

The following is for Informational Purposes Only and is not in sync with our environment. You do not need to do any of the Exercises but reading it will deepen your understanding.

## Exercise1: PL vector extraction from FO System with aggregation in Fusion RISK

The Bank has a core system in place and just want to configure extraction from existing core system to FR for aggregation and Display.

The purpose is to configure a Var run for eligible risk factor. By the same way PL extraction and possibly Stress-testing can be configured.

The risk factors are to be assigned by liquidity horizon and asset classes.

Risk Class	Risk Factor Category	10	20	40	60	120
Interest Rate	Interest rate –domestic currency of a bank: EUR, USD, GBP, AUD, JPY, SEK, and CAD	x				
	Interest rate other currencies		x			
	Interest rate ATM volatility				x	
	Interest rate (other than yields and ATM volatility)				x	
Credit Risk	Credit spread –sovereign (IG)		x			
	Credit spread –sovereign (HY)			x		
	Credit spread –corporate(IG)			x		
	Credit spread –corporate(HY)				x	
	Credit spread –structured (cash and CDS)					x
	Credit (other)					x
FX	FX rate-liquid currency pairs	x				
	FX rate (other currency pairs)		x			
	FX volatility			x		
	FX (other)			x		
Equity	Equity price (large cap)	x				
	Equity price (small cap)		x			
	Equity price (large cap) volatility		x			
	Equity price (small cap) volatility				x	
	Equity (other)				x	
Commodity	Energy price		x			
	Precious price		x			
	Other commodities price				x	
	Energy price volatility				x	
	Precious metal price volatility				x	
	Other commodities price volatility					x
	Commodity (other)					x

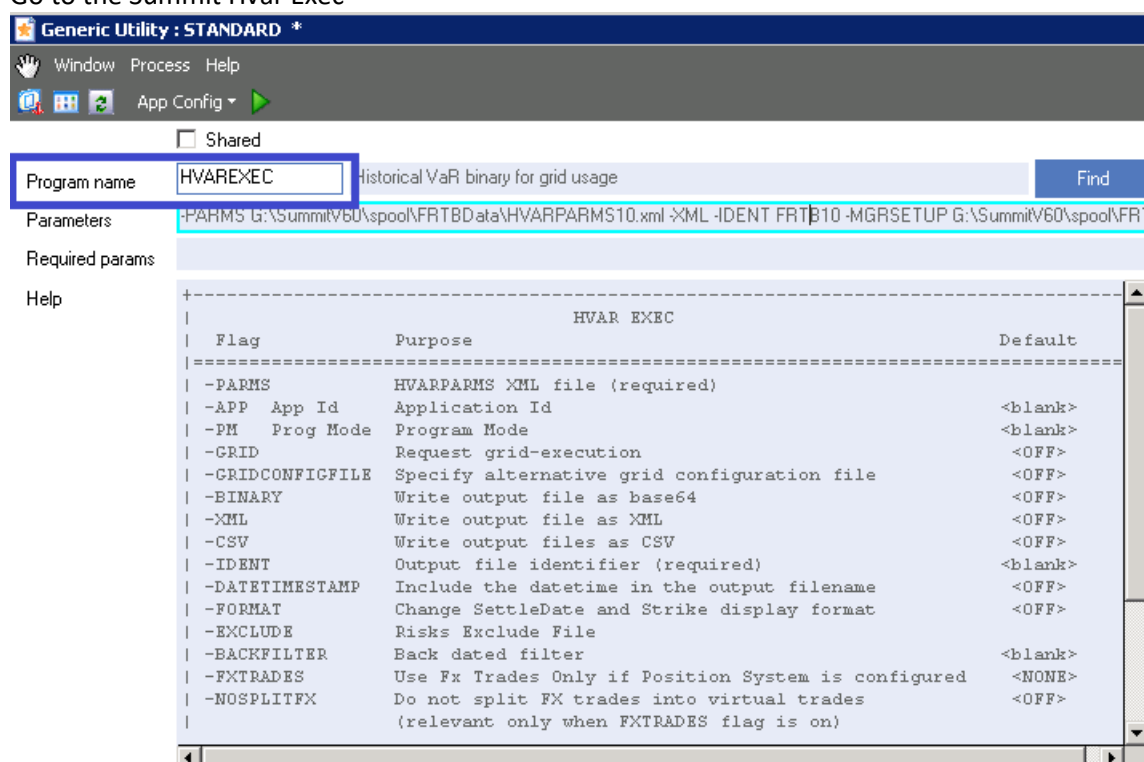
### Connect to the environment

#### 1. Login information:

Not provided as it's a sample onl

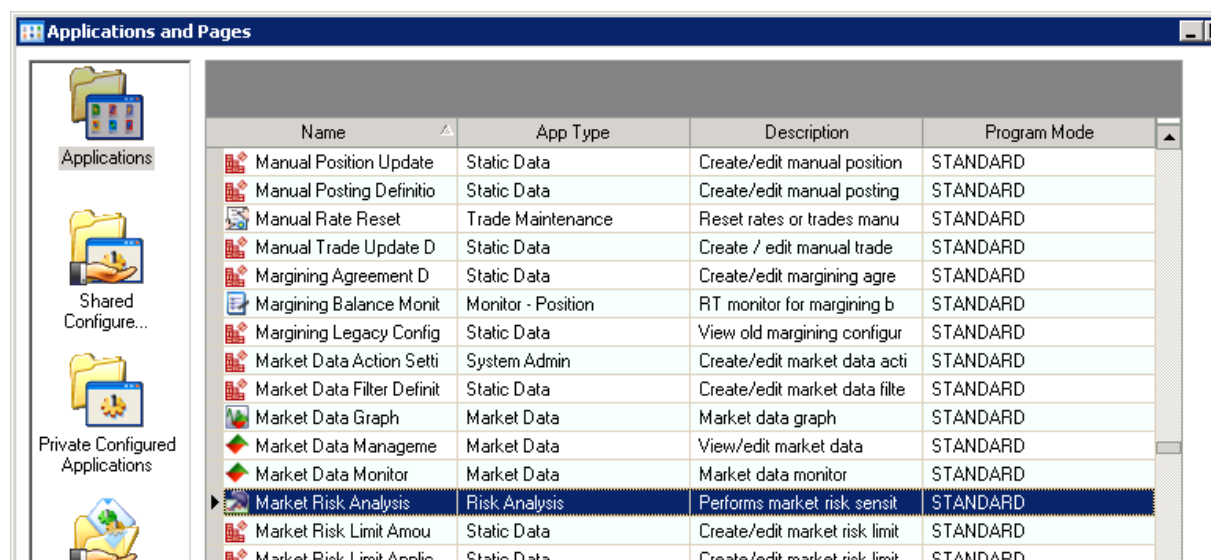
## Exercise 1: run PL vector extraction from summit on existing configuration for existing set of trades

Go to the Summit Hvar Exec



**Check the Var configuration for all liquidity horizon:**

Go into market risk analysis



Select Filter, Curve ID and Hedge config ID, look at the risk factor assigned for this 40 day horizon against regulatory classification.

Market Risk Analysis : STANDARD \*

Window Market Risk Help

App Config Show Selected Risk Export All Results

Parameters

Date 31/08/2016 Filter FRTBIM Load

Curve ID RISK PG ID

Parameters

Global Hedge Parameters

Risks

Hedge params ID Tree config ID

Hedge config ID FRTBIM40

Ccy/Index	Group Num	Shift Type	Delta Shift	Shift Format	HedgeGroup	ShiftGroup
IR /EUR/EONIA	10	PER	1.0	BP		
IR /EUR/EUR3M	110			BP		
IR /EUR/EUR1B	110			BP		
IR /EUR/TREAS	110			BP		
IR /EUR/USD	10	PER	1.0	BP		
IR /GBP/GBP3M	110			BP		
IR /GBP/LIBOR	110			BP		
IR /GBP/SONIA	110			BP		
IR /SEK/SEK3M	110			BP		
IR /USD/FED	40	PER	1.0	BP		
IR /USD/FEDF	110			BP		
IR /USD/LIB3M	110			BP		
IR /USD/LIBOR	110			BP		
IR /USD/OIS	110			BP		
IR /USD/TREAS	110			BP		
FVOL /EUR/EUR	110	CV	100.0			
FVOL /GBP/LIBO	110	CV	100.0			
FVOL /USD/LIBO	110	CV	100.0			
FXVOL/EUR/USD	210	CV	100.0			
FX /EUR/USD	210			BP		
SWVOL/EUR/EU	110	CV	100.0			
DIV /LSE:MISYS	10			PERCENT		
EQPRC/DEUTS	310			TICK		
EQPRC/LSE:MIS	310			TICK		
EQVOL/DEUTS	310	CV	100.0			
EQVOL/LSE:MIS	310	CV	100.0			
FXVSM/EUR/US	210	CV	100.0			

### Run different Var reports for the different liquidity horizon

Go into Generic utility

Applications and Pages

Name	App Type	Description	Program Mode
Generate TBA Securities	Report Launcher	Configure/run report: Gener	STANDARD
Generic Account Definit	Static Data	Create/edit generic account	STANDARD
Generic Asset Definition	Static Data	Create/edit generic asset d	STANDARD
Generic Entity Audit Rep	Report Launcher	Configure/run report: Gener	STANDARD
Generic Model Factor D	Static Data	Create/edit generic model f	STANDARD
Generic Model Factor M	Market Data	View/edit generic model fac	STANDARD
Generic Report	Report Launcher	Generic interface for runnin	STANDARD
Generic Utility	Utility	Generic interface for runnin	STANDARD
Geographic Location Def	Static Data	Create/edit geographic loca	
Global FX Position Laun	Monitor - Position	Launches Misys Board	
Global P/L Report	Report Launcher	Configure/run report: Goba	
Global Price Analysis	Risk Analysis	Performs global price analy	
Hedge Accounting Repo	Report Launcher	Configure/run report: Hedg	
Hedge Filter Definition	Static Data	Create/edit hedge filter defi	
Hedge Instrument Group	Static Data	Create/edit hedge instrume	
Hedge Relationship - Re	Static Data	Create/edit mappings for re	
Hedge Relationship Defi	Static Data	Create/edit hedge relations	
Hedge Strategy Definitio	Static Data	Create/edit hedge strategy	

Generic Utility : STANDARD

Window Process Help

App Config

Shared

Program name

Parameters

Required params

Help

Run different historical var for various liquidity horizon:

**File locations will change for our environment.**

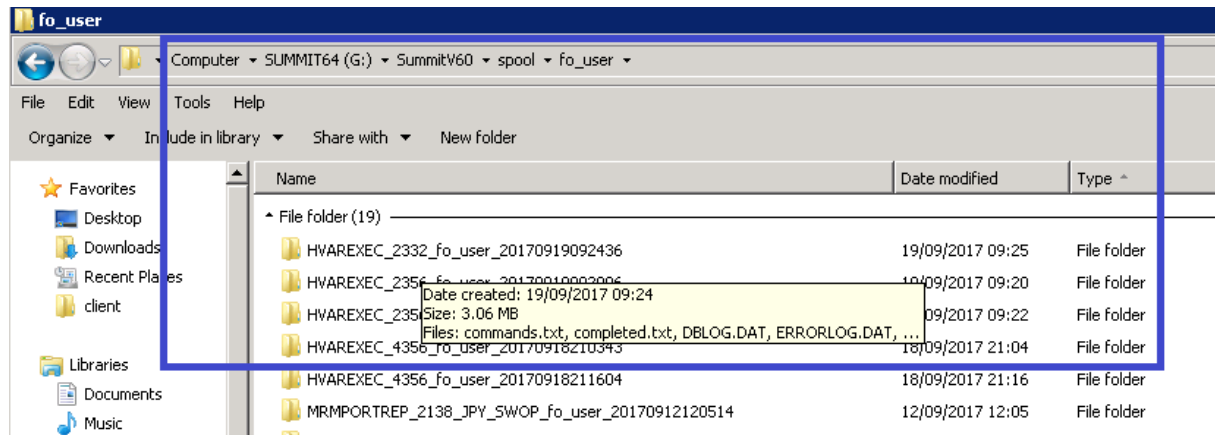
HVAREXEC -PARMS G:\SummitV60\spool\FRTBData\HVARPARMS10.xml -XML -IDENT FRTB10 -  
MGRSETUP G:\SummitV60\spool\FRTBData\mgrsetup\_attributes.xml

**HVAREXEC** -PARMS G:\SummitV60\spool\FRTBData\HVARPARMS20.xml -XML -IDENT FRTB20 -  
MGRSETUP G:\SummitV60\spool\FRTBData\mgrsetup\_attributes.xml

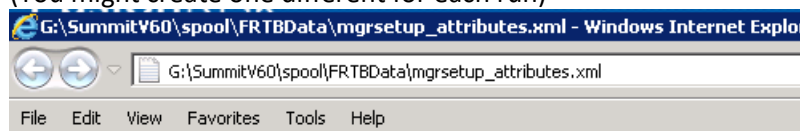
**HVAREXEC** -PARMS G:\SummitV60\spool\FRTBData\HVARPARMS40.xml -XML -IDENT FRTB40 -  
MGRSETUP G:\SummitV60\spool\FRTBData\mgrsetup\_attributes.xml

**HVAREXEC** -PARMS G:\SummitV60\spool\FRTBData\HVARPARMS60.xml -XML -IDENT FRTB60 -  
MGRSETUP G:\SummitV60\spool\FRTBData\mgrsetup\_attributes.xml

Result is stored under: G:\SummitV60\spool\fo\_user



The name of the PL Attribute is in the file G:\SummitV60\spool\FRTBData\mgrsetup\_attributes.xml  
(You might create one different for each run)



```
<?xml version="1.0"?>
- <MGRSETUP>
  <TYPE>HS</TYPE>
  <SHORTNAME>FRTB1</SHORTNAME>
  <BUFFERSIZE>1100</BUFFERSIZE>
  <MODE>INSERT</MODE>
</MGRSETUP>
```

As we are not using Fusion Risk we just need to generate the files with the P&L vectors so our IMA server can generate the IMA charges.

## Appendix



hvar\_RGRP\_STT\_VAR  
\_10D\_STT\_MGR.xml



hvar\_RGRP\_STT\_VAR  
\_10D\_STT.xml



hvar\_RGRP\_STT\_VAR  
\_20D\_STT.xml



hvar\_RGRP\_STT\_VAR  
\_20D\_STT\_MGR.xml



HVARPARMS10\_STT.  
xml



runES20\_STT.cmd



runES10\_STT.cmd



mgrsetup\_attribute  
s\_20D\_STT.xml



mgrsetup\_attribute  
s\_10D\_STT.xml



HVARPARMS20\_STT.  
xml



replacePvRiskClassL  
.py



parallelExecution.zi  
p