

LiquidMetrix

Best Execution, Quantified



LiquidMetrix ReportGenerator User Manual

Version 1.0



LiquidMetrix ReportGenerator User Manual

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Overview

This manual covers the LiquidMetrix ReportGenerator. For the LiquidMetrix WorkStation Pre Trade Statistics and the Post Trade (Best Execution/TCA) Service please refer to the separate LiquidMetrix WorkStation Manuals.

This document is divided into 3 main sections.

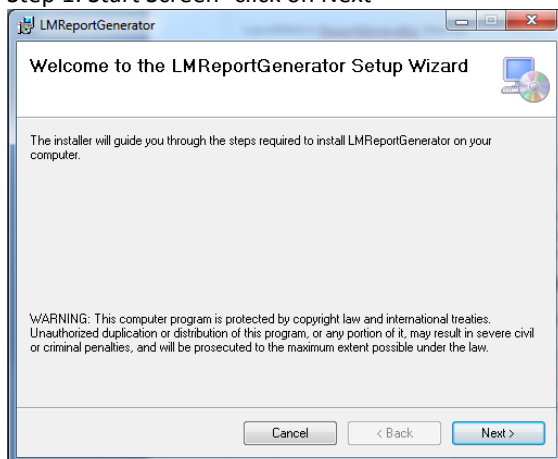
- **Section 1** contains a QuickStart guide showing you how to setup and access the ReportGenerator Configuration screens for the first time.
- **Section 2** gives you information about all the configuration screens and how to configure the report scheduler and view reports.

Section 1 - QuickStart Guide –Setting up and Accessing the ReportGenerator For the First Time

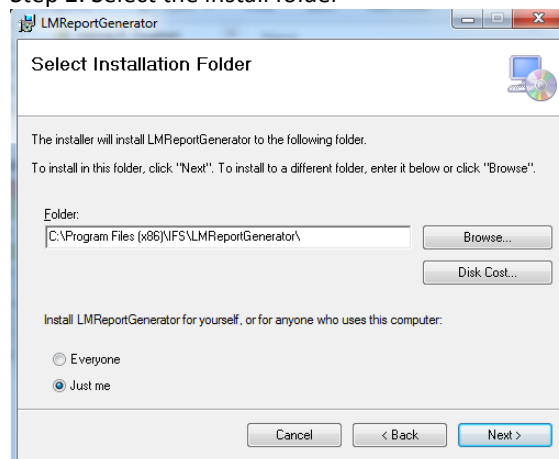
A. Installing the LiquidMetrix ReportGenerator

Double click on the LMReportGeneratorSetup.exe file which should be part of the ReportGenerator setup package. Follow the setup instructions to install the LiquidMetrix ReportGenerator onto your PC or Server.

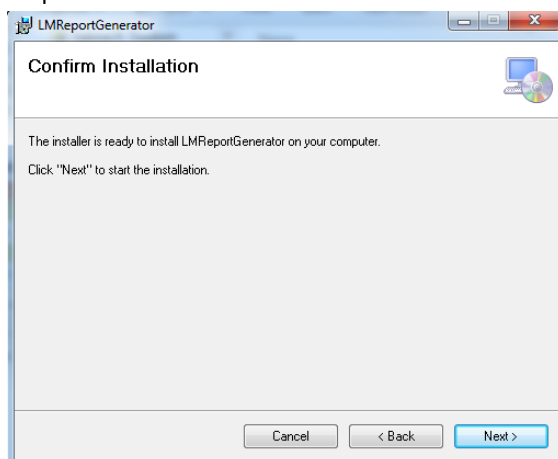
Step 1: Start Screen -click on Next



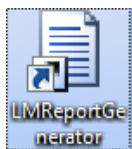
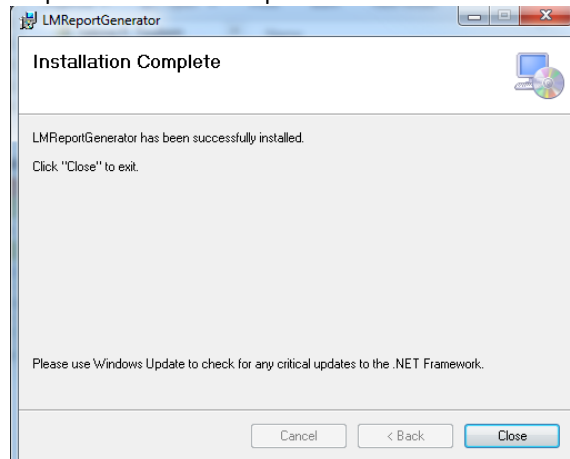
Step 2: Select the install folder



Step3: Confirm installation



Step 4: Installation complete



After the installation has been successfully completed, you will see a shortcut on your desktop that points to the LMReportGenerator application.

Please double click on the icon to start the ReportGenerator and a small tray icon will appear on your bottom toolbar.

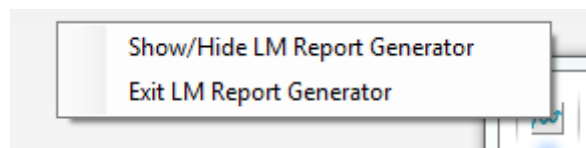


Note, that the LiquidMetrix ReportGenerator will run continuously in the background on your machine and does not need to be started or stopped. The little tray icon indicates that the ReportGenerator is running in the background.

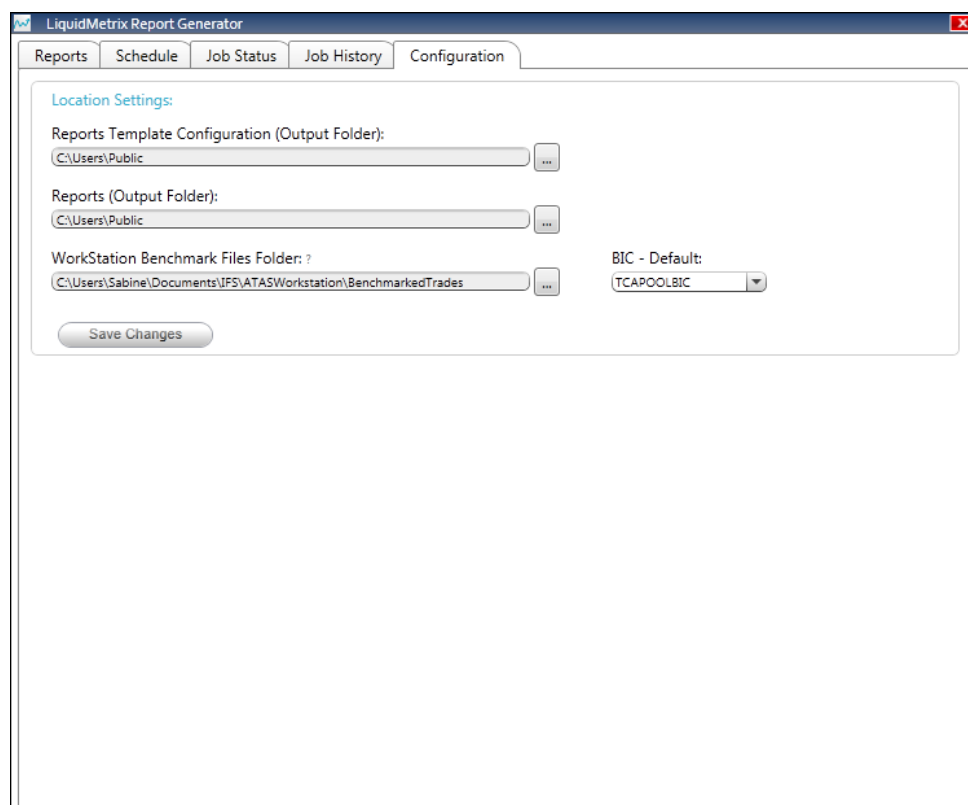
If the tray icon is not shown then please double click the LMReportGenerator icon on your desktop to start it again.

B. Accessing the LiquidMetrix ReportGenerator screens for the First Time

To open the configuration screens of the ReportGenerator right click on the tray icon and select 'Show/Hide LM Report Generator'.



The LiquidMetrix ReportGenerator main configuration screen will open.



The first time the ReportGenerator configuration screen is opened you will need to configure the default directories that all subsequent reports will use. There are 3 directories that need to be supplied:

- The directory where the report template configuration file should be stored. This is an internal file used to save all your configuration options.
- The directory where all the reports generated by the LiquidMetrix ReportGenerator will be saved.
- The directory where the LiquidMetrix WorkStation benchmark files are stored. Unless this has been changed via the WorkStation Preference screen, the default location is <My Documents>\IFS\ATASWorkStation\BenchmarkedTrades
- Once the above directory is selected the 'BIC-Default' dropdown will display the BIC(s) for the user.

Please Note: The above directories should be accessible by the user, i.e. the user should have permission to read and write to these directories. Please contact your IT administrator for advice.

LiquidMetrix Report Generator

Reports | Schedule | Job Status | Job History | **Configuration**

Choose report template:
 (ABCReport) [New...] [Delete] [Change Name] [Save Changes]

Design | Data Filters

Top Section Settings:
 Logo: C:\Logo.JPG
 Sub-Title: Execution Quality Report
 Notes: This is a daily performance outlier report using Trade Time as a benchmark.

Report Settings:
 Format: ☐ XPS ☒ PDF ☐ CSV
 Benchmark: Trade Time using Effective Price
 CCY: GBX

Main Sections To Include:
☒ Trading Summary (Number of Trades)
☒ Performance Summary (Show BPS and Values, Show Spread Capture (-3,+3))
☒ Worst Performing Trades (20) Order by: (Basis Points (BPS) Shortfall)
☒ Glossary
☐ Use Trade Time benchmark for performance, HiLo Band for outliers.

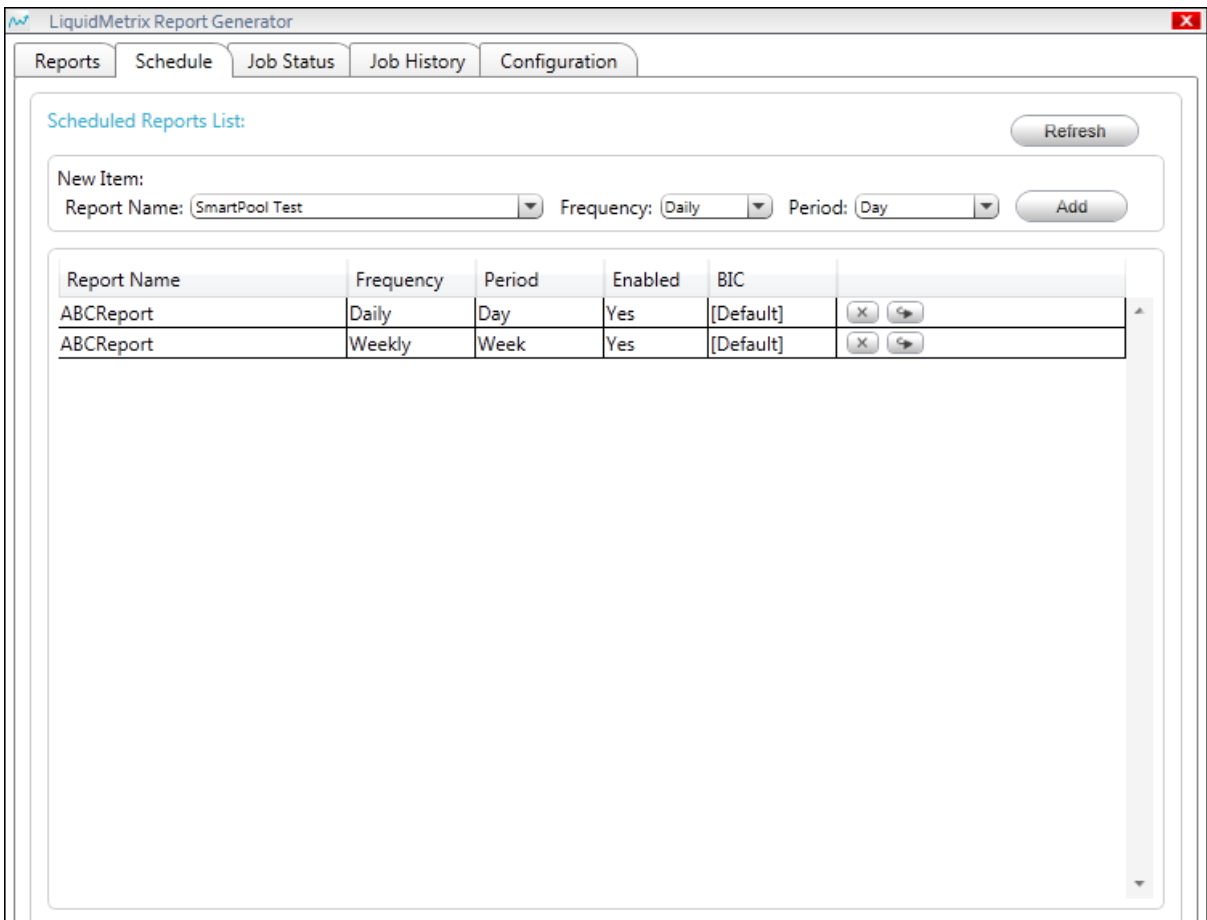
Summary Breakdown Tables To Include:

	Rows
☒ Venue	15
☐ Country	15
☒ Instrument	15
☐ Counterparty	15
☐ Trade Size	15
☐ PM ID	15
☐ Month	15
☒ Trading Day	15
☒ Hour Of Day	15
☐ Broker	15
☐ Trader	15
☒ Trading Network	15
☐ User Defined	15
☐ Settlement	15

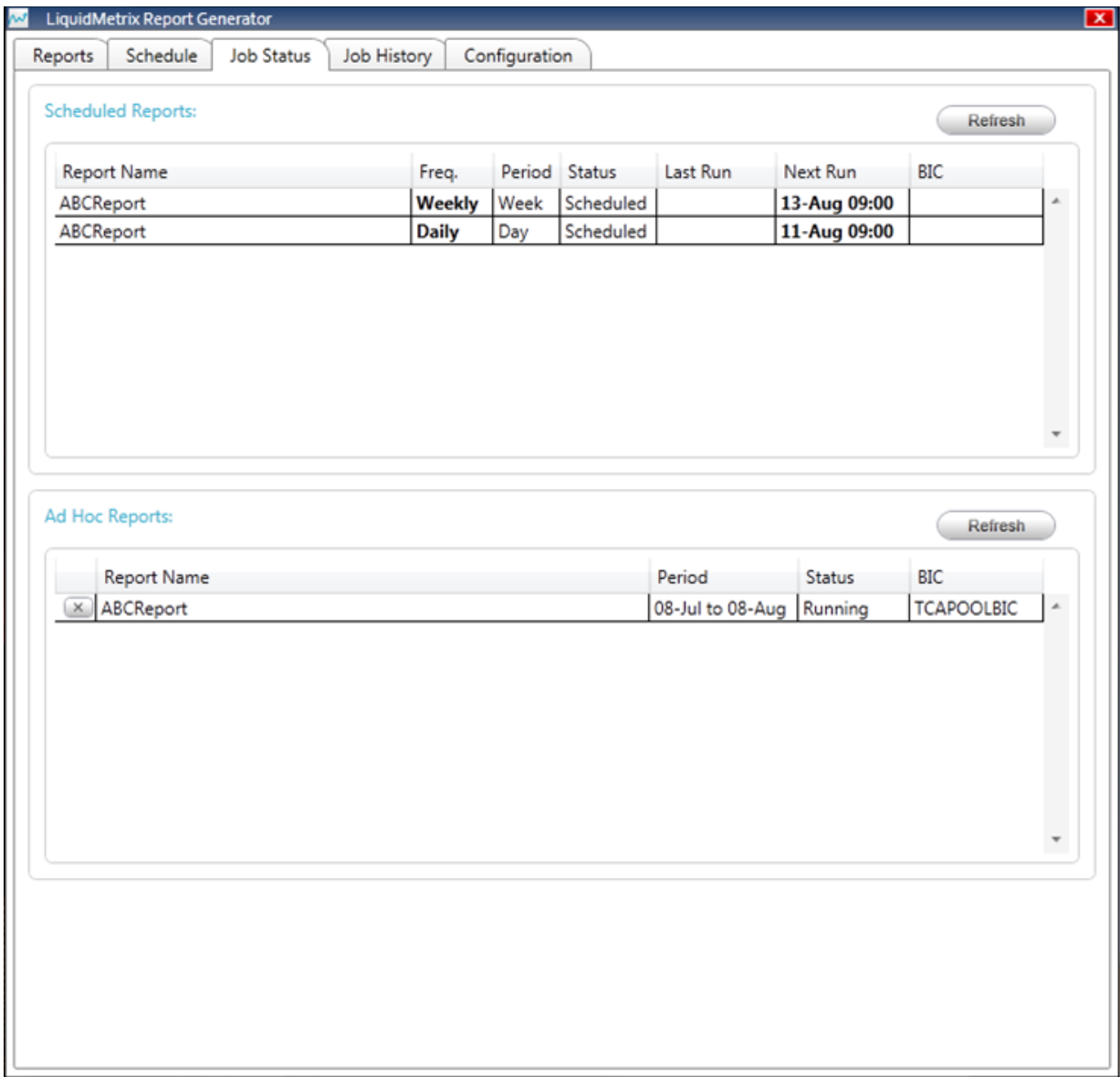
Performance Column: (% Success)
 Show Percentage: Based on Trade Count
 Show Improvement: in BPS and Values

Run Ad Hoc: To run the above report as a one off instance please use the options below. This report will then be queued to run with priority.
 Period: Last Month BIC: TCAPOOLBIC [Run Ad Hoc]

The above screen is very similar to the Execution Quality Report screen in the LiquidMetrix WorkStation. It is here that the template for the reports is set up. It will be covered in detail in the next section.



Clicking on the 'Schedule' tab will bring up the above screen where all the scheduled reports are displayed. The functionality will be described in Section 2B.



The Job Status window above displays the status of scheduled reports and any ad hoc reports which are still running. To be explained in detail in Section 2C.

LiquidMetrix ReportGenerator Job History

Period:

Report Name	Ran At	Status	Period Covered	Type	BIC
ABCReport	16-Aug 09:00 (2 secs)	Success	15-Aug - 15-Aug	S	SBOSGB2XSEC
ABCReport	15-Aug 09:00 (6 secs)	Success	12-Aug - 12-Aug	S	SBOSGB2XSEC
ABCReport	13-Aug 09:00 (6 secs)	Success	08-Aug - 12-Aug	S	SBOSGB2XSEC
ABCReport	12-Aug 09:00 (3 secs)	Success	11-Aug - 11-Aug	S	SBOSGB2XSEC
ABCReport	10-Aug 16:28 (7 secs)	Success	27-Jul - 27-Jul	A	SBOSGB2XSEC
ABCReport	10-Aug 11:26 (2 secs)	Success	08-Jul - 08-Aug	A	TCAPOOLBIC
ABCReport	10-Aug 11:26 (1 secs)	Success	08-Jul - 08-Aug	A	TCAPOOLBIC
ABCReport	10-Aug 11:22 (3 secs)	Success	08-Aug - 08-Aug	A	SBOSGB2XSEC
ABCReport	10-Aug 11:22 (4 secs)	Success	08-Aug - 08-Aug	A	SBOSGB2XSEC
ABCReport	10-Aug 11:21 (5 secs)	Success	08-Aug - 08-Aug	A	SBOSGB2XSEC

This page shows you all the jobs that were scheduled and have run (the most recent 500 jobs are listed). Scheduled jobs are listed with Type 'S', ad-hoc generated files are shown under 'A'. Click on the icon in front of the Report Name to open the file.

The Job History window shows the history of all the reports generated - scheduled and ad hoc. Further details in section 2D.

Section 2 - How to configure and schedule reports

A. Configuring a report template.

The Reports screen consists of three sections:

1. Setting up a template

Here you can create, delete and rename a template. The dropdown on the left allows you to choose a pre-defined template. In the below example a template ABCReport has been created.

Choose report template:

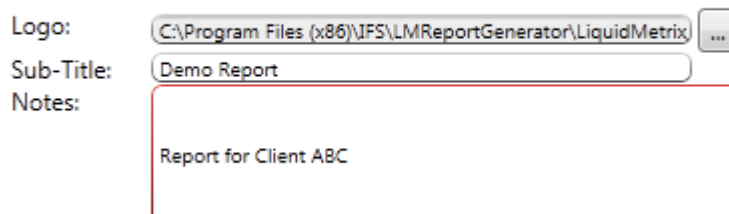


2. Data Setup

The middle section allows you to design the template with the information you want to appear on the report. There are two tabs in this section - Design and Data Filters. The Design tab controls the tables that appear on the report and the contents. The Data Filter tab gives you additional control to exclude data from the report.

Design

Top Section Settings:



Here the logo, sub-title and notes can be specified; these will appear on the top of the report. The logo size should be 150 x 40 pixels.

Report Settings:



- The report can be generated in any of three formats: XPS, PDF or CSV.
- The second row specifies the benchmark type and whether to use Effective, Touch or Mid price for benchmarking the trades.
- The currency dictates the currency that all the trades will be converted to for display. So for the above example, all trade values will be displayed in GBX equivalent.

Main Sections To Include:

☒ Trading Summary	Number of Trades
☒ Performance Summary	Show BPS and Values
	Show Spread Capture (-3,+3)
☐ Worst Performing Trades	20 Order by: Basis Points (BPS) Shortfall
☐ Glossary	

These are the main sections that appear just below the header.

- Trading Summary and Performance Summary will be displayed by default. Different formats for these summaries can be selected using the dropdowns on the right.
- It is possible to include Worst Performing Trades by checking the box and specifying the desired number of trades in the text box. These trades can be ordered by various parameters which can be selected from the Order by dropdown.
- There is also an option to print the Glossary which will appear at the end of the report.

Summary Breakdown Tables To Include:

	Rows
☒ Venue	15
☐ Country	15
☐ Instrument	15
☒ Counterparty	20
☐ Trade Size	15
☐ PM ID	15
☐ Month	15
☒ Trading Day	30
☐ Hour Of Day	15
☐ Broker	15
☐ Trader	15
☐ Trading Network	15
☐ User Defined	15
☐ Settlement	15

Performance Column: % Success

Show Percentage: Based on Trade Count

Show Improvement: in BPS and Values

The above section lists the tables that are available to be displayed on the report.

- Checking and un-checking the box enables the particular tables in the report. In the above example three tables: Venue, Counterparty and Trading Day will be printed with maximum 15, 20 and 30 rows respectively.
- The Performance Column shows the performance per parameter (venue, country, counterpart, etc) and can be displayed as %Success, %Worse or %At/Better.
- The above performance percentage can be shown based on total trade count or the total trade value.
- The Improvement column can be shown in BPS only or BPS and values.

☐ Use Trade Time benchmark for performance, HiLo Band for outliers.

The above option allows different benchmarks to be used for performance figures and outliers. Trade Time benchmark for performance ensures that performance figures aren't inflated, where as the Hi-Lo band benchmark for Outliers ensures that any discrepancy in timestamps are taken into account.

Data Filters

General Data Filters:

☒ Apply Trading Day Cutoff

Start: : : End: : :

☒ Use matched event time override

☒ Remove same exchange outliers (Aggressive)

☒ Remove same exchange outliers (Passive)

These are the general filters which are available on the WorkStation preference screen.

- Trading Day CutOff allows for auction periods to be excluded. In the above example trades that happen in the first two minutes of the day and the last ten minutes will be excluded.
- The three options below are there to ensure that no outliers on the same venue are generated.

Benchmark Venue Filters:

If you wish to specify the execution venues used or not used in the benchmarks please provide a comma separated list in the box below.

Country / Venue Selector:

Venue Benchmarks Filter:

The venue filters allow for particular venues to be excluded from the report if desired.

- The Country Venue selector brings up the following screen where venues and countries can be enabled or disabled. In the following example all Primaries and MTFs have been selected.
- The Venue Benchmarks Filter allows for an entire venue to be removed from benchmarks. So in the above example no benchmarks against CHI-X or Turquoise will be displayed.

Please Note: '!' denotes exclude

LiquidMetrix Report Generator Preference Country Venue

View or change the venues used to benchmark your trades on a per COUNTRY basis.

	GB	FR	DE	NL	IT	SE	NODK	ES	FI	CH	IE	AT	PT	BE	GR	AU	US	BMCY	EE	GG	IM	JE	KY	LU	VG
BATE	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
BURG	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
CHIX	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
EQTB	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
QMTF	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
TOM	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
TRQX	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XHFT	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XAMS	☐	☒	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XBRU	☐	☒	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XCSE	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XETR	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XLON	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XMIL	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XHEL	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XMAD	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XPAR	☐	☒	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XSTO	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XSWX	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XVTX	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XWBO	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XOSL	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XLIS	☐	☒	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XMTA	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XATH	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
XDUB	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☒	☒	☒	☒	☒	☒	☒	☒	☒	

Quick Set to:

Primary Only

Primary + MTFs

All

Cancel

Apply Changes

Trade Filters:

Venues:	IXPOS,IXCRS
ISINs:	GB00B16GWD56
Countries:	ISE,IFI
PMIDs:	123AB
TraderIDs:	456DF
Trading Networks:	NET1
User Defined:	
Counterparties:	CP1
Currencies:	GBX,EUR

The above Trade Filters provide extra granularity for including or excluding trades. A value by itself means inclusion and a value prefixed with '!' means exclusion. Multiple venues should be separated by commas. So in the above example all trades which pass the following criteria will be included:

All trades for Vodafone(ISIN: GB00B16GWD56), not executed on venues POSIT(XPOS) and Cross(XCRS), not executed on venues Sweden(SE) and Finland(FI), has Portfolio Manager ID 123AB, has Trader ID 456DF, has Trading Network NET1, traded against Counterparty CP1, with Currencies GBX or EUR.

Please Note: After all the above changes have been made it is necessary to click the 'Save Changes' button on the top right to save this template.

Save Changes

3. Running Ad Hoc reports

Once a template has been created an ad hoc report can be run at any time from the bottom section of the Reports tab, using the selected template.

Run Ad Hoc: To run the above report as a one off instance please use the options below. This report will then be queued to run with priority.

Period: Last Month



BIC: TCAPOOLBIC



Run Ad Hoc

In the above example, all data for Last Month (based on the most recent date of the data provided) for the user TCAPOOLBIC will be reported when the 'Run Ad Hoc' button is clicked.

B. Scheduling pre-configured reports.

Once a template has been created it can be scheduled to run Daily, Weekly or Monthly for a pre-defined period. The reports will be generated in the format specified on the Reports tab. These will be stored in the location specified on the Configuration tab (Reports Output Folder). The file name will include the name of the template, schedule, period for which it was run and the date on which it was run. E.g.

ABCReportDailyDay_20110812

1. Setting up a new scheduled report

New Item:

Report Name: Frequency: Period:

A new scheduled report can be set up by selecting options from the above drop downs and clicking on the Add button.

The scheduled reports will appear in the scheduled reports list.

Report Name	Frequency	Period	Enabled	BIC	
ABCReport	Daily	Day	Yes	[Default]	X ↶
Test Report	Weekly	Week	Yes	[Default]	X ↶
ABCReport	Monthly	Quarter	Yes	[Default]	X ↶

The first report uses the *ABCReport* template, runs daily, covering the data for the day before.

The second report uses the *Test Report* template, runs once at the end of the week, covering the data for that week.

The third report again uses the *ABCReport* template, runs on the first of every month, covering the data for the last quarter.

Different combinations of frequency and period can be selected from the dropdown lists.

2. Editing a scheduled report

A scheduled report can be deleted using the button on the right. A scheduled report can be re-run using the button next to the delete button.

Any field in the report can be edited by double-clicking on the field which will display a dropdown of available options.

Report Name	Frequency	Period	Enabled	BIC	
ABCReport	Daily	Day	Yes	[Default]	X ↻
Test Report	Daily	Week	Yes	[Default]	X ↻
ABCReport	Weekly	Quarter	Yes	[Default]	X ↻
	Monthly				

A scheduled report can be disabled by double-clicking on the Enabled field and selecting 'No'.

C. Checking the status of the jobs

The status of all the scheduled jobs can be seen on the 'Job Status' tab.

As per the example used above, the status of the reports are displayed as follows:

Scheduled Reports:

Refresh

Report Name	Freq.	Period	Status	Last Run	Next Run	BIC
Test Report	Weekly	Week	Scheduled	13-Aug 09:00	20-Aug 09:00	
ABCReport	Monthly	Quarter	Scheduled		01-Sep 13:00	
ABCReport	Daily	Day	Scheduled	17-Aug 09:00	18-Aug 09:00	

1. The Weekly *Test Report* was last run on August, 13 and will next run a week later on August, 20.
2. The Monthly *ABCReport* has never been run (No LastRun date) and will run for the first time on 1st September.
3. The Daily *ABCReport* was last run on August, 17 at 9am and will next run a day later on August, 20 at 9am.

Please Note: A blank value under BIC signifies the default BIC that was selected in the Configuration tab.

The lower section of the page also displays any Ad Hoc reports that were set to run from the Reports tab and are currently running.

D. Viewing reports history

Any job that has been run, scheduled or ad hoc, is displayed on the Job History tab.

The period for which the report history needs to be viewed can be selected from the following dropdown.

Period: 17-Jul-11 - 17-Aug-11 

In the above example the last month is selected. This displays the following results.

Report Name	Ran At	Status	Period Covered	Type	BIC
 ABCReport	17-Aug 09:00 (3 secs)	Success	16-Aug - 16-Aug	S	SBOSGB2XSEC
 ABCReport	16-Aug 09:00 (2 secs)	Success	15-Aug - 15-Aug	S	SBOSGB2XSEC
 ABCReport	15-Aug 09:00 (6 secs)	Success	12-Aug - 12-Aug	S	SBOSGB2XSEC
 ABCReport	13-Aug 09:00 (6 secs)	Success	08-Aug - 12-Aug	S	SBOSGB2XSEC
 ABCReport	12-Aug 09:00 (3 secs)	Success	11-Aug - 11-Aug	S	SBOSGB2XSEC
 ABCReport	10-Aug 16:28 (7 secs)	Success	27-Jul - 27-Jul	A	SBOSGB2XSEC
 ABCReport	10-Aug 11:26 (2 secs)	Success	08-Jul - 08-Aug	A	TCAPOOLBIC
 ABCReport	10-Aug 11:26 (1 secs)	Success	08-Jul - 08-Aug	A	TCAPOOLBIC
 ABCReport	10-Aug 11:22 (3 secs)	Success	08-Aug - 08-Aug	A	SBOSGB2XSEC
 ABCReport	10-Aug 11:22 (4 secs)	Success	08-Aug - 08-Aug	A	SBOSGB2XSEC
 ABCReport	10-Aug 11:21 (5 secs)	Success	08-Aug - 08-Aug	A	SBOSGB2XSEC

The Type 'S' denotes a scheduled job and 'A' an ad hoc job.

Hovering over the notes icon on the left shows the path where the report has been saved. Clicking on that icon also launches the report.

 ABCReport	17-Aug 09:00 (3 secs)	Success	16-Aug - 16-Aug	S	SBOSGB2XSEC
 ABCReport	16-Aug 09:00 (2 secs)	Success	15-Aug - 15-Aug	S	SBOSGB2XSEC
 ABCReport	15-Aug 09:00 (6 secs)	Success	12-Aug - 12-Aug	S	SBOSGB2XSEC

Please Note: If the Status field shows an 'Error' please contact the Support team (e-mail below). Please attach the relevant logs to the e-mail. These can be found in your user Documents folder under \IFS\LMReporter\App_Log.

Support

This manual covers all the areas and functionalities of the ReportGenerator. But if there are any questions regarding this product please send an e-mail to the following address:

LMWSSupport@if5.com