

How to push a live video stream via SRT using the Reuters API

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Live API

This section is designed to be used by developers, who will write and implement the code that interfaces with the Reuters Live video streams. The Reuters API includes a reference implementation of the [Live Production Exchange \(LPX\)](#) recommendation for live video.

Reuters Live streams are currently available for HLS, RTMP and, SRT protocols.

liveEvents Method

The liveEvents method obtains all the live event information via the API, such as status, headline, usage terms, event details (duration, start date, end date), and more.

	PARAMETERS			TYPE	DEFINITION	JSON REPRESENTATION
channels				String	Filter based on the customer-subscribed channels.	"jbh288"
cursor				String	The cursor parameter is used to specify the start position of the next page based on the query and sort criteria. Each search page returns a limited number of matching documents, and the "pageInfo" field tracks the pagination result across the search results based on current search queries and sort criteria. Repeat the same query and sort with the "endCursor" value on the last page until "hasNextPage" returns false to the page through a more extensive set of results.	"WzE3MTgxMDA1NDAxXJzLmNvbSwyMDI0Om5ld3NtbF9LQkU5OVQwM1kiXQ=="
dateRange				String	To filter using dates. The date range should be specified as <start_date>-<end_date>. Date format. YYYY-MM-DD.	"2024.01.01-2024.02.02"
event Identifiers				Scalar	To filter using a live event by id, uri or usn.	"uri": "9767edef-d472-4109-aaa5-1260424bd0d3"
limit				Int	This parameter is used to designate the maximum number of news items to be retrieved. The	"10"



					current limit is 100, but Reuters reserves the right to change this value at any time. If no limit is specified, the default number of news items returned will be 20.	
page				Int	This parameter is used to designate a specific page of search results to retrieve. The first page is 1 and if no value is specified for the page parameter, the default is 1. The maximum number of news items returned per page is constrained by the limit parameter. The maximum number of page is constrained by the combination of page and limit, page * limit must be less than 2500. If the cursor parameter is specified, the page parameter will be ignored.	"2"
events				Object	Live event results	events: {}
	contentCreated			Scalar	The date and time when this live event was created	"contentCreated": "2024-02-05T17:07:25.599Z"
	copyrightHolder			String	Corporation for the time being in possession of the copyright of the live event.	"copyrightHolder": "Thomson Reuters"
	copyrightNotice			String	Any necessary copyright notice for claiming the intellectual property for the live event.	"copyrightNotice": "(c) 2024 Thomson Reuters, unless otherwise identified. Full statement available at https://www.thomsonreuters.com/en/policies/copyright.html "
	eventDetails			Object	Property containing details of the event.	eventDetails: {}
		dates		Scalar	Dates and times for this event.	"dates": {}
			startDate	Scalar	The start date of live event.	"startDate": "2024-02-07T12:07:02.000Z"
			endDate	Scalar	The end date of the live event	"endDate": "2024-02-12T17:55:06.000Z"
			expectedDuration	String	Duration of the live event	"duration": "5 Days 5 Hours 48 Minutes"



		eventStatus		Enum	Status of the event, categories are: Cancelled, Scheduled, Live, and Completed.	"eventStatus": "canceled"
	genre			Object	Genre codes indicate the nature of the live event, not specifically its content.	
			name	String	Genre name	"Sport news"
			code	String	Genre topic or category code	N2: SPO
			literal	String	Genre literal name	
	headline			String	A brief and snappy introduction to the content, designed to catch the reader's attention.	"headline" : "Nikki Haley bus tour in Bamberg, South Carolina"
	id			String	Live event stream unique identifier	"id": "9767edef-d472-4109-aaa5-1260424bd0d3"
	language			String	language of the live item	"language": "en"
	located			String	The location where the live event happens.	"location" : "BAMBERG, SOUTH CAROLINA"
	renditions			Object	An array of objects, each of which is a rendition of the event. The Appendix 5 contains all the rendition list.	
		aspectRatio		String	Live event aspect ratio. We only offer a 16:9 aspect ratio.	"16:9"
		bitrate		String	Signal bitrate. There are different options.	"8000Kbps"
		code		String	Live video profile code. There are different options. Unique identifier	"hls:29.97"
		frameRate		String	Live event frame rate. There are different options.	"29.97"
		frameSize		String	Live event frame Size	"1920x1080"
		minBitrate		String	Minimum bitrate provided	"200Kbps"
		maxBitrate		String	Maximum bitrate provided	"4Mbps"
		name		String	Live video profile name.	"200Kbps-4Mbps Video: 1080p29.97 h.264"
		scanType		String	Live event scan type. We only offer progressive scan type.	"progressive"
	slugline			String	Item slug or short name used to identify an event. Slugs are a Reuters editorial mechanism used to standardize content by event. They are combinations of 2 or 3 words describing a news event – a string of keywords. For example, GLOBAL-CLIMATECHANGE/	"slugline": "NATO-DEFENCE-STOLTENBERG"



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	topic			String	Indicates subject of the event	"Topic" : "Politics / International Affairs"
	uri			String	Live event story unique number	"uri": "tag:reuters.com,2024:Newsml_ADKQ4TP20"
	usageTerms			String	Usage terms of the live event, it will display the live event restrictions.	"usageTerms": "Broadcast: No use UK, Digital: No use UK"
	usn			String	Live event story unique number. Same identifier as the uri	"usn": "ADKQ4TP20"
	version			String	Version of the live event	"version": "681326751"
	versionCreated			Scalar	Date when the current version was created	"versionCreated": "2024-02-14T17:55:06.000Z"
pageInfo				Object	Search results page information	
	endCursor			String	endCursor token information	"WzE3MTgxMDA1NDAxXJzLmNvbSwyMDI0Om5ld3NtbF9LQkU5OVQwM1kiXQ=="
	hasNextPage			Boolean	if the search has next page or not: true or false	"true"
totalHits				Scalar	Total number of findings	"8"



liveEventsSubscriptions Method

The liveEventSubscriptions method is used to provide information about existing live event subscriptions of an API user.

PARAMETERS			TYPE	DEFINITION	JSON REPRESENTATION
dateRange			String	To filter using dates. The date range should be specified as <start_date>-<end_date>. Date format. YYYY-MM-DD.	
eventIds			Scalar	To filter using live event ids (unique identifiers per event)	"2554f23f-05a1-435c-ab5b-adf614025d20"
types			Enum	To filter based on the type of subscription (HLS, HDS, RTMP)	
	eventId		String	The unique identifier of the event	
	subscriptions		Object	Property containing details of subscriptions	
		renditionCode	String	Identifier of a particular rendition of an event	"hls:29.97"
		rtmpUserName	String	Username parameter for the RTMP destination in a push subscription request	
		subscriptionId	String	Unique identifier of the event	"3c9802025ee68bdb120f"
		url	String	Location to the content rendition for a pull rendition (e.g HLS)	



Mutation Method for Lives

The mutation method used for lives allows you to subscribe and unsubscribe to a live event.

PARAMETERS			TYPE	DEFINITION	JSON REPRESENTATION
liveEventSubscribe			Object		
	eventId		Scalar	Event identifier	"1140e03a-05e1-4d80-b4a0-89698434b028"
	renditionCode		String	Stream bitrate	"hls:29.97"
	rtmpDestinationUrl		String	RTMP server URL	
	rtmpPassword		String	RTMP server stream ID	
	rtmpUserName		String	RTMP destination name	
	srtDestinationUrl		String	Target URL, eg. srt://your.server.com:portnumber/your.stream.key	
	srtKeyLength		String	Your encryption key length with algorithm, e.g. AES_128, AES_192, AES_196, need to match your receivers setting	
	srtPassPhrase		String	Encryption passphrase	
		subscriptionId	String	Event identifier	"c6d2af76b714bcb6490a"
		url	String	Live stream URL	"https://d3cgfqa8o6oiw.cloudfront.net/RL/smil:EU-1140e03a-05e1-4d80-b4a0-89698434b028.smil/38563249092345572113707536214628957630wsauy2xfxsfli8y9viamv8579l/playlist.m3u8"
liveEventUnsubscribe			Object		
	subscriptionId		String	Event identifier	"1140e03a-05e1-4d80-b4a0-89698434b028"
		message	String	Message from the Reuters Live stream server	"Subscription c6d2af76b714bcb6490a is removed"

How to subscribe and push a live stream via SRT

Use the following steps to subscribe to an event and push an event via SRT.

To subscribe to a current live event, it's required to have the "eventId" and the rendition "code" using the liveEvents method as shown below.

To get the "eventId" and the rendition "code", use the following query:

```
query liveEvents {  
  liveEvents(eventStatuses: MidEvent) {  
    events {  
      id  
      headline  
      renditions {  
        code  
      }  
    }  
  }  
}
```

To subscribe to an event, it's required to have the "eventId" and the rendition "code".

For example,

```
eventId: " c090966c-27be-46f0-a0f7-b6f26593c00b"  
code: " srt:29.97:2048"
```

And it's required to provide the SRT destination URL, passphrase and Key Length.

The "srtDestinationUrl" should be structured as: SRT destination URL + SRT stream key, such as: srt://your.server.com:portnumber/your.stream.key

For example, the following mutation is to push a stream, where the:

SRT destination server URL: srt://a.srt.example.com:2010/shgx-m46t-jjfj-fu64-ayt2

PassPhrase: pp-3fbd-3fe3-fb4f-0d78

srtKeyLength: AES_128

```
mutation MyMutation {  
  liveEventSubscribe(  
    eventId: "c090966c-27be-46f0-a0f7-b6f26593c00b"  
    renditionCode: "srt:29.97:2048"  
    srtDestinationUrl: "srt://a.srt.example.com:2010/shgx-m46t-jjfj-fu64-ayt2"  
    srtKeyLength: AES_128  
    srtPassPhrase: "pp-3fbd-3fe3-fb4f-0d78"  
  ) {  
    subscriptionId  
    url  
  }  
}
```

How to unsubscribe to a live event

To unsubscribe to an event, it's required to use the "subscriptionId" provided on the mutation response of "liveEventSubscribe". See the preview query.

```
mutation MyMutation2 {  
  liveEventUnsubscribe(subscriptionId:  
    "3c9802025ee68bdb120f") {  
    message  
  }  
}
```



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Support

For any product question, please contact: tania.vivero@thomsonreuters.com

For technical support contact us via: <http://liaison.reuters.com/contact-us> or send an email to ReutersMediaSupport@thomsonreuters.com