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## PREFACE SATURN

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### ABOUT THIS DOCUMENT

This client specification document is related to the Euronext Saturn Web Services, part of the Euronext Global Reporting Solution dedicated to answer the MiFID II reporting and publication requirements.

Saturn offers a REST API which can be used to access the reporting services.

The purpose of this document is to describe the technology and the supported messages for Commodity Position Reporting requirements under MiFID II

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### TARGET AUDIENCE

This document is targeted to clients of the following Euronext Reporting Service:

- **MiFID II Commodity Positions Reporting**

Euronext Global Reporting solution through Saturn covers the additional services below:

- Transaction Reporting on Euronext Markets conducted directly by Euronext members.
- Transaction Reporting on Euronext Markets conducted by Euronext members not subject to MIFIR (non-MiFID members);
- Short Code Long Code Management (SLC);

These services are described in separate documents.

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### ASSOCIATED DOCUMENTATION

The following lists the associated documents, which either should be read in conjunction with this document or which provide relevant information to user regarding the other services:

- Saturn User Guide
- 

### CONTACT

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## TERMS AND ACRONYMS

Term/Acronym	Description
NCA	National Competent Authorities
Attribute & Element	Basic building blocks of XML Schemas: <ul style="list-style-type: none"> <li>■ An XML element is everything from (including) the element's start tag to (including) the element's end tag</li> <li>■ Attributes are designed to contain data related to a specific element</li> </ul>
Client	An application, i.e. a system that accesses the services in Saturn through the API gateway.
HTTPS	Hypertext Transfer Protocol Secure
Function	A specific action in the Saturn REST API gateway, for example, Logon, Logoff, Submit Trades etc.
REST	REST, or Representational State Transfer, relies on a stateless, client-server, cacheable communications protocol. REST is an architecture style for designing networked applications. Rather than using complex mechanisms such as CORBA, RPC or SOAP to connect between machines, simple HTTPS is used to make calls between machines. REST is a lightweight alternative
SSL	Secure Sockets Layer (cryptographic protocol)
STP	Straight-through processing
User	A person accessing the Saturn services the Web user interface
XML	Extensible Markup language
FIX protocol	<b>Financial Information Exchange</b> protocol ( <b>FIX</b> ) is an open specification designed to standardize and streamline electronic communications in the financial securities industry supporting multiple formats and types of communications between financial entities for trade allocation, order submissions, order changes, execution reporting and advertisements

## HISTORY

REVISION NO.	DATE	CHANGE DESCRIPTION
1.0	03/08/2017	<ul style="list-style-type: none"> <li>■ Initial version</li> </ul>
1.06	25/11/2017	<ul style="list-style-type: none"> <li>● Adding service Get instrument</li> <li>● Change Amsterdam MIC</li> <li>● Add technical detail &amp; examples section</li> <li>● Add some comments in the functional section</li> </ul>
1.07	05/02/2018	<ul style="list-style-type: none"> <li>● cisin replaced isin has to be used in filterlist instead of cisin</li> <li>● expiry_date_offset lower case</li> <li>● All filter list fields must be lower case</li> <li>● Additional comments in the functional section</li> </ul>
1.08	10/04/2018	<ul style="list-style-type: none"> <li>● Adding new value "CONCAT" in the "Ultimate Parent ID Type" field for \$5.1 Upload CSV</li> <li>● Modified \$6.1Get instruments resource name</li> <li>● Additional comments in the functional section on Spot Month and Risk Reducing</li> </ul>
1.09	18/04/2018	<ul style="list-style-type: none"> <li>● Additional comments in section \$1.4 Content of Commodity Position</li> </ul>

REVISION NO.	DATE	CHANGE DESCRIPTION
		<p>Report</p> <ul style="list-style-type: none"> <li>• Add new “Position Holder Type” field in section \$5.1 Upload CSV</li> <li>• Add new “Position Holder Type” field for section \$13 Fields description</li> <li>• Add new check 7024 for \$8.Rejection codes</li> </ul>
1.10	21/06/2018	<ul style="list-style-type: none"> <li>• Added new fields in section \$6.1 Get Instruments</li> <li>• Example amended in section \$6.1 Get Instruments</li> <li>• Added 2 operators in section \$9.2 Operators</li> </ul>
1.12	01/04/2020	<ul style="list-style-type: none"> <li>• the <b>freetext4</b> field updated into <b>freetext 4</b></li> <li>• Added in section \$1.3.1 Direct Reporting: Brokers should also fill the <b>freetext 4</b> field with ‘REPORT_MYSELF’ in case of direct reporting.</li> </ul>
1.13	09/03/2021	<ul style="list-style-type: none"> <li>• Typo correction for “<b>Position holder ID type</b>” file header in section \$5.1 Upload for the csv file.</li> </ul>
1.14	21/12/2022	<ul style="list-style-type: none"> <li>• Definitions Long Position Delta Quantity, Short Position Delta Quantity: Descriptions and conditions corrected.</li> </ul>
1.15	15/01/2025	<p>The following changes have been made to this version of the document:</p> <ul style="list-style-type: none"> <li>■ Section <a href="#">1.2 Which Instruments need to be reported</a> -&gt; updated to remove reference to Securitized Derivatives</li> <li>■ Section <a href="#">1.3.1 Onboarding process for direct reporting clients</a> -&gt; renamed from “The on-boarding” to “Onboarding”, added additional explanation on how the user can request access to direct reporting</li> <li>■ Section <a href="#">1.4 Reporting Deadline</a> -&gt; added to explain the existing deadlines for position reporting</li> <li>■ Section <a href="#">1.5 How to Report</a> -&gt; added to explain how users can report their position. Subsection <a href="#">1.5.1 Entering a New Position</a>, <a href="#">1.5.2 Amending a Position</a>, <a href="#">1.5.3 Cancelling a Position</a> added to reflect the steps to be followed by the user</li> <li>■ Section <a href="#">1.6 The content of the commodity Positions Report</a> – updated to add table with the mapping between SATURN fields RTS-21 obligatory fields, and clarification of reporting being done on a net basis.</li> </ul>
<a href="#">5.354.0</a>	<a href="#">05/03/2025</a>	<p><a href="#">The following changes have been made to this version of the document:</a></p> <ul style="list-style-type: none"> <li>■ <a href="#">Corrected title from “Mifid II Commodity Reporting” to “Saturn Commodities Positions Reporting - Detailed Functional Specification - Euronext Derivatives Markets”;</a></li> <li>■ <a href="#">Adding new controls at the Commodity Position declaration to manage position declarations in Net within Saturn (fields Long/Short Position Quantity, Long/Short Position Delta Quantity);</a></li> <li>■ <a href="#">In Field Description: updated Long/Short Position Quantity, to manage position declarations in Net.</a></li> </ul>

#### IMPORTANT NOTE :

This document will be updated as required based on additional regulatory clarifications as well as additional features. Users must refer to the document history to get a precise description of updates.

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## 1. EURONEXT MIFID II APPROACH ON COMMODITY POSITIONS REPORTING

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### 1.1 WHAT IS MIFID II COMMODITIES POSITIONS REPORTING?

Under Article 58(3) of MiFID II, members and participants of trading venues must report to the trading venue on a daily basis a complete breakdown of their positions in commodity derivatives, emission allowances, and derivatives of emission allowances, as well as those of their **clients** and the clients of those clients until the **'end client'** is reached.

The trading venue must then provide those reports to their NCAs.

Under Article 4(1)(9) MiFID II defines a 'client' as a natural or legal person to whom a MiFID-regulated investment firm provide investment or ancillary services.

- If that 'client' is not an investment firm, then that client will also be considered as the "the end client" as it will not provide investment or ancillary services.
- If the client is an investment firm, but does not provide investment or ancillary services to another person, then the client will also be the 'end client'.

Such an approach limits the reporting obligation down the chain of intermediaries.

#### ■ Weekly Commitment of Traders (CoT) report

As per Article 58, trading venues should also make public a weekly Commitment of Traders (CoT) report with the aggregate positions held by the categories of persons for the different commodity derivatives or emission allowances or derivatives therefore traded on their trading venue, specifying the number of long and short positions by such categories, changes since the last report; the percentage of total interest represented by each category as well as the number of persons holding a position in each category.

Euronext will generate a weekly Commitment of Traders (COT report) for all its commodity contracts.

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### 1.2 WHICH INSTRUMENTS NEED TO BE REPORTED?

The instruments covered include both exchange-traded commodity derivatives and economically equivalent OTC commodity contracts, including:

- –Energy derivatives, metal derivatives, agricultural derivatives and other food derivatives;
- –Derivatives on intangibles such as climate derivatives;
- –Derivatives with flow-based delivery e.g. electricity and gas;
- –Both cash-settled and physically-settled derivatives;
- –Derivatives on any of the other instruments covered e.g. baskets, indexes, swaps.

*An OTC derivative shall be considered economically equivalent to a commodity derivative traded on a trading venue where it has identical contractual specifications, terms and conditions, excluding different lot size specifications, delivery dates diverging by less than one calendar day and different post trade risk management arrangements.*

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### 1.3 WHO NEEDS TO REPORT?

From Article 58(3), reporting obligations apply only to **members** of trading venues and **MiFID-regulated investment firms**.

As a standard regulatory approach, where General Clearing Members are also members of Euronext, they must report their own positions as well as the ones of their clients (NCMs).

In addition, the Euronext solution has been designed to allow a participant – even non-MiFID regulated – to report **directly to Euronext, without going through any intermediary**, its positions and the positions of its clients.

Although intermediaries (usually GCMs) will be made aware of list of their clients reporting directly, no filtering is required, i.e. GCMs must report the positions of all their clients with the level of information that they have for these clients.

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#### 1.3.1 On-boarding process for direct reporting clients

Clients willing to report directly must as an initial step inform their intermediary, member of Euronext. Direct Reporting entities are not required to fill any on-boarding document.

Access to Saturn will be granted to direct reporting clients upon declaration of the client’s intermediary through the Position Holder form.

Direct Reporting clients must also fill a Position Holder file indicating the list of their own clients.

[In order to access Saturn, user account\(s\) must be requested to market-access@euronext.com.](mailto:market-access@euronext.com)

[Direct reporting clients are required to fill an additional field in their daily reports, the “Free Text4” / “FreeText 4” \(GUI/.CSV\) field with the following string: ‘REPORT MYSELF’.](#)

[Brokers should also fill the “Free Text4” / “FreeText 4” \(GUI/.CSV\) field with ‘REPORT MYSELF’ in case of direct reporting.](#)

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### 1.4 REPORTING DEADLINE

[Clients must ensure to abide the defined timeline and report their positions for the previous day before 14:00 CET. In other words, on Day D clients must report their positions of the previous day before 14:00 CET.](#)

[Euronext submits Commodity Position Reporting once per day at 17:00 CET \(Paris time\) to the respective regulator.](#)

## 1.5 HOW TO REPORT

Clients can report positions their positions in the following way:

- Saturn GUI (manually)
- File Upload (GUI or API)

Clients can refer to *Saturn - User Guide - Euronext Cash and Derivatives Markets - External* section 11 Commodity Reporting Services for explanation on how to use the GUI.

For .CSV File Upload via API refer to section 11 and onwards.

The kinematic is different between the French & Dutch Commodity markets

### IMPORTANT:

Positions on French Commodities (XMAT) should always be reported as **LOTS**.

Positions on Dutch Power Derivatives (XEUC) should always be reported in **megawatt hours (MHWO)**.

### 1.3.21.5.1 Entering a New Position

#### French Commodities & Nordic Power Futures

- Enter a position through GUI or File Upload (GUI or API) with Report status=1.

### 1.3.31.5.2 Amending a Position

#### Amending a “Failed” position

- French Commodity Contracts:
  - Cancel & then amending the position (using GUI or .CSV file upload with Report status=3 first, then amendment with Report status=2 using the same Report reference number).  
Or
  - Cancel & enter a new position (using GUI or .CSV file upload with Report status=3, then entering Report status=1 with a new report reference number).
- Nordic Power Futures:
  - Amend position (using GUI or .CSV file upload with Report status=2).

#### Amending a “Checked & Ready” / “Sent” position

- French Commodity Contracts:
  - Cancel & then amending the position (using GUI or .CSV file upload with Report status=3 first, then amendment with Report status=2 using the same Report reference number).  
Or
  - Cancel the position & enter a new position (using GUI or .CSV file upload with Report status=3, then entering Report status=1 with a new report reference number).
- Nordic Power Futures:
  - Amend position (using GUI or .CSV file upload with Report status=2).  
Or
  - Cancel the position & enter a new position (using GUI or .CSV file upload with Report status=3, then entering Report status=1 with new report reference number).



### 1.3.41.5.3 Cancelling a Position

#### French Commodities & Nordic Power Futures

- Cancel a position through GUI or File Upload (GUI or API) with Report status=3.

### 1.3.51.5.4 How to properly report a position (NET)

#### Futures

When submitting/entering a position for a Future, the client should only populate **Long Position Quantity** field or the **Short Position Quantity** field (never both at the same time (as was expected for gross)).

	Field			
	LONG POSITION QUANTITY	LONG POSITION DELTA QUANTITY	SHORT POSITION QUANTITY	SHORT POSITION DELTA QUANTITY
LONG POSITION	100	N/A (futures)		N/A (futures)
SHORT POSITION		N/A (futures)	100	N/A (futures)

#### Options

When submitting/entering a position for an Option, the client should populate the combination of fields (depending on whether they are long or short on a call or put).

	LONG POSITION QUANTITY	LONG POSITION DELTA QUANTITY	SHORT POSITION QUANTITY	SHORT POSITION DELTA QUANTITY
LONG CALL	50	20	0	0
SHORT CALL	0	0	50	20
LONG PUT	50	0	0	20
SHORT PUT	0	20	50	0

### 1.41.6 THE CONTENT OF THE COMMODITY POSITIONS REPORT

The format of the Euronext daily commodity positions report follows as a general approach the specifications of ITS4.

Reporting entities should pay attention that positions have to be reported on a **net** basis. Such an approach is aimed at providing more transparency on the Commitment of Trader (COT) reports that will be issued each Wednesday at end of day.

Saturn GUI Field	.CSV File field	RTS21 Field #	RTS21 Field Name
N/A	N/A	1	Date and time of report submission

Report reference number	Report reference number	2	Report reference number
Holding Position Trading Day	Holding Position Trading Day	3	Date of the trading day of the reported position
N/A	Report status	4	Report Status
Reporting Entity ID	Reporting Entity ID	5	Reporting entity ID
Position holder ID	Position holder ID	6	Position holder ID
Position holder email	Position holder email	7	Email address of position holder
Ultimate Parent entity ID	Ultimate parent entity ID	8	Ultimate parent entity ID
Ultimate Parent entity email	Ultimate parent entity email	9	E-mail address of ultimate parent entity
Investment Firm Indicator	Investment Firm Indicator	10	Parent of collective investment scheme status
Security Id	SecurityId	11	Identification code of contract traded on trading venue
N/A	N/A	12	Venue product code
Trading Venue	Trading venue identifier	13	Trading venue identifier
Position Type	Position type	14	Position type
Position Maturity	Position maturity	15	Position maturity
Long Position Quantity & Short Position Quantity	Long Position quantity & Short Position quantity	16	Position quantity
N/A	N/A	17	Notation of the position quantity
Delta Equivalent Long Position & Delta Equivalent Short Position	Delta Equivalent Long Position Delta Equivalent Short Position	18	Delta equivalent position quantity
Risk Reducing Indicator	Risk reducing indicator	19	Indicator of whether the position is risk reducing in relation to commercial activity
N/A	N/A	20	not used
Position holder ID type	Position holder ID type	N/A	N/A
Free Text1	FreeText 1	N/A	N/A
Free Text2	FreeText 2	N/A	N/A
Free Text3	FreeText 3	N/A	N/A
Free Text4	FreeText 4	N/A	N/A
Free Text5	FreeText 5	N/A	N/A
N/A	Business Unit	N/A	N/A

### ■ Delta equivalent of options positions

Positions on options should be converted into delta equivalent positions on futures.

As a reminder, daily reporting of Euronext listed commodities contracts applies also to the positions in options on commodity futures. For each option series, members have to report, following the same principles of net basis as in the futures contracts, both the quantity of option contracts and its equivalent quantity in futures as expressed by the delta of the position (please refer to question 9 of ESMA Q&A on commodity derivatives topics). As the individual delta of one option is always less than or equal to 100% in absolute value, members are expected to include in their checks that, for a given line of option series

reporting, the delta equivalent position is therefore, in absolute amount, less than or equal to the option position.

~~Members should not aggregate in the reporting file the positions in futures and the equivalent positions corresponding to the options. This will be done by Euronext itself, notably for the purposes of producing the Commitments of Traders report. However, members and their clients are reminded for compliance purposes that the position limits as set out by the AMF do apply on such aggregated position for each relevant maturity perimeter (i.e. spot or all other months).~~

*Euronext intends to make delta on Commodity Options public for reporting purpose. Until the solution is in place post MIFID II go-live, reporting entities must use their own delta or delta available from their back office system. More information about the solution for distributing the delta publicly will be provided in due course.*

#### ■ The categories of market participants

The different categories of persons should be classified in the Weekly CoT Report according to the nature of their main business:

- **Investment firms** (as defined in MIFID 2) or **credit institutions**;
- **Investment funds**, either undertaking for collective investments in transferable securities or alternative investment fund manager;
- **Other financial institutions** including insurance undertakings, reinsurance undertakings and institutions for occupational retirement provision;
- **Commercial undertakings** (commercial activities are defined in ESMA guidelines on key concepts of the AIFMD, Ref. 2013/611).
- **Operators with compliance obligations** under Directive 2003/87/EC

*The category of participants is now considered as a new field provided by member and included in the Euronext specifications. It is included in the output files sent to the NCAs based on the value of the 'Position Holder type' provided in the Position Holder file.*

Euronext reminds reporting entities when assigning category of participants to their Position Holders that only Position Holders of type "Commercial Undertakings" have the possibility to declare positions with the "Risk Reducing" indicator.

For further guidance, reporting entities can refer to:

- **MiFID II Level 1 - Article 57.1:** "Position limits shall not apply to positions held by or on behalf of a non-financial entity and which are objectively measurable as reducing risks directly relating to the commercial activity of that non-financial entity"
- **MiFID II Level 2 - Article 7 of RTS 21** that provides information on criteria and methods to determine whether a position can be considered as risk reducing. The article also limits the use of the risk reducing indicator to non-financial entities.

### ■ The Venue Product Code

The Venue Product Code is not included in the Euronext specifications.

As per ITS 4, reporting entities must report their positions on a per instrument basis. The Venue Product Code is in place automatically determined par Euronext based on the ISIN code of the contract and included in the output file sent by Euronext to the NCAs. It corresponds to the Contract Code attached to the instrument, e.g. EBM for the Milling Wheat Future contract.

### ■ Reporting of OTC equivalent contracts

MiFID II requires all Investment Firms trading in commodity derivatives outside a trading venue to provide NCAs with daily position reports on economically equivalent OTC contracts, including a breakdown of proprietary positions and any client positions.

A report on commodity OTC economically equivalent contracts is due by any investment firm, exchange member or not, and this report has to reach the authority in charge of monitoring the corresponding listed commodity contract positions.

The Euronext solution has been designed in accordance with ITS4 standards to accommodate, on an optional basis, reporting of EOTC contracts and that all information contained in the position reporting files will be transmitted to the authority supervising our relevant listed commodity contracts.

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## 1.51.7 SPOT MONTH / OTHER MONTHS

Positions must be segregated between positions in *Spot Month* vs positions in *All Other Months*.

In relation to Euronext agricultural commodity contracts listed on MATIF, Euronext confirms that the spot month for the purposes of MiFID II daily reporting is **always the first maturity immediately available for trading**.

*For example, on the rapeseed contract, February is the spot month for the whole period starting from the first day following the last trading day of the previous November maturity until the last trading day of that February maturity, i.e. from 1 November 2017 to 31 January 2018, inclusive.*

Reporting of options on futures contracts follows the same logic as for their equivalent futures: options that have the spot month future as their underlying will also be classified as spot month options. *(Note that this implies there is a period during which no option at all will classify as spot month options: since options on MATIF futures expire prior to the maturity of the future itself, over that specific period they will either have been converted into spot month futures or will have expired unexercised).*

As a reminder, there are only expiries of a monthly nature on MATIF contracts and the issue of infra maturities as mentioned in the ESMA Q&As does not arise.

For complete background about this choice of organization by the AMF as the national competent authority for the MATIF, one may observe that this arrangement has been reflected in the setting of position limits by the national competent authority, which introduces a specific increased limit for the other months in the transitional period when liquidity gradually shifts from the spot month to the other months. However, this does not change the fact that the spot month is always deemed to be the first month open for trading until its last trading day.

The Spot Month indicator is available through the Saturn Web Service in the Get Instruments function.

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## 2. TECHNOLOGY

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### 2.1 WEB SERVICE

The services in the Saturn API are exposed as Web Services:

- *Message format:* REST
- *Transport mechanism:* HTTPS

Saturn Rest API allows to upload only a CSV file format. The response of the upload request can be formatted in json or XML. *Please note that in order to use the Saturn API, systems must be capable of calling a REST Web service through HTTP over SSL, as well as being capable of generating and parsing XML documents.*

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### 2.2 SECURITY

Services in Saturn are protected by authentication and authorization mechanisms. To access the services, a client is required to log on to the system.

The web services allow the customers to send commands and get reports to/from Saturn.

The web services agents and the passwords are managed by the Saturn application. The passwords are stored encrypted in the Saturn MySql Database.

The agent sends first a logon request in HTTPS with his name and password encrypted.

Then Saturn checks the credentials, assign a token and reply the token to the agent.

Then the agent is allowed to communicate with Saturn in Rest API by using this token in each message.

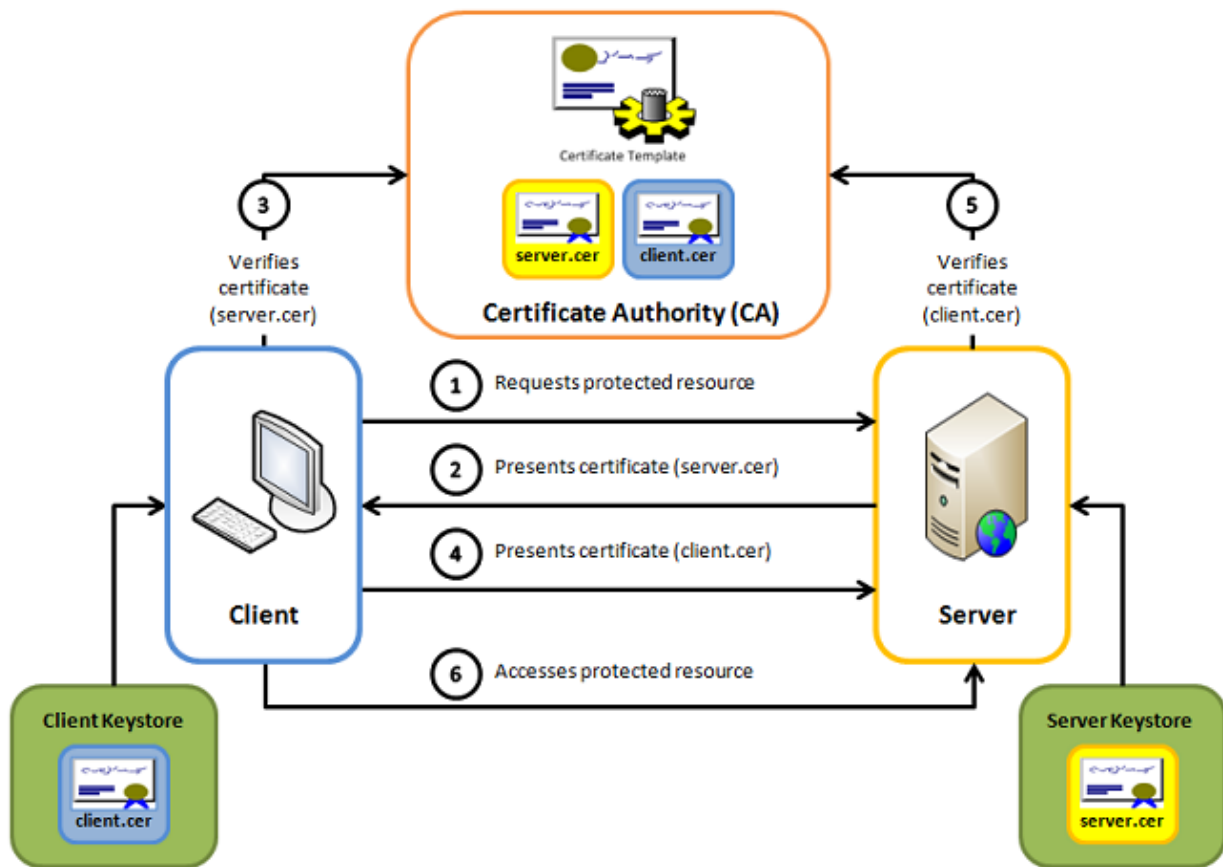
Tokens are valid for a defined period of time (parameter to be defined). If the agent sends a message with an expired token, then Saturn replies with an error message “Token expired”.

Passwords and tokens are transmitted in the Authorization fields of the HTTP header.

In addition, Saturn will use certificate based mutual authentication that refers to two parties authenticating each other through verifying the provided digital certificate so that both parties are assured of the others' identity. In other terms, it refers to a client (web browser or client application) authenticating themselves to a server (website or server application) and that server also authenticating itself to the client through verifying the public key certificate/digital certificate issued by the trusted Certificate Authorities (CAs). From a high-level point of view, the process of authenticating and establishing an encrypted channel using certificate-based mutual authentication involves the following steps.

A client requests access to a protected resource:

1. The server presents its certificate to the client;
2. The client verifies the server's certificate;
3. If successful, the client sends its certificate to the server;
4. The server verifies the client's credentials;
5. If successful, the server grants access to the protected resource requested by the client.



## 2.3 SESSION HANDLING

ALL	Euronext Members and Non-Members
-----	----------------------------------

To use some of the services provided by Saturn, the client must first logon to the system. After checking the credentials Saturn creates a token and assigns it to the client. The client then will be allowed to communicate with the Saturn REST API by using this token in each message. In addition, Saturn will memorise the client IP from the login request and will check that each message is sent by the same client IP.

Saturn, in each request, extracts the token from the authorization header and looks up the token / IP on its storage.

Tokens are valid for a defined period of time. If the client sends a message with an expired token, Saturn will reply with an error message "Token expired"

**Note:** A client is only allowed to have an active session at a time. The first session will be automatically invalidated, if a client logs on to the Saturn system already having an active session established.

## 2.4 AUTHENTICATION

ALL	Euronext Members and Non-Members
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Username and password are used to authenticate a client logging on to the system. These client credentials are stored in the Saturn database.

**Note:** The password is stored encrypted into the database

After a successful logon, a token is created by Saturn and is returned to the client.

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## 2.5 LOGOFF

ALL	Euronext Members and Non-Members
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If a client is logged-on to the system for more than a configurable number of minutes without performing any operation, the system will automatically log-off the client and terminate the session.

If the client invokes an operation when logged off, a REST error will be returned to the client. In this case, the client needs to log on to the system again to be able to perform any further operations.



### 3. FUNCTIONS SUMMARY

ALL	Euronext Members and Non-Members
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This section provides a summary of the functions available through the Saturn REST API.  
 For detailed information on each message, please refer to section [44: Function Details](#).

Function	Description
AuthenticateUser	Log-in function. This function should be used by client to access to the Saturn Web service
Upload	This function allows reporting entities to automatically upload their daily Positions report files to Saturn

## 4. FUNCTIONS DETAILS

### 4.1 AUTHENTICATE USER

ALL	Euronext Members and Non-Members
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The client must perform this function before any other. If successful, the function creates a session on the server and returns a token that a client needs to pass along with all subsequent functions during the ongoing session.

The token is used for session handling. The server returns the token in the HTTPS response header.

The client sends that token in each request using the “Authorization” header. Tokens are valid for a defined period (parameter to be defined). If the client sends a message with an expired token, then Saturn replies with the error message “Token expired”. Passwords and tokens are transmitted in the Authorization fields of the HTTP header.

#### Function:

Function name: AuthenticateUser

Request EndPoint: /SaturnWebServices/rest/Authentication/ AuthenticateUser

Method: POST

#### Request Parameters:

Name	Value	Type	Data Type	Required	Description
Authorization	Basic <Username:Password>	Attribute	string	Yes	Concatenate Saturn username and password (MD5 encrypted) – Concatenation is encrypted in base 64

#### Response Parameters:

Name	Type	Data Type	Required	Description
Token	Attribute	string	Yes	Token generated by Saturn and assigned to the above account. Each following function undertaken by the user shall contain this token
StatusCode	Attribute	int	Yes	The status code of the logon function. See below for description

Possible returned **status** codes:

**200 – Success**

**401 – Access denied ! Check your login/password**

**504 – Session expired**

## 4.2 ENVIRONMENT

ALL	Euronext Members and Non-Members
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The following table provides the links to connect to the Saturn Web / API application in the EUA and Productions environments.

Environment	URL Saturn GUI	URL Saturn Web Services
VEUA	<a href="https://saturn-v.euronext-net.com">https://saturn-v.euronext-net.com</a>	<a href="https://saturn-api-v.euronext-net.com">https://saturn-api-v.euronext-net.com</a>
PEUA	<a href="https://saturn-h.euronext.com">https://saturn-h.euronext.com</a>	<a href="https://saturn-api-h.euronext.com">https://saturn-api-h.euronext.com</a>
PRODUCTION	<a href="https://saturn-p.euronext.com">https://saturn-p.euronext.com</a>	<a href="https://saturn-api-p.euronext.com">https://saturn-api-p.euronext.com</a>

## 5. UPLOAD

ALL	Euronext Members and Non-Members
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The Upload function must be used by client to upload a Commodity Position Reporting file in csv format.

### Function:

Function name: upload  
 Request EndPoint: /SaturnWebServices/rest/files/upload  
 Method: POST

### Request Body :

This endpoint accepts a request body in one of the following formats:

Name	Type	Description	Notes	Validations
Type	"FormData"			
FieldValues	List of FieldValue	A list of key/value pairs identifying the form data (field name / value)		

### 5.1 UPLOAD .CSV FILE DESCRIPTION

The file must be in csv format with ‘;’ as separator.

The first line must contain the label of the fields in any order

The labels of the fields are listed below in the first column of the tab; please note that the labels are case sensitive.

The file size is 10Mo. Files larger than 10Mo are to be uploaded separately.

Label	Description	Mandatory	Format	Validation Rules
<b>Report reference number</b>	Unique identifier of the report provided by the reporting entity	Yes	{ALPHANUM-52}	<p>1 - The Report Reference Number must be unique per client when Report Status field is equal to 1 (NEW).</p> <p>2 - For a Report status field equal to 2 (AMEND), the Report Reference Number must exist and corresponds to the reference of the initial report</p> <p>3 - For a Report status field equal to 3 (CANCEL), the Report Reference Number must exist and corresponds to the reference of the initial report (that must have been cancelled prior to the modification)</p>
<b>Holding Position Trading Day</b>	Field to be populated with the date on which the reported position is held at the close of the trading day	Yes	<p>Date and time in the following format:</p> <p>YYYY-MM-DD</p> <p>- <b>YYYY</b>: Year</p> <p>- <b>MM</b>: Month</p> <p>- <b>DD</b>: Day</p>	

Label	Description	Mandatory	Format	Validation Rules
<b>Report status</b>	<p>Indication as to whether the report is (1) new, (2) cancelled, or (3) amended.</p> <p>Where a previously submitted report is cancelled or amended, a report which contains all the details of the original report and using the original Report Reference Number should be sent and the 'Report status' should be flagged as 'CANC'.</p> <p>For amendments, a new report that contains all the details of the original and using the original Report Reference Number with all necessary details corrected should be sent and the 'Report status' should be flagged as 'AMND'</p>	Yes	<p>Numerical value</p> <p><b>1:</b> New <b>2:</b> Amendment <b>3:</b> Cancellation</p>	
<b>Reporting Entity ID</b>	<p>LEI of the Reporting Entity.</p> <p>Direct clients must also populate this field with the LEI of their General Clearing Member (GCM)</p>	Yes	{ALPHANUM-20}	This code must have been previously declared to Euronext
<b>Position holder ID</b>	<p>Position Holder identifier.</p> <p>It can be either the Legal Entity Identifier (LEI) or the NATIONAL_ID for persons not having an LEI</p>	Yes	{ALPHANUM-35}	This code must have been previously declared to Euronext

Label	Description	Mandatory	Format	Validation Rules
<b>Position holder ID type</b>	Identify the Type of the Position Holder.	No	Numerical value 1: Investment firms or credit institutions 2: Investment funds 3: Other financial institutions 4: Commercial undertakings 5: Operators with compliance obligations under Directive 2003/87/EC	This value must have been previously provided to Euronext
<b>Position holder email</b>	Email address for notifications of position-related matters	<del>No</del> Yes*	{ALPHANUM-256}	<u>Mandatory for XEUC</u> <u>Optional for XMAT</u>
<b>Ultimate parent entity ID</b>	Field to be populated with the Legal Entity Identifier code (LEI) for legal entities or {NATIONAL_ID} for natural persons not having an LEI.	Yes	{ALPHANUM-35}	
<b>Ultimate parent entity ID type</b>	Identify the type of Ultimate Parent Id	Yes	Numerical value 1: LEI 2: National ID 3: CONCAT	
<b>Ultimate parent entity email</b>	Email address for correspondence in relation to aggregated positions	<del>No</del> Yes*	{ALPHANUM-256}	<u>Mandatory for XEUC</u> <u>Optional for XMAT</u>
<b>Investment Firm Indicator</b>	Field to report on whether the position holder is a collective investment undertaking that makes investment decisions independently from its parent	Yes	Numerical 1: True 0: False	

Label	Description	Mandatory	Format	Validation Rules
<b>SecurityId</b>	<p>ISIN code of the commodity derivative, emission allowance or derivative thereof.</p> <p>For Euronext instruments, the ISIN code of the instrument as provided in the standing data files</p>	Yes	{ISIN}	
<b>Trading venue identifier</b>	<p>Field to be populated with the ISO 10383 MIC code for positions reported on Euronext contracts.</p> <p>Where the segment MIC does not exist, use the operating MIC</p>	Yes	<p>{ALPHANUM-4}</p> <p>- <b>XMAT</b>: Euronext Paris contracts                      . <b>XEUC</b>: Euronext Amsterdam contracts                      . <b>XXXX</b>: off-venue positions in economically equivalent OTC contracts                      - <b>XOFF</b>: listed derivatives traded off-exchange</p>	"
<b>Position type</b>	Field to report whether the position is in either futures, options, emission allowances, or derivatives.	Yes	<p>Numerical value:</p> <p><b>1</b>: Options  <b>2</b>: Futures  <b>3</b>: OTC equivalent</p>	<p>- If position type is Options or Futures, the values of the Euronext ISIN code and the Euronext Trading venue identifier must be consistent</p> <p>- If Position Type is OTC equivalent, the Trading venue identifier must be either XXXX or XOFF</p>
<b>Position maturity</b>	Indication of whether the maturity of the contract comprising the reported position relates to the spot month or to all other months	Yes	<p>Numerical value:</p> <p><b>1</b>: Spot month  <b>2</b>: All other months</p>	



Label	Description	Mandatory	Format	Validation Rules
<b>Long Position quantity</b>	<p>This field should be populated with the <b>Long</b> position quantity held in the Euronext commodity derivatives contract expressed in number of lots <u>or MHWO</u></p> <p>For OTC equivalent contracts, this field should be populated with the number of units held.</p>	Yes	Decimal value with 15 digits and 2 fraction digits separated by “.”	<p>If Position Type is Option, the field should contain the Long Position Quantity held in number of lots <u>or MHWO</u>.  <u>Must be filled and greater than or equal to 0.</u>  <b>Error : [14] A Position quantity not null must be provided</b></p> <p><u>For Futures (Position type = 2 (FUTR)), either Long Position Quantity or Short Position Quantity can be filled.</u>  <b>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</b></p> <p><u>For Call Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OC**** (Call)), either (Long Position Quantity and Delta Equivalent Long Position) OR (Short Position Quantity and Delta Equivalent Short Position) can be filled.</u>  <b>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</b></p> <p><u>For Put Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OP**** (Put)), either (Long Position Quantity and Delta Equivalent Short Position) OR (Short Position Quantity and Delta Equivalent Long Position) can be filled.</u>  <b>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</b></p>

Label	Description	Mandatory	Format	Validation Rules
<p><b>Delta Equivalent Long Position</b></p>	<p>If the Position Type is 'OPTN', then this field shall contain the delta-equivalent quantity of the position reported in the "Position Quantity" field.</p>	<p>No</p>	<p>Decimal value with 15 digits and 2 fraction digits separated by "."</p>	<p>Must only be provided if Position Type is Option.</p> <p><u>For Call Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OC**** (Call)), either (Long Position Quantity and Delta Equivalent Long Position) OR (Short Position Quantity and Delta Equivalent Short Position) can be filled.</u></p> <p><u>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</u></p> <p><u>For Put Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OP**** (Put)), either (Long Position Quantity and Delta Equivalent Short Position) OR (Short Position Quantity and Delta Equivalent Long Position) can be filled.</u></p> <p><u>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</u></p> <p>If Position Type is Futures, the field should be left empty</p>

Label	Description	Mandatory	Format	Validation Rules
<p><b>Short Position quantity</b></p>	<p>This field should be populated with the <b>Short</b> position quantity held in the commodity derivatives expressed in number of lots <u>or</u> <u>MHWO</u>-</p> <p>For OTC equivalent contracts, this field shall be populated with the number of units held</p>	<p>Yes</p>	<p>Decimal value with 15 digits and 2 fraction digits separated by “.”</p>	<p>If Position Type is Option, the field should contain the Long Position Quantity held in number of lots or MHWO.</p> <p>Must be filled and greater than or equal to 0.</p> <p><b>Error : [14] A Position quantity not null must be provided</b></p> <p>For Futures (Position type = 2 (FUTR)), either Long Position Quantity or Short Position Quantity can be filled.</p> <p><b>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</b></p> <p>For Call Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OC**** (Call)), either (Long Position Quantity and Delta Equivalent Long Position) OR (Short Position Quantity and Delta Equivalent Short Position) can be filled.</p> <p><b>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</b></p> <p>For Put Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OP**** (Put)), either (Long Position Quantity and Delta Equivalent Short Position) OR (Short Position Quantity and Delta Equivalent Long Position) can be filled.</p> <p><b>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</b></p> <p>If Position Type is Option, the field should contain the Short Position Quantity held in number of lots or MHWO.</p> <p>Short quantity must be provided as a positive value</p>

Label	Description	Mandatory	Format	Validation Rules
<b>Delta Equivalent Short Position</b>	If the Position Type is 'OPTN', then this field shall contain the delta-equivalent quantity of the position reported in the "Position Quantity" field.	No	Decimal value with 15 digits and 2 fraction digits separated by "."	<p>Must only be provided if Position Type is Option</p> <p>If Position Type is Futures, the field should be left empty</p> <p>Delta equivalent Short Quantity must be expressed as a positive value.</p> <p><u>For Call Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OC**** (Call)), either (Long Position Quantity and Delta Equivalent Long Position) OR (Short Position Quantity and Delta Equivalent Short Position) can be filled.</u>  <u>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</u></p> <p><u>For Put Options (Position type = 1 (OPTN) &amp; Instrument's CFI = OP**** (Put)), either (Long Position Quantity and Delta Equivalent Short Position) OR (Short Position Quantity and Delta Equivalent Long Position) can be filled.</u>  <u>Error message : [7034]Only Long or Short Position Quantity can be filled. For Options, please check additional fields: Delta Equivalent Position.</u></p>
<b>Risk reducing indicator</b>	Field to report whether the position is risk reducing in accordance with Article 7 of RTS 21.	Yes	Numerical value:  1: True (the position is risk reducing)  0: False (the position is not risk reducing)	
<b>FreeText 1</b>	User free text #1	No	{ALPHANUM-55}	
<b>FreeText 2</b>	User free text #2	No	{ALPHANUM-55}	
<b>FreeText 3</b>	User free text #3	No	{ALPHANUM-55}	
<b>FreeText 4</b>	User free text #4	No	{ALPHANUM-55}	For direct reporting clients, the field should be filled with 'REPORT_MYSELF'

Label	Description	Mandatory	Format	Validation Rules
FreeText 5	User free text #5	No	{ALPHANUM-55}	
Business Unit	The Saturn client can have several business units; this field is to specify to which business unit the user who sends the file belongs to.	No	{ALPHANUM-10}	Must only contain capital letters and numbers

## 5.2 UPLOAD RESPONSE DATA

ALL	Euronext Members and Non-Members
-----	----------------------------------

This function returns the status of the file reception.

### Response Data Parameters:

Name	Type	Data Type	Required	Description
Code	Attribute	Int	Yes	Status of the function. 202 – OK, 600- FAILED
Data	Element	Sequence of data	Yes	Detailed description below

### Sequence of data

Name	Type	Data Type	Required	Description
Type	Attribute	String	Yes	Name of statistics: UploadedFileStatus
Filename	Attribute	String	Yes	Csv file name
Size	Attribute	Int	Yes	Csv file size
Status	Attribute	String	Yes	Flag W
Tid	Attribute	String	Yes	Treatment ID
UploadedDate	Attribute	Date	Yes	"YYYY-MM-DDTHH:MM:SS

### Successful upload example

```
{
  "code":200,
  "data":[
    {
      "type":"uploadedFileStatus",
      "fileName":"commo_CTSG_5.csv",
      "size":6144,
      "status":"W",
      "tid":1022, (please note that Tid is for Euronext internal usage)
    }
  ]
}
```

```

        "uploadedDate":"2017-09-12T12:54:25"
    }
},
"msg":"OK",
"recordCount":1
}
    
```

For more details, refer to the section Filter structure in the chapter Technical details & examples [here](#)

### 5.3 GETUPLOADED

ALL	Euronext Members and Non-Members
-----	----------------------------------

#### EXAMPLE OF THE GETUPLOADED FUNCTION:

Function name: GetUpload  
 Request EndPoint: /SaturnWebServices/rest/files/getuploaded  
 Method: GET

### 5.4 GETUPLOAD RESPONSE DATA

ALL	Euronext Members and Non-Members
-----	----------------------------------

#### RESPONSE DATA PARAMETERS:

Name	Type	Data Type	Required	Description
Code	Attribute	Int	Yes	Status of the function. 200 – OK
Data	Element	Sequence of data	Yes	Detailed description of uploaded data

#### SEQUENCE OF DATA:

Name	Type	Data Type	Required	Description
Type	Attribute	String	Yes	Name of statistics : UploadedFileStatus
Filename	Attribute	string	Yes	Csv file name
Msg	Attribute	Int	Yes	Detailed message by trade and column
Size	Attribute	String	Yes	Filename size

Name	Type	Data Type	Required	Description
Status	Attribute	String	Yes	E
Tid	Attribute	int		Treatment ID sequential number
uploadedDate	Attribute	date	Yes	“YYYY-MM-DDTHH:MM:SS

```
{
  "code":200,
  "data":[
    {
      "type":"uploadedFileStatus",
      "fileName":"commo_CTSG_5.csv",
      "msg":[
        "line[3]ERROR: Data too long for column 'POSITIONHOLDEMAIL' at row 1",
        "line[7]ERROR: Data too long for column 'ULTIMATEPARENTENTITYEMAIL' at row 1",
        "line[8] Try to insert an existing transaction",
        "line[9] Try to insert an existing transaction"
      ],
      "size":6144,
      "status":"E",
      "tid":1022, (please note that Tid is for Euronext internal usage)
      "uploadedDate":"2017-09-12T12:54:25"
    }
  ],
  "msg":"OK",
  "recordCount":1
}
```

Possible returned **status** codes:

**200 – OK**

**600 – FAILED**

## 6. RETRIEVE REFERENTIAL

ALL	Euronext Members and Non-Members
-----	----------------------------------

The functions below are used to retrieve referential data.

### 6.1 GET INSTRUMENTS

ALL	Euronext Members and Non-Members
-----	----------------------------------

The “Get Instruments” function is used to get instruments referential data.

#### Function:

Function name: Get  
 Request EndPoint: /SaturnWebServices/rest/referentials/instruments/get  
 Method: POST

It is recommended to set a “Limit” and “offset” value to avoid retrieve all instruments from the database. Please note that **limit** and **offset** are defined at request end Point level. The **limit** value is used to retrieve a maximum number of instruments and the **offset** value is used to retrieve instruments from a specific starting point.

**Example :** /SaturnWebServices/rest/referentials/instruments/get?limit=100offset=0

limit=100&offset=0, begin from the first instrument (offset) and take the 100 following instruments (limit)

#### Request Body:

This endpoint accepts a request body in one of the following formats:

- 1- application/json;
- 2- application/xml.

#### Request Parameters

Name	Type	Data Type	Required	Description
FilterList	Element	Sequence of FilterList	Yes	Detail of request (treatment ID, sort..)
Offset	Attribute	Int	Yes	Initial number = 0
Limit		Int	Yes	Number of retrieved instruments

#### Sequence of filterList

Name	Type	Data Type	Required	Description
------	------	-----------	----------	-------------



Name	Type	Data Type	Required	Description
Name	Attribute	String	Yes	Name of the field used as filter. It can be any field listed in the sequence data tab, for example ISIN
Value	Attribute	String	Yes	Value to filter
Operator	Attribute	String	Yes	Operator for filtering
Sort	Attribute	string	Yes	DESC or ASC (descending or ascending)

### Example of GetInstruments:

```
{
  "filterList": [
    {
      "name": "isin",
      "value": "DEC%",
      "operator": "LK"
    },
  ]
}
```

For more details, refer to the section Filter structure in the chapter Technical details & examples [here](#)

### Response Data Parameters:

Name	Type	Data Type	Required	Description
Code	Attribute	int	Yes	Status of the function. 200 – OK
Data	Element	Sequence of data	Yes	Detailed description below

### Sequence of data

Name	Type	Data Type	Required	Description
mic	Attribute	String	Yes	MIC of the Instrument
isin	Attribute	String	Yes	ISIN of the Instrument
euronextcode	Attribute	String	Yes	Euronext code of the Instrument (only for Cash instruments)
currency	Attribute	String	Yes	Currency of the Instrument
amr	Attribute	String	Yes	Euronext code of the Instrument (only for Derivative instruments)
adt	Attribute	Int	Yes	Average Daily Turnover
Cfi	Attribute	String	Yes	CFI code of the Instrument
product_code	Attribute	string	Yes	Euronext code of the product (only for Derivative instruments)

Name	Type	Data Type	Required	Description
symbol_Index	Attribute	Int	Yes	Euronext Optiq symbol index
trading_group	Attribute	String	Yes	Euronext trading group of the Instrument (only for Cash instruments)
expiry_date_offset	Attribute	Int	Yes	Rank of the maturity: 0: Spot month 1,2 3...: Other maturities
ldeleted	Attribute	Int	Yes	0: Instrument not delisted 1: Instrument delisted
Illiquidity	Attribute	Int	Yes	0: illiquid instrument 1: liquid instrument
q_notation	Attribute	String	Yes	This field indicates whether the quantity is expressed in monetary value, in nominal value or in Units: - 'UNIT' - 'MONE' – Monetary value; - 'NMNL' – Nominal value;
tick_size_denominator	Attribute	Int	Yes	Denominator used for tick size calculation
tick_size_numerator	Attribute	Int	Yes	Numerator used for tick size calculation
lissposttrade	Attribute	Int	Yes	Number of lots representing the Large In Scale post trade transparency deferral threshold.
lispretrade	Attribute	Int	Yes	Number of lots representing the Large In Scale pre trade transparency deferral threshold.
sstiposttrade	Attribute	Int	Yes	Number of lots representing the Size Specific To Instruments post trade transparency deferral threshold.
sstipretrade	Attribute	Int	Yes	Number of lots representing the Size Specific To Instrument pre trade transparency deferral threshold.
underlying_name	Attribute	String	Yes	Euronext name of the underlying (only for Derivative instruments)
underlying_product_code	Attribute	String	Yes	Euronext code of the underlying (only for Derivative instruments)

```
{
    "code": 200,
    "data": [{
        "type": "instrument",
        "adt": "0.00000",
        "amr": "YOOMA161117200P",
        "cfi": "OPAFPS",
```

```

    "currency": "EUR",
    "expiry_date_offset": 4,
    "ideleted": 0,
    "iliquidity": 0,
    "isin": "FRENX0146618",
    "lispostrade": "0",
    "lispretrade": "0",
    "mic": "XMAT",
    "product_code": "OMA",
    "q_notation": "",
    "sent_to_mdg": 0,
    "sstiposttrade": "0",
    "sstipretrade": "0",
    "symbol_Index": "4225800688",
    "tick_size_denominator": 100,
    "tick_size_numerator": 10,
    "trading_group": "",
    "underlying_name": "Corn / Mais",
    "underlying_product_code": "EMA"
  }},
  "msg": "success",
  "recordCount": 560
}

```

Please note that some of the attributes of the GetInstrument function will not be systematically populated.

**Specific notes for Commodity Reporting purpose:**

- Reporting entities are encouraged to filter the results of the function using the MIC code of Euronext Commodity markets (i.e.XMAT for Paris Commodity instruments).
- All commodity instruments having an expiry date offset equal to '0' correspond to instruments related to the 'Spot Month' (at the date the function is called).
- All Commodity instruments having an expiry date offset other than '0' correspond to instruments related to 'Other Months' (at the date the function is called).

## 7. RETRIEVE COMMODITIES REPORT

The “Get Commodity Reports” function is used to get instruments referential data.

### Function:

Function name: Get  
 Request EndPoint: /SaturnWebServices/rest/commodityReports/get  
 Method: POST

It is recommended to set a “Limit” and “offset” value to avoid retrieve all trades from the database. Please note that **limit** and **offset** are defined at request end Point level. The **limit** value is used to retrieve a maximum number of trades and the **offset** value is used to retrieve trades from a specific starting point.

Example: /SaturnWebServices/rest/commodityReports/get?limit=15&offset=0

limit=15&offset=0, begin from the first trade (offset) and take the 15 following trades (limit)

### Request Body :

This endpoint accepts a request body in one of the following formats:

- 1- application/json;
- 2- application/xml.

### Request Parameters

Name	Type	Data Type	Required	Description
FilterList	Element	Sequence of filterList	Yes	Detail of request
Offset	Attribute	Int	Yes	initial number = 0
Limit		Int	Yes	Number of retrieved trades

### Sequence of filterList

Name	Type	Data Type	Required	Description
Name	Attribute	String	Yes	<a href="#">Type of request : tid (treatment ID), status</a>
Value	Attribute	String	Yes	<a href="#">status of position</a>
Operator	Attribute	String	Yes	<a href="#">EQ</a>
Type	Attribute	String	Yes	<a href="#">Type of report (commodity report)</a>
Sort	Attribute	string	Yes	<a href="#">DESC or ASC (descending or ascending)</a>

### Example of Get function:

```
{
  "filterList": [
    {
      "name": "arm",
      "value": "DEC%",
    }
  ]
}
```

```

    "operator": "LK"
  },
]
}

```

## 7.1 GET COMMODITIES REPORT

ALL	Euronext Members and Non-Members
-----	----------------------------------

### Get ResponseData Parameters:

Name	Type	Data Type	Required	Description
code	Attribute	<a href="#">Int</a>	Yes	Status of the function. 200 – success
data	Element	Sequence of data	Yes	Detailed description below
Msg	Attribute	Sequence of data	Yes	Status – Success or failed
Recordcount	Attribute	Sequence of data	Yes	Number of retrieved trades

### Sequence of data

Name	Type	Data Type	Required	Description
Columns details	Attribute	List	Yes	block of positions with all columns filled in the database

```

{
  "code": 200,
  "data": [{
    "type": "commodityReport",
    "businessunit": {
      "deleted": 0,
      "name": "BU001",
      "participantid": 385,
      "tag": "BU001",
      "tid": 9 (please note that Tid is for Euronext internal usage)
    },
  },

```

"errors": "[REPORTINGENTITY][11] Wrong ESMA code. Not referenced.;[POSITIONHOLDERID][11] Wrong ESMA code.Not referenced.;[SECURITYID][19] Instrument invalid value;[VENUE][13] Invalid Value; [VENUE][16] MIC incompatible with ISIN; [SHORTPOSITIONQUANTITYDELTA][18] The delta position quantity must no be provided for Futures; [LONGPOSITIONQUANTITYDELTA][18] The delta position quantity must no be provided for Futures ",

"freetext1 ": "Smith ",

"freetext2 ": "Roland ",

"freetext3 ": "Vert ",

"freetext4 ": "Audi ",

"freetext5": "Bruxelles",

"holdingpositionday": "2016-10-14T00:00:00",

"investmentfirmindicator": 0,

"longpositionquantity": 940736.00,

"longpositionquantitydelta": 265758.00,

"origin": "SATURN",

"participantid": 385,

"positionholdemail": "[holder1@client.com](mailto:holder1@client.com)",

"positionholderid": "5493005GIOHA4VVQNV28",

"positionmaturity": 2,

"positiontype": 2,

"reportingentity": "549300KFCCJ1Y2M20965",

"reportref": "TRADEREFERENCECMQH7398852110",

"riskreducingid": 1,

"saturnuser": "CommoUser",

"securityid": "FRENX0717251",

"shortpositionquantity": 567772.00,

"shortpositionquantitydelta": 617137.00,

"status": 4,

"tid": 2751, *(please note that Tid is for Euronext internal usage)*

"tradereport": 1,

"tsreceive": "2017-08-24T13:31:06.15",

"ultimateparententityemail": "[test2@demo2.com](mailto:test2@demo2.com)",

"ultimateparententityid": "549300HUWQH7YHZVHL75",

"ultimateparententityidtype": 1,

"venue": "XMAT"

```
    }},  
    "msg": "success",  
    "recordCount": 560  
}
```

For more details, refer to the section Filter structure in the chapter Technical details & examples [here](#).

## 8. REJECTION CODES

The following table lists the error codes returned by Saturn as a result of the submission of the report. These error codes therefore do not correspond to the regulators' feedback.

Error Code	Description
7000	The Report Reference Number already exists
7001	Unknown Report Reference Number for Canc. Report
7002	Incorrect Report Reference Number for Amend. Report
7003	Incorrect Holding Position Trading Day format
7004	Invalid value for Report Status
7005	Unknown Reporting Entity ID
7006	Unknown Position Holder ID
7007	Incorrect Position Holder email format
7008	Unknown Ultimate Parent Entity ID
7009	Invalid Ultimate Parent Entity ID Type
7010	Incorrect Ultimate Parent Entity email format
7011	Invalid value for Investment Firm Indicator
7012	Unknown ISIN code
7013	Invalid Trading Venue Identifier
7014	Invalid value for Position Type
7015	Incorrect Euronext Trading Venue Identifier for ISIN
7016	Incorrect Trading Venue Identifier for Position type
7017	Invalid value for Position Maturity
7018	Long Delta Equivalent Position Quantity must be provided
7019	Long Delta Equivalent Position Quantity must not be provided for Futures
7020	Short Delta Equivalent Position Quantity must be provided
7021	Short Delta Equivalent Position Quantity must not be provided for Futures
7022	Invalid value for Risk Reducing Indicator
7023	Invalid Business Unit format
7024	Invalid Position Holder Type format



## 9. REST API STANDARDS

### 9.1 DATA FORMAT STANDARDS

ALL	Euronext Members and Non-Members
-----	----------------------------------

Certain data in the messages needs to be formatted according to standards for the respective data types.

Data Type	Standard	Example
Date	date	YYYY-MM-DD
DateTime	UTCTimestamp	YYYY-MM-DDThh:mm:ss.dzzzzzzZ
Decimal	decimal	3.1415927
Boolean	Boolean	True/ False
String	string	FUTURE
Long	long	234 (up to .. characters)
Integer	int	2 (up to 233 characters)
Account	account	Username : string Role : string ID : long Jean ; Admin ; 347
LEI	ISO 17442	969500HMVSZ0TCV65D58
MIC	ISO 10383	XMAT
Currency	ISO 4217	EUR
Country	ISO 3166	FR
CFI	ISO 10962	ESETFA

### 9.2 OPERATORS

ALL	Euronext Members and Non-Members
-----	----------------------------------

Operators	Description
EQ	Equal to
NEQ	Not Equal to
LK	Like
GT	Greater than
GE	Greater than or Equal to
LT	Less than
LE	Less than or Equal to
ISNULL	Is Null

Operators	Description
ISNOTNULL	Is Not Null

### 9.3 SPECIAL CHARACTERS <, & AND > IN XML

ALL	Euronext Members and Non-Members
-----	----------------------------------

The ampersand character (&) and the angle brackets (<) and (>) *MUST NOT* appear in their literal form, except when used as mark-up delimiters, or within a [comment](#), a [processing instruction](#), or a [CDATA section](#). If they are needed elsewhere, they *MUST* be [escaped](#) using either [numeric character references](#) or the strings "&amp;" for (&) and "&lt;" for (<). The right angle bracket (>) *MAY* be represented using the string "&gt;", and *MUST, for compatibility*, be escaped using either "&gt;" or a character reference when it appears in the string "]]>" in content, when that string is not marking the end of a [CDATA section](#).

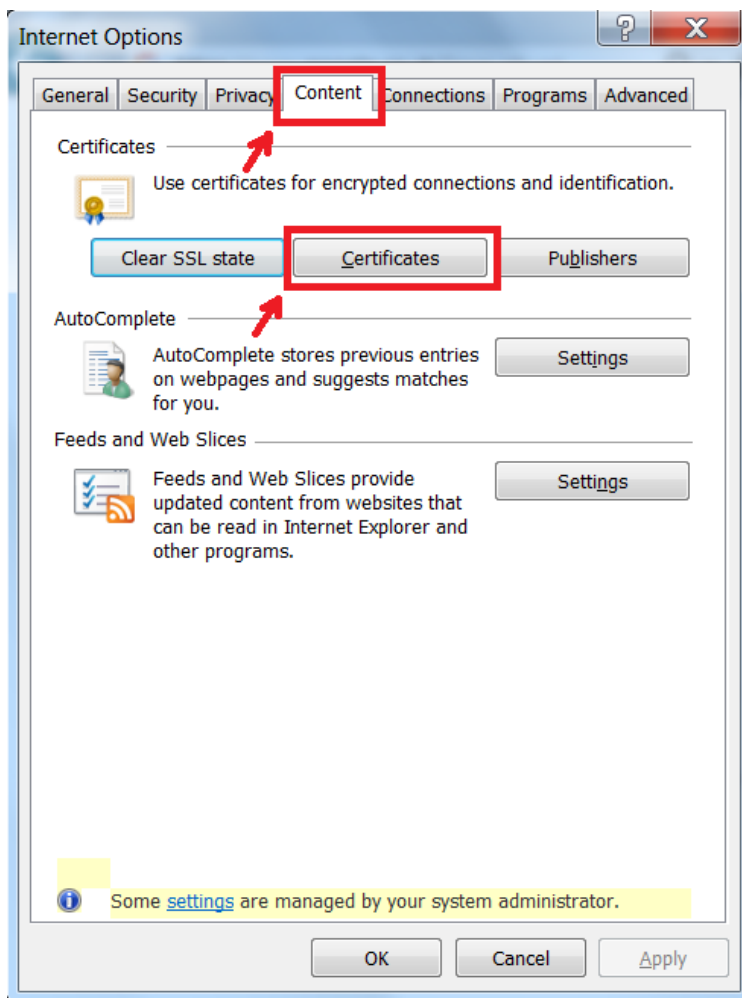
## 10. PRE REQUISITE BEFORE USING API

### 10.1 ENGLISH SCREENSHOTS

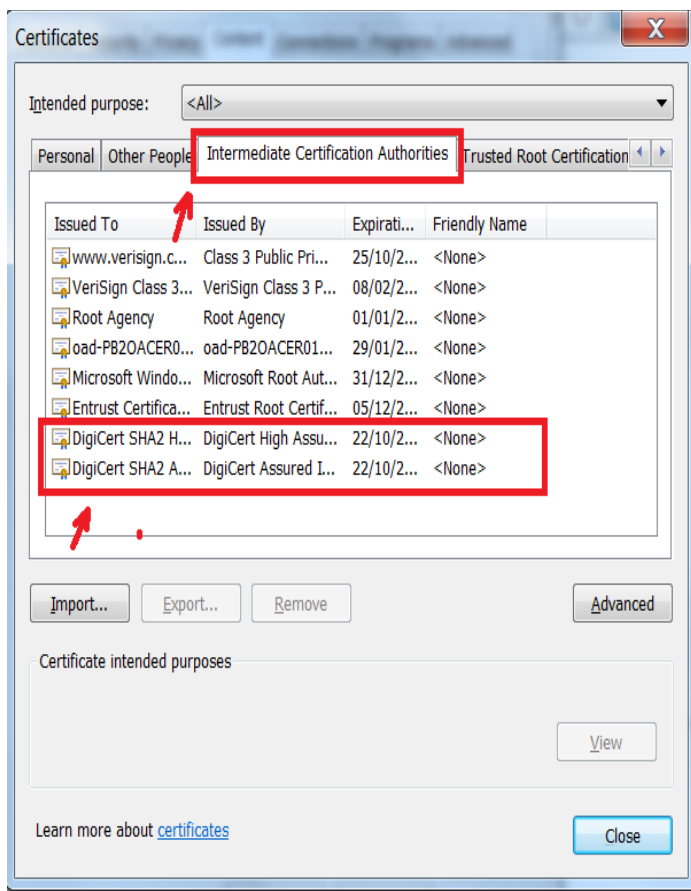
Before using SATURN API REST you have to check that your connection is made with a valid intermediate certificate.

Please follow the different steps below so that The connection is fully established.

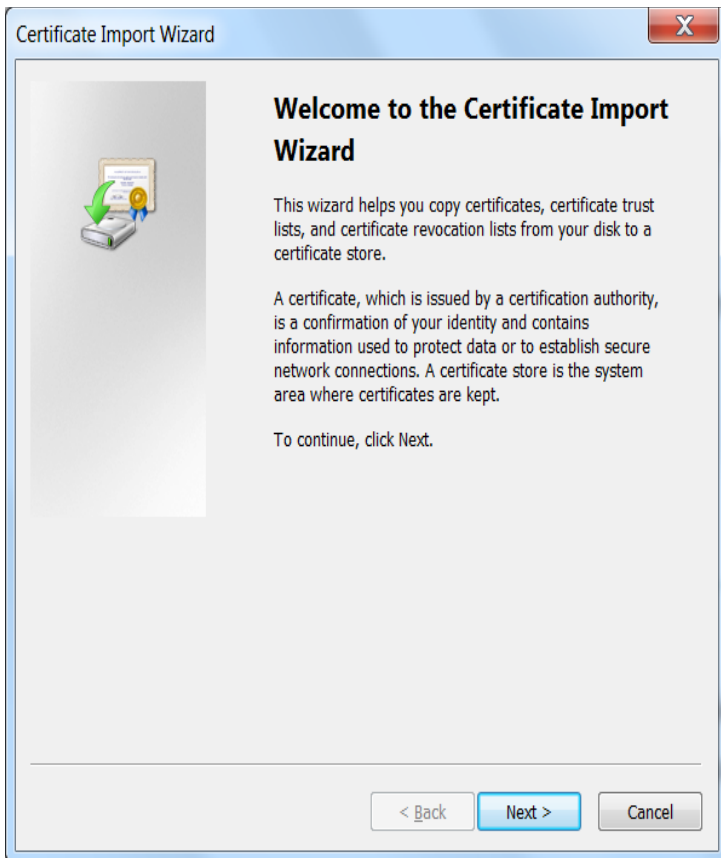
- Open your Internet Explorer navigator
- Go to Internet Options
- Click on 'Content' Tab
- Click on 'Certificates' button



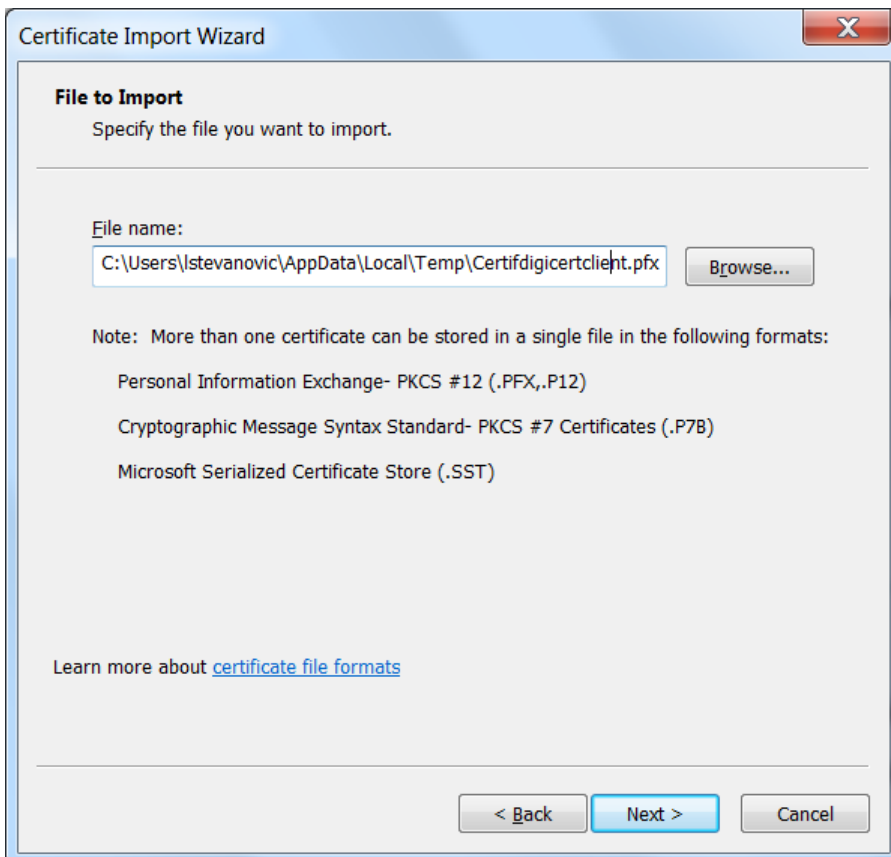
In the pop-in 'certificate' go to 'Intermediate Certification Authorities' and please check that you have the intermediate certificates Digicert



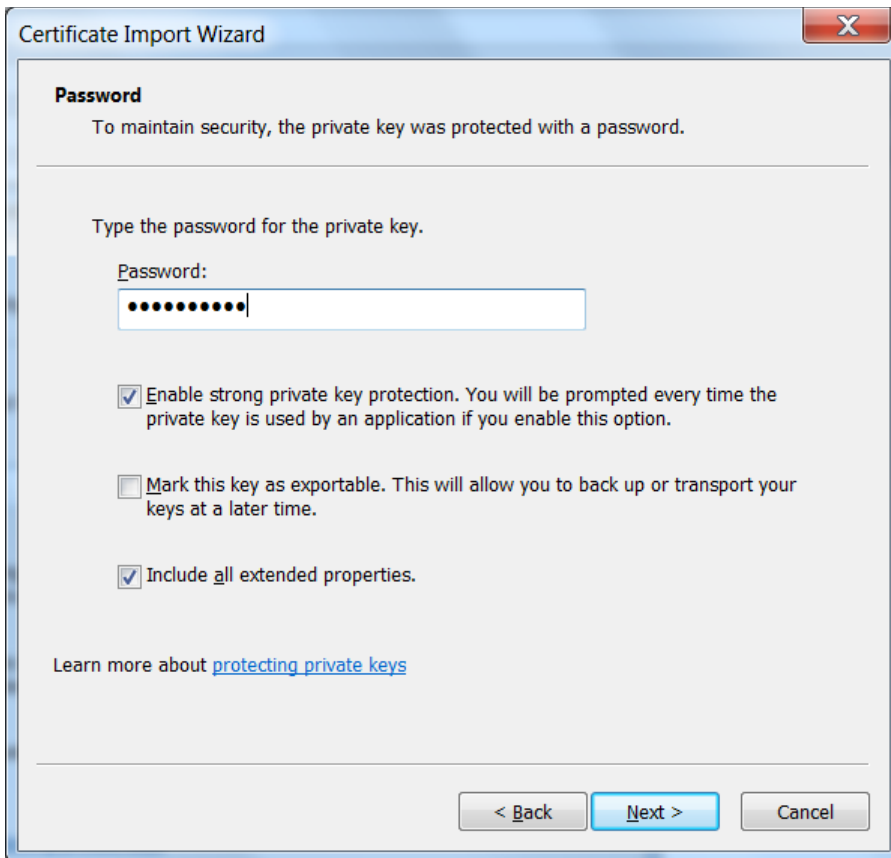
If any it is necessary to install them with executing the file attached “Certifdigicertclient.pfx” in this document, first click on ‘Next’.



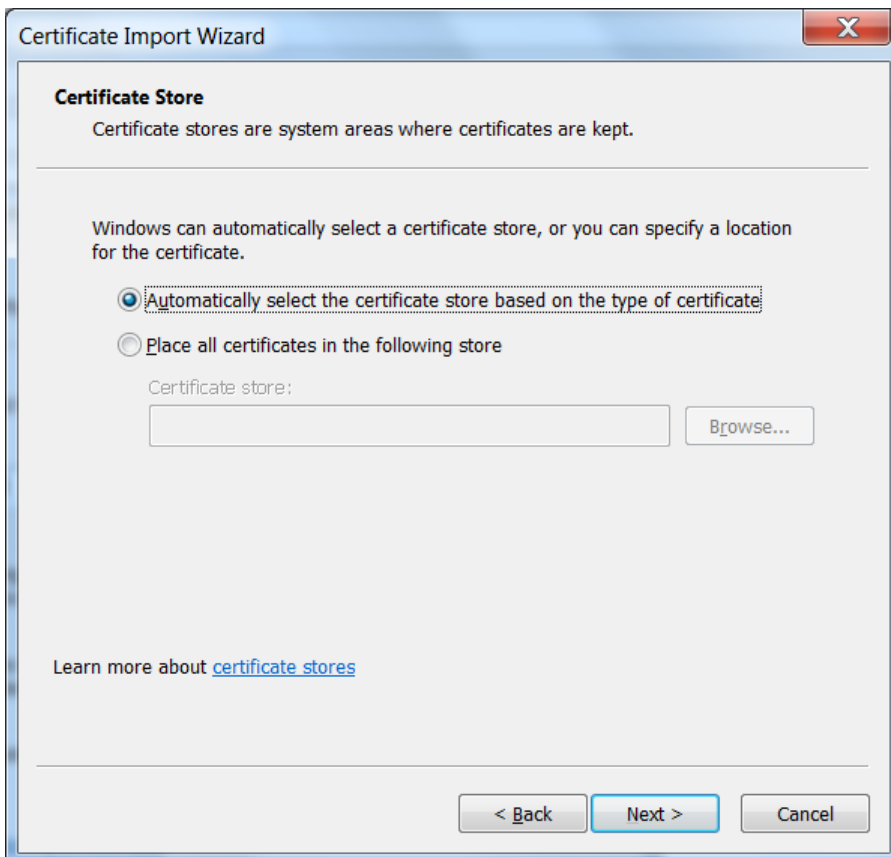
Browse the file on your desktop and click on 'Next'



The password is Cer\$!IF123 click on 'Next'.



Tick on 'Automatically select the certificate store based on the types of certificate' and click on 'Next'.



When the installation is finished you get the window below, click on 'Finish'.



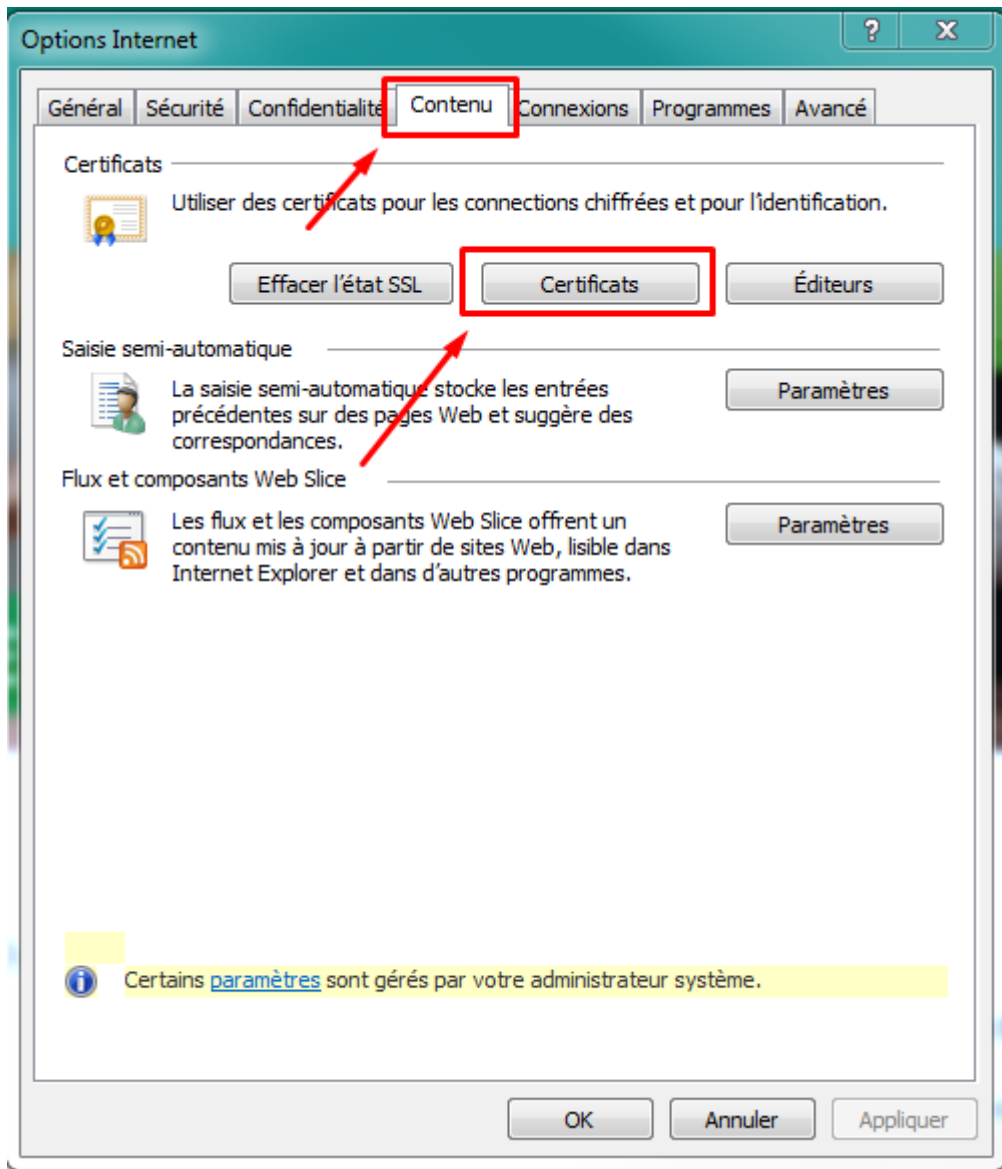
---

## 10.2 FRENCH SCREENSHOTS

Before using SATURN API REST you have to check that your connection is made with a valid intermediate certificate.

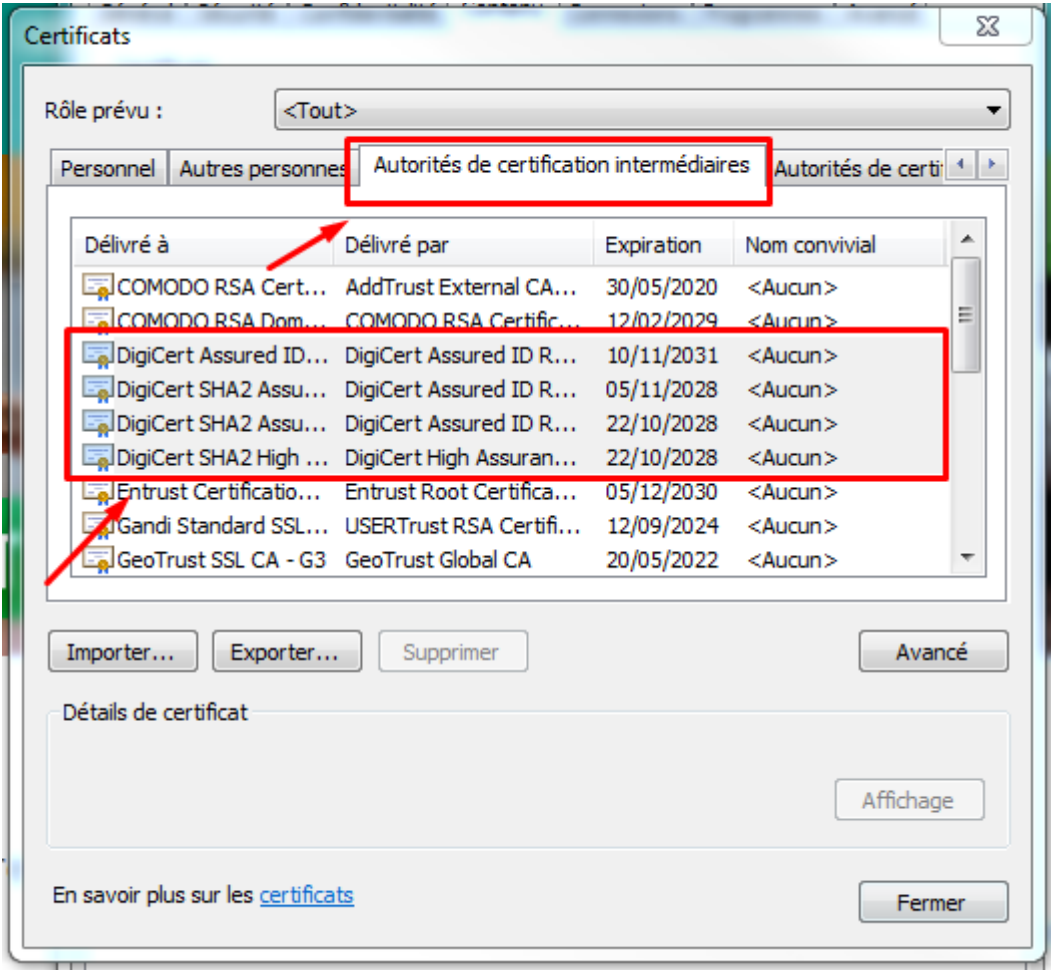
Please follow the different steps below so that The connection is fully established.

- Open your Internet Explorer navigator
- Go to Options Internet
- Click on 'Contenu' Tab
- Click on 'Certificats' button

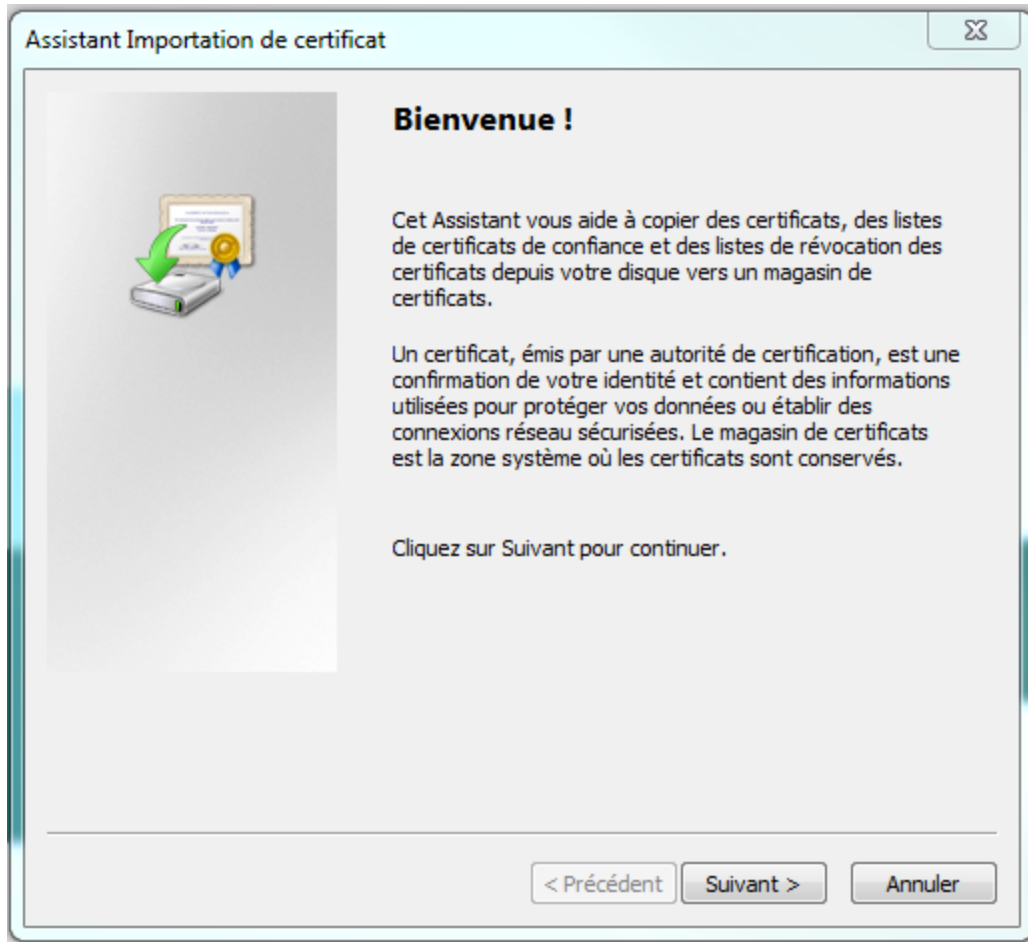


In the pop-in 'certificate' go to 'Autorités de certification intermédiaires' and please check that you have the intermediate certificates Digicert





If any it is necessary to install them with executing the file attached “Certifdigicertclient”, first click on ‘suivant’.



Browse the file on your desktop and click on ‘Suivant’

**Assistant Importation de certificat**

**Fichier à importer**  
Spécifiez le fichier à importer.

Nom du fichier :  
C:\Users\ohbali\Desktop\Certifdigicertdient.pfx

Remarque : des certificats peuvent être stockés dans un fichier aux formats suivants :

- Échange d'informations personnelles - PKCS #12 (.PFX, .P12)
- Standard de syntaxe de message de chiffrement - Certificats PKCS #7 (.P7B)
- Magasin de certificats sérialisés Microsoft (.SST)

En savoir plus sur les [formats de fichiers de certificats](#)

< Précédent   Suivant >   Annuler

The password is Cer\$!IF123 click on 'Suivant'

protection des clés privées'. At the very bottom, there are three buttons: '< Précédent', 'Suivant >', and 'Annuler'."/>

**Assistant Importation de certificat**

**Mot de passe**  
Pour maintenir la sécurité, la clé privée a été protégée avec un mot de passe.

Entrez le mot de passe de la clé privée.

Mot de passe :  
●●●●●●●●●●

Activer la protection renforcée de clés privées. Une confirmation vous sera demandée à chaque utilisation de la clé privée par une application.

Marquer cette clé comme exportable. Cela vous permettra de sauvegarder et de transporter vos clés ultérieurement.

Induire toutes les propriétés étendues.

En savoir plus sur la [protection des clés privées](#)

< Précédent   Suivant >   Annuler

Tick 'Sélectionner automatiquement le magasin de certificats selon le type de certificat' and click on 'suivant'

**Assistant Importation de certificat**

**Magasin de certificats**

Les magasins de certificats sont des zones système où les certificats sont stockés.

---

Windows peut sélectionner automatiquement un magasin de certificats, ou vous pouvez spécifier l'emplacement du certificat.

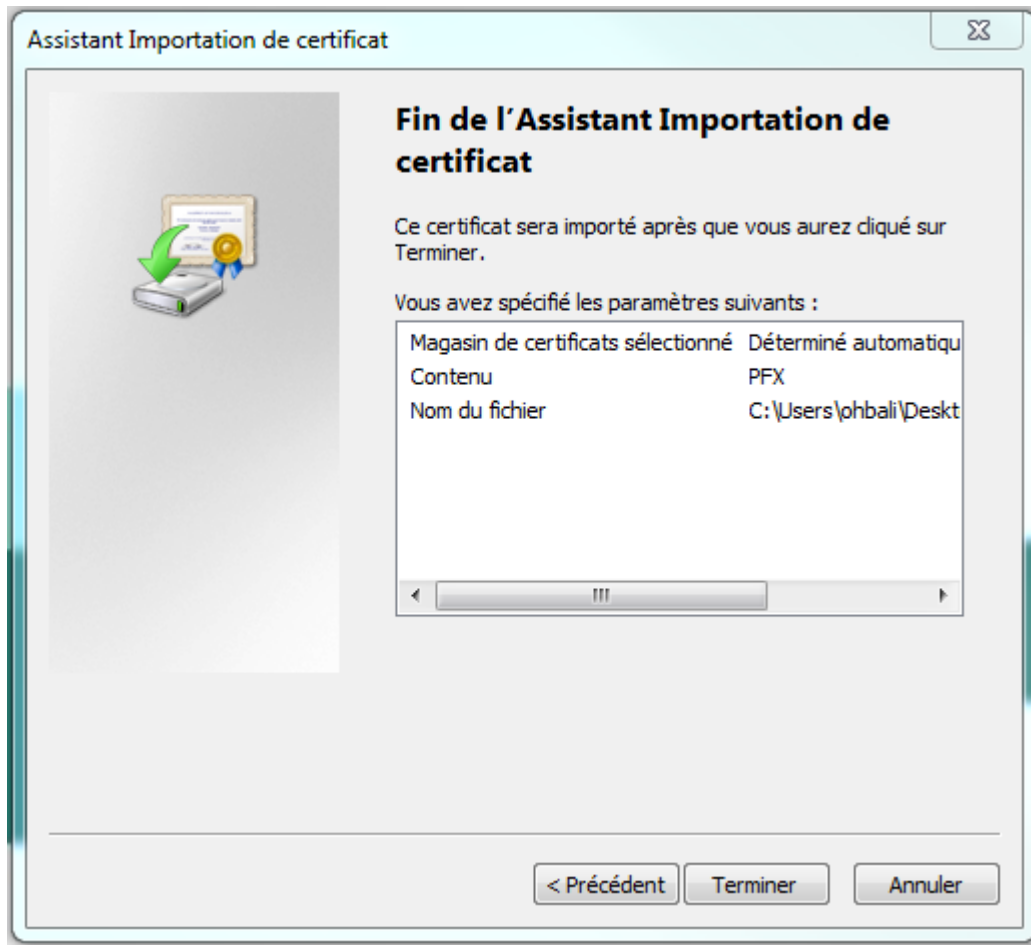
Sélectionner automatiquement le magasin de certificats selon le type de certificat

Placer tous les certificats dans le magasin suivant

Magasin de certificats :

En savoir plus sur les [magasins de certificats](#)

When the installation is finished you get the window below, click on 'Terminer'



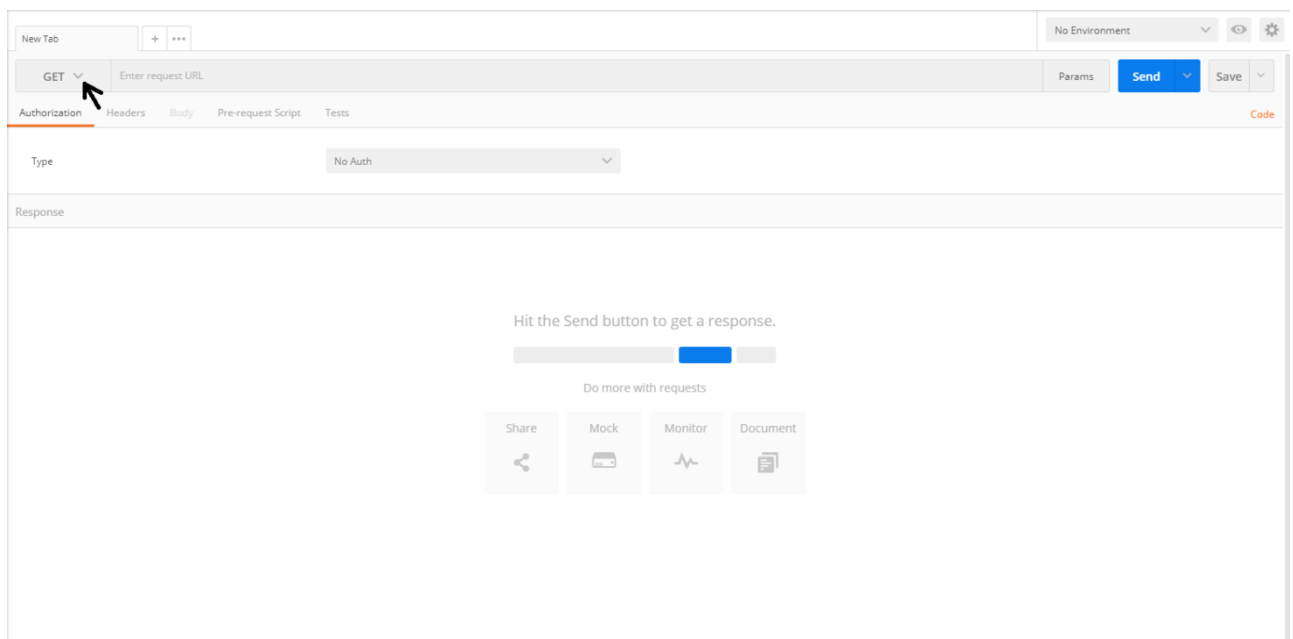
## 11. HOW TO SET UP A TEST

This section describes step by step how to test a function in Web service.

### 11.1 ACCESS TO API VIA POSTMAN

The function take in example hereafter is AuthenticateUser. It allows a user to connect to the API. The screenshots are Software Postman examples

Select in the combo box below the function POST (showed by the arrow in the following screenshot)



### 11.2 REQUEST ENDPOINT AND FUNCTION PARAMETER

All functions in this document have to be built as detailed below

**Function:**

Function name: AuthenticateUser

Request EndPoint: /SaturnWebServices/rest/Authentication/ AuthenticateUser

Method: POST

In Postman, select the method (POST) set up the URL followed by request end point.







## 12. TECHNICAL DETAILS & EXAMPLES

### 12.1 OVERVIEW

ALL Euronext Members and Non-Members

As part of the MIFID2-reporting trade (Saturn) we are developing the server web API rest.

The goal of this document is to describe the technical Rest API which will be used by the Saturn GUI, or by the external users who doesn't necessary use the Saturn GUI.

### 12.2 REQUIREMENTS

ALL Euronext Members and Non-Members

For testing API rest we can use postman (<https://www.getpostman.com/>), curl command or Saturn GUI.

### 12.3 ACCESS

ALL Euronext Members and Non-Members

The web server API Rest is accessed via a URL using the HTTPS protocol and is served from the SaturnWebServices/rest domain. Which will be defined later by Euronext' Infosec team.

### 12.4 REST API RETURN STATUS CODE

ALL Euronext Members and Non-Members

Status Code	Description	Cause	Comments
200	OK	Success	
400	Bad Request	Unsupported or invalid parameters, or missing required parameters	
401	Unauthorized	User is not authorized	
403	Forbidden	User does not have access to this resource	
404	Not Found	No matching pattern for incoming URI	

Status Code	Description	Cause	Comments
405	Method Not Allowed	The service does not support the HTTP method used by the client	
408	Request Timeout		
412	Precondition Failed	A non-syntactic part of the request was rejected. For example, an empty POST or PUT body	
415	Unsupported Media Type	A PUT or POST payload cannot be accepted	
423	Locked	The resource that is being accessed is locked	Account, rights, etc locked.
500	Internal Server Error	A generic error message, given when an unexpected condition was encountered and no more specific message is suitable	
503	Service Unavailable	The server is currently unavailable (because it is overloaded or down for maintenance). Generally, this is a temporary state	If some services are blocked or the thread pools that handle each service is full.
600	KO	Failed	
601	Bad filter	Bad filter	
602	Check transaction with error		

## 12.5 SERVICES

### 12.5.1 Request

ALL	Euronext Members and Non-Members
-----	----------------------------------

	Description/Value	Mandatory
Method	POST	Yes
Service name (path)	Files/upload	Yes
Authorization	Login/pwd	Yes

	Description/Value	Mandatory
Header : <b>Content-Type</b>	The MIME type of the body of the request (used with POST and PUT requests). Value : multipart/form-data	Yes
Header : <b>Accept</b>	The <b>Accept</b> indicates which format the result will be returned :application/json or Accept: application/xml. If the <b>Accept</b> isn't sat up, the result is returned under the JSON Format	No

### 12.5.1.1 Filter structure

ALL	Function applying to all users
-----	--------------------------------

The filter allows user to refine his search (for example get trades for a specific instrument).

All Saturn REST API services provide the possibility to use the filters available.

The filter is the json/xml Object (structure) passed in the header of the POST request. Its definition is described as below:

```
{
  "filterList":
  [
    {
      "name": "field1",
      "sort": "DESC",
      "subFilterOR":
      [
        {
          "value": "%durand%",
          "operator": "LK"
        },
        {
          "value": "%durand%",
          "operator": "LK"
        }
      ]
    },
    {
      "subFilterOR":
      [
        {
          "name": "field11",
          "value": "%durand%",
          "operator": "LK"
        },
        {
```

```

    "name": "field12",
    "value": "%durand%",
    "operator": "LK"
  }
]
}, ....
} ]
}

```

The filter contains one (1) main section called filterList :

1. you can concatenate one or several filters, for example get transaction which the side=1, here is the filter json structure: **"filterList": [{"name": "side", "value": "1", "operator": "EQ"}]**
2. you can filter by the value domaine, for example get transactions which the status in(0,1), here is the filter json structure: **"filterList": [{"name": "status", "subFilterOR": [{"value": "0", "operator": "EQ"}, {"value": "1", "operator": "EQ"} ]}]**
3. you can search records which contain something : for example get transactions which the freetext1 like "%durand%" or freetext1 like"%alain%", here is the filter json structure: **"filterList": [{"subFilterOR": [{"name": "freetext1", "value": "%durand%", "operator": "LK"}, {"name": "freetext2", "value": "%alain%", "operator": "LK"} ]}]**
4. you can sort the get result by using the sor word, for eamaple get transaction order by tradelegtid ascendant, here is the filter json structure **"filterList": [{"name": "tradelegtid ", "value": "123645", "operator": "EQ", "sort": "ASC"}]**

Operator allowed are :

Operator	Description
EQ	Equal To
NEQ	Not Equal To
LK	Like to
GT	Greater Than
GE	Greater Than Or Equal To
LT	Less Than
LE	Less Than Or Equal To

### 12.5.1.2 Response

ALL	Euronext Members and Non-Members
-----	----------------------------------

The response of that command has the following format, by default the response is under the json.

Code	Status Code OK, KO, etc. refer to the <a href="#">Status code table</a> above
Data	Contains the result of the service
Msg	Success or fail

RecordCount	The max record available in the data base
-------------	-------------------------------------------

## 12.5.2 Upload service

ALL	Euronext Members and Non-Members
-----	----------------------------------

### a) Request (POST)

Using curl command , input file name to upload is in green below

```
curl -i -X POST -H "Authorization: Bearer [Token]== " -H "Content-Type: multipart/form-data" -F
"data=@@uploadCommodities.csv" http://localhost:8080/SaturnWebServices/rest/files/upload
```

**\*[Token]** : you have to set the token that the server returns during the authentication phase.

### b) Response JSON

```
{
  "code":200,
  "data":[
    {
      "type":"uploadedFileStatus",
      "fileName":"uploadCommodities.csv",
      "size":8770,
      "status":"W",
      "tid":940, (please note that Tid is for Euronext internal usage)
      "uploadedDate":"2017-07-05T13:44:07"
    }
  ],
  "msg":"OK",
  "recordCount":1
}
```

## 12.5.3 Instrument service

### a) Request (POST):

Using curl command without filter

```
curl -i -X POST -H "Authorization: Bearer [Token]"
http://localhost:8080/SaturnWebServices/rest/referentials/getInstruments?offset=0&limit=1
```

Using curl command with filter (in green)

```
curl -i -X POST -H "Authorization: Bearer [Token]" -H "Content-Type: application/json" -d '{"filterList": [{"name": "isin", "value": "DEC%", "operator": "LK"}]}' http://localhost:8080/SaturnWebServices/rest/referentials/getInstruments?offset=0&limit=1
```

\*[Token]: you have to set the token that the server returns during the authentication phase.

b) Response JSON:

```
{
  "code": 200,
  "data": [{
    "cmic": "XBRD ",
    "isin": "DECGA150902 ",
    "cdevnm": "EUR ",
    "amr": "DECGA1509024055 ",
    "tick_size_denominator": "10000 ",
    "tick_size_numerator": "1",
    "cfi_code": "FFSCSX",
    "product_code": "CO6",
    "price_decimals": NULL,
    "quantity_decimals": NULL,
    "symbol_index": 4254400011,
    "cgrvalcot": NULL,
    "underlying_product_code": "COL",
    "expiry_date_offset": 2,
    "ideleted": 0,
    "underlying_medium_name": NULL,
  }],
  "msg": "success",
  "recordCount": 100
}
```

---

#### 12.5.4 Commodity service

a) Request (POST):

Using curl command without filter

```
curl -i -X POST -H "Authorization: Bearer [Token]" http://localhost:8080/SaturnWebServices/rest/CommodityReports/get?offset=0&limit=1
```

Using curl command with filter (in green)

```
curl -i -X POST -H "Authorization: Bearer [Token]" -H "Content-Type: application/json" -d '{"filterList": [{"name": "name", "value": "BU001", "operator": "EQ"}]}' http://localhost:8080/SaturnWebServices/rest/CommodityReports/get?offset=0&limit=1
```

*\*[Token]* : you have to set the token that the server returns during the authentication phase.

b) Response JSON:

```
{
  "code": 200,
  "data": [{
    "type": "commodityReport",
    "businessunit": {
      "ideleted": 0,
      "name": "BU001",
      "participantid": 385,
      "tag": "BU001",
      "tid": 9 (please note that Tid is for Euronext internal usage)
    },
    "errors": "[REPORTINGENTITY][11] Wrong ESMA code. Not referenced.;[POSITIONHOLDERID][11] Wrong ESMA code.Not referenced.;[SECURITYID][19] Instrument invalid value;[VENUE][13] Invalid Value; [VENUE][16] MIC incompatible with ISIN; [SHORTPOSITIONQUANTITYDELTA][18] The delta position quantity must no be provided for Futures; [LONGPOSITIONQUANTITYDELTA][18] The delta position quantity must no be provided for Futures ",
    "freetext1 ": "Smith ",
    "freetext2 ": "Roland ",
    "freetext3 ": "Vert ",
    "freetext4 ": "Audi ",
    "freetext5": "Bruxelles",
    "holdingpositionday": "2016-10-14T00:00:00",
    "investmentfirmindicator": 0,
    "longpositionquantity": 940736.00,
    "longpositionquantitydelta": 265758.00,
    "origin": "SATURN",
    "participantid": 385,
    "positionholdemail": "holder1@client.com",
    "positionholderid": "5493005GIOHA4VVQNV28",
    "positionmaturity": 2,
    "positiontype": 2,
    "reportingentity": "549300KFCCJ1Y2M20965",
    "reportref": "TRADEREFERENCECMQH7398852110",
    "riskreducingid": 1,
    "saturnuser": "CommoUser",
    "securityid": "FRENX0717251",
    "shortpositionquantity": 567772.00,
    "shortpositionquantitydelta": 617137.00,
    "status": 4,
    "tid": 2751, (please note that Tid is for Euronext internal usage)
    "tradereport": 1,
    "tsreceive": "2017-08-24T13:31:06.15",
    "ultimateparententityemail": "test2@demo2.com",
  }
}
```



```
        "ultimateparententityid": "549300HUWQH7YHZVHL75",  
        "ultimateparententityidtype": 1,  
        "venue": "XMAT"  
    }},  
    "msg": "success",  
    "recordCount": 560  
}
```

## 13. FIELDS DESCRIPTION

### B

#### BUSINESS UNIT

<b>Field Name</b>	Business Unit
<b>Description</b>	Free form text manually entered by the client – Custom Field
<b>Format</b>	{ALPHANUM}
<b>Length</b>	10
<b>Possible Values</b>	Only capital letters and numbers
<b>Conditions</b>	Optional
<b>Used In</b>	COMMODITY POSITIONS

### F

#### REETEXT 1

<b>Field Name</b>	FreeText 1
<b>Description</b>	Free form text manually entered by the client – Custom Field
<b>Format</b>	{ALPHANUM}
<b>Length</b>	55
<b>Possible Values</b>	
<b>Conditions</b>	Optional
<b>Used In</b>	COMMODITY POSITIONS

#### REETEXT 2

<b>Field Name</b>	FreeText 2
<b>Description</b>	Free form text manually entered by the client – Custom Field
<b>Format</b>	{ALPHANUM}
<b>Length</b>	55
<b>Possible Values</b>	
<b>Conditions</b>	Optional
<b>Used In</b>	COMMODITY POSITIONS

#### REETEXT 3

<b>Field Name</b>	FreeText 3
<b>Description</b>	Free form text manually entered by the client – Custom Field
<b>Format</b>	{ALPHANUM}
<b>Length</b>	55
<b>Possible Values</b>	No restriction

<b>Field Name</b>	FreeText 3
<b>Conditions</b>	Optional
<b>Used In</b>	COMMODITY POSITIONS

#### REETEXT 4

<b>Field Name</b>	FreeText 4
<b>Description</b>	Free form text manually entered by the client – Custom Field
<b>Format</b>	{ALPHANUM}
<b>Length</b>	55
<b>Possible Values</b>	No restriction
<b>Conditions</b>	Optional
<b>Used In</b>	COMMODITY POSITIONS

#### REETEXT 5

<b>Field Name</b>	FreeText 5
<b>Description</b>	Free form text manually entered by the client – Custom Field
<b>Format</b>	{ALPHANUM}
<b>Length</b>	55
<b>Possible Values</b>	No restriction
<b>Conditions</b>	Optional
<b>Used In</b>	COMMODITY POSITIONS

## I

#### INVESTMENT FIRM INDICATOR

<b>Field Name</b>	Investment Firm Indicator
<b>Description</b>	Field to report on whether the position holder is a collective investment undertaking that makes investment decisions independently from its parent.
<b>Format</b>	Numerical
<b>Length</b>	
<b>Possible Values</b>	0 - FALSE the position holder is not a collective investment undertaking that makes independent investment decisions 1 - TRUE – the position holder is a collective investment undertaking that makes independent investment decisions
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## L

### LONG POSITION QUANTITY

<b>Field Name</b>	Long Position Quantity
<b>Description</b>	This field shall be populated with the <del>gross</del> -net position quantity held in the commodity derivatives expressed either in lots (when the position limits are expressed in lots) or units of the underlying. This field should be populated with the long positions. If the position is in commodity derivatives under point (c) of Directive 2014/65/EU (e.g. securitized derivatives) this field shall be populated with the number of units held
<b>Format</b>	{DECIMAL-15/2}
<b>Length</b>	15 +1
<b>Possible Values</b>	Decimal value with 15 digits and 2 fraction digits separated by “.”
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

### LONG POSITION DELTA QUANTITY

<b>Field Name</b>	Long Position Delta Quantity
<b>Description</b>	If the Position Type is 'OPTN', then this field shall contain the delta-equivalent quantity of the position reported in the “Position Quantity” field. This field should be populated with long calls and short puts.
<b>Format</b>	{DECIMAL-15/2}
<b>Length</b>	15+1
<b>Possible Values</b>	Decimal value with 15 digits and 2 fraction digits separated by “.”
<b>Conditions</b>	Mandatory only if the Position Type is "OPTN", otherwise should be left empty.
<b>Used In</b>	COMMODITY POSITIONS

## P

### POSITION REPORTER ID

<b>Field Name</b>	Position Reporter ID
<b>Description</b>	The identifier of the reporting investment firm. Field to be populated with the Legal Entity Identifier code (LEI) for legal entities or {NATIONAL_ID} for natural persons not having an LEI.
<b>Format</b>	{ALPHANUM}
<b>Length</b>	20 or 35
<b>Possible Values</b>	LEI or National ID of the GCM
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## POSITION HOLDER EMAIL

<b>Field Name</b>	Position Holder Email
<b>Description</b>	Email address for notifications of position-related matters.
<b>Format</b>	{ALPHANUM}
<b>Length</b>	256
<b>Possible Values</b>	Email
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## POSITION HOLDER ID

<b>Field Name</b>	Position Holder ID
<b>Description</b>	Field to be populated with the Legal Entity Identifier code (LEI) for legal entities or {NATIONAL_ID} for natural persons not having an LEI
<b>Format</b>	{ALPHANUM}
<b>Length</b>	20 or 35
<b>Possible Values</b>	LEI or National ID
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## POSITION HOLDER TYPE

<b>Field Name</b>	Position Holder Type
<b>Description</b>	Field to be populated to identify the type of the Position Holder.
<b>Format</b>	Numerical
<b>Length</b>	1
<b>Possible Values</b>	<ul style="list-style-type: none"> <li>• 1: Investment firms or credit institutions</li> <li>• 2: Investment funds</li> <li>• 3: Other financial institutions</li> <li>• 4: Commercial undertakings</li> <li>• 5: Operators with compliance obligations under Directive 2003/87/EC</li> </ul>
<b>Conditions</b>	Optional
<b>Used In</b>	COMMODITY POSITIONS

## POSITION TYPE

<b>Field Name</b>	Position Type
<b>Description</b>	Field to report whether the position is in either futures, options, emission allowances, or derivatives thereof commodity derivatives defined under point (c) of Article 4(1)(44) of Directive 2014/65/EU or any other contract type
<b>Format</b>	Numerical
<b>Length</b>	
<b>Possible Values</b>	<ul style="list-style-type: none"> <li>1 – Options</li> <li>2 - Futures</li> <li>3 - OTC equivalent</li> </ul>

<b>Field Name</b>	Position Type
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## POSITION MATURITY

<b>Field Name</b>	Position Maturity
<b>Description</b>	Indication of whether the maturity of the contract comprising the reported position relates to the spot month or to all other months. No consistency check with ISIN
<b>Format</b>	Numerical
<b>Length</b>	
<b>Possible Values</b>	1 - spot month 2 - all other months
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## R

### REPORT REFERENCE NUMBER

<b>Field Name</b>	Report Reference Number
<b>Description</b>	Field to be populated with the unique identifier given by the submitter unambiguously identifying the report to both, submitter and receiving competent authority
<b>Format</b>	{ALPHANUM}
<b>Length</b>	52
<b>Possible Values</b>	
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

### REPORT STATUS

<b>Field Name</b>	Report Status
<b>Description</b>	Indication as to whether the report is new or a previously submitted report is cancelled or amended. Where a previously submitted report is cancelled or amended, a report which contains all the details of the original report and using the original Report Reference Number should be sent and the 'Report status' should be flagged as 'CANC'. For amendments, a new report that contains all the details of the original and using the original Report Reference Number with all necessary details corrected should be sent and the 'Report status' should be flagged as 'AMND'
<b>Format</b>	Numerical
<b>Length</b>	
<b>Possible Values</b>	1 - New 2 - Amend 3 - Cancel

<b>Field Name</b>	Report Status
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## RISK REDUCING INDICATOR

<b>Field Name</b>	Risk Reducing Indicator
<b>Description</b>	Field to report whether the position is risk reducing in accordance with Article 7 of RTS 21
<b>Format</b>	Numerical
<b>Length</b>	
<b>Possible Values</b>	0 - FALSE– the position is not risk reducing 1 - TRUE – the position is risk reducing
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## S

### SECURITYID

<b>Field Name</b>	SecurityId
<b>Description</b>	Instrument identifier based on the value of the ISIN
<b>Format</b>	ISIN
<b>Length</b>	12
<b>Possible Values</b>	ISIN
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

### SHORT POSITION QUANTITY

<b>Field Name</b>	Short Position Quantity
<b>Description</b>	This field shall be populated with the <b>gross-net</b> position quantity held in the commodity derivatives expressed either in lots (when the position limits are expressed in lots) or units of the underlying. This field should be populated with the short positions. If the position is in commodity derivatives under point (c) of Directive 2014/65/EU (e.g. securitized derivatives) this field shall be populated with the number of units held
<b>Format</b>	{DECIMAL-15/2} Decimal value with 15 digits and 2 fraction digits separated by “.”
<b>Length</b>	15 +1
<b>Possible Values</b>	
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## SHORT POSITION DELTA QUANTITY

<b>Field Name</b>	Short Position Delta Quantity
<b>Description</b>	If the Position Type is 'OPTN', then this field shall contain the delta-equivalent quantity of the position reported in the "Position Quantity" field. This field should be populated with short calls and long puts.
<b>Format</b>	{DECIMAL-15/2} Decimal value with 15 digits and 2 fraction digits separated by "."
<b>Length</b>	15 +1
<b>Possible Values</b>	
<b>Conditions</b>	Mandatory only if the Position Type is "OPTN", otherwise should be left empty.
<b>Used In</b>	COMMODITY POSITIONS

## T

### TRADING VENUE IDENTIFIER

<b>Field Name</b>	Trading venue identifier
<b>Description</b>	Field to be populated with the ISO 10383 segment MIC for positions reported in respect of on-venue contracts. Where the segment MIC does not exist, use the operating MIC: . 'XMAT' or 'XAMS' for Euronext Commodity Contracts; . 'XXXX' for off-venue positions in economically equivalent OTC contracts; . 'XOFF' for listed derivatives traded off-exchange.
<b>Format</b>	{ALPHANUM}
<b>Length</b>	4
<b>Possible Values</b>	XEUC, XMAT, XXXX,XOFF
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

## U

### ULTIMATE PARENT ENTITY ID

<b>Field Name</b>	Ultimate Parent Entity ID
<b>Description</b>	Field to be populated with the Legal Entity Identifier code (LEI) for legal entities or {NATIONAL_ID} for natural persons not having an LEI.
<b>Format</b>	{ALPHANUM}
<b>Length</b>	20 or 35
<b>Possible Values</b>	LEI or NATIONAL_ID
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS



### ULTIMATE PARENT ENTITY ID TYPE

<b>Field Name</b>	Ultimate Parent Entity ID Type
<b>Description</b>	Identify the type of Ultimate Parent-ID
<b>Format</b>	{ALPHANUM}
<b>Length</b>	20 or 35
<b>Possible Values</b>	LEI or NATIONAL_ID or CONCAT
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS

### ULTIMATE PARENT ENTITY EMAIL

<b>Field Name</b>	Ultimate Parent Entity Email
<b>Description</b>	Email address for correspondence in relation to aggregated positions
<b>Format</b>	{ALPHANUM}
<b>Length</b>	256
<b>Possible Values</b>	
<b>Conditions</b>	Mandatory
<b>Used In</b>	COMMODITY POSITIONS