

BTS[®]: Pre-Trade Validation Service for IDEM Market

User Manual

May 2017

Version 1.0



London
Stock Exchange Group

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1 Revision History

Issue	Date	Description
1.0	May 2017	First release

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2 Introduction

The Pre-Trade Validation Service (PTVS) offered by IDEM Market complements the risk control systems in place by IDEM participants to control order flow activity.

The PTVS provides an additional tool for:

- General Clearing Members (GCMs) to manage the cleared risk exposure generated by the trading activity of their NCMs;
- IDEM Members offering Direct Market Access (DMA) to control the risk related to the trading activity of their DMA clients;
- IDEM Members to monitor the risk associated to their own trading activity.

The PTVS allows the Risk Manager (i.e. the controlling entity) to set pre-trade controls for a specified Managed Entity (i.e. a single TraderID or a group of Trader IDs associated with a Firm) and at different levels, in particular:

- Firm / Group of Trader IDs / Instrument Group / Instrument
- Firm / Group of Trader IDs / Instrument Group
- Firm / Instrument Group / Instrument
- Firm / Instrument Group.

In advance of setting up pre-trade validation controls, the Risk Manager should inform the Managed Entity that these will be implemented; if in doubt, the Managed Entity should check with its Risk Manager whether pre-trade validation controls are applied to its orders.

The following limits can be configured:

- Max Order Quantity limit (for orders and quotes)
- Max Cross/Committed Order Quantity
- Position limit on executed trades (net long/short position, excluding cross trades) during the day, expressed in quantity terms:
 - the trade triggering the limit's breach is executed
 - the breach of the net long threshold triggers the cancellation of all buy orders and all quotes (and vice versa for the net short threshold)
 - incoming orders are rejected
- Exposure limit on open orders (excluding quotes) plus executed trades (net long/short position) during the day (cross orders and related trades do not contribute to limit computation), expressed in quantity terms:
 - the breach of the net long threshold triggers cancellation of all buy orders and all quotes (and vice versa for the net short threshold)
 - incoming orders are rejected
- Kill Switch functionality, allowing to cancel all orders (cross orders included) and quotes for a TraderID and to disable a TraderID / Firm
- Access to Market Maker Protection to control quoting activity of Managed Entity (in case of conflicts, the most restrictive rules will apply).

Based on configurations defined by the Risk Manager, SOLA will perform real-time checks before allowing each order and quote to enter the Trading System; configured limits can be updated real-time with immediate effectiveness.

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SOLA will disseminate messages related to the “usage” of the predefined Position and Exposure limits (“Risk Limits Usage Notice”): starting from 50% of the threshold upwards an alert is disseminated each time a 10% interval changes (e.g. 50%, 60%, 70%, etc.).

For further details on PTVS, please refer to the “IDEM market - Guide to Pre-Trade Validation (PTV) functionality” available on the Borsa Italiana website.

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3 Pre-Trade Validation Service BTS® solution

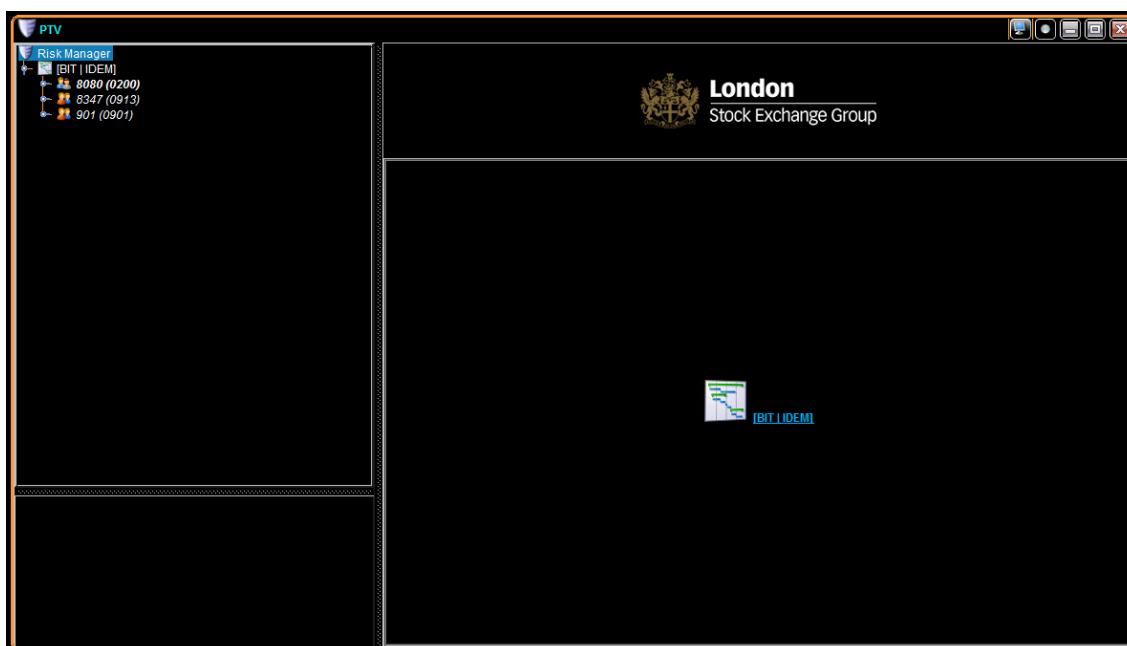
BTS® front-end provides a GUI that allows authorized Risk Managers to set daily limits, view limits, amend daily limits and receive visual alerts for participants approaching or exceeding their set limits.

3.1 PTV tool

By clicking the PTV icon that can be found in the PTV menu reserved to Risk Managers



PTV interface will open, the list of Markets the Risk Manager is authorised :



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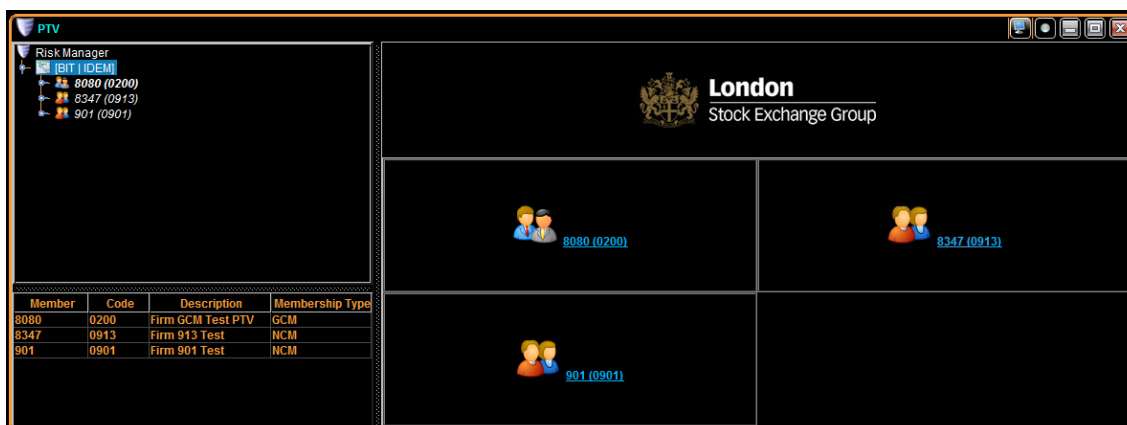
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3.2 PTV hierarchy tree



By clicking on the Market () where the user is entitled as Risk Manager, members hierarchy will appear.

Each member is identified by their BTS® Member name and SOLA FirmID, in particular a GCM BTS® member (**8080**) and SOLA FirmID (**0200**) can be easily distinguished from managed NCMs by bold font and different icon color.



By clicking the circle on the left of Member **8080** the node will expand, showing the managed TraderIds of the selected Member

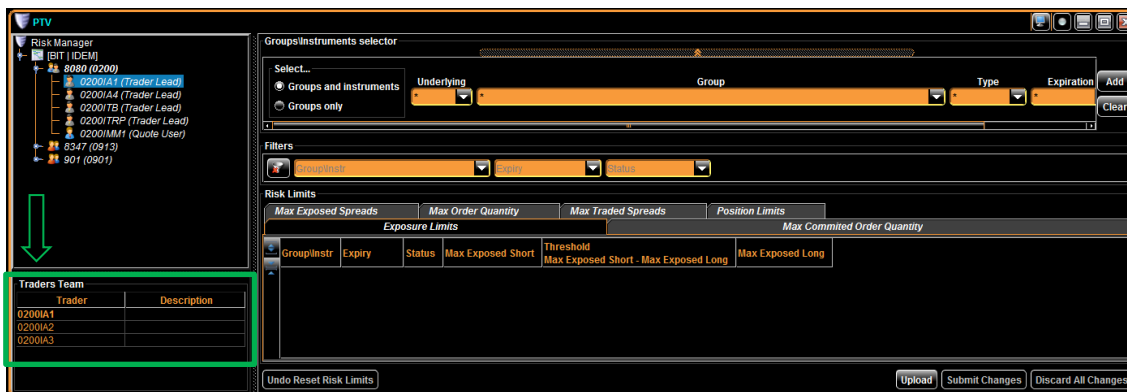


A Group of TraderIds can be differentiated between Trader Leads  and Quote Users  through the graphical icon and description in brackets.

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If a Trader Lead or Market Maker is selected, its dependent TraderIds are displayed in the panel under the risk manager list (highlighted in the green box below):



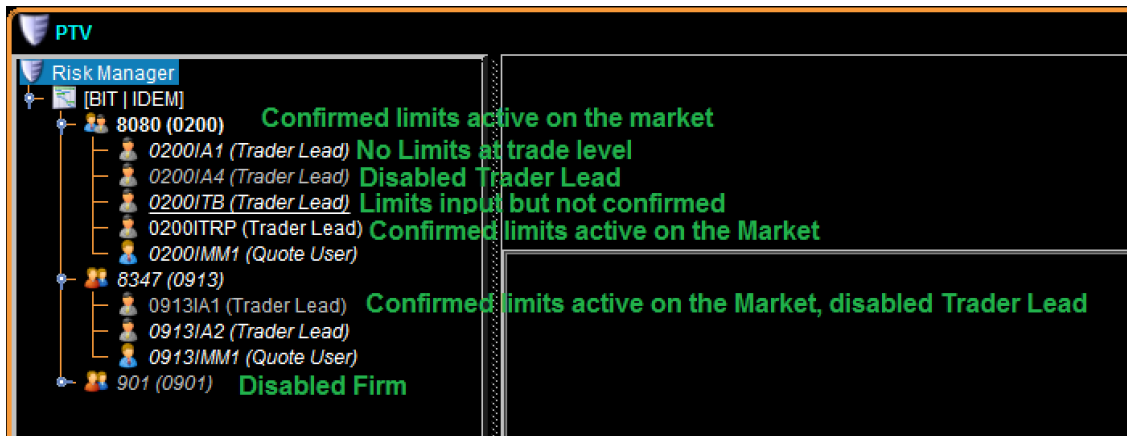
The enablement of the Trader Lead or the Market Maker, and the Limits Status on the frontend are identified by the following notation convention:

Italics : no limits are active on SOLA, nor changes on the BTS[®] PTV are waiting for confirmation

Underlined : limits set on BTS[®],PTV but not yet confirmed and active on SOLA (see 3.5)

Standard white : limits set on BTS[®] PTV, confirmed and active on SOLA

Grey : the Entity is disabled on SOLA (see 3.3)



3.3 Kill Switch functionality

Risk Manager has the possibility to disable a Firm or a Market Maker / Trader Lead from the Market.

All the TraderIDs belonging to the disabled firm or the single disabled Market Maker / Trader Lead will be excluded from trading and all their active orders removed, please note that possible limits set on the disabled entity will remain active.

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To disable a Firm or Market Maker / Trader Lead, right click on the Firm or Market Maker / Trader Lead in Risk Manager tree and select "Kill Switch":

Property	Value
BTS Codes	[8347]
Member	8347
Code	0913
Membership Type	NCM
Description	Firm 913 Test

Trader	Description
0913IA1	
0913IA3	
0913IA4	

Once the disabling is confirmed the color of the entity switches to grey:

Property	Value
BTS Codes	[8347]
Member	8347
Code	0913
Membership Type	NCM
Description	Firm 913 Test

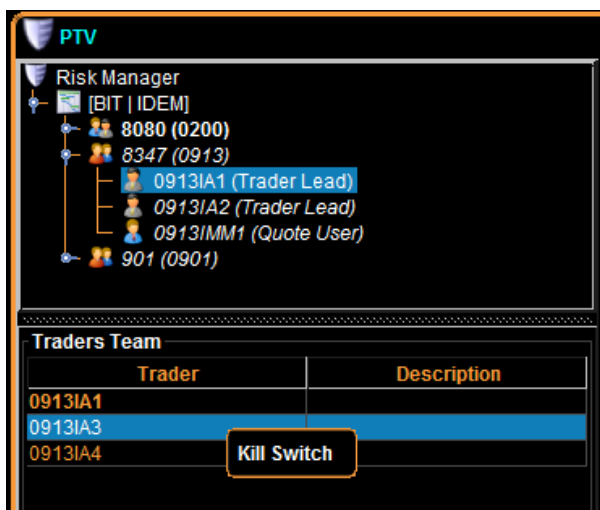
Trader	Description
0913IA1	
0913IA3	
0913IA4	

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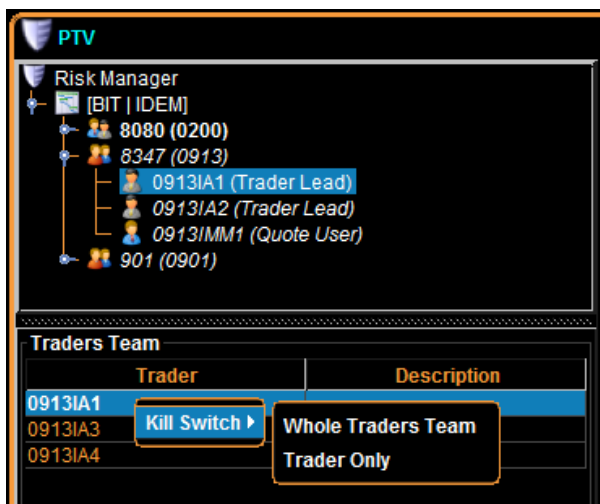
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Trader that are member of IDEM market can be disabled even if they are not TraderLead.

In the little panel below the hierarchy tree by right clicking on the Trader, Kill Switch option is proposed



While for a TraderLead there is the possibility to disable all the Traders subordinated to the selected TraderLead or the TraderLead only



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3.4 Groups/Instruments list

By clicking on a risk managed entity (Firm or Trader Lead) the Risk Manager is responsible for, the list of the groups active on the market is displayed in the right hand pane.

The screenshot displays the PTV Risk Manager application. On the left, a tree view shows the hierarchy of risk managed entities, including 'BIT (DCM)' and several 'Trader Lead' and 'Quote User' entries. The main area is titled 'Groups/Instruments selector' and features a 'Select...' dropdown menu with 'Groups and Instruments' selected. Below this are five dropdown filters: 'Underlying', 'Group', 'Type', 'Expiration', and 'Instrument'. A 'Filters' section contains a 'Group/Instr' dropdown and a 'Status' dropdown. The 'Risk Limits' section includes tabs for 'Exposure Limits', 'Max Committed Order Quantity', 'Max Exposed Spreads', 'Max Order Quantity', 'Max Traded Spreads', and 'Position Limits'. The 'Exposure Limits' tab is active, showing a table with columns: 'Group/Instr', 'Expiry', 'Status', 'Max Exposed Short', 'Threshold', 'Max Exposed Short - Max Exposed Long', and 'Max Exposed Long'. The table is currently empty. At the bottom, there are buttons for 'Undo Reset Risk Limits', 'Upload', 'Submit Changes', and 'Discard All Changes'.

The Risk Manager has the possibility to select a list of Instruments and the Group they belong by using the following fields:

- Underlying
- Group description
- Type (Future, Option, Call/Put Option)
- Expiration Day
- Instrument Symbol

If the Option “Groups only” is ticked only Underlying and Group filters are enabled.

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For instance, if a specific underlying (FTMIB) and the Instrument Type “Futures” are selected and “Groups and Instruments” option has been clicked:

The screenshot shows the 'Groups/Instruments selector' window. The 'Select...' section has 'Groups and instruments' selected. The 'Underlying' dropdown is set to 'FTMIB'. The 'Type' dropdown is open, showing 'Futures' as the selected option. The 'Filters' section has 'Download', 'Copy', and 'Status' buttons. The 'Risk Limits' section has tabs for 'Exposure Limits', 'Max Committed Order Quantity', 'Max Exposed Spreads', 'Max Order Quantity', 'Max Traded Spreads', and 'Position Limits'. The 'Exposure Limits' tab is active, showing a table with columns: Group/Instr, Expiry, Status, Max Exposed Short, Threshold (Max Exposed Short - Max Exposed Long), and Max Exposed Long.

FTMIB Future Group and Future products belonging to the group are added to the Risk panels:

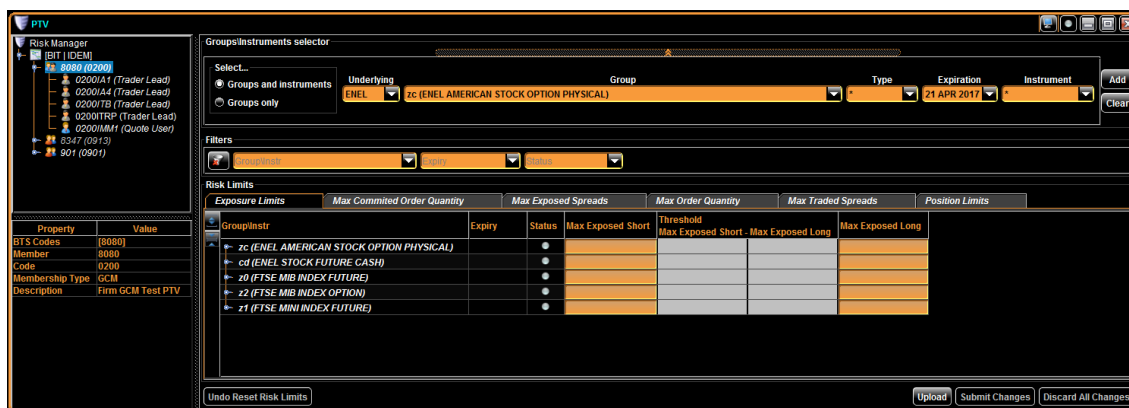
The screenshot shows the 'Groups/Instruments selector' window with 'z0 (FTSE MIB INDEX FUTURE)' selected in the 'Group' dropdown. The 'Type' dropdown is set to 'Futures'. The 'Filters' section has 'Group/Instr', 'Expiry', and 'Status' buttons. The 'Risk Limits' section has the same tabs as the previous screenshot. The 'Exposure Limits' tab is active, showing a table with columns: Group/Instr, Expiry, Status, Max Exposed Short, Threshold (Max Exposed Short - Max Exposed Long), and Max Exposed Long. The table contains the following data:

Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long
z0 (FTSE MIB INDEX FUTURE)					
FIB7F	2017/06/16				
FIB7I	2017/09/15				
FIB7L	2017/12/15				
FIB8C	2018/03/16				
FIB8F	2018/06/15				

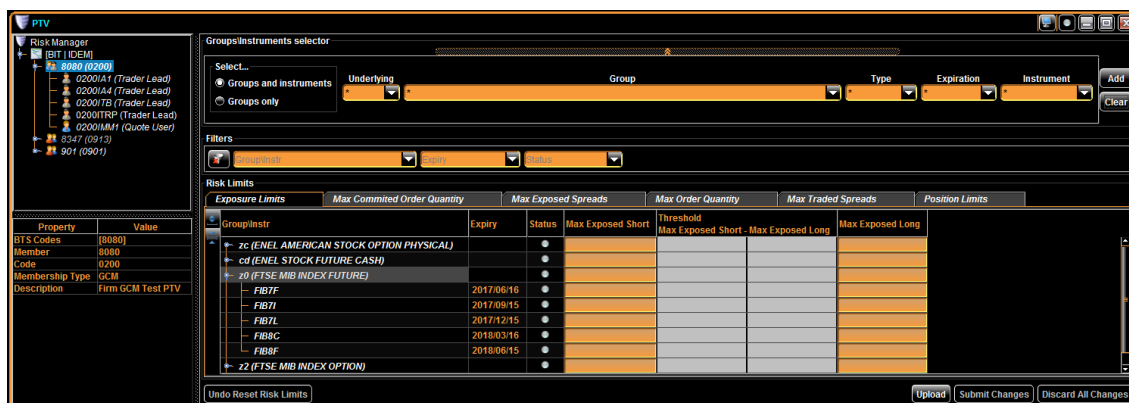
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Each of the tabs displays the risk limits that can be set on the specific market.



By clicking the circle to the left of a Group (z0 | FTSE MIB INDEX FUTURE for instance) the node will expand, listing all the Instruments belonging to the Group. At Instrument level, the Expiration Date (YYYY/MM/DD) is also shown.

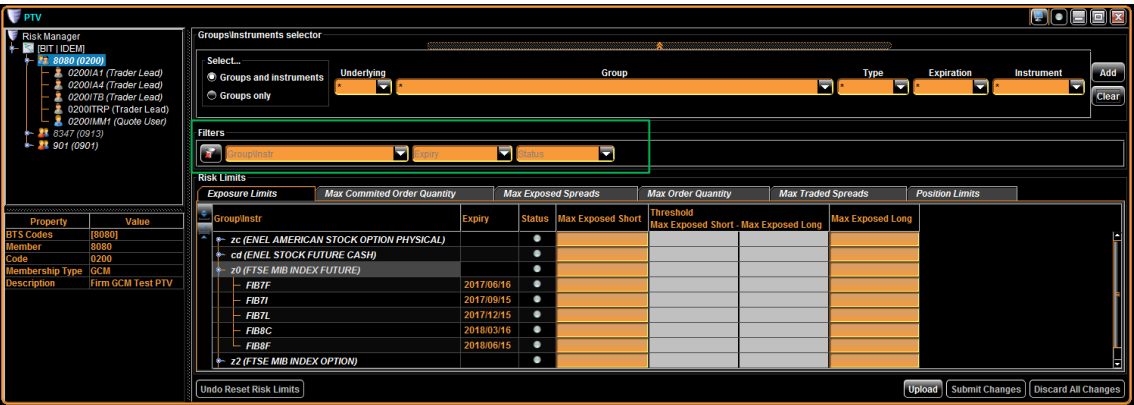


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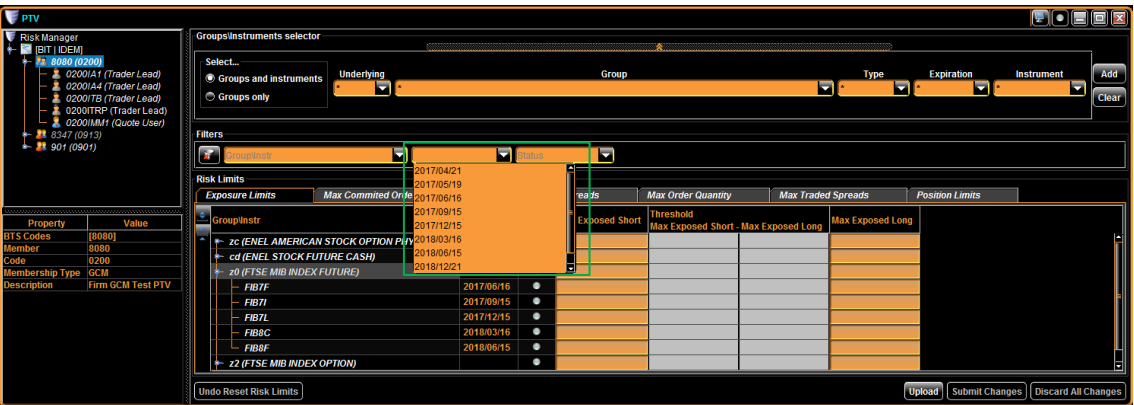
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Above the Groups \ Instruments list, a filter panel is provided



By clicking in the “Expiry” field and pressing the down arrow key, the list of Instrument Expiration Dates is shown in the drop down list.



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Once an Expiration Date is selected, the relevant Instruments are filtered out.

The screenshot shows the PTV Risk Manager interface. On the left is a 'Risk Manager' sidebar with a tree view of instruments. The main area is the 'Groups/Instruments selector'. It has a 'Select...' dropdown with 'Groups and instruments' selected. Below it are filters for 'Underlying', 'Group', 'Type', 'Expiration', and 'Instrument'. The 'Expiration' filter is set to '2017/09/15'. Below the filters is a table of instruments with columns: Group/Instr, Expiry, Status, Max Exposed Short, Threshold, Max Exposed Short - Max Exposed Long, and Max Exposed Long. The table lists instruments like 'cd (ENEL STOCK FUTURE CASH)', 'ZENEL7I', 'Z0 (FTSE MIB INDEX FUTURE)', 'FIB7I', 'Z1 (FTSE MINI INDEX FUTURE)', and 'MINI7I'. The 'Expiry' column shows dates like '2017/09/15'.

The field supports an autocomplete function so that – while typing – only the entries matching the field content are listed.

This screenshot is similar to the previous one but shows the 'Expiration' filter set to '2018'. The table of instruments is filtered to show only those with an expiry date of 2018, including 'ZENEL8C', 'ZENEL8L', 'FIB8C', and 'FIB8F'. This demonstrates the autocomplete function where only matching entries are listed.

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3.5 Groups/Instruments list Quote User

If a Market Maker is selected, only the groups where the Market Maker has obligations are listed.

For Market Makers, Market Maker Protection limits are displayed by default, but by clicking the upwards arrow on the window border, Order Risk Limits input mask is shown:

The screenshot shows the PTV Risk Manager interface. On the left, the 'Risk Manager' tree is expanded to show the '0200MM1 (Quote User)' group. The main panel displays the 'Market Maker Protection' table with columns: Group, Status, Protection Number of Trades, Protection Trade Quantity, Calculation Time Interval (number of seconds), Maximum Volume, Maximum Value, and Max. The table lists several groups including 'c0 (AZIMUT HOLDING STOCK FUTURE CASH)', 'zc (ENEL AMERICAN STOCK OPTION PHYSICAL)', 'cd (ENEL STOCK FUTURE CASH)', 'zp (ENI AMERICAN STOCK OPTION PHYSICAL)', 'z0 (FTSE MIB INDEX FUTURE)', 'z2 (FTSE MIB INDEX OPTION)', and 'z1 (FTSE MINI INDEX FUTURE)'. At the bottom, there are buttons for 'Undo Reset MMP Limits', 'Upload', 'Submit Changes', and 'Discard All Changes'.

In this way the Risk Manager may enter Orders Risk Limits for a selected Market Maker, too.

The screenshot shows the PTV Risk Manager interface with the 'Order Risk Limits' section expanded. The 'Groups/Instruments selector' is set to 'Groups and instruments' with 'FTMIB' as the underlying and 'z0 (FTSE MIB INDEX FUTURE)' as the group. The 'Risk Limits' table has columns: Group/Instr, Expiry, Status, Max Exposed Short, Threshold, Max Exposed Short - Max Exposed Long, and Max Exposed Long. The table lists several groups including 'z0 (FTSE MIB INDEX FUTURE)', 'FIB7F', 'FIB7I', 'FIB7L', and 'FIB8C'. At the bottom, there are buttons for 'Undo Reset Risk Limits', 'Upload', 'Submit Changes', and 'Discard All Changes'.

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3.6 Set Risk Limits

Manual settings

BTS® Pre-Trade Validation Service tool allows Risk Managers to set limits for multiple Instruments/Groups for the same entity (Trader or Firm).
Select the entity (e.g. : 8080 | 0200), click on the tab of the selected limit ('Exposure Limits' is displayed by default):

The screenshot displays the BTS Pre-Trade Validation Service interface. On the left, a 'Risk Manager' sidebar shows a tree view of entities, including 8080 (BTS IDEM) and its sub-groups. The main area features a 'Groups/Instruments selector' with dropdowns for Underlying, Group, Type, Expiration, and Instrument. Below this is a 'Filters' section. The 'Risk Limits' section is active, showing a table with columns for Group/Instr, Expiry, Status, Max Exposed Short, Threshold, Max Exposed Short - Max Exposed Long, and Max Exposed Long. The table lists several instruments, including 'zc (ENEL AMERICAN STOCK OPTION PHYSICAL)', 'cd (ENEL STOCK FUTURE CASH)', 'x0 (FTSE MIB INDEX FUTURE)', 'x2 (FTSE MIB INDEX OPTION)', and 'x1 (FTSE MINI INDEX FUTURE)'. At the bottom, there are buttons for 'Undo Reset Risk Limits', 'Upload', 'Submit Changes', and 'Discard All Changes'.

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Input the limit value in the cell related to the required Instrument/Group (please note that, for Exposure Limits and Position Limits, Long and Short limits are provided), once the value is confirmed (Enter key or mouse clicking outside the cell) the cell turns yellow, while Entity, Limit and Instrument/Group tags become underlined.

Once a value has been input in the cell, the Risk Manager user can extend the values to multiple rows.

Risk Limits				
Exposure Limits		Max Committed Order Quantity		Max Exposed Spreads
Group\Instr	Expiry	Status	Max Exposed Short	
z0 (FTSE MIB INDEX FUTURE)		<input type="radio"/>	1000	
z2 (FTSE MIB INDEX OPTION)		<input type="radio"/>		
z1 (FTSE MINI INDEX FUTURE)		<input type="radio"/>		

By clicking on cell corner Risk Manager user can :

Risk Limits				
Exposure Limits		Max Committed Order Quantity		Max Exposed Spreads
Group\Instr	Expiry	Status	Max Exposed Short	
z0 (FTSE MIB INDEX FUTURE)		<input type="radio"/>	1000	
FIB7F	2017/06/16	<input type="radio"/>		
FIB7I	2017/09/15	<input type="radio"/>		
FIB7L	2017/12/15	<input type="radio"/>		
FIB8C	2018/03/16	<input type="radio"/>		
FIB8F	2018/06/15	<input type="radio"/>		
z2 (FTSE MIB INDEX OPTION)		<input type="radio"/>		
z1 (FTSE MINI INDEX FUTURE)		<input type="radio"/>		

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- 1) Drag and drop the value that will copied in the selected cells
- 2) Double click and the value will be automatically extended to:
 - a. All the instruments below the one selected belonging to the same group
 - b. All the instruments belonging to the group if the value is set at group level and the group is expanded
 - c. All the groups displayed if the value is set at group level and the group is collapsed

Risk Limits				
Exposure Limits		Max Committed Order Quantity	Max Exposed Spreads	M
Group\Instr	Expiry	Status	Max Exposed Short	T
z0 (FTSE MIB INDEX FUTURE)		●	1000	
FIB7F	2017/06/16	●	1000	
FIB7I	2017/09/15	●	1000	
FIB7L	2017/12/15	●	1000	
FIB8C	2018/03/16	●	1000	
FIB8F	2018/06/15	●	1000	
z2 (FTSE MIB INDEX OPTION)		●		
z1 (FTSE MINI INDEX FUTURE)		●		

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Excel Upload

Risk Manager user can upload Risk limits using a specifically formatted excel file.

Accepted file types are .xls and .xlsx.

Starting from cell A1, Excel file must be built as follow

Row 1 column header :

- A. "Group" : SOLA Instrument Group id, Mandatory
- B. "Instr" : SOLA Instrument Symbol
 - If specified, limits will be applied at the Instrument level only
 - If blank, limits will be applied at Group level only
 - If * is used, limits will be applied to all the Instruments belonging to the Group
- C. "Max Exposed Short"
- D. "Max Exposed Long"
- E. "Max Committed Order Quantity"
- F. "Max Exposed Spreads" (*Group level only*)
- G. "Max Order Quantity"
- H. "Max Traded Spreads" (*Group level only*)
- I. "Max Traded Short"
- J. "Max Traded Long"

Please note that an empty cell will remove the value present in the PTV table.

In order to keep the value, user must use the '#' symbol

Considering the Excel example below

	A	B	C	D	E	F	G	H	I	J
1	Group	Instr	Max Exposed Short	Max Exposed Long	Max Committed Order Quantity	Max Exposed Spreads	Max Order Quantity	Max Traded Spreads	Max Traded Short	Max Traded Long
2	z0		1000	1000	250	300		200	700	700
3	z0	FIB7F	600	600			50		500	500
4	z0	FIB7I	500	500	100		25		250	250
5	z0	FIB7L	300	300	0	50	15		150	150
6	z0	FIB8C	0	0	0		0		0	0
7	z0	FIB8F	#	#	0		0		0	0
8	z1	*	100	100	10		5		80	80
9	z2		500	500	25	100	25	50	400	400

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Values will be uploaded as follow:

- **Row 2** : Limits uploaded for z0 group only since “Instr” cell is blank
- **Row 3** : Limits uploaded for FIB7F (belonging to z0 group), “Max Committed Order Quantity” value will be reset
- **Row 5** : “Max Exposed Spread” can’t be set at Instrument level, row will be skipped and an error message will be displayed in the report window popup
- **Row 7** : Current “Max Exposed Short” and “Max Exposed Long” values in the PTV table will be maintained
- **Row 8** : Limits will be uploaded for all the Instruments belonging to z1 group

The same logic applies to Market Maker Protection Limits

Starting from cell A1, Excel file must be built as follow :

Row 1 column header :

- “Group” : SOLA Instrument Group id, Mandatory
- “Protection Number of Trades”
- “Protection Trade Quantity”
- “Calculation Time Interval (number of seconds)”
- “Maximum Volume”
- “Maximum Value”
- “Maximum Delta Volume”
- “Maximum Delta Value”

See the example below:

	A	B	C	D	E	F	G	H
1	Group	Protection Number of Trades	Protection Trade Quantity	Calculation Time Interval (number of seconds)	Maximum Volume	Maximum Value	Maximum Delta Volume	Maximum Delta Value
2	z0	30	10	120	500	30000	1800	50000
3	z1	20	5	120	100	10000	1000	30000

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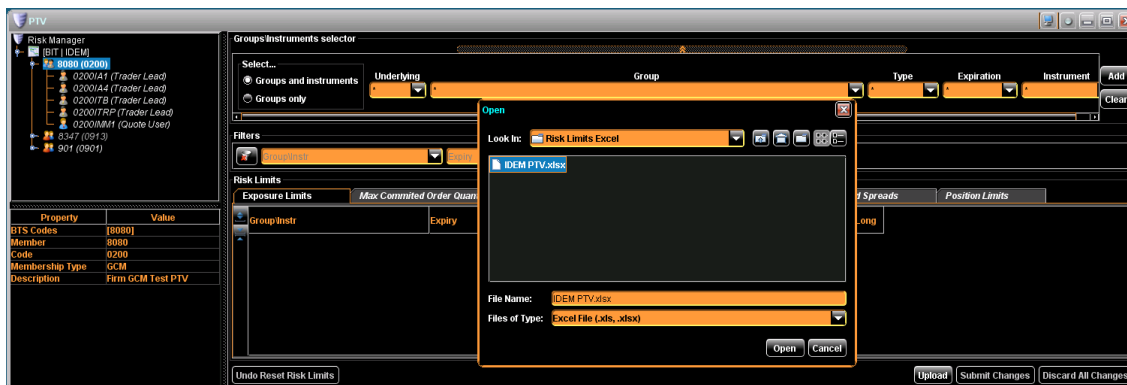
On PTV window by clicking Upload button:



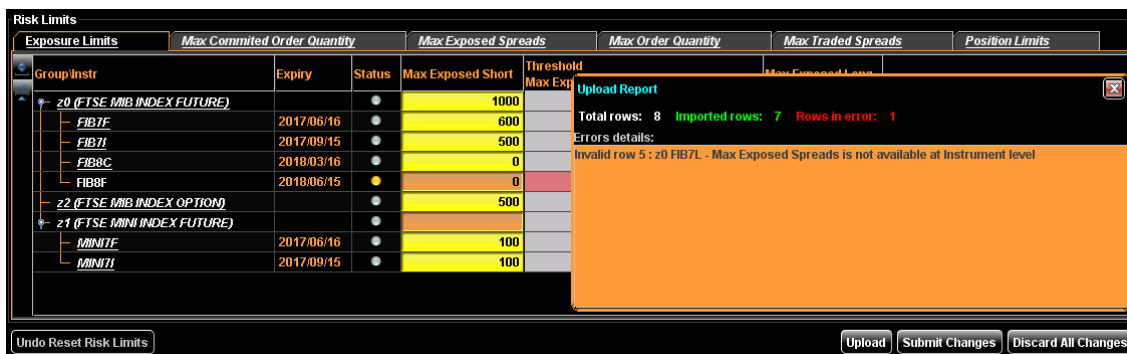
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A Open File pop up window will appear



Once the file is uploaded a confirmation dialog that summarize the operation is displayed and limits are ready to be submitted



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Limits Submission

By clicking the Submit Changes button, pending changed limits are submitted to SOLA, while a click on Discard All Changes clears the table:

Risk Limits						
Exposure Limits		Max Committed Order Quantity		Max Exposed Spreads		Position Limits
Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long	
z0 (FTSE MIB INDEX FUTURE)			1000		1000	
FIB7F	2017/06/16		600		600	
FIB7I	2017/09/15		500		500	
FIB8C	2018/03/16		0		0	
FIB8F	2018/06/15		0		0	
z2 (FTSE MIB INDEX OPTION)			500		500	
z1 (FTSE MINI INDEX FUTURE)						
MINI7F	2017/06/16		100		100	
MINI7I	2017/09/15		100		100	

Once the limits are submitted to SOLA, cells color switches back to orange and the underlining is removed.

Risk Limits						
Exposure Limits		Max Committed Order Quantity		Max Exposed Spreads		Position Limits
Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long	
z0 (FTSE MIB INDEX FUTURE)			1000		1000	
FIB7F	2017/06/16		600		600	
FIB7I	2017/09/15		500		500	
FIB8C	2018/03/16		0		0	
FIB8F	2018/06/15		0		0	
z2 (FTSE MIB INDEX OPTION)			500		500	
z1 (FTSE MINI INDEX FUTURE)						
MINI7F	2017/06/16		100		100	
MINI7I	2017/09/15		100		100	

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In the Status column a green light icon informs the user if the limit/s for the Instrument or Group is/are active on SOLA, in case of a Limit that includes both Long and Short components, if only one side is set up the icon would be yellow (eg : FIB8F).

Please also note that “0” is a limit value accepted by SOLA, in such event the correspondent 'Threshold' cell turns red.

The filter selector can be used to filter out Instruments or Groups by Limit Status:

The screenshot displays the PTV Risk Manager application. On the left, a tree view shows the hierarchy of instruments and groups, including 'BIT IDEM', 'Q200IA1 (Trader Lead)', 'Q200IA4 (Trader Lead)', 'Q200IB (Trader Lead)', 'Q200ITAP (Trader Lead)', 'Q200MM1 (Quote User)', 'Q347 (0913)', and 'Q91 (0901)'. The main area is titled 'Groups/Instruments selector' and features a 'Select...' dropdown menu with options for 'Groups and instruments' and 'Groups only'. Below this, there are filters for 'Underlying', 'Group', 'Type', and 'Expiration'. A 'Filters' section shows a dropdown menu with options for 'Limit Status' (Off, On, Partial) and a 'Limit Status' dropdown menu with options for 'Off', 'On', and 'Partial'. The 'Limit Status' dropdown is currently set to 'Partial'. Below the filters, there is a table with columns for 'Group/Instr', 'Expiry', 'Status', 'Max', 'Max Exposed Short', 'Max Exposed Long', and 'Max Exposed Long'. The table contains two rows: one for 'z0 (FTSE MID INDEX FUTURE)' with a status of 'On' and a 'Max' value of '1000', and another for 'FIB8F' with a status of 'Partial' and a 'Max' value of '0'. The 'FIB8F' row has a red background, indicating a limit value of 0. At the bottom of the interface, there are buttons for 'Undo Reset Risk Limits', 'Upload', 'Submit Changes', and 'Discard All Changes'.

Property	Value
BTS Codes	[8080]
Member	8080
Code	0200
Membership Type	GCM
Description	Firm GCM Test PTV

Group/Instr	Expiry	Status	Max	Max Exposed Short	Max Exposed Long	Max Exposed Long
z0 (FTSE MID INDEX FUTURE)		On	1000			1000
FIB8F	2018-06-15	Partial	0			

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Discard all changes

If limits have been inserted but not yet confirmed (yellow cell), Risk Manager may discard all the changes applied to the limits by right clicking on the Group/Instrument and then select “Discard all Changes”: in this way all the risks for the selected Instrument or Group will be reverted to the previous values.

The button “Discard all Changes” on the bottom edge of the window will revert all the values just changed in the selected entity:

The screenshot shows the 'Risk Limits' application window. It has several tabs: 'Exposure Limits', 'Max Committed Order Quantity', 'Max Exposed Spreads', 'Max Order Quantity', 'Max Traded Spreads', and 'Position Limits'. The 'Exposure Limits' tab is active. The table displays the following data:

Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long
z0 (FTSE MIB INDEX FUTURE)			1200		1200
FIB7F			600		600
FIB7I			500		500
FIB8C			0		0
FIB8F			0		0
z2 (FTSE MIB INDEX OPTION)			500		500
z1 (FTSE MINI INDEX FUTURE)					
MINI7F	2017/06/16	●	100		100
MINI7I	2017/09/15	●	100		100

A context menu is open over the 'z0 (FTSE MIB INDEX FUTURE)' group, showing the following options:

- Discard All Changes
- Reset All Risk Limits for All Tabs
- Limits history
- Alerts history
- Remove Group/Instr...

At the bottom of the window, there are three buttons: 'Undo Reset Risk Limits', 'Upload', and 'Submit Changes'. A 'Discard All Changes' button is also present at the bottom right of the table area.

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Reset Risk Limits

Risk Manager may remove active limits set on all groups/instruments both at Firm and Trader Lead level.

Moreover, by right clicking on the Group or Instrument, all the limits placed on a single Instrument/Group will be removed, this includes limits in the background tabs.

The screenshot shows the 'Risk Limits' window with several tabs: Exposure Limits, Max Committed Order Quantity, Max Exposed Spreads, Max Order Quantity, Max Traded Spreads, and Position Limits. The 'Exposure Limits' tab is active, displaying a table with columns: Group/Instr, Expiry, Status, Max Exposed Short, Threshold, Max Exposed Short - Max Exposed Long, and Max Exposed Long. The table lists instruments like z0 (FTSE MIB INDEX FUTURE), FIB7F, FIB7I, FIB8C, FIB8F, z2 (FTSE MIB INDEX OPTION), z1 (FTSE MINI INDEX FUTURE), MINI7F, and MINI7I. A right-click context menu is open over the table, showing options: 'Discard All Changes', 'Reset All Risk Limits for All Tabs' (highlighted with a green box), 'Limits history', 'Alerts history', and 'Remove Group/Instr...'. At the bottom, there are buttons for 'Undo Reset Risk Limits', 'Upload', 'Submit Changes', and 'Discard All Changes'.

Group/Instr	Expiry	Status	Max Exposed Short	Threshold	Max Exposed Short - Max Exposed Long	Max Exposed Long
z0 (FTSE MIB INDEX FUTURE)		●	1000			1000
FIB7F			600			600
FIB7I			500			500
FIB8C			0			0
FIB8F			0			0
z2 (FTSE MIB INDEX OPTION)			500			500
z1 (FTSE MINI INDEX FUTURE)						
MINI7F	2017/06/16	●	100			100
MINI7I	2017/09/15	●	100			100

Reset MMP Limits

In the same way as for Firm / Trader lead 'Reset Risk Limits', Risk Manager may reset the Market Makers Protection Limits set on groups/instruments both at Firm and Trader Lead level:

The screenshot shows the 'MMP Parameters' window with a tab for 'Market Maker Protection'. It displays a table with columns: Group, Status, Protection Number of Trades, Protection Trade Quantity, Calculation Time Interval (number of seconds), Maximum Volume, and Maximum Value. The table lists instruments z0 (FTSE MIB INDEX FUTURE) and z1 (FTSE MINI INDEX FUTURE). A right-click context menu is open over the table, showing options: 'Discard All Changes', 'Reset MMP Limits' (highlighted with a green box), and 'Limits history'. At the bottom, there are buttons for 'Undo Reset MMP Limits', 'Upload', 'Submit Changes', and 'Discard All Changes'.

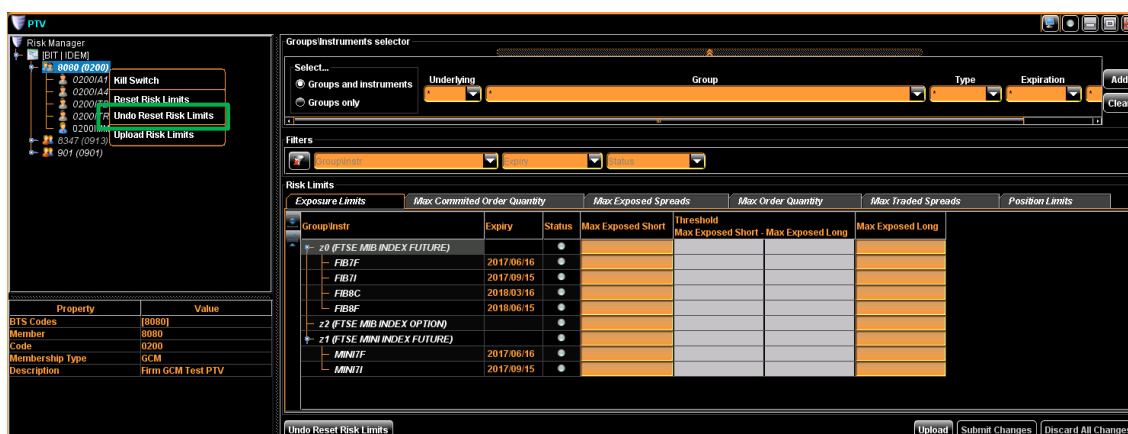
Group	Status	Protection Number of Trades	Protection Trade Quantity	Calculation Time Interval (number of seconds)	Maximum Volume	Maximum Value
z0 (FTSE MIB INDEX FUTURE)	●	30	10	120	500	3000
z1 (FTSE MINI INDEX FUTURE)		20	5	120	100	1000

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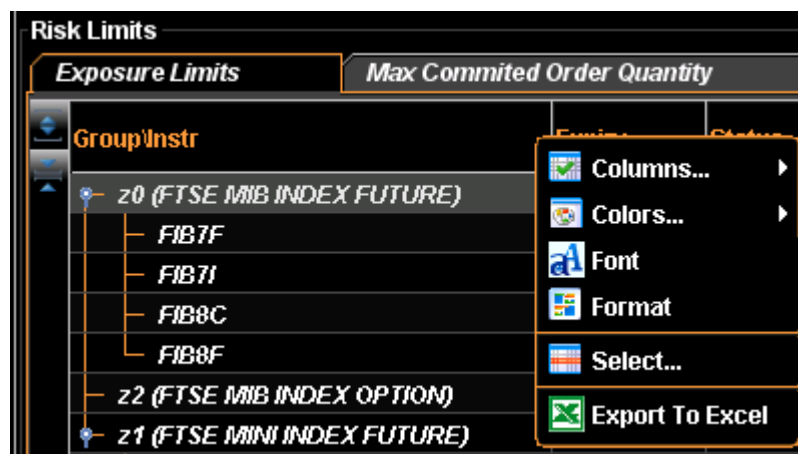
Undo Reset Risk Limits

Once the Limits Reset has been confirmed, Risk Manager may request BTS® to revert the table to the removed values, The functionality is available only on the same entity where no new limits have been submitted following the reset.



Excel Export

All the values displayed in the PTV table can be exported as Excel file by selecting the proper option in the columns header context menu



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3.7 Threshold Update

The PTV window provides a graphical view of the current quota exploitation of the Risk Limits for each limit set at Instrument/Group level (except for Max Order Quantity and Max Committed Order Quantity).

Below 50% of usage the threshold diagram is not displayed



Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long
z0 (FTSE MIB INDEX FUTURE)		●	1000		1000
FIB7F	2017/06/16	●	600		600
FIB7I	2017/09/15	●	500		500
FIB8C	2018/03/16	●	0		0
FIB8F	2018/06/15	●	0		0
z2 (FTSE MIB INDEX OPTION)		●	500		500
z1 (FTSE MINI INDEX FUTURE)		●			
MINI7F	2017/06/16	●	100		100
MINI7I	2017/09/15	●	100		100

Undo Reset Risk Limits Upload Submit Changes Discard All Changes

Above 50%, the usage is represented with a progress bar, where color and length are proportional to the current usage of the limit, shown as a percentage, and updated every 10% of increment or decrease.

If the limit value is removed, the threshold is cleared.

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In the below example, 3 orders belonging to Firm 8080 (entered by any of 02001* TraderIDs) firm are active on IDEM Market:
Size 260 on FIB7I, size 410 on FIB7F, that gives a sum of 670 for the whole group z0.

Risk Limits						
Exposure Limits		Max Committed Order Quantity		Max Exposed Spreads		Position Limits
Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long	
z0 (FTSE MIB INDEX FUTURE)		●	1000		67.00%	1000
FIB7F	2017/06/16	●	600		68.33%	600
FIB7I	2017/09/15	●	500		52.00%	500
FIB8C	2018/03/16	●	0			0
FIB8F	2018/06/15	●	0			0
z2 (FTSE MIB INDEX OPTION)		●	500	260 + 410 = 670	Long Size : 410	500
z1 (FTSE MINI INDEX FUTURE)		●			Long Size : 260	
MINI7F	2017/06/16	●	100			100
MINI7I	2017/09/15	●	100			100

Undo Reset Risk Limits Upload Submit Changes Discard All Changes

Also, by hovering the mouse pointer over the percentage bar a tooltip providing the current usage of the limits is displayed in absolute terms.

Risk Limits						
Exposure Limits		Max Committed Order Quantity		Max Exposed Spreads		Position Limits
Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long	
z0 (FTSE MIB INDEX FUTURE)		●	1000		67.00%	1000
FIB7F	2017/06/16	●	600		68.33%	600
FIB7I	2017/09/15	●	500		52.00%	500
FIB8C	2018/03/16	●	0			0
FIB8F	2018/06/15	●	0			0
z2 (FTSE MIB INDEX OPTION)		●	500			500
z1 (FTSE MINI INDEX FUTURE)		●				
MINI7F	2017/06/16	●	100			100
MINI7I	2017/09/15	●	100			100

Undo Reset Risk Limits Upload Submit Changes Discard All Changes

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In case the Limits Threshold is updated the Risk Limits, the Group/Instrument and the Managed Entity (Firm/Trader) involved are highlighted in yellow:



Please note that the higher level (both in hierarchy tree and Group/Instr list) is highlighted if the tree is collapsed and the update concerns a lower level item.

Eg: if the update is received on FIB71, if the structure is closed the Group Name is highlighted.

When the tree is expanded, only the instrument will be highlighted:

Risk Limits						
Exposure Limits						
Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long	Position Limits
z0 (FTSE MIB INDEX FUTURE)						
FIB7F	2017/06/16		600	76.00%	1000	
FIB7I	2017/09/15		500	68.33%	600	
FIB8C	2018/03/16		0	52.00%	500	
FIB8F	2018/06/15		0		0	
z2 (FTSE MIB INDEX OPTION)			500		500	
z1 (FTSE MINI INDEX FUTURE)						
MINI7F	2017/06/16		100		100	
MINI7I	2017/09/15		100		100	

By clicking the highlighted Instr/Group the alert will be acknowledged

3.8 Limits and Alerts History

Risk manager has the possibility to consult the history of amendments applied to the Limits Values (providing a 5-days depth) and the history of all the Alerts received for each Instrument/Group (providing just a daily history).

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Risk Limits						
Exposure Limits		Max Committed Order Quantity	Max Exposed Spreads	Max Order Quantity	Max Traded Spreads	Position Limits
Group/Instr	Expiry	Status	Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long	Max Exposed Long	
z0 (FTSE MIB INDEX FUTURE)			1000	67.00%	1000	
FIB7F		Discard All Changes	600	68.33%	600	
FIB7I		Reset All Risk Limits for All Tabs	500	52.00%	500	
FIB8C		Limits history	0		0	
FIB8F		Alerts history	0		0	
z2 (FTSE MIB INDEX OPTION)			500		500	
z1 (FTSE MINI INDEX FUTURE)		Remove Group/Instr...				
MINI7F	2017/06/16		100		100	
MINI7I	2017/09/15		100		100	

Undo Reset Risk Limits Upload Submit Changes Discard All Changes

Once clicked 'Limits History', the Limits History window pops up.
Given the example below, events are described as follows:

- 1- Limit values are empty
- 2- Values of 1000 are added both on Long and Short sides
- 3- Max Exposed Short is modified to 1200
- 4- Max Exposed Short is reset

Limits history: 8080 (0200), z0 (FTSE MIB INDEX FUTURE)						
Status	Max Exposed Short	Max Exposed Long	UserName	Member	Last Market Event	UpdTimestamp
●	4	1000	IDEM_8080	8080	Request accepted	2017-04-20 15:13:21.533
●	3	1200	IDEM_8080	8080	Request accepted	2017-04-20 15:13:15.563
●	2	1000	IDEM_8080	8080	Request accepted	2017-04-20 15:13:07.767
●	1		IDEM_8080	8080	Request accepted	2017-04-20 15:13:01.290

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Once clicked 'Alerts History', the Alerts History window pops up, providing all the usage updates of the limit for the selected Group/Instrument for the current trading day:

Alerts history: 8080 (0200), z0(FTSE MIB INDEX FUTURE), FIB7I 2017/09/15				
Max Exposed Short	Threshold Max Exposed Short - Max Exposed Long		Max Exposed Long	UpdTimestamp
500		100.00%	500	2017-04-20 15:17:05.000
500		72.00%	500	2017-04-20 15:16:56.000
500		92.00%	500	2017-04-20 15:16:42.000
500		52.00%	500	2017-04-20 14:54:21.000
500			500	2017-04-20 14:50:46.000

In the same way as explained for Risk Limits values, both the Alerts history and Limits history can be exported as Excel file

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