



DOWNLOAD API USER GUIDE

Version 1.0

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SOMMAIRE

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1 Introduction

This document describes version 1 of the **download** API that RTE provides for its Clients in order to expose the following RMC application data:

- The list of files available for download,
- The downloading of a file via its ID,
- The downloading of the last available file

1.1 Definitions

The terms used in this User Guide (the first letters of which are always capitalised) are defined below. Otherwise, their definitions are given in the General Conditions of Use **[R1]**:

API	Application Programming Interface
Authentication	Protection Mode for ensuring that the identity of the Sender or Receiver has been verified by RTE, and that they are authorised to access the IT system and use the Applications.
Sender	Party which sends a Message.
Message	Set of computer data used to transmit information, structured in accordance with a particular order that is specified in the User Guide. A Message can be sent by the User or by RTE.
Operation	An operation is the way in which the client interacts with the API's resource. An HTTP verb is always used (for example: GET for reading)
Party or Parties	Within the framework of the User Guide, these terms refer to either RTE or the User individually, or to both RTE and the User collectively.
Receiver	Party which receives the Sender's Message.
Resource	A resource is the data in relation to which the client application interacts.
URL	Uniform Resource Locator: character string based on a specific format used to locate a resource on a network and specify what protocol should be used on this resource.
User(s)	Legal entity which has agreed to RTE's General Terms and Conditions for Using APIs and which has been granted access to RTE's IT system for the purposes of using the APIs it has made available.

Translation of English values returned by the API:

English output value of the API	French translation

1.2 Technical support

In the event of difficulties accessing or using an API, users can contact the telephone support services provided by RTE in accordance with the technical conditions detailed in the General Terms and Conditions of Use.

2 Functional description of the Download API

2.1 General description

The service provided by this API can be used to obtain the following data:

- The list of files available for download,
- The downloading of a file via its ID,
- The downloading of the last available file

2.2 Prerequisites for using the APIs

The **RMC** APIs are for stakeholders operating on the electricity market and the general public. Nevertheless, users of the API must have a security certificate.

2.2.1 Data confidentiality

The information contained in the Messages may not be used for any purpose other than the ones described in the General Terms and Conditions of Use **[R1]**.

2.2.2 Termination

Should the User wish to cease using an API, they simply need to stop sending calls to it.

3 Accessing the API

The REST protocol is used to access the API described in this document.

As is the case for all of the APIs provided by RTE, accessing and using them are subject to the provisions of the General Terms and Conditions of Use **[R1]**.

The authorisation method used for accessing the APIs is by certificate.

4 Resources exposed by the "RmcTelechargement" API

4.1 flow/{flow_code}/files resource

4.1.1 GET flow/<flow_code>/files

4.1.1.1 Call methods

The resource is exposed in the following way:

Exposure	REST / JSON
Method	GET
Resource URL	https://portail.iservices.rte-france.com/RmcTelechargement/api/flow/<flow_code>/files?status=ALL&start_date=<DD-MM-YYYY>&end_date=<DD-MM-YYYY>

4.1.1.2 Inputs

NAME	CARD.	DESCRIPTION	TYPE	VALUES / FORMAT
flow_code	1..1	Channel code of the RMC feed for the sought-after files	String	Example: R1-F-MAIL
status	1..1	Status of the sought-after files	Enum	ALL: all results 0: new files (not downloaded) 1: archived files (already downloaded)
start_date	1..1	File search start date	String	DD-MM-YYYYYY
End_date	1..1	File search end date	String	DD-MM-YYYYYY

Call examples*:

URL:

https://portail.iservices.rte-france.com/RmcTelechargement/api/flow/R1-F-MAIL/files?status=ALL&start_date=01-09-2017&end_date=15-09-2017

* All parameters are mandatory

4.1.1.3 Outputs

NAME		CARD.	DESCRIPTION		
None		1..1	fileDTO {JSON} table containing n occurrences. It is structured as shown below:		
	NAME	CARD.	DESCRIPTION	TYPE	VALUES / FORMAT
	id	1..1	File ID	String	—
	name	1..1	File name	String	—
	availabilityDate	1..1	File availability date	Date	YYYY-MM-DDThh:mm:ss:SSS

JSON format of the return:

GET /flow/R1-F-MAIL/files?status=ALL&start_date=01-01-2001&end_date=31-12-2017
<pre> HTTP/1.1 200 OK [{ "id": "254159", "name": "FTP vers mail.txt", "availabilityDate": "2017-08-29 11:12:00.043" }, { "id": "254158", "name": "FTP vers mail.txt", "availabilityDate": "2017-08-29 11:03:30.039" }, { "id": "254154", "name": "FTP vers HTTP.txt", "availabilityDate": "2017-08-29 10:07:00.045" }, { "id": "254153", "name": "FTP vers mail_zip.zip", "availabilityDate": "2017-08-29 09:58:30.04" }, { "id": "254152", "name": "FTP vers mail_zip.zip", "availabilityDate": "2017-08-29 09:58:00.039" }] </pre>

4.1.1.4 Control rules

Control rules for different input parameters:

Number	Description
FILES_RG01	All parameters are mandatory
FILES_RG02	The status field can take one of the following values: <ul style="list-style-type: none"> • ALL: all files • 0: new files (not yet downloaded) • 1: archived files (already downloaded at least once)
FILES_RG03	The start_date field must be equal to or earlier than the end_date field

Output control rules applied:

Number	Description
FILES_RG04	The output data is sorted based on the availability_date field

4.1.1.5 Error codes

All The following table lists the error codes which may be returned when the resource is called.

Error type	Error code	Details
Technical	204	No File retrieved for current parameters.
Technical	400	The correct syntax to use for this API is: /api/flow/flow_code/files?status=X&start_date=DD-MM-YYYY&end_date=DD-MM-YYYY.
Technical	400	Status parameter has to be 0 (for new files) or 1 (for archived files) or ALL.
Technical	400	Date format is DD-MM-YYYY and end_date parameter must be greater than start_date parameter.
Technical	403	You don't have the necessary rights for accessing to this API Service or this flow.
Technical	500	Internal server Error.
Technical	500	Technical Error during the retrieving of files.
Technical	500	Technical error during the authentication process.
Technical	500	Technical error during the retrieving of user's applications.

4.2 flow/{flow_code}/files/last resource

4.2.1 GET /flow/{flow_code}/files/last

4.2.1.1 Call methods

The resource is exposed in the following way:

Exposure	REST / JSON
Method	GET
Resource URL	https://portail.iservices.rte-france.com/RmcTelechargement/api/flow/<flow_code>/files/last

Call recommendations

Files are kept for 3 months. After this period, the files are no longer available.

4.2.1.2 Inputs

NAME	CARD.	DESCRIPTION	TYPE	VALUES / FORMAT
flow_code	1..1	Channel code of the RMC feed for the sought-after files	Text	Example: R1-F-MAIL

Example:

<u>URL:</u> GET /flow/{flow_code}/files/last

4.2.1.3 Outputs

The API sends back the requested file as a bitstream

4.2.1.4 Control rules

Control rules for different input parameters:

N/A

Output control rules applied:

N/A

4.2.1.5 Error codes

All The following table lists the error codes which may be returned when the resource is called.

Error type	Error code	Details
Technical	204	There is no last file for this flow code on the server.
Technical	403	You don't have the necessary rights for accessing to this API Service or this flow.
Technical	500	Internal server Error.
Technical	500	Technical Error during the retrieving of files.
Technical	500	Technical error during the authentication process.
Technical	500	Technical error during the retrieving of user's applications.

4.3 flow/{flow_code}/files/{file_id} resource

4.3.1 GET /flow/{flow_code}/files/{file_id}

4.3.1.1 Call methods

The resource is exposed in the following way:

Exposure	REST / JSON
Method	GET
Resource URL	https://portail.iservices.rte-france.com/RmcTelechargement/api/flow/<flow_code>/files/<file_id>

Call recommendations

Files are kept for 3 months. After this period, the files are no longer available.

4.3.1.2 Inputs

NAME	CARD.	DESCRIPTION	TYPE	VALUES / FORMAT
flow_code	1..1	Channel code of the RMC feed for the sought-after files	Text	Example: R1-F-MAIL

Example:

URL:

GET /flow/{flow_code}/files/last

4.3.1.3 Outputs

The API sends back the requested file as a bitstream

4.3.1.4 Control rules

Control rules for different input parameters:

N/A

Output control rules applied:

N/A

4.3.1.5 Error codes

All The following table lists the error codes which may be returned when the resource is called.

Error type	Error code	Details
Technical	204	There is no file on the server for the given id.
Technical	400	The correct syntax to use for this API is: /api/flow/flow_code/files/file_id.
Technical	400	File Id must be a positive number.
Technical	403	You don't have the necessary rights for accessing to this API Service or this flow.
Technical	500	Internal server Error.
Technical	500	Technical Error during the retrieving of files.
Technical	500	Technical error during the authentication process.
Technical	500	Technical error during the retrieving of user's applications.

5 Details of errors

In the event of an error, the message is in the response header's "x-rmc-message" attribute.
Example:

Body Cookies Headers (10) Tests Status: 204 No Content

x-rmc-msg → No File retrieved for current parameters.

6 Appendices

204	
Http code	204
Message	No content
Call example	No result with the input parameters entered
400	
Http code	400
Message	Bad request
Call example	The request's syntax is incorrect
403	
Http code	403
Message	Forbidden
Call example	Attempt to access a forbidden resource
404	
Http code	404
Message	Not Found
Call example	The resource called does not exist or no data was found
408	
Http code	408
Message	Request Time-out
Call example	Error generated when the service called does not reply or when the service called times out (HTTP 408).
413	
Http code	413
Message	Request Entity Too Large
Call example	The size of the request exceeds 5 MB
414	
Http code	414
Message	Request-URI Too Long
Call example	The URI sent by the caller is longer than 512 characters.

429	
Http code	429
Message	Too Many Requests
Call example	The maximum number of calls has been made in a given period of time.
500	
Http code	500
Message	Internal Server Error
Call example	All other technical errors. (This error is accompanied by a JSON message with an error_code and error_description field)
503	
Http code	503
Message	Service Unavailable
Call example	Error generated during maintenance (HTTP 503).
509	
Http code	509
Message	Bandwidth Limit Exceeded.
Call example	The total number of client requests has reached the maximum limit.