

User Guide

BCS CCP.A

Clearing Members Guide

Issue 1.3 | 29TH APRIL 2021



CC&G

A EURONEXT COMPANY

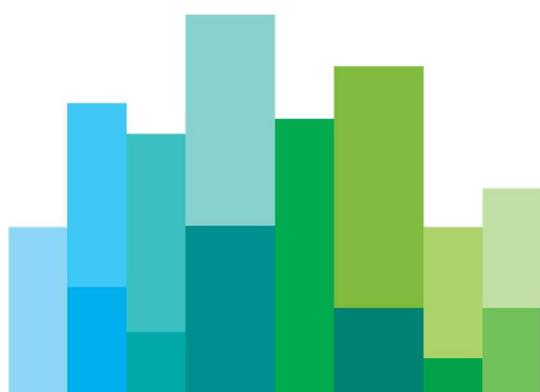
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Revision History

Date	Version	Description	Author
Mar 2020	1.2	First public Version	Borsa Italiana
Apr 2021	1.3	7.2. Collateral Account Balance - added Last price, Gross Value, Haircut fields; 9.1 Margin Calls - added Cash Held and Cash required fields; Changed londonstockexchange.com and Iseg.com domains to borsaitaliana.it; 15 Appendix 3: Removed all references to SMS option Euronext rebranding	Borsa Italiana



1. INTRODUCTION



BCS CCP.A is the Graphical User Interface (GUI) used by the Austrian Clearing Members/Clearing Agents to monitor and perform the clearing operations. Below the list with the BCS main features:

- Download reference data;
- Receive intraday trades and positions;
- View settlement and margin positions;
- Receive margin calls and clearing information;
- Check net margin position;
- View collateral balance and eligible instruments;
- Retrieve historical data;
- Receive and download the reports provided by the clearing system.

Please note that a General Clearing Member/Clearing Agent can monitor also the activity of its own clients.

1.1 Requirements

The BCS CCP.A application size is about 200 MB. Following the list containing the minimum requirements for BCS CCP.A GUI:

- Processor: Intel Pentium Dual Core 2Ghz or better;
- RAM: 1 GB or better;
- HD: at least 200MB;
- An updated browser;
- An internet connection;
- Java SE Runtime Environment version 8u191 or above is required;
- Operating System: Windows XP or newer version.

1.2 Logging in

The BCS CCP.A is available in two environments via public internet at the following URLs:

- Test environment: **<https://bcs-at-cds.borsaitaliana.it>**
- Production environment: **<https://bcs-at-prod.borsaitaliana.it>**

To be compliant with the security policy the connections are equipped with a TLS protocol and the access is secured by the SecurEnvoy two factor authentication mechanism (please refer to Appendix 2 for the technical details).

The Clearing Member logs in with a *username*, a *password* and a *member-code*. This information is provided by CCP.A support team as part of the membership process for either the test or the production environment.

A *two-factors authentication* token is required to complete the login process. (please refer to Appendix 2 for the technical details).



The screenshot shows a login form with the following fields and a button:

- Username**: [Input field]
- Password**: [Input field]
- Member Code**: [Input field]
- Token**: [Input field]
- Sign in**: [Button]

At the first login, a *password change* is required.

The Clearing Member can be configured with 5 different roles: *General Clearing Member*, *Clearing Agent*, *Non Clearing Member*, *Direct Clearing Member* and *Registered Client*.

The *General Clearing Member* and the *Clearing Agent* have full visibility

and control of the activities of its clients.

A *Non Clearing Member*, *Direct Clearing Member* and *Registered Client* have the rights to execute and monitor their own clearing operations.

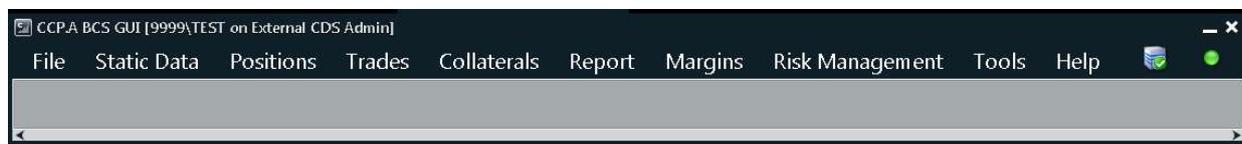
1.3 Service Availability

Live and test services are available to the members and supported by the service desk from 07.00 AM to 10.00 PM (CET/CEST).

2. MENU BAR



After the login, the BCS main menu is shown on the screen. It is composed of a Login bar (upper part) a Menu Bar (central part), two status light buttons (lights on the right) and an active windows bar (grey bottom part).



Login Bar

The Login Bar shows the *member code*, the *username* and the *environment* where the user is connected to.

Menu Bar

The Menu Bar containing all the following sections:

FILE	
Menu	Description
Login	Shows the login prompt
Settings	to select the available markets
Save Environment	to save windows configuration
Change Password	to change the current password
Exit	to perform the logout

STATIC DATA	
Menu	Description
Markets	List of available markets
Instruments	List of available instruments
Participants	List of Clearing Members split for markets
Member Accounts	Member Account Structure
Position Accounts	Position Account Structure

POSITIONS	
Menu	Description
Position Account Items	List of positions
Settlement Account Items	List of settlement positions

TRADES	
Menu	Description
Trades	List of trades received during the day

COLLATERALS	
Menu	Description
Eligible Instruments	List of available instruments for collateral deposit
Collateral Account Balance	Collateral account balances
Default Fund Contribution	Default fund contribution

REPORT	
Menu	Description
Reports	Table of available reports produced by clearing system

MARGINS	
Menu	Description
Margin Calls	List of intraday margin calls received
Margin Requirement Items	Margin calculation details for Margin Account
Margin Account Items	List of net positions linked to the Margin Account

RISK MANAGEMENT	
Menu	Description
What If	Margin simulation tool

TOOLS	
Menu	Description
Monitor	List of messages received, split for subscriptions
Clearing Messages	List of clearing messages

HELP	
Menu	Description
Log Manager	To manage the log file trace
About	BCS Information

Status Light Buttons

The menu bar contains two status lights:



Server	IP:port	Status
BCSPREPRODAPP02	10.178.25.40 : 34900	Connection Up
BCSPREPRODAPP01	10.178.25.39 : 34900	Connection Up

1. BCS Server Connection Status: it shows the status of connection between the BCS CCP.A GUI and the BCS application server.

2. BCS Server components status: it shows the status of the BCS server components (green/yellow/red):

- *Green*: the process is up and running, all the functionalities are available.
- *Yellow*: the process is up and running, its functionalities are restricted or not available.

Example:

When the *CCP.A* component is yellow is not possible to query the clearing system. Such functions as the *Real Time* updates or the *Reports* download are available.

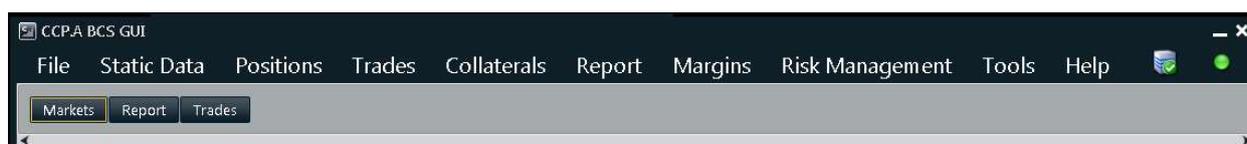
- *Red*: the process is down; all the functionalities are not available. Examples:
If the *Reports* component is red, it means that the clearing reports files could not be downloaded;
If *CCP.A* light is red it is not possible to query the clearing system. The login to the *BCS CCP.A GUI* is impacted as well.
If the *Real Time* component is red the real time updates are not available. The login to the *BCS CCP.A GUI* is impacted as well.



Server	Real Time	CC&G	Reports
BCSPREPRODAPP02	Green	Green	Green
BCSPREPRODAPP01	Green	Green	Green

Active Windows Bar

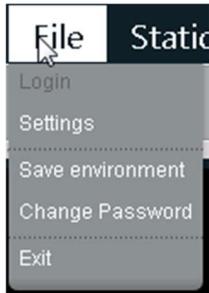
This bar shows the open active windows on the screen. Clicking on a button the selected window is brought to the foreground.



3. FILE



Through the *FILE* menu it is possible to select the following tasks:

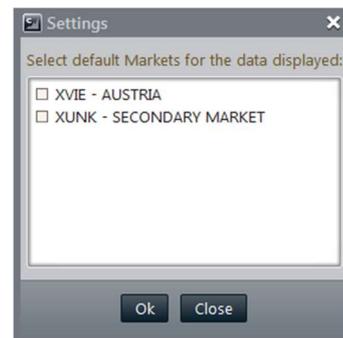


3.1 Login

This section provides the log in window.

3.2 Settings

In this section the Clearing Member can select the markets that are cleared by the CCP.A, in order to receive all data and information about it.



3.3 Save Environment

By clicking *Save Environment*, the windows and preferences setup are saved.

3.4 BCS Change Password

Through this menu the Clearing Member can change the password.

A password change is required at least every 90 days. The password of BCS must respect the following rules:

- must be at least twelve characters long;
- is not possible to reuse an old password;
- must include characters belonging at least to three of the four following groups:
 - Uppercase characters (A-Z);
 - Lowercase characters (a-z);
 - Numbers (0-9);
 - Special characters (eg. \$, % , ^ , & , * and so on).

3.5 Exit

It allows to close the BCS application. When the Clearing Member logs out, the BCS saves all the windows configuration and also their position on the screen.



The windows configuration can be changed using the proper buttons as explained in the appendix at the end of the document.

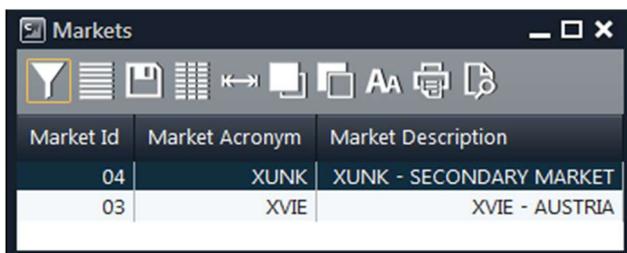
4. STATIC DATA



In the *Static Data* drop down menu the Clearing Member can download the static reference data. Static data is updated overnight by a batch procedure and made available through BCS on the next trading day.



4.1 Markets



Market window shows the list of the available markets.

Following all the fields contained in this window:

MARKETS	
Field	Description
Market Id	Market identification code
Market Acronym	Market identification name
Market Description	Market Description

4.2 Instruments

The *Instruments* window shows the list of instruments traded on the market on which a Clearing Member is enabled to operate. The following information is available in this section:

INSTRUMENTS	
Field	Description
Class ID	Instrument class identification code
ISIN	International security identification number
Description	Instrument description
Risk Factor (%)	Margin interval (percentage)
Multiplier	Product size
Settlement Period	Days between trade date and the intended settlement date
Currency	ISO code for the currency (E.g. "EUR" for EURO). For equities and warrants this field is not filled
Class Type	Class type: "Equity" or "Bond"
CFI Code	Defines the structure and format for classification of financial instrument
Liquidity	Type of instrument: "Liquid" or "Illiquid"

Asset Class ID	Type of asset class, possible values are: "Bond", "Certificate", "Funds", "Right", "Stock" and "Warrant"
Segment	ISO Market Code
Bond Issue Date	Represents the bond issue date expressed in the format "YYYY-MM-DD"
Bond Expiry Date	Represents the instrument maturity date expressed in the format " YYYY-MM-DD"
Coupon Frequency	Coupon frequency, possible values are: "No Coupon", "Yearly", "Half Yearly", "Quarterly", "Bimonthly" and "Monthly"
Bond Coupon Rate	Coupon Rate expressed as percentage. (E.g. '3,50000' means 3,5%)
Country of Registration	Country of registration
End of Validity Period	End of validity for the instrument. When not populated the default end of validity period is used
Buy-In Offset	Buy-In date represented as number of business days before/after the end of validity date. In case it is not populated the default value is used
Cash Settlement Offset	Cash Settlement date represented as number of business days before/after the end of validity date. In case it is not populated the default value is used
Quantity Type	Type of quantity: "Unit" or "Face Value"
Zero Coupon	"Yes" (Zero Coupon Bond) or "No" (No Zero Coupon Bond)
Subscription Rights	"Standard" or "Subscription Rights"

4.3 Participants

The *Participants* window shows the members' list for each market.

Table description:



PARTICIPANTS	
Field	Description
Participant Code	Clearing Member identification code
Participant Name	Clearing Member description
Participant Mnemonic	Mnemonic code

4.4 Member Accounts

In this section the user can check the member structure configuration. Please note that a General Clearing Member/Clearing Agent is able to see and manage data also for its clients.



Participant Mnemonic	Participant Code	Participant Name	Membership Type	CM Ownership	Margin Add-In
NCM2B	1021	NCM2B	Non Clearing Member	1001	0,000
NCM2	1002	NCM2	Non Clearing Member	1001	25,000
GCM1	1001	GCM1	General Clearing Member	1001	15,000

Table columns description:

MEMBER STRUCTURE	
Field	Description
Participant Code	Clearing Member identification code
Participant Name	Clearing Member description
Participant Mnemonic	Mnemonic code
CM Ownership	General Clearing Member code In case the “Membership Type” is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code
Membership Type	Type of the Clearing Member. Possible values are: “General Clearing Member”, “Non Clearing Member”, “Direct Clearing Member”, “Registered Client” and “Clearing Agent”
Margin Add-in (%)	Percentage of margin increase

4.5 Position Accounts

The *Position Accounts* shows the Participant Codes used in order to identify which Member acts on the market.



Position Account ID	Participant Code	Account Category	Membership Type	Position Account Description	Collateral Account ID	Settlement Account ID
5012	1021	House	Non Clearing Member	PA-H-V2B	CO-1012-1	SA-1001
5002	1002	House	Non Clearing Member	PA-H-V2	CO-1001-1	SA-1001
5001	1001	House	General Clearing Member	PA-H-V1	CO-1001-1	SA-1001
3001	1001	Client	Registered Client	PA-RC1	CO-1001RC	SA-1001.3
2022	1021	Client	Non Clearing Member	PA-C-V2B	CO-1012-1	SA-1001
2002	1002	Client	Non Clearing Member	PA-C-V2	CO-1001-1	SA-1001
2001	1001	Client	General Clearing Member	PA-C-V1	CO-1001-1	SA-1001

Table columns description:

POSITION ACCOUNTS	
Field	Description
Position Account ID	Unique ID for position account
Participant Code	Clearing Member identification code
Account Category	Category: "House" or "Client"
Membership Type	Type of the Clearing Member. Possible values are: "General Clearing Member", "Non Clearing Member", "Direct Member", "Registered Client" and "Clearing Agent"
Position Account Description	Account Description
Collateral Account ID	Collateral Account ID of the linked collateral account
Settlement Account ID	Settlement Account ID of the linked settlement account
DF Participant Account ID	Reference to the unique identifier of the linked participant default fund account
Margin Account ID	Margin Account ID of the linked margin account
CM Ownership	General Clearing Member code. In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code

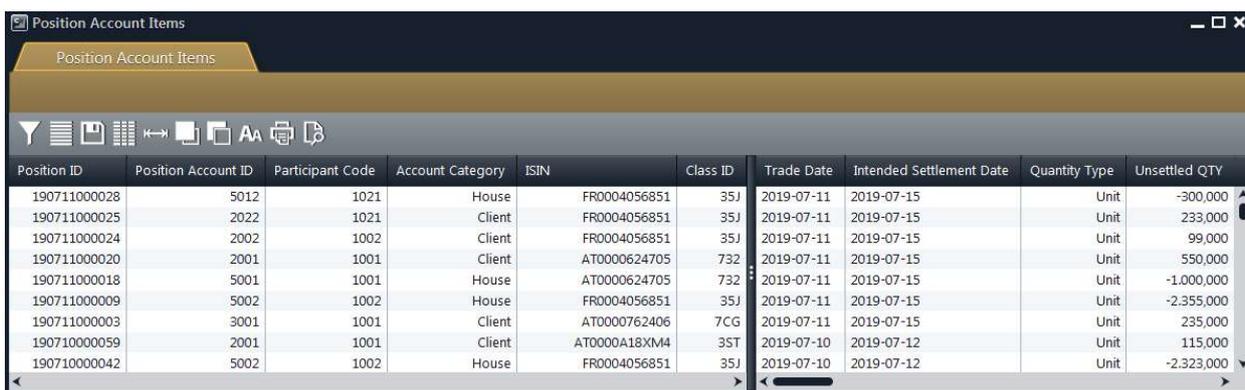
5. POSITION



This section is dedicated to the net position kept. Here we have two subsections: position account items and settlement account items.

5.1 Position Account Items

By selecting this window, the open positions are displayed in real time. For a General Clearing Member/Clearing Agent it is possible to see and manage own open positions and also those of its own clients.



Position ID	Position Account ID	Participant Code	Account Category	ISIN	Class ID	Trade Date	Intended Settlement Date	Quantity Type	Unsettled QTY
190711000028	5012	1021	House	FR0004056851	35J	2019-07-11	2019-07-15	Unit	-300,000
190711000025	2022	1021	Client	FR0004056851	35J	2019-07-11	2019-07-15	Unit	233,000
190711000024	2002	1002	Client	FR0004056851	35J	2019-07-11	2019-07-15	Unit	99,000
190711000020	2001	1001	Client	AT0000624705	732	2019-07-11	2019-07-15	Unit	550,000
190711000018	5001	1001	House	AT0000624705	732	2019-07-11	2019-07-15	Unit	-1,000,000
190711000009	5002	1002	House	FR0004056851	35J	2019-07-11	2019-07-15	Unit	-2,355,000
190711000003	3001	1001	Client	AT0000762406	7CG	2019-07-11	2019-07-15	Unit	235,000
190710000059	2001	1001	Client	AT0000A18XM4	35T	2019-07-10	2019-07-12	Unit	115,000
190710000042	5002	1002	House	FR0004056851	35J	2019-07-10	2019-07-12	Unit	-2,323,000

Table columns description:

POSITION ACCOUNT ITEMS	
Field	Description
Market	Market identification name
Position ID	Position identification code
Position Account ID	Unique ID for position account
Participant Code	Clearing Member identification code
Account Category	Category: "House" or "Client"
ISIN	International security identification number
Unsettled QTY	Position quantity which has not been settled yet. Positive values represent long positions
Class ID	Instrument class identification code
Trade Date	Trade date for the settlement position
Intended Settlement Date	The settlement date for which the position is applicable
Quantity Type	Type of quantity: "Unit" or "Face Value"
Corporate Action Fraction	Corporate Action Fraction (e.g. reverse split)
Original QTY	The original quantity (may be different from the current quantity after partial or full settlement)
Original CTV	CounterValue related to the original quantity
CM Ownership	General Clearing Member code.

	In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code.
Accrued Interest	Interest rate
MTM Datetime	Timestamp of MarktoMarket evaluation
Settlement Currency	Currency on which the position will be settled
Settlement Ref	Reference to the settlement instruction where the position has been included in
Settlement Lock	Lock flag: "Lock Activated" or "Lock Deactivated"
Buy-In Status	"Yes" or "No"
Position Status	Status of position. Possible values are: "Active", "Cancelled", "Cancelled as consequence of Corporate Action" and "Cancelled as consequence of Cash Settlement"
Position Source	Source of position. Possible values are: "Standard", "Claim", "Transformation" and "Position Migration"
Offset	"Yes" or "No"
Offset Reference	Populated with the settlement cycle in which the position has been closed. Populated only when offset is "Yes"
Adj. Factor	Adjustment factor applied to positions in case of corporate actions
Clearing Currency	Currency in which the collateral call is done
Cache Settlement Status	"Yes" or "No"
End Validity Date	The last date of validity for the financial instrument
MTM CTV	MarktoMarket CounterValue. Positive values represent long positions (deliver cash)
Risk Factor	Risk factor applied to the specific ISIN
Exchange Rate	Exchange rate applied. It is 1 in case the settlement and the clearing currency are equal
Haircut	Haircut applied on the position (in percentage terms) as a consequence of the exchange rate conversion. It is equal to zero in case the settlement and the clearing currency are equal
Added Datetime	Date related to the record creation
Modification Datetime	Timestamp related to the last record modification

5.2 Settlement Account Items

By selecting this window, settlement positions are displayed. For a General Clearing Member/Clearing Agent it is possible to see and manage own settlement positions (GCM) and those of its own clients (GCM/CA).

Settlement Account ID	CM Ownership	Settlement Position ID	Settlement Cycle ref	Class ID	ISIN	Market	Original QTY
SA-3377	1001	40807	200042	KK	DE0006335003	XVIE	-450,000
SA-1001	1001	41398	200050	7Q8	AT00000FACC2	XVIE	2.500,000
SA-1001	1001	41397	200050	85Y	AT0000821103	XVIE	4.685,000
SA-1001	1001	41396	200050	10I	AT0000831706	XVIE	-1.073,000
SA-1001	1001	41395	200050	4RK	AT0000946652	XVIE	-24,000
SA-1001	1001	41394	200050	6KK	AT0000908504	XVIE	-2,000
SA-1001	1001	41393	200050	1RD	AT0000827209	XVIE	2.333,000
SA-1001	1001	41392	200050	5V6	AT00000VIE62	XVIE	-139,000
SA-1001	1001	41391	200050	2L4	AT000000STR1	XVIE	-595,000
SA-1001	1001	41390	200050	28Q	AT000KAPSCH9	XVIE	186,000
SA-1001	1001	41389	200050	3Q5	AT0000720008	XVIE	-11.213,000
SA-1001	1001	41388	200050	29O	AT0000785555	XVIE	-2.218,000

Table columns description:

SETTLEMENT ACCOUNT ITEMS	
Field	Description
Settlement Account ID	Identification code for the settlement account
CM Ownership	General Clearing Member code. In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code.
Settlement Position ID	A unique reference number generated for the specific settlement position
Settlement Cycle Ref.	Unique reference number generated for the specific settlement
Class ID	Instrument class identification code
ISIN	International security identification number
Market	Market identification name
Original QTY	The original quantity (may be different from the current quantity after partial or full settlement)
Original CTV	Original CounterValue
Unsettled QTY	Position quantity which has not been settled yet. Positive values represent long positions (receive securities)
Unsettled CTV	Unsettled CounterValue
Quantity Type	Type of quantity: "Unit" or "Face Value"
Settlement Currency	Currency on which the position will be settled
Intended Settlement Date	The available settlement date for the position
End Validity Date	The last date of validity for the financial instrument
Settlement Status	Possible values are: "Unsent", "Matched", "Unmatched", "Pending Settlement", "Cancelled", "Failing", "Rejected", "Settled" and "On Hold"
Settlement Instruction Source	Possible values are: "Standard", "Claim" and "Transformation"
Partial Settlement Status	Partial settlement indicator. Is null if the position is not a partial settlement

Sender Msg Ref	The reference to the settlement instruction where the position has been included
Linked Instruction Msg Ref	Reference in case of Corporate Action
Place Of Settlement	BIC Code of the CSD or Investor CSD used to populate the SWIFT
Buy-In Date	Buy-in date; it can be manually amended in case the position is locked for settlement
Cash Settlement Date	Cash settlement date; it can be manually amended in case the position is locked for settlement
Corporate Action Ref	Reference assigned for corporate action event
Position Imbalance	The difference between the actual quantity at settlement account level and the actual quantity at position account level
Position Fraction	Represent the sum of the fractions of the positions. They are included in the settlement process
Reason Code	The reason code for the last status change (e.g.: the reason for cancellation)
Reason Description	The reason description for the last status change (e.g.: the reason for cancellation)
Clearing Agent	Identification code of the Clearing Agent that manages the account
Trade Date	Trade date for the settlement position
Effective Settlement Date	Date when a transaction is effectively settled
CSD BIC Code	CSD code for the settlement
POA Instruction Msg Ref	Reference to the linked POA instruction
Cancel Confirmation Msg Ref	Status of canceled position. It is populated only in case of canceled instructions
Market Infrastructure Msg Ref	Reference of the Instruction
CCP Cash Account ID	The CCP Cash Account Identifier associated with the CSD of settlement
CCP Security Account ID	The CCP Security Account Identifier associated with the CSD of settlement
Modification Datetime	Timestamp related to the last record modification
Added Datetime	Timestamp related to the record creation

6. TRADES



This menu allows the Clearing Member to receive real time trades executed on the market and validated by the clearing system.

6.1 Trades

By selecting this window, the trades executed on the current business day are displayed in real time according to the scheduled trade files uploads. For a General Clearing Member/Clearing Agent it is possible to see and manage the ones of its own clients.

It is possible to retrieve historical trades by clicking the “+” button on the Business Date Bar and selecting a specific time window. A new tab will appear in the Business Date Bar. The user should select the Market and click on the Download button. Trades that match the specified criteria will be displayed.

New trades are automatically shown as soon as they are managed by the clearing system, with no manual refresh.



Account	Trading Member	Account Category	Class ID	Trade Generation Date	Trade Generation Time	ISIN
5012	1021	House	35J	2019-08-19	2:42:57 PM	FR0004056851
5002	1002	House	35J	2019-08-19	12:39:31 PM	FR0004056851
5002	1002	House	35J	2019-08-19	12:39:31 PM	FR0004056851
5002	1002	House	35J	2019-08-19	12:39:31 PM	FR0004056851
2022	1021	Client	35J	2019-08-19	12:28:01 PM	FR0004056851
2002	1002	Client	35J	2019-08-19	11:40:08 AM	FR0004056851

Table columns description:

TRADES	
Field	Description
Account	Account number of the clearing member
Trading Member	Clearing member identification code
Account Category	Category: “House” or “Client”
Class ID	Unique internal identification code for the financial instrument
Trade Generation Date	Trade execution date
Trade Generation Time	Trade execution time
ISIN	International security identification number
Trade Quantity	Quantity of the trade
Trade Price	Price of the trade
Trade Number	Trade identification number

Buy-Sell Indicator	Trade side
Settlement Amount	CounterValue
Accrued Interest	Part of the next interest payment that belongs to the seller
Denomination Currency Code	Currency, for equities and warrants this field is not filled
Settlement Date	The settlement date for which the position is applicable
Order Code	Identifier for the order
Mbr Internal Order	Identifier for the order assigned by the member which has entered the order
Text	Description
User Group	User group to which the user belongs
User ID Code	ID of the user who has entered the order resulting in this trade
Account Type Code	Account Type: "Agent (A)" or "Principal(P)"
Order Quantity	Quantity related to the inserted order
Exchange ID	Exchange system name, where the trade has been generated
Market Status Indicator	The identifier of the type of price. Possible values are: "Opening Auction", "Continuous Trading", "Volatility Interruption in continuous trading", "Auction", "Final Auction", "Blank for OTC trades", "Exercises/Assignments", "Manual Processing"
Instrument Subtype	Defines the type of the bond
Issuer	Name of the financial instrument issuer
Coupon	Coupon rate
Maturity Date	Date when the bond is redeemed
Trade Code Suffix	Indicates the actual version number of the trade (e.g. after trade modification)
Trade Type	Indicates that the trade is an exchange trade always "XP" + " " ('Space')
Settlement Currency Code	Currency in which the trade has to be settled
Settlement Exchange Rate	Exchange rate between the denomination currency and the settlement currency for non-EMU currencies
Settlement Conversion	Conversion factor between the denomination currency and the settlement currency for EMU currencies
Settlement Code	Blank for on-exchange trades
Settlement Period	Date when the trade has to be settled, expressed in number of days
Rate of Interest	Percentage of the bonds face value that is paid as interest
Divergent Interest Payment	Interest payment date if different from the standard date
Deposit Option	Deposit option
Accrued Interest Days	Number of days since the last interest payment.
Amended	"Yes" or "No"

7. COLLATERALS



This menu allows the information on instruments that are eligible as collateral and on securities deposited as collateral.



7.1 Eligible Instruments

This window shows the list of available instruments for collateral deposit in the clearing system.

ISIN	Description	Currency	Initial Price	Haircut (%)	Maturity Date	Collateral Class	Issuer Group	Asset Type
AT0008009410	3,75% EGB OEFF. PFBR11-21/1042	EUR	90,69	2,000	2021-05-25	1	G4	AT01
AT0008008248	4,41% EGB KB HYP.PFBR10-30/932	EUR	100,00	9,000	2030-04-21	1	G4	AT10
AT0008002530	E2E PRAGA 1	AUD	131,744421	13,000	2024-01-20	1	G4	AT01
AT0008004643	EGB 4,1% ANL. 10-20/DIP S.949	EUR	5,00	10,000	2020-06-18	2	G4	AT01
AT0008002837	EGB 5,08 % ANL. 09-23/S.731	EUR	10,19	13,000	2023-07-28	2	G4	AT01
AT0008004221	EGB CAP/FLOOR FLOAT.10-20/915	EUR	60,89	10,000	2020-09-03	1	G4	AT01
AT0008004254	EGB CAP/FLOOR FLOATER10-20/919	EUR	40,44	7,500	2020-03-11	2	G4	AT01
AT0008004338	EGB CAP/FLOOR FLOATER10-20/923	EUR	50,55	7,500	2020-03-12	3	G4	AT01
AT0008004833	EGB CMS-FLOATER10-20/962	EUR	70,67	7,500	2020-09-01	1	G4	AT01
AT0008002852	EGB GARANT 09-21/S.775	EUR	20,25	10,500	2021-06-01	1	G4	AT01
AT0008006648	EGB INFL-LI BOND 12-27/PEP 161	EUR	2,00	18,000	2027-05-01	3	G4	AT01
AT0008003918	EGB VAR. ANL. 10-20/PEP S.S	EUR	50,53	10,000	2020-01-07	1	G2	AT01

Table columns description:

ELIGIBLE INSTRUMENTS	
Field	Description
ISIN	International security identification number
Description	Instrument description
Currency	Instrument denomination currency
Initial Price	Market price. Used in the collateral evaluation in case the price is not yet available in the feed
Haircut (%)	Haircut (percentage) assigned to collateral instrument. In case this field is not populated the default haircut of the respective collateral class is used.
Maturity Date	Represents the instrument maturity date expressed in the format "YYYY-MM-DD"
Collateral Class	Instrument liquidity class
Issuer Group	Issuer group as from ECB classification
Asset Type	Represents the instrument asset type as from ECB classification
Credit Rating	Instrument rating provided by external agencies domain
Expiration Period	Offset with respect to maturity date: it defines the limit, in number of days, after which the instruments' is still accepted. It is null by default. Possible values are integers number which represent business days
Liquidity Class	Liquidity Class as defined in the ECB classification
Country	Code representing the issuing country
Market	Market identification name
Price Date	Price date with reference to the initial price

7.2 Collateral Account Balance

This window shows the deposited collateral.

Collateral Account ID	CM Ownership	Collateral Type	Maturity Date	Quantity	Quantity Type	Balance HCT	ISIN
CO-1012P1	1012	Cash		0,000		2.000.000,00	
CO-1001RC	1001	Security	2020-03-12	400,000	Face Value	0,00	AT000B004338
CO-1012-1	1012	Cash		0,000		5.000,00	
CO-1001-1	1001	Security	2046-06-08	2.000,000	Face Value	1.336,89	XS1423837720
CO-1001-1	1001	Security	2027-01-08	5.000,000	Face Value	3.600,00	IT0000966017
CO-1001RC	1001	Security	2030-04-21	960,000	Face Value	597,12	AT000B008248
CO-1012-1	1012	Security	2020-12-07	400,000	Face Value	272,76	AT000B011200
CO-1012-1	1012	Security	2020-07-24	800,000	Face Value	550,25	AT000B092218

Following the table columns description:

COLLATERAL ACCOUNT BALANCE	
Field	Description
Collateral Account ID	Collateral account identification code
CM Ownership	General Clearing Member code. In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code.
Collateral Type	Security or Cash
Maturity Date	Instrument maturity date expressed in the format "YYYY-MM-DD"
Quantity	Quantity (0 if Cash)
Quantity Type	Face Value or Unit
Balance HCT	Requested margin
ISIN	International security identification number
Account Description	Description of the instrument
Clearing Currency	Instrument currency
Clearing Agent Code	Clearing Agent identification code
Last Price	Price applied to the security
Gross Value	Collateral value before applying haircut and concentration limits
Haircut	Haircut applied to the security

7.3 Default Fund Contribution

This section shows the contribution for each default fund participant account ID.

CM Ownership	DF Account ID	DF Participant Account ID	Minimum Quota	Dynamic Quota	Required Quota	Account Balance (RT)	Evaluation Date
1001	CPP-XVIE	CO-1116-2	0,00	0,00	0,00	0,00	201

Table columns description:

DEFAULT FUND CONTRIBUTION	
Field	Description
CM Ownership	General Clearing Member code. In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code
DF Participant Account ID	Reference to the unique identifier of the linked participant default fund account
DF Account ID	Default Fund identification code for position account
Minimum Quota	Minimum default fund quota required
Dynamic Quota	Calculated dynamic contribution
Required Quota	Required default fund quota (calculated applying the minimum threshold to the dynamic quota)
Account Balance (RT)	Total default fund balance per participant
Evaluation Date	Date in which the default fund was calculated
DF Excess (RT)	Collateral posted in excess with reference to the required contribution
DF Call (RT)	Additional collateral call with reference to the required contribution
Average Margins	Average margin value used to calculate the participant default fund share
Evaluation Time	Time in which the default fund was calculated
Currency	Default Fund Currency

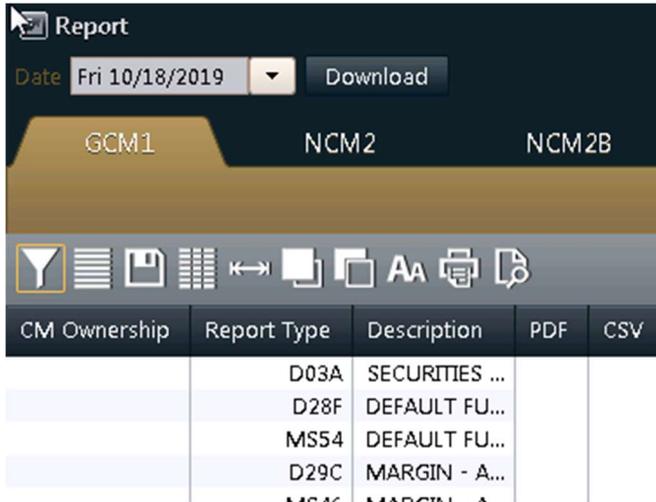
8. REPORT



This section shows the list of the clearing reports that the clearing member can download.



8.1 Report



Several reports are available in two formats, CSV or PDF. A General Clearing Member/Clearing Agent can manage and download also its clients reports selecting the corresponding tab. By default, the current business day is selected but by using the Business Date Bar is possible to retrieve reports belonging to the previous days. Clicking on the row allows to select the release number and retrieve all the report versions.



Below the table columns description:

REPORT	
Field	Description
Report Type	Report type identification code
Description	Report description
PDF	PDF report availability status and zipped file size
CSV	CSV report availability status and zipped file size
CM Ownership	General Clearing Member code. In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code.

9. MARGINS



This menu allows the clearing member to check his margin positions. For a General Clearing Member/Clearing Agent also the margin positions of his own clients are shown.



9.1 Margin Calls

Margin Evaluation Date	Margin Evaluation Time	Collateral Account ID	CM Ownership
2020-02-20	14:57:57	CO-8585-1	1001
2020-02-20	14:57:57	CO-3377-1	1001
2020-02-20	14:57:57	CO-2242-1	2242
2020-02-20	14:57:57	CO-1012-1	1012
2020-02-20	14:57:57	CO-1002-1	1002

This window shows the real time requests of additional intraday margins sent by the clearing system to the participant. The intraday margin call message is displayed in a pop-up window.

Table columns description:

MARGIN CALLS	
Field	Description
Margin Evaluation Date	Date of the request
Margin Evaluation Time	Time of the request
Collateral Account ID	Collateral account identification code
CM Ownership	General Clearing Member code. In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code.
Margin Requirement	The aggregated sum of all the initial margin
Sec. Collateral Pledged	Post evaluation collateral pledged expressed per collateral account
Collateral Call	Cash quantity amount required to fulfil the cash call
Clearing Currency	Currency is EURO for XVIE
Call	Status of the Call. Possible values are: "Call", "Warn" and "No"
Cash Held	Cash held in clearing currency
Cash Required	Margin requirements in cash after security pledging

9.2 Margin Requirement Items

This window shows the Margin calculation details per ISIN.

Margin Account ID	Participant Code	MTM Margin	Additional Margin	Margin Add-In	Clearing Currency	ISIN	CM Ownership
1021-5022	1021	-337.126,26	92.597,49	0,000	EUR	FR0004056851	1001
1021-5012	1021	25,50	211,64	0,000	EUR	FR0004056851	1001
1021-2023	1021	1.434,42	394,29	0,000	EUR	FR0004056851	1001
1021-2022	1021	2,34	328,74	0,000	EUR	FR0004056851	1001
1002-5002	1002	3.054,08	31.291,14	25,000	EUR	FR0004056851	1001
1002-2002	1002	-164,00	16,48	25,000	EUR	AT000AGRANA3	1001
1002-2002	1002	12.870,65	7.544,58	25,000	EUR	AT0000A18XM4	1001
1002-2002	1002	1,00	139,68	25,000	EUR	FR0004056851	1001

Below the table columns description:

MARGIN REQUIREMENT ITEMS	
Field	Description
Margin Account ID	Margin Account identification code
Participant Code	Clearing member identification code
Additional Margin	Additional margin calculated per ISIN
Margin Add-in	Add-in calculated per ISIN
Clearing Currency	Currency is EURO for XVIE
ISIN	International security identification number
CM Ownership	General Clearing Member code In case the "Membership Type" is NCM/RC this field represents the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code
Market	Market identification name
Initial Margin	Initial Margin calculated as the sum of MTM and Additional Margin
Account Category	Category: "Client" or "House"
Margin Requirement	Total margin requirement per margin account, considering the add-on, expressed in clearing currency
Collateral Account ID	Collateral account identification code
MTM Margin	MTM calculated per ISIN
MTM Datetime	Timestamp of MTM evaluation

9.3 Margin Account Items

This window contains net positions at Margin Account level. Positions are enriched applying an exchange rate and a haircut. MTM CounterValue in settlement currency is calculated.

Margin Account ID	Margin Position ID	Participant Code	Account Category	Trade Date	Intended Settlement Date
-------------------	--------------------	------------------	------------------	------------	--------------------------

Below the table columns description:

MARGIN ACCOUNT ITEMS	
Field	Description
Margin Account ID	Margin account identification code
Margin Position ID	Margin position identification code
Participant Code	Clearing member identification code
Account Category	Client or House
Trade Date	Date of the trade from which the position has been created. Expressed in "YYYY-MM-DD".
Intended Settlement Date	Intended settlement date for the position; expressed with "YYYY-MM-DD"
ISIN	International security identification number
Market	Market identification name
Class ID	Instrument class identification code
Clearing Currency	The clearing currency of the position
Settlement Currency	The settlement currency of the position
Haircut	Haircut applied to the position
Exchange Rate	Exchange rate applied. It is 1 in case Settlement Currency and Clearing currency are equal
Quantity	Net quantity
Quantity Type	Unit or Face value
CTV	Position CounterValue. Positive values represent long positions
MTM Price	Price used for the MTM countervalue calculation
MTM CTV	Position CounterValue marked to market. Positive values represent long positions (deliver cash)
MTM Datetime	Timestamp of MTM evaluation
Accrued Interest	The interest rate CounterValue for Bond position
Risk Factor	Risk factor applied to the specific ISIN
CM Ownership	General Clearing Member code In case the "Membership Type" is NCM/RC this field represent the Participant Code of the linked Clearing Member. In case the participant is a CA or a GCM this field contains its own participant code

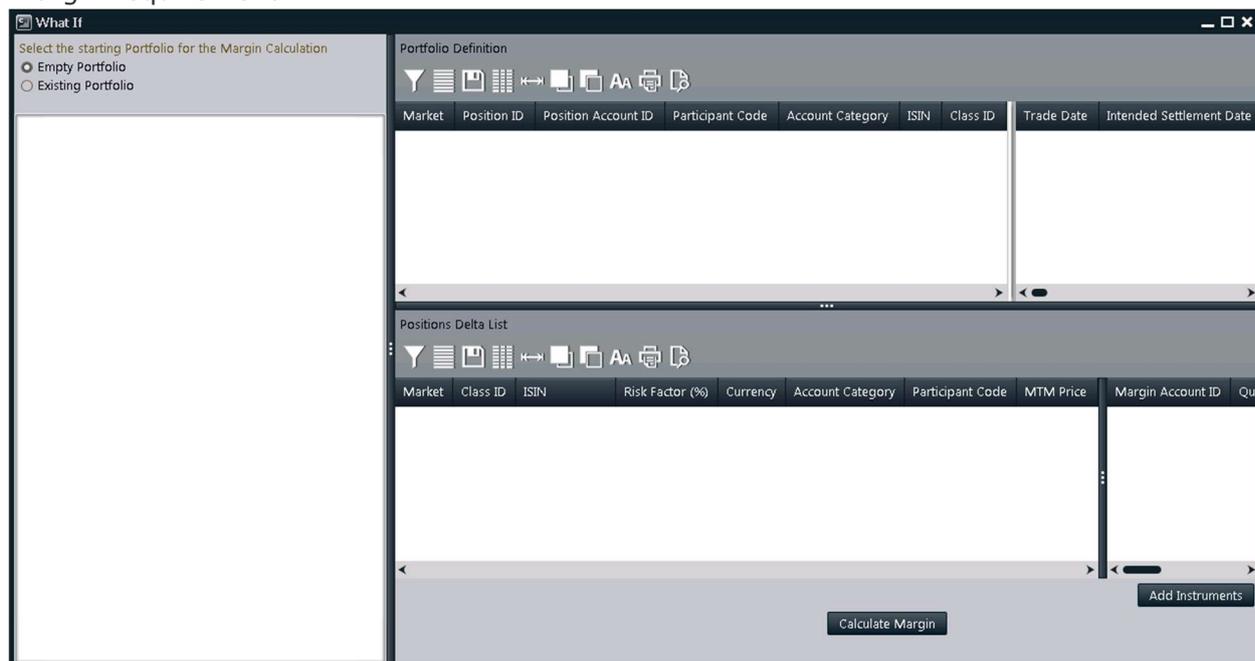
10. RISK MANAGEMENT



This section allows the clearing member to know in advance the margins that will be requested by the CCP.

10.1 What If

Trough the *What If* window is possible to create a custom portfolio and simulate the margin requirement.



Clicking the “Add Instruments” button the clearing member can select the financial instruments to add to the delta portfolio.

Positions Delta List

Portfolio Type Standard Custom

Portfolio Name

Portfolio ABI Code

Instruments List

Quick Filters

Markets: XUNK - SECONDARY MARKET Class ID: Class Type:

Selected 11588 on 23405 records
 DoubleClick on the record to add to the Positions Delta List

Market	Class ID	ISIN	Description	Risk Factor (%)	Multiplier	Settlement Period	Currency	Class Type	CFI Code	Liquidity	Asset Class ID	Segme
XUNK	999	XS0...	OBB-BAU 1...	7,500	1,000	2	EUR	Bond	DMMXXB	Illiquid	Bond	WE
XUNK	998	XS0...	OBB-Bau 1...	7,500	1,000	2	EUR	Bond	DMMXXB	Illiquid	Bond	WE
XUNK	997	AT0...	Zins-Strip 1...	7,500	1,000	2	EUR	Bond	DBZPFB	Illiquid	Bond	WE
XUNK	996	AT0...	Zins-Strip 1...	7,500	1,000	2	EUR	Bond	DBZPFB	Illiquid	Bond	WE
XUNK	995	AT0...	Zins-Strip 1...	7,500	1,000	2	EUR	Bond	DBZPFB	Illiquid	Bond	WE
XUNK	994	AT0...	Zins-Strip 1...	7,500	1,000	2	EUR	Bond	DBZPFB	Illiquid	Bond	WE
XUNK	993	AT0...	Zins-Strip 1...	7,500	1,000	2	EUR	Bond	DBZPFB	Illiquid	Bond	WE

Positions Delta List

DoubleClick on the record to remove from the Positions Delta List

Class ID	ISIN	Risk Factor (%)	Currency	Account Category	Participant Code	Margin Account ID	Quantity	Price	Accrued Interest	Clearing Currency

Add Close

Pushing the calculation button, the value of the simulation is shown.

What If Result

Margin Requirement of the What If calculation: 642319.960000

OK

Please note that the results of the simulation will not be binding for the CCP.

11. TOOLS



This menu allows Clearing Member to access the *Monitor* and the *Clearing Messages*.

11.1 Monitor

The *Monitor* window shows in real time the clearing event messages generated by the Clearing System. Messages are displayed in a pop-up window anytime the event is generated for the clearing member.



The user could customize the list of events just clicking the *Settings* button in the toolbar.



The *Settings* button allows the user to select which clearing events are to be shown in the Monitor window. It's also possible to select the *Always Show on Top* and the *Open at Startup* options. To enable any change, the user should click the *Ok* button.



By clicking on the *Trash* symbol all historical events are deleted.

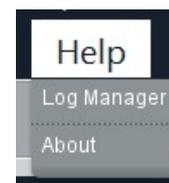
Clicking on any event in the *Monitor* window the corresponding window of the GUI where the information of that event is displayed.

It's possible to set different colors for different type of clearing events and customize the window clicking on the *Background* button of the toolbar.

12. HELP



Help window provides the Member to check logs level and some information about BCS.



12.1 Log Manager

Log	Level
Trsp	INFO
Context Manager	SEVERE
main	OFF
desk	FINEST
TOOLS	SEVERE
apiClient	FINEST
Context Server	SEVERE
Tool Bar Status Tool	CONFIG
Control Panel	SEVERE
On Behalf Of Tool	CONFIG
Admin Report Tool	CONFIG

In this section the Clearing Member is able to modify the level of trace of the log files, choosing among FINEST, FINER, FINE, CONFIG, INFO, WARNING, SEVERE details.

The logs are saved at the installation path into the *log* folder.

12.2 About

In the section the Clearing Member finds some BCS CCP.A GUI information.

Product Information

Name: BCS Clearing Station
Version: 7.9.2 (build: 107)
Licensed to: BCS Client
Provider: Borsa Italiana S.p.A.

System Information

O.S.: Windows 10 (10.0) -
Building JVM: 1.8.0_45-b15
Running JVM: 1.8.0_281-b09
User dir: C:\Users\forig\Downloads
User home: C:\Users\forig
Log dir: C:\Users\forig\AppData\Local\BCS\log
Address: 192.168.1.95
Server list: BCSCDSAPP01
Trsp version: 6.2.0 06/05/2010
Bridge info: Acked Http - bcs-at-ods.borsaitaliana.it-1 (1/0)
Text Locale: en_US
Reg. Settings: en_US
Look & Feel: LSEGLookAndFeel
Log Enable: Yes

Built on traderpath technology by:

 **GATELAB** www.gatelab.com
 A EURONEXT COMPANY

Copy to clipboard

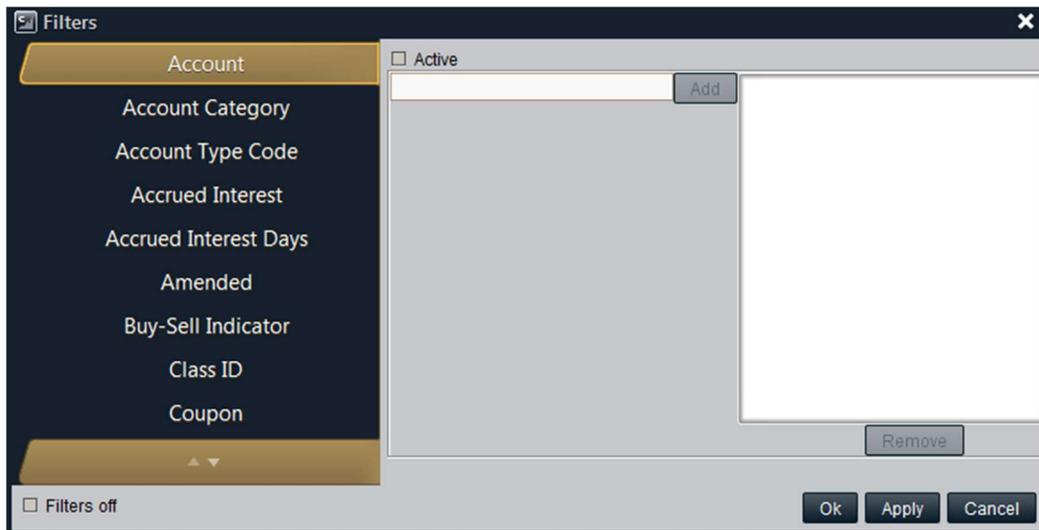
13. APPENDIX 1: WINDOWS LAYOUT



This section describes the layout of the BCS CCP.A windows and how to manage, sort, filter and export data.

13.1 Toolbar

The following toolbar is shown in the main windows of the BCS GUI and is used to filter and organize the data:



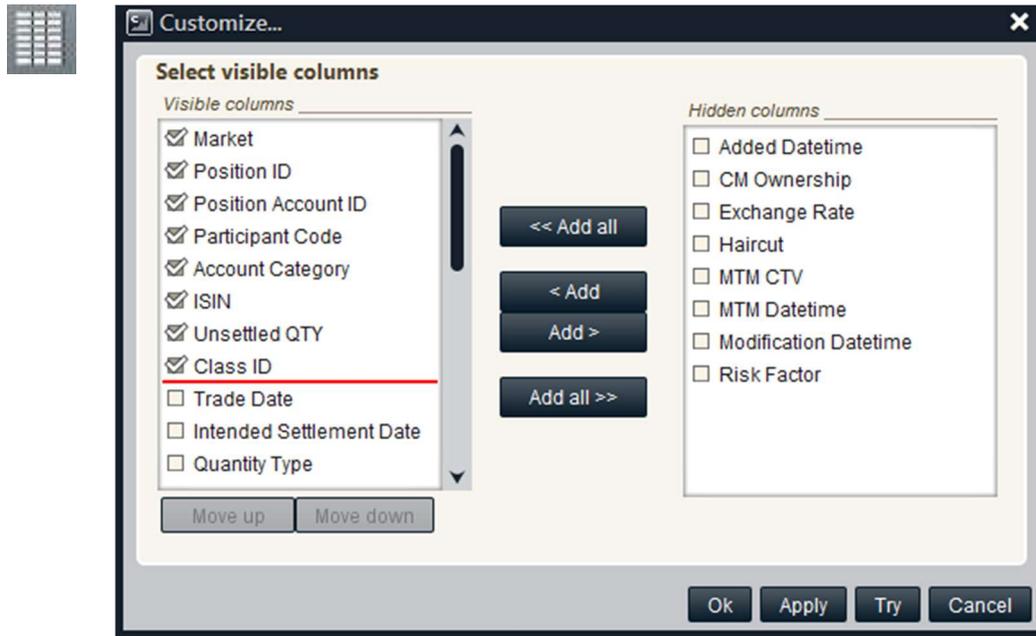
Filter: allows the filtering of data displayed and, in some cases, also regular expressions can be used (See Appendix 2: Regular Expressions).



Select All: allows to select all the rows of the table.



Save: allows to save the content of the table in a Microsoft Excel file or into an ASCII/PDF file.



Customize: allows to select and organize the columns to be shown in the window (see below the details)



Autofit: to resize the columns width



Foreground: to select the foreground color of the rows of the table



Background: to select the foreground color of the rows of the table



Font: to select the font of the data displayed in the table



Print: to print the data of the table. Only data shown on the screen are printed: hidden columns, if any, or filtered data will not be printed.



Print Preview: display a preview of the page

13.2 Business Date Bar



A *Business Date Bar* is present in the windows of the BCS CCP.A GUI where previous days data are available. By default, the current business day is selected. In order to download data belonging to a specific time windows, the user should select the range of interest (e.g. From ... To ...). A new tab is shown in the bar, allowing to download data for the selected time window. It's possible to switch between any active tab of the Business Date Bar in any time. Only the bar belonging to the current date is automatically updated in case of a change on the displayed data, even if the tab is active in background.

13.3 Table Functions

It is possible to access a basic set of functions for the data management clicking on the table header of every BCS window.

ISIN	Class ID	Trade Date	Intended Settlement Date
ATMARI			2019-10-03
FR000			2019-10-22
FR000			2019-10-22
FR000			2019-10-22
AT000			2019-10-22
XS175			2019-10-22
XS175			2019-10-22
AT000			2019-10-22
FR000			2019-10-22
ATMARI			2019-10-04
GB00B			2019-10-21
GB00B			2019-10-18
AT000			2019-10-18
AT000			2019-10-21
FR000			2019-10-21
CH011			2019-10-21
IT117			2019-08-26
ATSK01			2019-10-18
ATMARI			2019-10-18
AT0000			2019-10-17
DE000			2019-10-17
AT0000634705		2019-10-16	2019-10-18



The *Sort by Ascending* button allows to sort the data of the column in ascending order.



The *Sort by Descending* button allows to sort the data of the column in descending order.



The *Remove All Sorts* button allows to remove any sort previously defined on any column of the table.



The *Quick Filter* button allows to filter the rows of the table basing on a value of the selected column.



The *Remove All Quick Filters* button allows to remove any filter previously defined on any column of the table.



The *Remove Current Quick Filter* button allows to remove a filter previously defined on the selected column of the table.



The *Columns* button allows to access a submenu with the following functions: *Hide Column*, *Customize*, *Autofit Column* and *Autofit All*.



The *Colors* button allows to access a submenu with the following functions: *Background* and *Foreground*



The *Font* button allows to select the font of the data displayed in the table



The *Select* button allows to select all the rows of the table basing on a value of the selected column



The *Export to Excel* button allows to export the content of the table into a Microsoft Excel file.



The *Print* button allows to print the data of the table. Only data shown on the screen is printed: hidden columns, if any, or filtered data will not be printed.



The *Print Preview* button allows to have a preview of the data before it will be printed

14. APPENDIX 2: REGULAR EXPRESSION



A regular expression is a string (sequence of characters) built with a proper syntax, which express characteristics shared by a set of strings.

Assume you intend to use a notation to indicate all the strings which begin by 'a' and end by 'o': we will write 'a*o' to indicate all these strings which share the characteristic to start by 'a' and end by 'o'. The following strings belong to the set mentioned above 'ao', 'ago', 'also' but not 'Aristoteles' or 'psycho'. The character '*' used into the regular expression indicate whatever sequence of characters.

Let's see the syntax to be used for regular expressions and the meaning of each abbreviation:

Abbreviation	Description
X	"X" character
[]	Finds a single character into the brackets. For instance, [abc] looks for an 'a', a 'b' or a 'c'. [a-z] is an interval and finds every small character of the alphabet. Mixed cases can occur: [abcq-z] looks for b, c, q, r, s, t, u, v, w, x, y, z, just as [a-cq-z].
[^]	Finds every small character not included into the brackets. For instance, [^abc] finds all the characters different than "a", "b", o "c". [^az] looks for every character different than small letter
^	Indicates the beginning of the string
\$	Indicates the end of the string
()	Define a sub expression
X?	X which recurs 0 or one time
X*	X which recurs 0 or several times
X+	X which recurs at least once
X{n}	X which recurs twice exactly
X{n,}	X which recurs at least n times
X{n,m}	X which recurs at least n times and no more than m times
XY	X followed by Y
X Y	X or Y

In the above table X and Y are regular expressions.

Examples:

- [ab]* = all the strings which start by a or b
- [^a-c]*a\$ = all the strings which start by "a", "b" e "c" but which end by "a"
- *s{2}* = all the strings which have two "s" at any point of the sequence
- *cu(t|p) =strings which end by "cut" and "cup"

15. APPENDIX 3: SECURENVOY TECHNICAL DETAILS



BCS clients can access the platform over the public internet by previously subscribe on Clearing System this access method; the subscription is confirmed by a welcome e-mail which provides further instructions for finalizing the procedure.

In order to keep the access secure, users must authenticate themselves by submitting two codes:

- A passcode (token), which is generated by a software application, which runs on the user's PC or on the user's mobile device (handset/tablet);
- A password which the user defines.

Purpose of this appendix is to describe how users access the BCS in 6 subsections:

- download and installation
- enrollment
- BCS logon
- temporary pass code
- password changes
- moving soft tokens between PCs

Users who employ a soft token must perform the following three steps:

- Download and install the Secure Envoy soft token software / app on their PC / mobile device, and configure it in order to communicate with the BCS.
- Enroll themselves by authenticating on Secure Envoy web page via the soft token by submitting their User ID, initial password and initial pass code, and then submitting further information. Only after this sequence the soft token will start to generate pass codes.
- Log on to BCS for the first time, which involves submitting their User ID, the initial password, the Member Code and the pass code generated by the soft token. Users are immediately obliged to change their password. On subsequent logons users shall submit the defined password.

Users are requested to complete all of these steps in one dedicated and uninterrupted session to avoid problems with timeouts.

15.1 Download and installation

15.1.1 Soft Token Users

Clients download the soft token software from:

<https://www.securenvoy.com/en-gb/support#id4> (section: "PC/Mac Soft Token Download")

install the soft token software and then configure the soft token software so that it points to the enrollment URL:

- In production <https://secureauth.borsaitaliana.it/secenrol/>
- in test environment (CDS) <https://secureauth-cds.borsaitaliana.it/secenrol/>

Every single individual user must have a separate soft token – for example if a client has 9 users then there must be 9 soft tokens. A single instance of soft token software can support up to 6 soft tokens.

Once installed, the client's Systray contains the following icon:



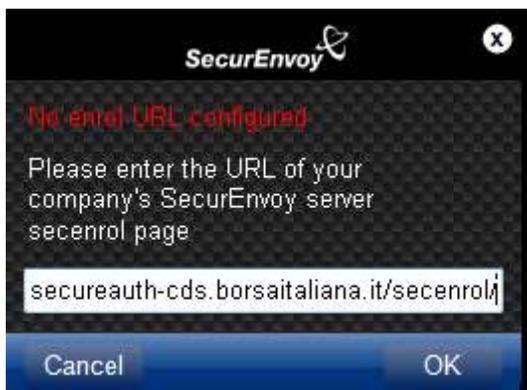
The client should then launch the soft token software.

15.2 Enrollment

The user shall enroll only after receiving the welcome email; an example of it is provided at the end of this section.

15.2.1 Soft Token Users

a) Selecting "Add", the popup reported above is displayed. The user enters the secenrol page URL



<https://secureauth.borsaitaliana.it/secenrol/>

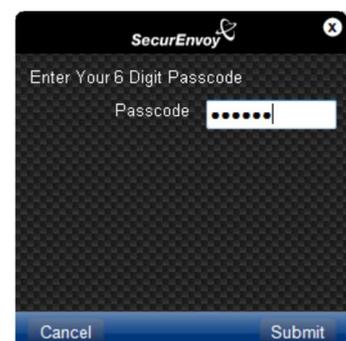
In test environment (CDS) <https://secureauth-cds.borsaitaliana.it/secenrol/>

and selects 'OK'.

b) In the following popup the 'Username' shall be entered as provided in the welcome mail (see the text highlighted in yellow). This takes the form

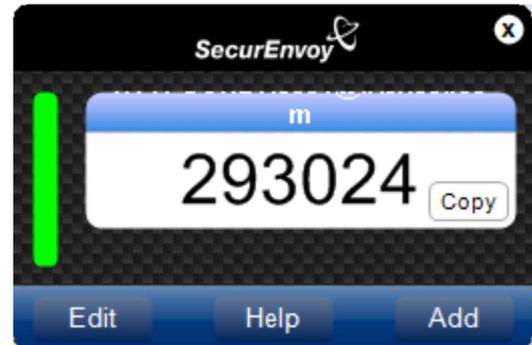


user.member. For example, a username might be **BCSUser0.9999@bcs.com**, where 9999 is the Member ID, BCSUser0 is the User ID and **@bcs.com** is the BCS domain for production (@bcs.test.com for CDS); in the field 'Microsoft Password' the BCS password shall be entered as provided by CCP.A. and then select 'Submit'.



c) Enter the initial 6-digit Passcode notified to you in the welcome e-mail, which has to be sent by no-reply-securenvoy@lseg.com (no-reply-securenvoy-test@lseg.com for CDS)

d) The user is then be requested to select two additional security questions and specify answers so they can access the help facility (see section 5). The enrollment process is now complete and the soft token starts to display pass codes.



15.2.2 Mobile App Users

a) From the welcome mail select the enrollment site URL

- in production environment <https://secureauth.borsaitaliana.it/sechelpdesk>
- in test environment (CDS) <https://secureauth-cds.borsaitaliana.it/sechelpdesk>.

b) Enter the User ID (in this case HTTPSAPP.8081@bcs.com or HTTPSAPP.8081@bcs.test.com for CDS, the field is pre-populated if the full URL is entered) and the BCS password (field Enter Microsoft Password). Select Login.

Manage My Token : Authentication

c) In the next page users have to enter the passcode provided in welcome e-mail and then select login.

d) Users are now authenticated on the enrollment page, where they can complete the enrollment process. Select 'Setup My Soft Token App' radio button and follow the instructions detailed in the page. It is necessary to have the SecurEnvoy app already installed and running on the handset while following the steps.

SecurEnvoy Manage My Token

Send My Passcodes Via SMS

Note: Your mobile number will be encrypted and will only be used for receiving passcodes

Enter Your Mobile Number:

(Format + CountryCode Number) Example +391234567890

Setup My Soft Token App

Step 1 -> Install the SecurEnvoy App on your phone

Step 2 -> Press the ADD button

Step 3 -> Scan the QR code displayed on your phone

or manually enter the key: FNWYMKXV7HBLV

Step 4 -> Enter the displayed Code:

You Must Complete Step 4 To Activate Your Soft Token

Answer the following secret questions

Select Your First Secret Question:

Answer To Question 1: Max 13 Characters

Select Your Second Secret Question:

Answer To Question 2: Max 13 Characters

Continue

SecurEnvoy, The Leaders of Tokenless Two Factor Authentication

e) Provide answers to the two secret questions, which shall be used when accessing the help page. Select 'Continue' to close the process.

f) On the App confirm the name to be assigned to the token. Tokens are now displayed and updated automatically.

Example Enrollment email (Welcome Mail)

From: **no-reply-secureenvoy@lseg.com**
 Sent: Thursday, December 24, 2015 1:55 PM
 To: **mickey.mouse@mouseton.com**
 Subject: BCS HTTPS web access – Two Factor Authen

To ensure that you receive this email, please configure your spam filter to accept an email from the address

The BCS web access uses a two-factor security solution provided by SecurEnvoy to authenticate user access.

There are a number of options how a user can authenticate themselves to use the BCS web access. The options are:

- PC soft token (software installed on your computer)
- Smartphone soft token (software installed on your smartphone)

PC Soft Token

If you intend to use the PC soft token solution, please download the appropriate software from <https://www.secureenvoy.com/en-gb/support#id4> and 'Add' a new token. Enter your username, BCS password (provided to you separately, to be entered in the field 'Microsoft Password') and this passcode **398073**. The PC soft token will be displayed.

Smartphone Token

If you are enrolling to use smartphone tokens, you will need to click here <https://secureauth-cds.borsaitaliana.it/secenrol/?userid=TEST.9999@bcs.test.com> to register your smartphone on the SecurEnvoy application. Beyond the pre-compiled field 'UserID', enter the BCS password which has been provided to you separately (field 'Microsoft Password') and – on the following page - the passcode **398073**.

If you have any questions, please contact the Clients support – first level of support.

Notes:

- If you do not successfully complete enrollment within 30 days your account will be disabled

Above highlighted in yellow all the User ID

Above highlighted in green all the Passcode

15.3 BCS Login and prerequisites

Before launching BCS via https access, it is required to install the Java SE Runtime Environment, version 8u191 or later, which can be downloaded from:

<https://www.oracle.com/java/technologies/javase/javase8-archive-downloads.html>

The process to start BCS is the same for both soft token and text message users.

- The user must first access **https://bcs-at-prod.borsaitaliana.it** (for CDS environment **https://bcs-at-cds.borsaitaliana.it**):

Enter BCS user's credentials:

- Username: BCS user name, as provided by CCP.A



The image shows a login form for BCS. At the top center, the text 'BCS' is displayed in a large, bold, teal font. Below this, there are four input fields, each with a label to its left: 'Username', 'Password', 'Member Code', and 'Token'. Each label is in a teal font. To the right of each label is a white input box with a thin teal border. At the bottom right of the form area, there is a teal button with the text 'Sign in' in white.

- Password: BCS password, as provided by CCP.A
- Member Code
- Token: token displayed on the PC Soft Token, or Mobile App

Click on 'Sign In' to finalize the authentication on BCS. At this point the application shall be downloaded, started and verified.

Depending on the browser configuration a confirmation to run may be asked.

To prevent concurrent access a timeout of some minutes is configured: during this timeframe a second access attempt is denied. If the timeout elapses before the process is completed, the user must re-start the whole authentication process from scratch, otherwise an error is returned.

15.4 Password Management

Password can be changed by the users without performing the enrolling procedure.

Instead when users forget their password, the enrolling procedure should be submitted as follows: they inform CCP.A support team who resets the account and provides a new password. The account reset triggers an email that is sent to the user with a new initial passcode.

15.5 Moving Soft Tokens Between PCs

Users can only have a single instance of a soft token (they cannot have the same soft token running on multiple PCs). If the soft token is moved between two PCs, a re-enrollment has to be performed on the destination PC.

The steps to be performed are:

- Download and install the soft token software on the new PC as described in the first section;
- Enroll as described in this document, using the pass code generated by the soft token on the old PC (or if that is not available the passcode from the help facility);
- Log on to BCS using the pass code generated on the new PC. You will not be obliged to change password;
- Finally, delete the soft token on the old PC as this will no longer work.

If an organization deploys a set up in which users are allocated to different PCs each day (for example a terminal server arrangement), the soft token will not work unless it is re-enrolled daily. The options are either to bind the user to a particular terminal server, or to change from a soft token to text messages or phone/tablet app.

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