTTP POST request to one of the service methods listed in the List Service & Methods section.

These are the components that should be included in the general body format below.

- RequestPrefix associated with the service
- RequestDataElementName the root element of the request as can be found in each content section
- ApplicationId provided when you request an API Key
- binaryAuthorizationToken is either service or impersonation token as required by corresponding TRKD method
- RequestData contains request body which looks exactly the same as the TRKD request body

For complete list of Request prefixes and namespaces please, see List of Services and Methods.

XML Sample Request – General Request Body Format

XML Sample Request - Fundamentals for IBM

Note: The Content-Type header cannot be omitted.



Templates

Templates are designed as samples of correct requests, which can be posted to RKD API. One can use them as a starting point by adding/changing parameters. You can find these templates in the Resource Section at www.streetappschallenge.com.

XML Sample Template – Online Reports

```
<
```



List of Content Services & Methods

Fundamentals

Overview & Request

Thomson Reuters Fundamental Snapshot Report has been created to meet the demands of users who primarily intend to display or print information about publicly traded companies. The report contains a company description, address, contact details, officer names and a limited number of financial ratios and estimates. The reports contain all active companies available on the Thomson Reuters financial database. As of January 2004, there were over 26,000 active companies.

Endpoint – http://prod.mobileapp.thomsononeqa.com/Services/FundamentalsService.svc **RequestPrefix** – FundamentalsRequest

RKD XML Namespace - http://www.reuters.com/ns/2009/01/26/webservices/rkd/Fundamentals 1

Functional specification	Method name	Template
Fundamental Report:	GetSnapshotReports	fd 10 gatenanchatronarts
Snapshot Report	Getshapshotkeports	fd_10_getsnapshotreports

Snapshot Reports Information Sets (3)

Business Intelligence:

- Short business description
- · Financial summary
- Address/Phone number

- Web links
- Industry/Sector information
- Officer names/ages/titles

<u>Ratios</u>

20+ commonly used ratios based on pricing data and historical financials.

Pricing:

- Current price
- 52 week hi/lo
- Pricing date
- Volume (avg last ten days)

Size:

- Market cap
- Revenues
- EBITDA
- Net income
- No. of employees
- Enterprise value

Per Share Data:

- Earnings Per Share (EPS)
- Rev per share
- BV per share
- Cash per share
- Cashflow per shareDividends per share

Ratios:

- Gross margin
- ROE
- Price/Sales
- P/E
- P/Book

Forecasted Data

Eight frequently used forecasted matrix:

- · Consensus recommendation;
- Target price;
- LT growth rate;
- Projected P/E (North America/Non-North American - current year);
- Sales (North America current year, quarter;
- Non-North American current year);
- EPS (North America current year, quarter; Non-North American - current year);
- Profit (North America n/a; Non-North American - current year);
- DPS (North America n/a; Non-North American current year).

Content Attributes & Parameters

Attribute

Description



CoIDs	Issued at a company level therefore there is only one of each for every company. The required attribute 'RepoNo' is the permanent identifier for a company in the Thomson Reuters database.	
Issues	Allows user to cross-reference the issues with some commonly used identifiers, and also get other basic information on the issue.	
CoGeneralInfo	General information pertaining to the primary issue and the most recent set of financials.	
TextInfo	 Various descriptive information sets on the company, including the following: Business Summary - Short business description, limited to 1,000 characters; Financial Summary - Summary of most recently reported results. 	
contactinfo	Provides contact information for the company, including an address, a contact person with title, and phone/fax number(s).	
webLinks	Lists various commonly used web page addresses for the company, include home page, 'news releases' page, 'profile' page, the investor relations page etc. This section also contains a contact email address.	
IndustryInfo	Information on company executives, including name, age, title(s) and source document where officer information was collected from. Codes are used to represent officer titles and source document types.	
officers	Information on company executives, including name, age, title(s) and source document where officer information was collected from. Codes are used to represent officer titles and source document types.	
Ratios	The pre-calculated ratios and values. Both issue level and company level ratios are provided. A total of up to 390 ratios may be available per company.	
ForecastData	Information on the latest Consensus Estimates, including Revenues, EPS, P/E, Target Price and Long Term Growth Rate. All values within this section will be in Major Currency.	



Estimates

Overview & Request

Thomson Reuters Fundamental Snapshot Report has been created to meet the demands of users who primarily intend to display or print information about publicly traded companies. The report contains a company description, address, contact details, officer names and a limited number of financial ratios and estimates. The reports contain all active companies available on the Thomson Reuters financial database. As of January 2004, there were over 26,000 active companies.

Endpoint - http://prod.mobileapp.thomsononeqa.com/Services/EstimatesService.svc **RequestPrefix** - EstimatesRequest

RKD XML Namespace - http://www.reuters.com/ns/2008/01/12/webservices/rkd/Estimates 1

Functional specification	Method name	Template
Consensus estimates and	GetConsensus	os 01 gateansansus
ratings	detconsensus	es_01_getconsensus

Content Attributes & Parameters

Description		
Consensus Estimates Section.		
Fiscal Year Estimates contains multiple FYEstimate items.		
d post goodwill. t goodwill. post goodwill. al. e exceptional. pre exceptional.		



	 SUBSCRS - Subscribers. OUTOILGAS - Output, Oil and Gas. ROA - Return on Assets. ROE - Return on Equity. Units: Estimate units U - Major Currency Units (x1.00). T - Thousands of Major CU (x1000.00). M - Millions (x1000000.00). B - Billions (x1000000000.00). MC - Minor Currency Units (x0.01). P - Percent (%). 	
FYPeriod	Fiscal Year Period. Contains the following attribute(s): • fyear: Fiscal Year • periodType: Fiscal Period's Type. Can have the following values: • A - Annual • Q - Quarterly • S - Semi-annual • T - Trimester (Reserved for future use) • M - Monthly (Reserved for future use) • periodNum: Fiscal Period's Number (not provided for Annual period). Can contain values (1,2,3,4,5-12). • endCalYear: Period End Calendar Year. • endMonth: Period End Month.	
ConsEstimate	 Consensus Estimate. Contains the following attribute(s): type: Consensus Estimate Type. Can have the following values: High - High Estimate. Low - Low Estimate. Mean - Mean Estimate (primary consensus measure for North American companies). Median - Median Estimate (primary consensus measure for non-NorthAm companies). StdDev - Standard Deviation. NumOfEst - Number of Estimates. Upgradings - Number of Estimates upgraded. (Consensus Analysis Only) Dngradings - Number of Estimates downgraded. (Consensus Analysis Only) 	
ConsValue	 Contains the following attribute(s): dateType: Date Type. Can have the following values: CURR - Current Estimate (note applicable for Upgradings or Dngradings). 1WA - Median / Mean value as of last week. Number of upgrades /downgrades between last week and current estimates (Consensus Analysis Only). 1MA - Median / Mean value as of last month. Number of upgrades / downgrades between last month and current estimates (Consensus Analysis Only). 2MA - Median / Mean value as of 2 months ago. Number of upgrades / downgrades between 2 months ago and current estimates (Consensus Analysis Only). 3MA- Median / Mean value as of 3 months ago. Number of upgrades / downgrades between 3 months ago and current estimates (Consensus Analysis Only). 4MA - Median / Mean value as of 4months ago (Consensus Analysis Only). 5MA - Median / Mean value as of 5 months ago (Consensus Analysis Only). 6MA - Median / Mean value as of 6 months ago (Consensus Analysis Only). 7MA - Median / Mean value as of 7 months ago (Consensus Analysis Only). 8MA - Median / Mean value as of 8 months ago (Consensus Analysis Only). 9MA - Median / Mean value as of 9 months ago (Consensus Analysis Only). 	



	 10MA - Median / Mean value as of 10 months ago (Consensus Analysis Only). 11MA - Median / Mean value as of 11 months ago (Consensus Analysis Only). 12MA - Median / Mean value as of 12 months ago (Consensus Analysis Only). 13MA - Median / Mean value as of 13 months ago (Consensus Analysis Only). 14MA - Median / Mean value as of 14 months ago (Consensus Analysis Only). 15MA - Median / Mean value as of 15 months ago (Consensus Analysis Only). 16MA - Median / Mean value as of 16 months ago (Consensus Analysis Only). 		
	 17MA - Median / Mean value as of 17 months ago (Consensus Analysis Only). 18MA - Median / Mean value as of 18 months ago (Consensus Analysis Only). 		
NPEstimates	Non-Periodic Estimates section.		
NPEstimate	Non-Periodic Estimate. Contains the following attribute(s): type: Estimate Type. Can have the following values: TARGETPRICE - Target Price LTGROWTH Long - Term Growth Rate unit: Estimate units. Can have the following values: U - Major Currency Units (x1.00) T - Thousands of Major CU (x1000.00) M - Millions (x1000000.00) B - Billions (x1000000000.00) MC - Minor Currency Units (x0.01) P - Percent (%)		
ConsEstimate	 type: Consensus Estimate Type. Can have the following values: High - High Estimate Low - Low Estimate Mean - Mean Estimate (primary consensus measure for North American companies) Median - Median Estimate (primary consensus measure for non-NorthAm companies) StdDev - Standard Deviation NumOfEst - Number of Estimates Upgradings - Number of Estimates upgraded. (Consensus Analysis Only) Dngradings - Number of Estimates downgraded. (Consensus Analysis Only) 		
Recommendations	Recommendations		
STOpinion	Opinions		
ConsOpinion	Consensus Opinion. Contains the following attribute(s): set: Opinion Set. Can have the following values: STD - Standard code: Opinion Code. Can have the following values: 1 - Buy 2 - Outperfrom 3 - Hold 4 - Underperform 5 - Sell 6 - No Opinion desc:. Opinion Description. Can have the following values: BUY - Buy OUTPERFROM - Outperfrom HOLD - Hold UNDERPERFORM - Underperform SELL - Sell NA - No Opinion		



Online Reports Service

Overview & Request

The Online Reports service provides access to online news reports and allows the rendering of text and pictures from the reports.

Endpoint - http://prod.mobileapp.thomsononega.com/Services/OnlineReportsService.svc

RequestPrefix – OnlineReportsRequest

RKD XML Namespace - http://www.reuters.com/ns/2006/05/01/webservices/rkd/OnlineReports 1

Functional specification	Method name	Template	
Summary by Topic	GetSummaryByTopic	or_01_getsummarybytopic	
Summary by Stories	GetSummaryByStories	or_02_getsummarybystories	
Headlines	GetHeadlines	or_03_getheadlines	
Topics	GetTopics	or_04_gettopics	

Content Attributes & Parameters

Region	Report Description	Topic Code
U.S. Online Report	Business	OLUSTOPNEWS
	World	OLRLIFBO
	Sports	OLUSWORLD
	Politics	OLUSSPORT
Canada Online Report	Business	OLCABUS
	National	OLCANAT
	Sport	OLCASPORT
UK Online Report	Top News	OLGBTOPNEWS
	World	OLGBWORLD
	Business	OLGBBUS
	Sports	OLGBSPORT



Quotes

Overview & Request

TRKD API delivers snap prices only; you may not deliver streaming prices using TRKD API. By default TRKD provides delayed stock prices. However, if your organization has an agreement within an exchange to provide its prices in real-time, then real-time snap prices can be delivered by TRKD for that exchange.

An instrument is identified by a RIC (Reuters Instrument Code). Each RIC has a series of attached fields that contain different items of information (for example, today's high price, traded volume, etc.). Not all instruments contain the same fields, and the fields are not always returned in the same order; this depends on the type of financial instrument (for example, stock, index, FX rate, fund, etc.). Thomson Reuters has provided permission to three major exchanges – New York Stock Exchange (NYSE), London Stock Exchange (LSE) and National Stock Exchange of India (NSE).

Each field has a label that identifies it and it is called a Field Identifier or FID. Since you are parsing the data returned in XML format, it is essential that your program finds the required values by using these identifiers, not by searching for the third or fourth field (for example), because over time Thomson Reuters may add extra fields or change the field order.

RICs & FIDs Data Guide

A list of RIC's from the three exchanges & FID's can be found under **Resources on The StreetApps Challenge website**. Note that up to 75 instruments and 25 fields may be included in each request.

 $\textbf{Endpoint} - \underline{\text{http://prod.mobileapp.thomsononeqa.com/Services/QuotesService.svc}}$

RequestPrefix – QuotesRequest

RKD XML Namespace - http://www.reuters.com/ns/2006/05/01/webservices/rkd/Quotes 1

Functional specification	Method name	Template
Quote Data	Retrieveltem_1	mk_01_retrieveitem

Content Attributes & Parameters

Attribute	Description
Retrieveltem_1	
ItemRequest	 Specifies request attributes to retrieve a specific or multiple instruments. ItemRequest attributes are listed below. Contains the following Attribute(s): IncludeHints: Setting this attribute to True will display hints on how to display the data for each Field: decimal, fraction, date, or date time, and so on. This value is False by default. ExpandChain: By default the value is true which results in showing all data (Fields) for each of the Instruments in the chain. If the value is set to false only data about the chain will be sent with a listing of all Instruments contained but without detailed information about them. Scope: You can indicate what fields you want returned for instruments listed in RequestKey by entering one of the following options into the scope: All - Is a default value that returns all the fields. AllExcept - Excludes the fields entered into the Fields attribute List - Returns only the fields indicated in Fields attribute Note: Each symbol specified has to have the exchange (example: TRIN.O). Symbol format should be as follows [Symbol].[Exchange].



Fields (optional)	A string containing the names of the desired fields, separated by a colon (no spaces). The Quotes service returns this set of fields for each Request Key in ItemRequest. The service permits the specification of an additional namespace and user-defined data type in this string.	
RequestKey	Specifies item name and service name.	

Markets - Exchanges

Exchange	Name	Product Code	Exchange Code
NYSE	New York Stock Exchange	WWEXNYSLS	NYS
LSE - Domestic	London Stock Exchange	WWEXLSE1D	LSE1D
LSE - International	London Stock Exchange	WWEXLSE1I	LSE1I
BSE	Bombay Stock Exchange	WWINDNA2	INDNA2
NSE - Domestic	National Stock of India	WWEXNSI	NSI
NSE - International	National Stock of India	WWINDNSI	INDNSI
HKEX - Domestic	Stock Exchange of Hong Kong	WWEXHKG	HKG
HKEX - International	Stock Exchange of Hong Kong	WWINDHKG	INDHKG
TMX	Canada Stock Exchange	WWEXCNQ	CNQ
TSX	Toronto Stock Exchange	WWEXCGD	CGD
ASX	Australia Stock Exchange	WWEXASX	ASX
NASDAQ	(Level 1 UTP)	WWEXNAS1	NAS1



Reuters Search

Overview & Request

Thomson Reuters Search web service could be described as a search engine that searches on Thomson Reuters financial information. Primary use case of Search service is as a symbol resolution engine. That is, use search to resolve company identifiers (for example, a company name) into the identifiers required for other APIs.

Endpoint - http://www.reuters.com/ns/2006/05/01/webservices/rkd/Search/Searchall 1

RequestPrefix – ReutersSearchRequest

RKD XML Namespace - http://www.reuters.com/ns/2006/05/01/webservices/rkd/Search/Searchall 1

Functional specification	Method name	Template	Description
Search	GetSearchAll	sr_01_getsearchall.xml	Searches any item in the index

Common Elements used in Search

Query Header

The parameters in this section affect the way in which the query will be processed by the search engine. If this section is left out default values are passed. The following is an example of the Header section with default values:

Attribute	Description
Max Count	The maximum number of records to be returned by this query. The max number is set to 4020 and
	the service will throw an exception if it is more.
Pivot	The offset of the first record returned from the total identified by the search engine.
Timeout	The timeout (in seconds) to allow before the query returns an empty result. Default value is 10
	seconds.
Spellcheck	Whether the search engine performs spell checking on the query. This value only affects searches made outside of a criteria value (on the Name, Code or NameSymbol fields). The possible values for Spellcheck are: On Off Suggest

Query

Each Query command contains Expression fields and Value fields. An Expression has a number of characteristics that you will be able to specify. These can be defined as:

- The expression can include a number of values that could be matched for the query.
- o Indicates what information is returned in the response through the use of Include attribute in each field.
- o The search engine may provide additional information for a particular field, such as Navigation.
- o It may be possible to sort a set of results on a particular field.

Note: Query must generally be used only for requests against the default field sets: "Search", "Name" and "Code" as these fields allow ranking to be performed by the search engine based on how well the user query matches the content of these fields. For more information see section Searchable Field Types.

Note: The types of request which contain many terms as a part of the <Query/> element are not executed.

Attribute	Description		
Sort	Only available for fields that are configured as sortable by the search engine. If a sort order is not		
	specified Search results are returned in a ranked order. This is dictated by a static rank value		
	defined for each document according to a set of business rules and a dynamic ranking created at		



	run time designed to boost documents that are the best match for the query.				
Negated	Specifies that results should not contain this value.				
ExpressionType	Only available for numeric and date fields. To allow the user to specify how the field will be				
	matched by the search engine.				
UpperValue	Only available for numeric and date fields. When an expression type of "Between" is specified, the				
	user will be required to specify both the upper and lower bounds for the match. In these cases,				
	"Value" is interpreted as the lower bound and "UpperValue" will specify the upper boundary of the				
	range expression.				
ExactMatch	Only available for symbol fields. This flag specifies that the search engine should perform an exact				
	match against the field. Support for this feature is specified by the search engine and is not				
	available by default for all symbol fields. This being the case, specifying that an exact match should				
	be performed will not always guarantee that an exact match was performed by the search engine.				
	Current support for this feature is only available for RIC fields.				

Value fields represent a single expression and contain the actual value to be included in the criteria for the search. Each data type has a specific value container as shown:

Attribute	Description
Value	The value to match for this field.
Navigation	Only available for fields for which the search engine is configured to provide analytics on a set of results.
Include	You would set this value to true for a field you want to be returned in the response. You can set this
	to be returned in the response without specifying query criteria.

Filter

Values can be specified in a Filter rather than a Query when they are required to only limit the universe of results available to the query. The Filter parameter is typically used for query terms that relate to metadata, such as specifying the collection(s), document type or category for the query. One reason for using the Filter parameter rather than query is the lower overhead and faster execution time.

Filters do not perform query transformation processing, such as approximate match. The terms will impact which documents that are returned (by limiting the scope of the query), but will not impact the ranking/sorting of the results. For example, the quality of the match (e.g. related to proximity) for filter terms will not impact the rank of the document. Features such as sorting and navigation are not available on expressions specified as part of a filter either.

Note: Like with fields in the query section it is also possible to set the Include attribute to true to include the field in the response.

Difference between Query and Filter in Thomson Reuters Search

Thomson Reuters Search uses the **Query** parameter to try and find as many matches in its database as possible. It tries alternate spellings, near matches, and will query against many different parameters in order to find good search results. For example if you enter "Microsof 20 Put Warrant" in the Search parameter, Thomson Reuters Search will suggest Microsoft despite the fact that it was spelt incorrectly. Once the spelling is corrected, it will search across a wide range of parameters until it finds that there are hits for Microsoft which are of asset class warrant, and of strike price 20.

Thomson Reuters Search uses the **Filter** parameter to try to remove from the search results things which you tell it you're not interested in. There is no intelligence applied to items you specify in the filter parameter. For example, if you specify that the exchange must be LSE, then Thomson Reuters Search will not return any results which don't have LSE as the Exchange, it will not try to second-guess you.

You should use **Query** in Thomson Reuters Search in the following cases:

- 1. When you have values for Name, Code and Search, because Query can have only those values specified.
- 2. When you want your input to be intelligently interpreted.



- 3. When you want to get near matches to the values you specify.
- 4. When you want to retrieve navigation for metadata.
- 5. When you want your results to be partially prioritized on how well they fit your query.

Use **Filter** when you:

- 1. Want to specify how the search results are to be cut down.
- 2. Do not want to apply any intelligence in search results.



Significant Developments

Overview & Request

Thomson Reuters Significant Developments is a news analysis and filtering service that identifies crucial, market-moving company news on a near real-time basis for a large universe of public companies. You can use Significant Developments to screen through company press releases and briefly summarize major company specific developments. The targeted coverage is 30,000+ publicly traded companies in 80 countries.

Thomson Reuters Significant Developments allows users to keep abreast of the market without screening through high volumes of press releases. This service allows for customized reports on companies and/or areas of interest (e.g. M&A activity in a particular industry). The data, including history, is made available in a highly searchable format allowing users to analyze trends and patterns for a company, industry or subject matter.

Thomson Reuters analysts monitor thousands of press releases daily, identifying those developments that are significant to a company's current or future operations. Each story, complete with a date, time and headline, is tagged according to subject and is assigned a significance level. There are 27 possible subject topics and three 2 = medium, 3 = low). There is only one level of significance per request (i.e. Significance = 2, NOT Significance = 1, 2)

The Thomson Reuters significant development database is created by trained analysts on a real time basis who continuously monitor various news sources (Business Wire, Wall Street Journal, for example) for significant developments that are viewed as soon as they become available to public. The analysts create abstracts and tag them by subject and importance.

Endpoint - http://prod.mobileapp.thomsononeqa.com/Services/SignificantDevelopmentsService.svc

RequestPrefix - SignificantDevelopmentsRequest

RKD XML Namespace - http://www.reuters.com/ns/2006/05/01/webservices/rkd/SignificantDevelopments

1

Functional specification	Method name	Template
Significant Developments	GetSignificantDevelopments	sd_01_getsignificantdevelopments

Content Attributes & Parameters

Request Attributes

Attribute	Description		
Find Request			
StartDate	The starting date where Thomson Reuters Significant Developments should begin searching for news stories.		
EndDate	The end date where Thomson Reuters Significant Developments should end searching for news stories significance. There are 3 flags used to disclose the level of significance: 1 = High 2 = Medium 3 = Low		
Topics	There are total of 22 topics available for Thomson Reuters Significant Development stories. Each development can include up to 3 topic codes depending on the nature of development story. There will always be a minimum of one topic code will be assigned to each development. For further information on Topic codes and their descriptions please		



	refer to section Topics and Descriptions.		
FrontPage	Indicates if response should only contain stories that are "Front Page".		
MaxNumberOfitems	Sets the number of news stories returned in the response.		
	Note : Thomson Reuters recommends setting MaxNumberOfltems="100" for all requests to speed up the search and to avoid time out errors in cases when companies have accumulated an extremely large amount of stories that are not relevant to the search. Even though <maxnumberofltems> is an optional attribute, Thomson Reuters recommends including <maxnumberofltems> in each significant developments request.</maxnumberofltems></maxnumberofltems>		
FindbyIDRequest			
DevelopmentID	Development Id of a news story.		
FindRequestbyFrontPage			
FrontPage	Indicates if response should only contain stories that are "Front Page" or the ones that are not. The default value is "Yes".		
MaxNumberOfItems	Sets the number of news stories returned in the response.		
	Note : Thomson Reuters recommends setting MaxNumberOfItems="100" for all requests to speed up the search and to avoid time out errors in cases when companies have accumulated an extremely large amount of stories that are not relevant to the search. Even though <maxnumberofitems> is an optional attribute, Thomson Reuters recommends including <maxnumberofitems> in each significant developments request.</maxnumberofitems></maxnumberofitems>		

Response Data

Data Type	Description		
RepNo	A RepNo (Reuters Report Number) uniquely identifies each issuer (company) covered by Thomson Reuters. Thomson Reuters generates and maintains these numbers. RepNos do not change over time and are never re-used.		
Development ID	ID Thomson Reuters uses a Development ID to uniquely identify each development in the database. Thomson Reuters generates and maintains these numbers. Development IDs do not change over time and are never re-used.		
Name	Company name.		
Ticker	Ticker Id.		
RIC	RIC ID assigned to the company.		
Country	Country the headquarters of the company is located in.		
Development Dates - Thre	e dates associated with each development. Each date is displayed in GMT.		
Source Date	Indicates the date of the press release where the development news was originally sourced from.		
Initiation Date	Indicates the date and time when the development new was entered into our database for the first time by our analyst staff.		
LastUpdate	Date Indicates the date and time when Thomson Reuters last updated the development news. If the initiation and last update dates are the same, then there is no update for the given development after the first time it was entered.		
Front Page & Significance	- Thomson Reuters associates two flags with each development: front page and significance.		
Front Page	Indicates if a given development is coming from a front page story or not. There are true or false flags used to indicate the nature of this data point.		
Significance	Indicates the level of importance (1=High, 2=Medium, 3=Low) for the development.		



Topics

Thomson Reuters Analysts categorize Significant Development stories using the following Topics. Thomson Reuters assigns up to three topics to each story.

Description	Codes	Explanation
Primary Topic Codes		
Positive Earnings Pre- Announcement	249	Pre-announcement (Guidance) provided by company when it expects to exceed (and by how much) estimates published by analysts or company themselves. Includes revised estimates, current consensus estimates, and reason for revision.
Negative Earnings Pre- Announcement	246	Pre-announcement (Guidance) provided by company when it expects to fall below (and by how much) estimates published by analysts or company themselves. Includes revised estimates, current consensus estimates, and reason for revision.
Other Pre-Announcement	252	Pre-announcement (Guidance) provided by company when it expects to meet estimates published by analysts or company themselves. May also incorporate general business outlook or specific guidance when no published estimates are available. Includes revised estimates and current consensus estimates.
Initial Public Offerings	231	All new issuances of stock for the first time publicly on a stock exchange.
Equity Financing /Related	232	Encompasses the issuance of new debt instruments as well as financial restructurings.
Debt Financing	233	Country the headquarters of the company is located in.
Mergers / Acquisitions	207	Includes name of company and brief business summary, specific terms of the deal, expected completion date and type of accounting treatment used. Does not include whether or not deal is accretive to earnings, is subject to regulatory factors or board/shareholder approval and subsequent new management structure.
Equity Investments	219	Any purchase/sale of a company's equity by another company, individual or group of investors when interest represents less than 50% of company.
Divestitures / Spin-offs	213 214	Disposal or sale of product line, segment or division.
Share Repurchase	222	Company's repurchase of common stock on the open market.
Indices Changes		Includes DJIA, S&P 500, NASDAQ 100 Does not include other indices such as S&P MidCap 400, S&P SmallCap 600, Russell 2000.
Litigation / Regulatory/ Related	243 254 244	Includes lawsuits for a significant amount of money or resulting in discontinuation of a product, division or segment. Also includes Justice Department inquiries, state inquiries, criminal investigations and SEC investigations. Does not include class action security lawsuits or lawsuits of immaterial value.
Accounting Issues	242	Includes inquiries regarding companies accounting practices, earnings restatements, delayed filings, and auditor's comments.
Bankruptcy / Related	228	Companies filing for, or emerging from, Chapter 11 Bankruptcy protection.
Restructuring /Reorganization	225	All reorganizations and organizational restructurings and cost of restructuring, where available. Includes workforce reductions, facility closures and consolidation of business segments/divisions.
Joint Ventures /Strategic Alliances / Business Deals	204	Includes joint ventures, collaborations or alliances involving multiple companies and the licensing of one company's product to another. Separate stories will be



		written up for each company involved.
Expansion / New Markets / New Units	216 217	Includes geographical expansion, the creation of new operating segments/units and entrance into new markets.
Products	201	Includes new products and enhancements to existing products with specified improvements. Not Included: Enhancements/beta versions of existing products.
Officer Changes	210	Changes to Chairman, CEO, President or CFO only.
Exchange Changes	237	Changes in exchange (NYSE, Nasdaq, Amex, OTC Bulletin Board).
Name Changes	240	Name changes as confirmed by an exchange.
Special Events	258	Includes all other developments that do not fall into any of the above categories or developments added based upon stock volatility (unless +/- movement in excess of 15%). This includes positive or weak earnings reports, analyst up/down grades, significant dividend cuts, and political news.
Additional Topic Codes		
Production Guidance	202	
Layoffs	226	
Labour Issues	227	
Indices Changes	234	
Earnings Announcements	245	
Strategic Combinations	253	

255

256

257

259 260

261

281

282

283

No Significant Developments

Change in Accounting Method /

Too long Significant Development

Reported Dividends

Debt Ratings

Restatements

Policy

Delinquent Filings

Too long Comments

Too short Significant

Development



StreetEvents

Overview & Request

The Street Events API is a web service providing access to StreetEvents' proprietary content. The service allows searching for events, retrieving detail for specific events, and retrieving events related to specific companies. The information returned by the service includes identifiers which may be passed to Thomson Reuters Document Retrieval (TRDR) to obtain briefs, transcripts, and SEC filings delta reports.

- **Get Economic Headlines** searches for economic events based on date/time range, and/or relatedness to one or more specified market country code.
- **Get Event** retrieves details for a specific event.
- **Get Event Headlines** searches for events based on date/time range, type of event, relatedness to specific symbols or symbols in a portfolio, and/or relatedness to one or more specified markets or industries.
- **Get Event Headlines Overview** retrieves a limited set of recent and upcoming events related to a specific company.

Endpoint - http://prod.mobileapp.thomsononega.com/Services/StreetEvents.svc

RequestPrefix – StreetEventsRequest

RKD XML Namespace - http://www.reuters.com/ns/2009/01/26/webservices/rkd/StreetEvents 1

Functional specification	Method name	Template
Economic Headlines	GetEconomicHeadlines	ev_01_geteconomicheadlines
Event	GetEvent	ev_02_getevent
Event Headlines	GetEventHeadlines	ev_03_geteventheadlines
Event Headline Overview	GetEventHeadlinesOverview	ev_04_geteventheadlinesoverview

Content Attributes & Parameters

Specific – Request Data Types

Attribute	Description
Get Economic Headlines	
DateTimeRange	The date/time range over which events must be included in the search results. This is a required field, and the From date must precede the To date.
MarketCountryCodes	An optional array of ISO 3166 country codes. If included, only economic event headlines related to the specified country or countries will be returned by the search. If left empty or null, no market/countrybased filtering will be done.
Classification	An optional array of Economic Classification enumerations restricting the response to events with the specified classifications. Since events may have multiple classifications, the response may still indicate classifications outside of the subset included in this filter. Possible values are: • Consumer sector • External sector • Government sector • Industry sector



	Labour market Money and finance National accounts Prices
	 Surveys and cyclical indexes Other If left null or empty, no classification filter will be applied.
SortOrder	An optional field specifying the sort field and sort direction. If left blank or empty, default sorting is by ascending date. For more details see section SortCriterion.
Pagination	A required structure indicating which page to return and how many records to define as a "page". Pagination is a required field. The PageNumber and RecordsPerPage properties of Pagination must both be greater than 0. For more details see section Pagination.
Get Event	
EventId	A valid event id obtained from a Headline.
OutputSymbolTypes	The Organizations of headline will be returned with company identifiers as per the OutputSymbolTypes. If it is not specified, the response will default to SE Exchange Ticker. For more details see section SymbolCriterion.
	Note: OutputSymbolTypes request parameter is restricted to RIC and ExchangeTicker values only.
Get Event Headlines	
DateTimeRange	The date/time range over which events must be included in the search results. This is a required field, and the From date must precede the To date.
EventTypes	An optional list of types of events to include in the search results. If left empty or null, no filtering will be done on event type, and all event types may appear in the search results. For more details see section EventType.
IndustryCodes	An optional structure specifying an industry code schema and a list of codes defined in this schema. If specified, only events related to the requested industry or industries will be included in the search results. If left empty or null, no industry-based filtering will be done. Currently, GICS is the only supported schema, and this property is ignored. IndustryCodes - a list of industry codes defined in the requested schema.
MarketCountryCodes	An optional array of ISO 3166 country codes. If included, only events related to the specified country or countries will be returned by the search. If left empty or null, no market/country-based filtering will be done.
Pagination	A required structure indicating which page to return and how many records to define as a "page". Pagination is a required field. The PageNumber and RecordsPerPage properties of Pagination must both be greater than 0. For more details see section Pagination.
Portfoliold	An option id representing either a PortfolioWarehouse portfolio or a StreetEvents watchlist. Portfoliold may be left empty, in this case portfolio-based filtering will be done. Otherwise, Portfoliold must be convertible to an integer. Additionally, StreetEvents watchlist ids must be prefixed with "SE". Failure to meet these requirements will result in a service fault of category InvalidRequest.
SortOrder	An optional field specifying the sort field and sort direction. If left blank or empty, default sorting is by ascending date. For more details see section SortCriterion.
Symbols	An optional list of symbols by which to filter the returned headlines. If included, only events related to the listed symbols will be returned. If left empty or null, no symbol-based filtering will be done. For more details see section SymbolCriterion.
OutputSymbolTypes	The Organizations of headline will be returned with company identifiers as per the OutputSymbolTypes. If it is not specified, the response will default to SE Exchange Ticker. For more details see section SymbolCriterion.



	Note: OutputSymbolTypes request parameter is restricted to RIC and ExchangeTicker values only.
Get Event Headlines Overvi	ew
EventTypes	An optional list of types of events to include in the response. If left empty or null, no filtering will be done on event type, and all event types may appear in the response. For more details see section EventType. • Conferences • CorporateCallsAndPresentations • EarningsCallsAndPresentations • EarningsReleases • EconomicEvents • GuidanceCallsAndPresentations • MergerAndAcquisitionCallsAndPresentations • SalesAndTradingStatementCallsAndPresentations • SalesAndTradingStatementReleases • ShareholderAndAnnualMeetings
RecordsPerGroup	The number of event headlines to include in each returned group (Recent and Upcoming). RecordsPerGroup must be between 1 and 10, inclusive. Values outside of this range will result in a service fault.
Symbol	A required field indicating which symbol to return overview results for. For more details see section SymbolCriterion.

Generic - Request Data Types

Attribute	Description
Pagination	
PageNumber	The requested page of a multi-page set of headlines. This field is 1-based - specifying PageNumber=1 returns the first available page.
RecordsPerPage	The maximum number of headlines to include in the returned page of results.
SortCriterion	
Ву	The field on which to sort. Possible values are: • Date • Symbol • CompanyName • EventName • EventType - Note: The applied EventType sorting is based on the "eventsort" column found in one of the tables. It is not alphabetical by event type name. If absent or set to a value other those listed above, sorting will default to Date.
Direction	Specifies whether to sort Ascending or Descending.
SortDirection	SortDirection is a enumeration with values "Ascending" and "Descending".
SymbolCriterion	
Symbol	Symbol Type and Value.
Туре	The symbol type. The following symbol types are supported:



	ISIN ILXID RIC SEDOL TKOCOMPANYID TKOQUOTEID TKOSECURITYID
Value	A symbol of the given symbol type.

Response Data Types

Attribute	Description
Event	
Brief	A structure describing the Brief status and, if available, a content identifier (Briefld) which may be used to retrieve the brief from TRDR. Brief status can have the following values: • Available • Expected (in the future) • None (not available)
CountryCode	The ISO 3166 country code to which this event is related.
EventType	The type of event described by this headline. For more details see section EventType.
Duration	The start and end times of the event (a conference call or webcast). Possible values: • 'IsEstimate' - If true, the start and end dates/times are estimated. • DateTimeQualifier - is an enumeration which describes adjustments applied to a date and time. Possible values are: • None • DateOnly • DateTime • BeforeMarketOpen • AfterMarketClose
EventId	A unique id for this event. This id may be used in a subsequent call to the Get Event Request.
LastUpdate	The date/time at which event information was last updated.
LiveDialIn	 A structure describing when and how to access the live dial-in. Possible values: Duration - the duration of a dial-in conference call or conference-call replay. Password - the password, if required, for a dial-in. PhoneNumber - the phone number for a dial-in. AlternatePhoneNumber - the alternate phone number, if any, for a dial-in.
LiveWebcast	A structure describing the status and, if available, a content identifier which may be used to retrieve the webcast url using the GetWebcastUrl request. Possible values: • Status - whether a webcast is available, expected, or not available. • Duration - the start and end times of the webcast. • WebcastId - if the status is Available, a content identifier which may be used to retrieve the webcast url using the GetWebcastUrl request.
Name	The name of the event.
ReplayDialIn	A structure describing when and how to access the replay dial-in. Possible values: • Duration - the duration of a dial-in conference call or conference-call replay. • Password - the password, if required, for a dial-in. • PhoneNumber - the phone number for a dial-in. • AlternatePhoneNumber - the alternate phone number, if any, for a dial-in.
ReplayWebcast	A structure describing the status and, if available, a content identifier which may be used



	to retrieve the replay webcast url using the GetWebcastUrl request. Possible values: • Status - whether a webcast is available, expected, or not available. • Duration - the start and end times of the webcast. • WebcastId - if the status is Available, a content identifier which may be used to retrieve the webcast url using the GetWebcastUrl request.
Transcript	A structure describing the Brief status (Available , Expected or None) and, if available, a content identifier which may be used to retrieve the brief from TRDR.
Organizations	 A list of organizations related to the event. Possible values: CompanyName - the organization's name. Symbols - collections of organization's symbols. See section SymbolCriterion for more details.
AssociatedEvents	A list of events associated with this event. See section EventOverview for more details.
Contacts	A list of contacts for this event including their names, organization names, titles, addresses, phone numbers, e-mails, Urls.
Location	The location of this event. Possible values: Name - name of the location. Description - description of the location. Notes - notes about this location. Address - address of the location. Room - a room for this location. PrimaryPhoneNumber - a primary phone number for this location. AlternatePhoneNumber - an alternate phone number for this location. PrimaryFaxNumber - a primary fax number for this location. AlternateFaxNumber - an alternate fax number for this location. Email - an email for this location. Url - a web url for this location.
Notes	Notes on this event.
Source	The source of the event information. For example: CLIENT or Sponsor.
Sponsor	 The company name and symbol of the event's sponsor. Possible values: CompanyName - the organization's name. Symbols - collections of organization's symbols. See section SymbolCriterion for more details.
Summary	A summary of this event.
RsvpInformation	A structure indicating how to rsvp to this event. Possible values: • Deadline - date/time before which Rsvp must be submitted. • Email - e-mail address to which Rsvp may be submitted. • FaxNumber - fax number to which Rsvp may be submitted. • PhoneNumber - phone number for submitting the Rsvp. • Url - web-site through which an Rsvp may be submitted.
Dividend	Dividend details. This field is populated only for events of type ExDividends. Possible values: • AnnouncementDate - date on which an income payment was first announced. • ExDate - date on or after which transactions are not eligible for an Income Payment, unless traded on a special basis. • PaymentDate - income payment date. • RecordDate - date by which transfers must be received at the registrar to participate in direct distribution of income. • Amount - amount of the dividend. • Currency - currency in which the dividend was paid. • PaymentType - describes the nature or type of the dividend. See section IdcPaymentTypeCode1 for more details. • SecondaryPaymentType - provides supplemental, or alternative, to PaymentType. See section IdcPaymentTypeCode2 for more details.



Split	 Split details. This field is populated only for events of type StockSplits. Possible values: AnnouncementDate - date on which the capital event details were first added in FTID's system. ExDate - date on which the event begins and new purchases of the security no longer confer the benefits of the issue unless special trading conditions are attached. PaymentDate - first day of trading for capital event securities. RecordDate - holders registered by this date may participate in the capital event. Amount - a value reflecting the dilution or concentration of the parent security capital relative to the pre-issue capital. For example, a 2-for-1 stock split would equal 2.0. Ratio
IPO	IPO details. This field is populated only for events of type IpoFilings, IpoLockupExpirations, IpoPricings, IpoWithdrawals, SecondaryWithdrawals, SecondaryPricings, and SecondaryFilings. Possible values: • FilingDate - date on which IPO was filed. • LockupExpiryDate • OfferingPrice • FilingPriceLow • FilingPriceHigh • FinalPrice • TotalShares • WithdrawalDate • PricingDate • Exchange - exchange in which the IPO was filed. • FormFiled - form with which the IPO was recorded. • LeadUnderwriter • Description
FiscalPeriod	Fiscal Period of the event. Can have the following values: • Quarter - quarter of the Fiscal Period. • FiscalYear - fiscal Year of the Fiscal Period.
Event Overview	
EventType	The type of this event. For more details see section EventType.
Duration	The start and end times of the event. Can have the following values: • 'IsEstimate' - If true, the start and end dates/times are estimated. • DateTimeQualifier - is an enumeration which describes adjustments applied to a date and time. Possible values are: • None • DateOnly • DateTime • BeforeMarketOpen • AfterMarketClose
Eventid	A unique id for this event. This id may be used in a subsequent call to the GetEvent request
Name	The name of this event.
LastUpdate	The date/time at which event information was last updated.
Organization	 The company name and symbol of the event's subject company. Possible values: CompanyName - the organization's name. Symbols - collections of organization's symbols. See section SymbolCriterion for more details.
Transcript	A content identifier which may be used to construct a request to retrieve the transcript from TRDR.



Headline	
Brief	A structure describing the Brief status and, if available, a content identifier (BriefId) which may be used to retrieve the brief from TRDR. Brief status can have the following values: • Available • Expected (in the future) • None (not available)
CountryCode	The ISO 3166 country code to which this event is related.
EventType	The type of event described by this headline.
Duration	The start and end times of the event (a conference call or webcast). Possible values: • 'IsEstimate' - If true, the start and end dates/times are estimated. • DateTimeQualifier - an enumeration describing adjustments applied to a date and time. Possible values are: • None • DateOnly • DateTime • BeforeMarketOpen • AfterMarketClose
EventId	A unique id for this event. This id must be used in a subsequent call to the GetEvent request.
LastUpdate	The date/time at which event information was last updated.
LiveDialIn	A structure describing when and how to access the live dial-in. Possible values: • Duration - the duration of a dial-in conference call or conference-call replay. • Password - the password, if required, for a dial-in. • PhoneNumber - the phone number for a dial-in. • AlternatePhoneNumber - the alternate phone number, if any, for a dial-in.
LiveWebcast	A structure describing the status and, if available, a content identifier which may be used to retrieve the webcast url using the GetWebcastUrl request. Possible values: • Status - whether a webcast is available, expected, or not available. • Duration - the start and end times of the webcast. • WebcastId - if the status is Available, a content identifier which may be used to retrieve the webcast url using the GetWebcastUrl request.
Name	The name of the event.
ReplayDialIn	A structure describing when and how to access the replay dial-in. Possible values: • Duration - the duration of a dial-in conference call or conference-call replay. • Password - the password, if required, for a dial-in. • PhoneNumber - the phone number for a dial-in. • AlternatePhoneNumber - the alternate phone number, if any, for a dial-in.
ReplayWebcast	A structure describing the status and, if available, a content identifier which may be used to retrieve the replay webcast url using the GetWebcastUrl request. Possible values: • Status - whether a webcast is available, expected, or not available. • Duration - the start and end times of the webcast. • WebcastId - if the status is Available, a content identifier which may be used to retrieve the webcast url using the GetWebcastUrl request.
Transcript	A structure describing the Brief status (Available , Expected or None) and, if available, a content identifier which may be used to retrieve the brief from TDR.
Organization	The company name and symbol of the event's subject company. Possible values: • CompanyName - the organization's name. • Symbols - collections of organization's symbols.
RsvpRequired	Indicates whether this event requires an rsvp.
Location	The location of this event. Possible values: • Name - name of the location. • Description - description of the location. • Notes - notes about this location. • Address - address of the location. • Room - a room for this location.



Economic Headlines EventId EventType	PrimaryPhoneNumber - a primary phone number for this location. AlternatePhoneNumber - an alternate phone number for this location. PrimaryFaxNumber - a primary fax number for this location. AlternateFaxNumber - an alternate fax number for this location. Email - an email for this location. Url - a web url for this location. A unique id for this event. An optional list of types of events to include in the search results. If left empty or null, no filtering will be done on event type, and all event types may appear in the search results.
	filtering will be done on event type, and all event types may appear in the search results. For more details see section EventType.
Duration	Date/time on which the subject document was filed. Possible values: • 'IsEstimate' - If true, the start and end dates/times are estimated. • DateTimeQualifier - is an enumeration which describes adjustments applied to a date and time. Possible values are: • None • DateOnly • DateTime • BeforeMarketOpen • AfterMarketClose
EventName	The name of the event.
CountryCode	The ISO 3166 country code to which this event is related.
IndicatorName	Indicator name for the event.
Unit	Unit is derived from unit based on Expectedlevel and CalculatedheaderName column from U_EventEconomicIndicatorDetail table.
Scale	Scale is derived from scale based on Expectedlevel and CalculatedheaderName column from U_EventEconomicIndicatorDetail table.
Period	The Month or the quarter of the year the event belongs to.
ExpectedValue	Estimated value.
ActualValue	Actual value.
PriorValue	Previous value.
LastUpdate	Last updated date/time.
Classification	An optional array of Economic Classification enumerations restricting the response to events with the specified classifications. Since events may have multiple classifications, the response may still indicate classifications outside of the subset included in this filter. Possible values are: • Consumer sector • External sector • Government sector • Industry sector • Labour market • Money and finance • National accounts • Prices • Surveys and cyclical indexes • Other
Mnemonics	Mnemonics

