



Athena UCITS Compliance Module

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Athena Madrid

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SUMMARY

Athena

Athena Systems develops and supports Athena . is a highly configurable investment management platform that delivers: Portfolio Management, Trading, Performance Calculation & Analytics, Risk, Surveillance, Data Warehouse, Reporting and Straight-Through Processing. The Athena System's client list includes leading hedge funds, mutual funds, banks, insurance & institutional managers.

A key feature of the platform is its ability to monitor portfolios and transactions affecting these portfolios and warn portfolio managers, traders and risk managers as certain thresholds are approached or breached (ex-post or ex-ante). This feature is known as the Compliance/Surveillance Module.

UCITS Scope

The Compliance/Surveillance Module can be configured to monitor and alert users to a variety of internal investment guidelines and/or several sets of regulatory guidelines encapsulated in the Guideline Libraries. One of Guideline Libraries is the UCITS V Cumulative Guideline Library.

The UCITS Directives have very far reaching implications for many aspects of the investment management process including Local Regulation, Marketing, Safekeeping, Fund Information, Liquidity of the UCITS Vehicle, etc. However, since Athena 's focus is on Portfolio Management, Analytics, Trading and Reporting, the Compliance/Surveillance Module UCITS V Cumulative Guideline Library can only focus on the subset of the many dimensions of the UCITS Directives relating to holdings and trading. This subset covers:

- Process: Defining and enforcement of a multi-point internal process for ensuring compliance.
- Eligible Assets: Ensuring the proper definition of eligible assets and ensure that the upper limits of ineligible assets is not breached.
- Concentration Risk: Ensure that the upper concentration limit of issuers and counterparties is not breached.
- Risk Management: A sophisticated, but simple to use, Value at Risk methodology for stress testing what-if portfolios.
- Transaction Types: Ensuring that only allowed transaction types are executed.
- Data Quality: Ensure that all input data, including valuations are of sufficient quality.

IMPLEMENTATION OF UCITS

The current production implementation of the UCITS in Compliance/Surveillance Module contains the following:

- Asset Designation Process
- Pre-Trade Reporting
- Post-Trade Reporting
 - Daily Reporting/Archiving
 - Proof of Compliance/Audit Trail
 - Valuations and Data Quality

Asset Designation

The process of UCITS compliance within begins at asset setup. When an asset is setup in , either manually or programmatically, the UCITS Asset Designation process is triggered and the asset is evaluated and assigned to several different UCITS rule designations categories. If a security characteristic is edited, the Asset Designation process is re-triggered and the asset is re-evaluated and re-designated. The UCITS Asset Designation process will also add notes and designation details to a notes field to provide additional information on why the process designated in that manner that it did.

These UCITS rule designations include:

- Assignment to the Eligible Assets category as:
 - Eligible – Generally Eligible Assets
 - Eligible 10 – Transferable but Non-Listed Eligible Assets. Up to 10% ownership.
 - Ineligible - Ineligible Assets
- Assignment to an Issuer category as:
 - Unique Issuer Identifier - Ultimate Issuer or Guarantor of Assets
 - Exempt – Issuers exempt from Primary Concentration Limits
- Assignment to a Counterparty category as (can be security or deal level):
 - Unique Counterparty Identifier - Ultimate Counterparty or Guarantor of Assets
 - Exempt –Counterparty exempt from Primary Concentration Limits
- Assignment to a Voting/Control category as:
 - Voting Shares – Voting-Shares
 - Non-Voting Shares – Non-Voting Shares/Units
 - Exempt – Assets Exempt from Voting/Control

Assigning these designations at the time of setup has several important benefits:

- Asset designations can be manually reviewed for accurate assignment.
- Asset designations can be overridden if determined to be incorrect.
- Designations can be used for Pivots and Subtotals in Holdings Reports and Views.
- It allows users to more easily understand why certain compliance exceptions were raised.
- It provides transparency into the compliance engine.

Pre-Trade Reporting

Depending on the severity type of the rule as its implemented, alerts can take one of two forms:

- Critical Breaches: A hard-stop preventing the order from being saved.
- Informational Alerts: The order can be saved, but it will generate any/all of the following alert types (see below):
 - In-Cell
 - Desktop Pop-up
 - Email

Daily Trade View with Active Alerts

| Buy/Sell | Description | Completed | Broker | Executed Price | Account | Compliance Notes |
|----------|--|-------------|------------|----------------|-----------|--|
| BY | IRS: Flo/Fix: P33425000ILS QuarterlySpd 0% | 33,425,000 | CITIC | 1.0000 | MACRO | |
| BY | GGB 0.00 10/15/42-GDP | 21,284,501 | DBAG | .8500 | MACRO | |
| BY | AUDUSD VOL SWAP 9.90 % 25/04/2013 | 160,400 | GSCO | (1.2190) | MACRO | |
| SS | CORN FUTURE Dec12 (US) | (40) | MSDW | 738.5000 | MACRO | |
| BY | SILVER FUTURE Dec12 (US) | 6 | MSDW | 32.5990 | MACRO | |
| SS | S&P500 EMINI FUT Dec12 Future/Financial (| (72) | MSDW | 1,375.5000 | MACRO | |
| BY | EURO STOXX BANK Dec12 Future/Financial (| 200 | MSDW | 131.0000 | MACRO | |
| BY | S&P500 EMINI OPTN Mar13C 1520 Option/I | 108 | MSDW | 6.0000 | MACRO | |
| SS | CAMECO CORP Equity/Ordinary (US) | (8,020,000) | CIBN | .0000 | MACRO | RESTRICTED TRADE: This trade is greater than 4% total AUM for some accou |
| BY | VALE SA Equity/Ordinary (US) | 3,340 | BTIL | 22.1500 | MACRO | |
| BY | CORN FUTURE Dec12 (US) | 100 | NATIXISPRD | 700.0000 | Mult | |
| BY | USD/BRL FORWARD | 1,000,000 | ABFX | 1.0000 | Mult | |
| BY | VODAFONE GROUP Equity/Ordinary (GB) | 1,000,000 | AALOISE | .0000 | GUARNIERI | RESTRICTED TRADE: Currency Concentration: GBP: 7.00% Threshold [Feb 2 |

Alert of Severity: Critical
Alert triggered for value [RESTRICTED TRADE: Currency Concentration: GBP: 7.00% Threshold [Feb 28 2013 8:37AM]] in row [992, AALOISE] and column [Compliance Notes]

Post-Trade Reporting

Post trade reporting can take multiple forms including:

- Daily Reporting/Archiving: A report is run all holdings. This report can be viewed onscreen, distributed via email and/or archived.
- Proof of Compliance/Audit Trail: Historical Trade Report showing compliance status on a given "As Of" date or over a given date range.
- Valuations and Data Quality: A robust set of data integrity checks designed to identify problems with incorrect or outdated security terms and conditions or valuations.

ELEGIBLE ASSETS:

Overview:

UCITS funds are subject to rules on what kind of assets they are allowed to invest in (eligible assets), which you will find in the investment policy section of a fund's prospectus. Generally they must invest in transferable securities or in other liquid financial assets – for example, money-market instruments, bonds, shares and any other instruments offering the right to acquire these securities through subscription or exchange, as well as other funds and bank deposits.

Under certain conditions they may also use financial derivative instruments, such as futures, options or swaps based on an eligible UCITS asset or an approved financial index – either for investment or hedging purposes (to reduce the risk of the portfolio). Since the UCITS directive defines eligible assets in general terms, European regulators have issued additional guidelines to ensure there is a common understanding of what kind of assets may be acquired by a UCITS fund.

Guidelines:

- Transferable Securities (e.g. stocks, bonds) and money market instruments either listed on a recognized stock exchange or dealt on a market which is regulated, operated regularly and is open to the public
- Recently issued Transferable Securities to be dealt on a regulated market within 12 months (pre IPOs).
- Investments in UCITS funds and other eligible UCIs (being collective investment schemes which the EU Member State regulator considers to be of an equivalent standard of recognition to that of UCITS funds).
- Deposits with credit institutions (repayable on demand and maturing in no more than 12 months).
- Financial Derivative Instruments ("FDIs").
- Financial indices (sufficiently diversified and properly listed).
- Repos, reverse repos, swap and forwards (provided that they are used within an Efficient Portfolio Management oversight and are ancillary to the UCITS fund's investment strategy, and are used mostly for risk management).
- Transferable Securities and money market instruments not listed on a recognized stock exchange or dealt on a market which is regulated (e.g. investments in hedge funds), are allowed, up to a maximum limit of 10% of a UCITS fund's assets.
- Ancillary liquid assets (cash).

Financial Derivative Instruments ("FDI"s)

FDIs should be based on an underlying Eligible Asset, and either traded on a regulated market or OTC with institutional recognized counterparties (e.g. foreign exchange swaps, S&P 500

index futures). It is important to note that FDIs on commodities, including non-financial indices, are not considered to be Eligible Assets.

FDIs and OTC FDIs should meet the following criteria:

- They must be cash settled and not result in the delivery or in the transfer to the UCITS fund of assets other than Eligible Assets. Their risks must be adequately captured by the Risk Management Policy of the UCITS fund.
- They must be valued accurately and sufficiently verified. For example, according to the UCITS Luxembourg Law of 17 December 2010 (Article 41 (1) g), UCITS funds must apply a “reliable and verifiable valuation on a daily basis for the OTC FDIs” in order to establish a fair value. The UCITS fund will ensure that the valuation:
 - Does not rely on market quotations given by the counterparty.
 - Is based on reliable up to date market value or on a pricing model using an adequate methodology.
 - The UCITS fund remains in all cases responsible for the correct valuation of OTC FDIs through its own valuation systems.

Non-Eligible Assets

Investments either directly or indirectly (i.e. through the use of derivatives) are not generally permitted in the following:

- Property/Real Estate;
- Commodities, including precious metals or certificates representing them, and any other nonfinancial indices; or
- Private Equity.

CONCENTRATION LIMITS:

Overview:

Diversification is a vital means of reducing risk for investors of all kinds, from the biggest pension schemes to individuals putting their savings into funds. Different types of fund give investors access to asset classes and strategies whose performance may vary according to the market and economic conditions. The vast range of UCITS funds on the market offers investors diversification in terms of the assets in which funds invest, the economic or business sectors they cover, and the countries or regions where investments are located.

Since UCITS funds are designed to be suitable to the retail investors, their rules build in certain levels of diversification with the aim of reducing their vulnerability to the performance of a small number of assets. In general, the more different assets a fund holds, the less the risk to investors of losing a substantial portion of their portfolio if one particular asset falls in value.

The most commonly known restriction is the so-called 5/10/40 rule. This says that a maximum of 10 per cent of a fund's net assets may be invested in securities from a single issuer, and that investments of more than 5 per cent with a single issuer may not make up more than 40 per cent of the whole portfolio.

There are some exceptions to this rule. For example, where the fund is replicating a stock market or other index, the maximum limit per issuer is 20 per cent of net assets (or 35 per cent in exceptional circumstances).

An individual investment in another fund must not exceed 20 per cent of assets, while no more than 30 per cent of the UCITS fund's portfolio can be invested in non-UCITS funds. In addition, UCITS funds may not make an investment in another fund that amounts to more than 25 per cent of the other fund's total assets.

In accordance with the principle of risk-spreading, the regulator of a UCITS may authorize it to invest up to 100 per cent of its assets in securities and money-market instruments issued or guaranteed by EU member states or local authorities. In this case the fund should hold securities from at least six different issuers, and securities from a single issuer should not account for more than 30 per cent of its total assets.

There are a range of further limits, all designed not to eliminate all risk but to keep it within bounds suitable for ordinary investors. These rules cover investment in assets that are not listed or traded on a recognized exchange, the use of derivative instruments such as futures and options, and counterparty risks (the risk of default by the other party to a fund's transaction)

The UCITS fund's prospectus should contain detailed information in the prospectus and indicate in which categories of assets the fund in question is authorized to invest. It should also mention whether transactions in financial derivative instruments are authorized. If so, the prospectus should state prominently whether the derivatives transactions are for the purpose of hedging, or to meet investment goals, and how the use of derivatives may affect the fund's risk profile.

Limits Guidelines:

Dealing with one issuer – Transferable Securities and money market instruments – 5/10/40 Rule

Generally, no more than 10% of net assets of a UCITS fund can be invested in Transferable Securities or money market instruments issued by the same issuer ("10% Rule").

- Where investments in Transferable Securities and money market instruments each represent more than 5% of net assets of a fund, these investments in aggregate must not exceed 40% ("40% Rule") of the total net assets of the fund ("5% Rule").
- The 10% Rule limit does not apply to:
 - Deposits and OTC FDIs made with financial institutions subject to prudential supervision.
 - Certain Transferable Securities.
 - Investments in other UCITS funds or UCIs.

For Index replicating UCITS funds however, the 10% Rule can be raised to 20% (or, if justified, 35%) whereby the investment policy is to replicate an index recognized by the regulator.

Investing in UCITS fund or UCIs

- UCITS Fund of Funds may be able to invest up to 20% of their net assets in a single UCITS fund or other Eligible UCI. Where the underlying UCI is an umbrella fund, each sub-fund of that umbrella fund may be regarded as if it were a separate UCI for the purposes of this limit. This prohibition does not apply to feeder UCITS fund investing almost all of its assets into a diversified portfolio of a master UCITS fund. These restrictions would apply however to the master UCITS fund's strategy.
- UCITS Fund of Funds may not invest more than 30% of its total net assets in UCIs that are not UCITS funds.
- A UCITS Fund of Funds may not invest in any other fund which invests more than 10% of its assets in other funds (so called "funds of funds of funds").

Deposits – Dealing with one issuer

- No more than 20% of the UCITS fund's net assets can be invested in deposits made with the same body.

FDIs and OTC FDIs – Dealing with one issuer

- Maximum OTC FDI counter party risk exposure is limited to 5% of the UCIT fund's net assets. This is increased to 10% where the counterparty is a credit institution, i.e. a bank.

Overriding Limits – Dealing with one issuer

- No more than 20% of the net assets of a UCITS fund may be invested in any combination of the following with the same issuer:
 - Transferable Securities or money market instruments
 - Deposits
 - OTC FDIs

Increasing Concentration Limits

These concentration limits may be increased in the following circumstances:

- The 10% Rule can be increased to 35% if the Transferable Securities are issued or guaranteed by an EU Member State or its local authorities, by a non-Member State or by a public international body.
- The 10% Rule can also be increased to 25% for certain debt securities (i.e. bonds) if they are issued by a credit institution whose registered office is situated in an EU Member State and follows applicable regulation (i.e. public supervision). However under the 5% Rule principle, such investments must not in aggregate exceed 80% of the net assets of the fund.

The transferable securities and money market instruments referred to in the above two points shall not be taken into account for the purpose of applying the limit of the 40% rule. However the concentration limits in the increased limit situations above cannot be combined with the normal limits on dealings with one issuer so that exposure to a single issuer exceeds in total 35% of the net assets.

Issuer Control Limits

- A UCITS fund, or its Management Company overseeing a number of funds, may not acquire any voting shares which would enable it to exercise significant influence over the management of an issuer.

- A UCITS fund may acquire no more than the following issuer control limits:
 - 10% of the non-voting shares of the same issuer
 - 10% of the debt securities of the same issuer
 - 25% of the units of the same UCITS funds and/or other UCIs
 - 10% of the money market instruments issued by the same issuer

Other than for non-voting shares, the issuer control limits laid down may be disregarded at the time of acquisition if at that time the gross amount of the debt securities or of the money market instruments or the net amount of the securities in issue cannot be calculated.

Issuer control limit restrictions do not apply to:

- Transferable Securities and money market instruments issued or guaranteed by EU Member States or its local authorities as well as non-EU Member States.
- Transferable Securities and money market instruments issued by public international bodies of which one or more EU Member States are members (i.e. OECD).
- Shares held in an intermediary incorporated in a non-EU Member State which invests mainly in securities issued by that state and where such holding is the only way in which the UCITS funds can hold these securities.

Borrowing Limits

A UCITS fund generally cannot borrow, except under the following borrowing limits. The combined amount of the following borrowing limits may not exceed 15% of the net assets of the UCITS fund:

- To finance redemption requests from its investors, it may borrow up to 10% of its net assets, provided that the loan is on a short term basis.
- Up to 10% of the net assets can be borrowed in relation to the acquisition of immovable property essential for the direct pursuit of its business (i.e. business premises).

Despite the above, UCITS funds can be leveraged up to 100% of its net assets through the use of FDIs. However at all times, the UCITS fund must be in a position to pay-back all of its obligations (the "Coverage Rule").

RISK MANAGEMENT:

All investments involve at least some risk. What is important is that a UCITS fund adheres to the level of risk it has told investors it will take. Managers must have procedures to measure the risk of a fund's investments at all times, and the risk management function must be independent of the portfolio management activity, to minimize the possibility of conflicts of interest. The manager may hire an outside firm to provide risk monitoring and measurement if necessary.

The risk management procedure for a UCITS fund must be appropriate, fulfil specific requirements, be described in detail, and approved by the CSSF. One of the best-known approaches to measure the risk of loss of the fund's investments is value at risk or VaR, but others may be used as long as the regulator agrees that this is appropriate for the fund's risk profile. The use of an advanced risk methodology is required where the fund is following a complex investment strategy or where it invests significantly in derivatives.

The investment compliance function, which in some companies is a part of the risk management function, must monitor compliance with the fund's policy and procedures and with the UCITS investment and diversification rules; it reports to the fund's board of directors on its activities, including details of any remedial action taken to correct deficiencies. It will also alert the fund manager's executives to actual or potential breaches of limits, and should oversee valuation procedures for OTC derivatives.

The European Union recently approved new regulation on mutual funds called UCITS IV (Undertakings for Collective Investment in Transferable Securities, fourth edition). UCITS IV, which is patterned on regulatory risk requirements for banks, provides two approaches to regulatory risk management of a fund's portfolio: the Commitment Approach and the VaR (Value-at-Risk) Approach. A UCITS IV fund, through its board of directors, has to select the approach that best fits the investment activities of the portfolio.

In the Commitment Approach, the net exposure of derivatives cannot exceed 100% of the fund's net asset value (NAV). There are complex rules to translate the derivatives held by the portfolio into equivalent amounts of underlying assets. Other rules concern the process of netting offsetting exposures to come up with a final exposure of derivatives, also called "global exposure" or leverage.

Funds that use derivatives more extensively often opt for the VaR approach. They can choose between relative and absolute VaR limits. The relative approach uses a ratio of up to 200% between the VaR of the portfolio and the VaR of a reference portfolio. The absolute approach is generally used when there is no reference portfolio or benchmark; it allows the one-month VaR to be up to 20% of the NAV. UCITS IV establishes strict rules for the computation of VaR and requires regular stress- and back-testing to complement VaR estimation.

UCITS IV requires VaR to be computed on at least a daily frequency. Depending on the strategy being pursued, intraday calculations may also be necessary. The VaR fund must establish, implement and maintain a documented system of internal limits for the measures used to satisfy the regulatory requirements. UCITS IV indicates that the VaR process must meet the following parameters and standards:

- One-tailed confidence interval of 99%.
- Horizon equivalent to one month.
- Effective observation period (history) of risk factors of at least one year.
- Must take into account idiosyncratic and default risks.
- Must include all positions and derivatives.
- Must take into account basis risks, and second-order and nonlinear risks.

The back-testing requirements of the regulation are also strict. The intent is to closely monitor the accuracy and performance of the VaR model used. Back-testing of the VaR model should be performed at least once a month, using daily data. By definition, a 99% confidence level daily VaR is a loss that the fund is not expected to exceed on more than 1% of days. A common way to back-test a VaR model is to observe the realized returns of the fund and check the frequency at which they exceed the VaR number calculated by the model. For UCITS back-testing, if a loss exceeding the calculated VaR (called an exceedance) occurs much more often than once every 100 days (1% of the time), it means that the model underestimates the real risk of the fund. It is expected that two to three exceedances occur per year (1% of 250 business days is 2.5).

Athena includes in its suite of financial software modules a Value at Risk engine that provides timely valuations of the client's portfolios both on a near-real-time and a historical basis.

Athena VaR engine offers three different calculation methods to provide a wider choice to the client:

- Variance-Covariance VaR method
- Historical VaR method
- Monte Carlo VaR method

The Variance-Covariance method can be applied to linear portfolios only. The Historical and Monte Carlo methods can be applied to non-linear portfolios (i.e. portfolios with options).

The Variance-Covariance approach uses past log-returns for the positions in the current portfolio to build the statistical information that will end up in the correlation matrix, thereby assuming normal distributions. It enjoys a very good numerical stability, it can require a moderate amount of processing power. The parameters that can be acted upon to drive the calculations are:

- Number of data points (default: 300)
- Confidence Interval (default: 95%)

The Historical approach uses historical price series for the positions in the current portfolio to generate simulations. The results are sorted from worst to best P&L and the one that corresponds to the chosen confidence interval is picked as the solution. It is very stable numerically and it requires a relatively low amount of processing power. The fact that actual unadjusted historical prices are used in the calculation means that no assumption on the price distributions are made, and dividend are taken into account in the calculations. In order to account for the diminishing predictability of data that are further away from the present, a decay parameter is provided to smooth out the returns in the past. The parameters that can be acted upon to drive the calculations are:

- Number of data points (default: 300)
- Confidence Interval (default: 95%)
- Decay (default: 0.95)

The Monte Carlo approach is a purely statistical approach where many portfolio simulations are built by using price generators. Every asset class may have different price generators that better model the asset class' price distribution. The results are sorted from worst to best P&L and the one that corresponds to the chosen confidence interval is picked as the solution. The method can be prone to numerical instability, and it requires a lot of computing resources to provide a reliable solution.

The parameters that can be acted upon to drive the calculations are:

- Number of simulations (default: 50,000)
- Confidence interval (default: 95%)

All calculations are performed at 1 day horizon. A 5 day horizon VaR can be obtained by multiplying the 1 day numbers by $\sqrt{5}$ as per the current literature.

The calculation process is run on the server on a periodical basis (currently every 5 minutes), to capture changes in the positions and update the VaR numbers accordingly.

All the calculation methods return the following data:

- Portfolio-level VaR
- Position-level VaR corresponding to the portfolio-level VaR

Additionally, thanks to its low requirement for processing power the Historical VaR engine also returns the following data:

- Position-level Marginal VaR
- The Marginal VaR is calculated as follows:
- The Portfolio VaR is calculated at the requested confidence interval
- Then, each position is iteratively removed from the portfolio and VaR recalculated for the same confidence interval
- At this point, the Marginal VaR for the position is calculated as Initial Portfolio VaR – Current Portfolio VaR.
- The resulting Marginal VaR is assigned to the position

SHORT SELLING:

Physical (uncovered) short selling is not permitted in UCITS funds, although certain synthetic shorting strategies are possible through FDIs.

VALUATION/DATA QUALITY:

For investors to have confidence in a UCITS fund, they must be able to trust the valuations it uses for individual assets and for the NAV. Investors buy shares or units in a UCITS without knowing the exact price, which is only established after the deal has been placed. As a rule, the latest official market closing prices must be used to value publicly-traded securities, otherwise a 'fair market value' must be provided. This is designed to offer protection against late trading, market timing and other practices that can affect the value of a fund.

There are also prescribed rules for valuing certain assets such as short-term commercial debt and OTC derivative instruments (short for over the counter) that are not listed or traded on public exchanges. The management company of a UCITS fund must put in place valuation procedures for derivatives that are appropriate to their level of complexity, and details of the process must be disclosed to investors. The manager may appoint an outside firm to carry out such valuations. If it does so in-house, the process must be independent of the portfolio management to avoid conflicts of interest.

has the following Valuation and Data Quality Tests:

- Missing Spot Securities vs. USD for Active Currencies
- Account Allocations to 100%
- Active Countries for Active Securities
- Active Exchanges for Active Securities
- Active Security Types for Active Securities
- BB Ticker
- Holiday Calendars
- Correct Cost Factor
- Correct Notional Factor
- Counter Currency
- CUSIP
- SWAPS FUTURE OPTIONS without Underlying
- Expired/matured securities need to be inactive
- Extended Detailed by Security Type
- FIX Column Identifier
- Forwards for Active Currencies
- Forwards for Active Currencies OK
- FPML
- ISIN
- Issue Date

- Issuer
- Issuer Counterparty
- Last price for active securities inconsistent with recent prices
- Missing Price History
- Price Currency
- Needed Price History for VaR
- Pricing ID
- Quantity Outstanding
- Quantity Outstanding Date
- Review All Entities
- RIC
- Security PX to Positions check
- Security PX to History check
- SEDOL
- Service Broker Check
- SPOTS
- Spots for Active Currencies
- Standard Deviation Sanity Check
- Underlying ID
- Yesterday's Price Loaded

UCITS CONFIGURATION:

In order to properly configure you UCITS compliance in Athena , it is important to understand the following components:

- Security Specific Eligibility Attributes - These are security attributes relating to UCITS eligibility which are either programmatically or manually designated for each security.
- Security Specific Issuer Attributes - These are security attributes relating to UCITS issuer which are either programmatically or manually designated for each security.
- Compliance Rule Types - Compliance rule types are rule templates that contain the calculation methodology. For example, the calculation logic for issuer diversification would be contained in the compliance rule type, but the specific account assignment, severity, and rule thresholds would be contained in the compliance rule (see below).
- Compliance Rules - Compliance Rules contain the information needed to apply a compliance rule type to a specific account and threshold. For example, to implement an issuer diversification rule one would create a compliance rule referencing the issuer diversification compliance rule type and add the account assignment, severity, and specific rule thresholds (e.g. 10%) using a compliance rule.

Security Specific Eligibility Attributes

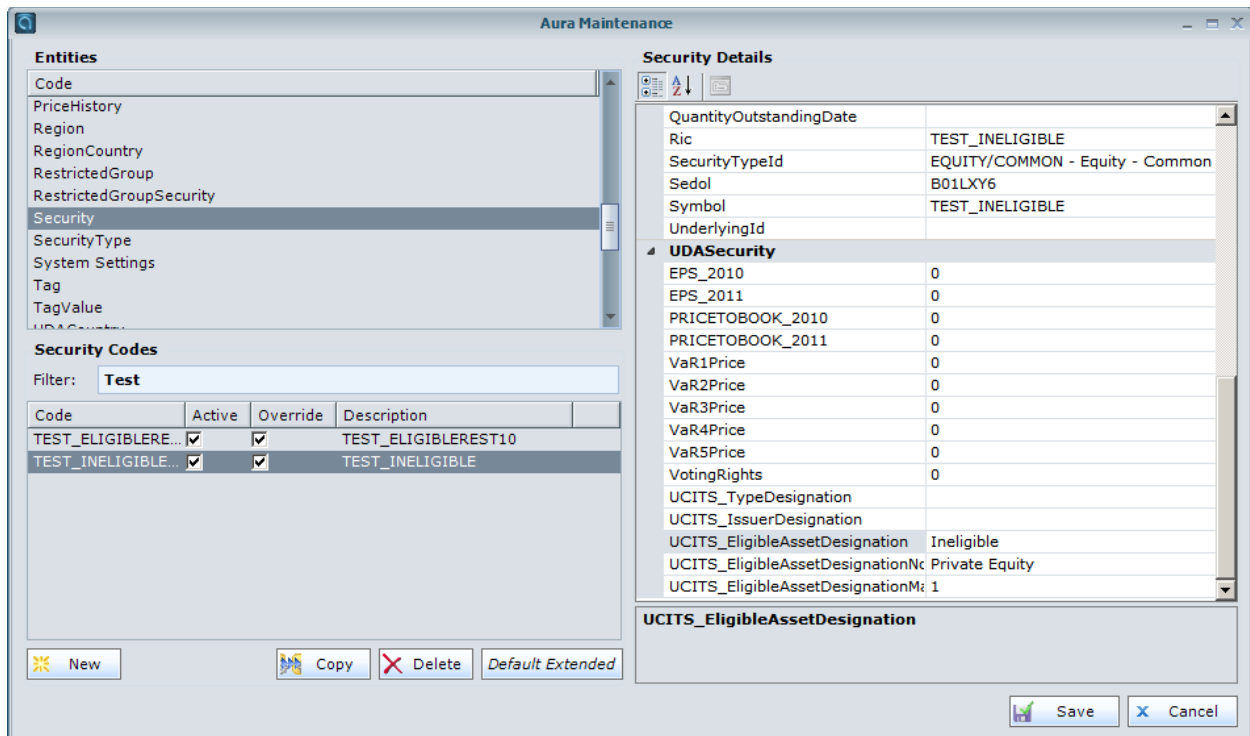
These are security attributes relating to UCITS eligibility which are either programmatically or manually designated for each security.

Security specific eligibility attributes include:

- UCITS_EligibleAssetDesignationManualOverride - the eligible asset designation manual override flag prevents from automatically updating the eligible asset designation upon the entry or edit of the security. This allows the user to override any or all of the eligible asset designation settings.
- UCITS_EligibleAssetDesignation - Attribute indicating eligible asset designation for the purposes of determining UCITS compliance. This designation is typically set automatically at time of security creation or editing. This automatic designation can be disabled if the eligible asset designation manual override flag is set to 1/True. At that point a user can manually enter this value and it will persist.
 - Eligible - includes most transferable exchange traded securities
 - Ineligible - includes real estate and commodities
 - EligibleRestricted10% - includes transferable non-exchange traded securities.
- UCITS_EligibleAssetDesignationNote - attribute containing notes on the automatic designation of the eligible asset designation. Or in the case of a manual override, any value entered into this field by a user will persist

To set these from Maintenance

1. Select the Security
2. Select the specific security that you would like to edit in the security code section
3. Scroll to the bottom of the security detail section and find the rows starting with the word UCITS.
4. Edit these as needed.
5. Click save store your changes



Compliance Rule Types

Eligible Assets:

- UCITS Restricted Ineligible
- UCITS Eligible With Restrictions (10)

Concentration:

- UCITS Net Assets General Issuer (5/10/40)
- UCITS Net Assets Index Replication Issuer (5/20/40)
- UCITS Net Assets Governmental Body Issuer (35/35)
- UCITS Net Assets EU Credit Institution Debt Issuer (25/35)
- UCITS Net Assets Deposits Issuer (20)
- UCITS Net Assets Counterparty (5)
- UCITS Net Assets Aggregate Issuer (20)
- UCITS General Voting Shares Control (5)
- UCITS General Non-Voting Shares Control (10)
- UCITS Debt Control (10)
- UCITS General UCITS/UCI Control (25)
- UCITS General Money Market (10)

Risk:

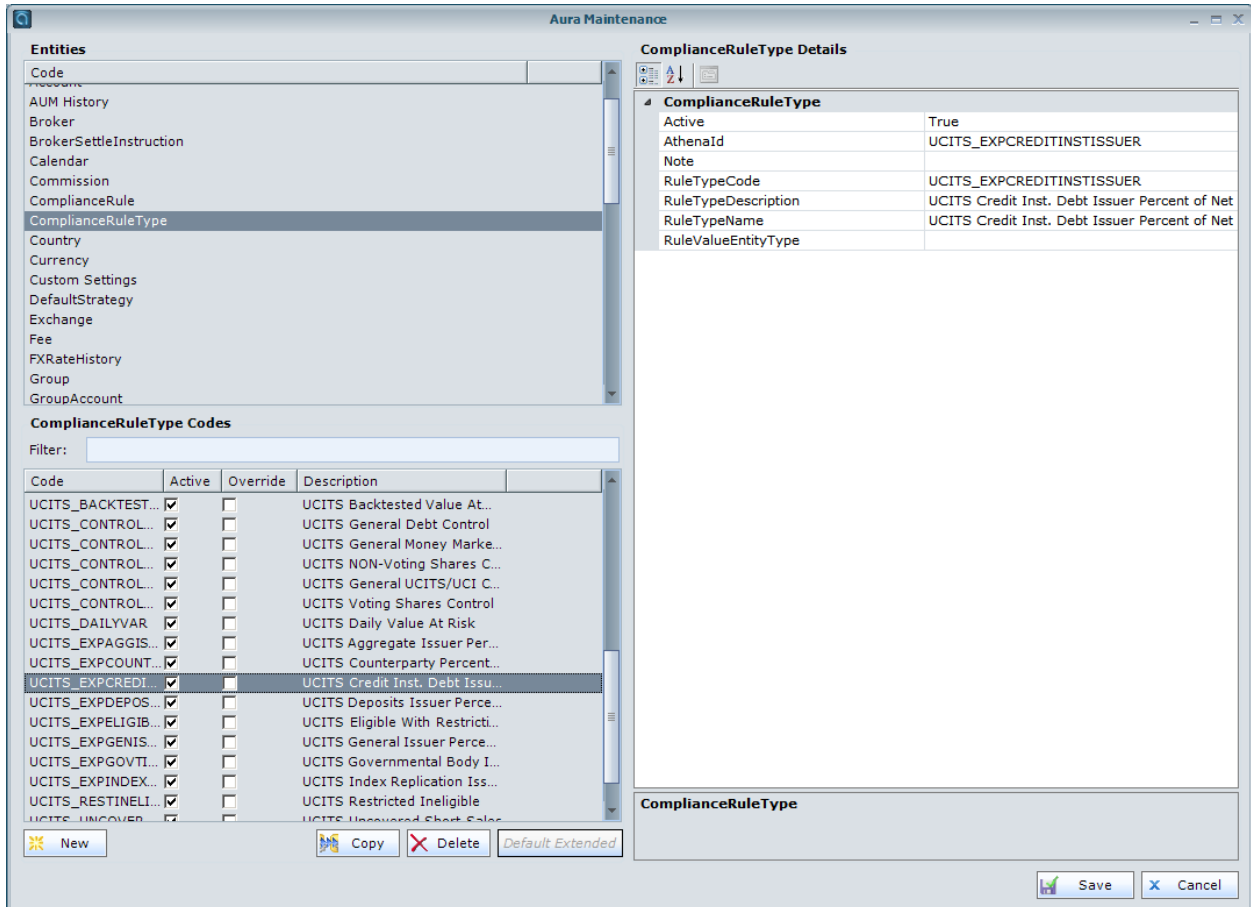
- UCITS Daily VaR (20)
- UCITS BackTesting VaR (1)

Transaction:

- UCITS Uncovered Shorts

To see these from Maintenance

1. Select Compliance Rule Type



Compliance Rules

For UCITS, actual rules have been created for each rule type. To see these from Maintenance

1. Select Compliance Rule

The screenshot displays the 'Aura Maintenance' application window. On the left, the 'Entities' list includes 'ComplianceRule', which is selected. Below it, the 'ComplianceRule Codes' table is visible, with the following data:

| Code | Active | Override | Description |
|--------------------|-------------------------------------|-------------------------------------|---------------------------------|
| UCITS_BACKTEST... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Backtested Value At... |
| UCITS_CONTROL... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS General Debt Control... |
| UCITS_CONTROL... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS General Money Marke... |
| UCITS_CONTROL... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS NON-Voting Shares C... |
| UCITS_CONTROL... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS General UCITS/UCI C... |
| UCITS_CONTROL... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Voting Shares Control... |
| UCITS_DAILYVAR | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Daily Value At Risk (2... |
| UCITS_EXPAGGIS... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Aggregate Issuer Per... |
| UCITS_EXPCOUNT... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Counterparty Percent... |
| UCITS_EXPCREDI... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Credit Inst. Debt Issu... |
| UCITS_EXPDEPOS... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Deposits Issuer Perce... |
| UCITS_EXPELIGIB... | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | UCITS_EXPELIGIBLERESTRI... |
| UCITS_EXPGENIS... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS General Issuer Perce... |
| UCITS_EXPGOVTL... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Governmental Body I... |
| UCITS_EXPINDEX... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Index Replication Iss... |
| UCITS_RESTINELI... | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | UCITS_RESTINELIGIBLE |
| UCITS_UNCOVER... | <input checked="" type="checkbox"/> | <input type="checkbox"/> | UCITS Uncovered Short-Sales |

The main area of the window shows the 'ComplianceRule Details' for the selected rule. The details are as follows:

| Field | Value |
|-----------------|---|
| AccountId | UCITS - UCITS |
| Active | True |
| AthenaId | UCITS_EXPAGGISSUER |
| AttributeValue | |
| Note | |
| RestrictedSide | >= |
| RuleCode | UCITS_EXPAGGISSUER |
| RuleDescription | UCITS Aggregate Issuer Percent of Net Assets (20) |
| RuleName | UCITS Aggregate Issuer Percent of Net Assets (20) |
| RuleTypeId | UCITS_EXPAGGISSUER - UCITS Aggregate Issuer Perc |
| Severity | Info |
| ThresholdValue | 0.20 |

At the bottom of the window, there are buttons for 'New', 'Copy', 'Delete', 'Default Extended', 'Save', and 'Cancel'.

UCITS PRE-TRADE REPORTS:

Transaction Report (Pre-Trade) - the Transaction Report, either current day or historical, generally shows transaction information. If UCITS compliance is enabled, these reports will also show any compliance restrictions and their details.

Transaction Report – Pre-Trade Compliance

| Description | SYMBOL | Txn | Broker | State | Target | Filled Qty | Avg Price | Settle Date | Allocated | Unallocated | VWAP | Compliance Rule Description | Compliance Severity |
|---------------------|------------------|-----|--------|--------|--------|------------|-----------|-------------|-----------|-------------|--------|-----------------------------------|---------------------|
| AUSTRALIAN PIPELINE | APA AU Equity | LI | INTR | MANUAL | 21,318 | 21,318 | 8.6000 | 2014-12-23 | 21,318 | | 0.0000 | | |
| TEST_INELIGIBLE | 001480 KS Equity | BY | INTR | MANUAL | 100 | 100 | .0000 | 2016-01-13 | | 100 | .0000 | UCITS Restricted compliance issue | INFO |

UCITS POST-TRADE REPORTS:

The compliance restriction report will show the history of all compliance restrictions ever triggered within the system regardless of whether they are currently in breach for various types of rules including issuer, counterparty, VaR, etc.

Value At Risk Report

| Description | Symbol2 | 99% 1 Day VaR | VaR Limit | VaR % Range | VaR Utilization | VaR Status | Factor |
|-----------------------------------|-----------------|---------------|-----------|-------------|-----------------|------------|--------|
| TAIWAN MOBILE EQUITY/ORDINARY CFD | CFD-3045.TW-TWD | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| CHINA MOBILE EQUITY/ORDINARY | 0941.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| CHINA MOBILE EQUITY/ORDINARY | 0941.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| DBS GRP HLDGS EQUITY/ORDINARY | DBSM.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| STARHUB EQUITY/ORDINARY | STAR.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| BANK OF CHINA EQUITY/ORDINARY | 3988.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| LINK REIT EQUITY/ORDINARY | 0823.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| TELKOM INDONESIA EQUITY/ORDINARY | TLKM.KK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| ASCEN REIT EQUITY/ORDINARY | AEMN.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| CAPMALL TRUST EQUITY/ORDINARY | CMLT.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| PUBLICBK FOREIGN | PUBMe.KL | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| KEPPEL CORP EQUITY/ORDINARY | KPLM.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| SINGTEL EQUITY/ORDINARY | STEL.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| PHI LONG DIST EQUITY/ORDINARY | TEL.PS | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| POWER ASSETS EQUITY/ORDINARY | 0006.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| BOC HONG KONG EQUITY/ORDINARY | 2388.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| SUNTEC REIT EQUITY/ORDINARY | SUNT.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| HSBC HOLDINGS EQUITY/ORDINARY | 0005.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| ANTA SPORTS EQUITY/ORDINARY | 2020.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| MAYBANK BHD EQUITY/ORDINARY | MBBM.KL | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| UOB LTD EQUITY/ORDINARY | UOBH.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| CINOC EQUITY/ORDINARY | 0883.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| PETROCHINA EQUITY/ORDINARY | 0857.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| ICBC EQUITY/ORDINARY | 1398.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| ABC EQUITY/ORDINARY | 1288.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| YUE YUEN IND EQUITY/ORDINARY | 0551.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| HUANENG POWER EQUITY/ORDINARY | 0902.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| WYNN MGAU EQUITY/ORDINARY | 1128.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| XINYI GLASS HOLDINGS LTD | 0868.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| SIME DARBY BHD EQUITY/ORDINARY | SIME.KL | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| CHEUNG KONG HLDG LTD | 0001.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| DIGI.COM BHD | DSOM.KL | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| HUTCHISON PORT HOLDINGS TRUST | HPHT.SI | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| HERO MOTOCORP LTD CFD | CFD-HROM.NS-INR | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| SJM HOLDINGS | 0890.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| STANDARD CHARTERED PLC | 2888.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| SKYWORTH DIGITAL HLDGS | 0751.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| SIAM CEMENT PCL | SCCF.BK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| SIANS CHINA LTD | 1928.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| LARGAN PRECISION CO LTD CFD | CFD-3008.TW-TWD | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |
| HUTCHISON WAMPDA EQUITY/ORDINARY | 0812.HK | 154,766 | 1,490,980 | 7.00% | 10.38% | OK | |

Loss Limit Report

| Description | Symbol | 15% Loss Limit | Month Total | Monthly Limit |
|--|-----------------|-------------------|-------------------|---------------|
| | | -3,194,957 | -1,344,126 | -6.31% |
| TENAGA NASIONAL BHD EQUITY/ORDINARY | TENA.KL | (3,194,957) | (483,912) | (2.27%) |
| SINGTEL EQUITY/ORDINARY | STEL.SI | (3,194,957) | (432,993) | (2.03%) |
| CHEUNG KONG HLDG LTD | 0001.HK | (3,194,957) | (54,227) | (0.25%) |
| WESFARMERS LTD | WES.AX | (3,194,957) | (29,159) | (0.14%) |
| UNI-PRESIDENT ENTERPRISES CO EQUITY/ORDINARY CFD | CFD-1216.TW-TWD | (3,194,957) | (28,179) | (0.13%) |
| CHALLENGER LTD | CGF.AX | (3,194,957) | (27,406) | (0.13%) |
| LEND LEASE CORPORATION | LLC.AX | (3,194,957) | (25,938) | (0.12%) |
| AMP LTD | AMP.AX | (3,194,957) | (25,033) | (0.12%) |
| HSBC HOLDINGS EQUITY/ORDINARY | 0005.HK | (3,194,957) | (24,991) | (0.12%) |
| TELSTRA CORPORATION | TLS.AX | (3,194,957) | (24,092) | (0.11%) |
| ANZ BANKING GROUP | ANZ.AX | (3,194,957) | (21,118) | (0.10%) |
| SYDNEY AIRPORT UNITS | SYD.AX | (3,194,957) | (20,897) | (0.10%) |
| SPOTLESS GROUP HOLDINGS LTD | SPO.AX | (3,194,957) | (19,232) | (0.09%) |
| PUBLIC BANK BERHAD | PUBM.KL | (3,194,957) | (17,978) | (0.08%) |
| TRANSURBAN GROUP | TCL.AX | (3,194,957) | (17,499) | (0.08%) |
| SCENTRE GROUP LTD | SCG.AX | (3,194,957) | (16,156) | (0.08%) |
| AMCOR LTD | AMC.AX | (3,194,957) | (14,801) | (0.07%) |
| DIGI.COM BHD | DSOM.KL | (3,194,957) | (14,401) | (0.07%) |
| HERO MOTORCORP LTD CFD | CFD-HROM.NS-INR | (3,194,957) | (13,916) | (0.07%) |
| MACQUAIRE GROUP LTD | MQG.AX | (3,194,957) | (13,054) | (0.06%) |
| POWER ASSETS EQUITY/ORDINARY | 0006.HK | (3,194,957) | (12,162) | (0.06%) |
| SUNCORP | SUN.AX | (3,194,957) | (11,156) | (0.05%) |
| ASCEN REIT EQUITY/ORDINARY | AEMN.SI | (3,194,957) | (10,455) | (0.05%) |
| ANTA SPORTS EQUITY/ORDINARY | 2020.HK | (3,194,957) | (9,221) | (0.04%) |
| SUNTEC REIT EQUITY/ORDINARY | SUNT.SI | (3,194,957) | (7,825) | (0.04%) |
| BOCHONG KONG EQUITY/ORDINARY | 2388.HK | (3,194,957) | (7,806) | (0.04%) |
| LARGAN PRECISION CO LTD CFD | CFD-3008.TW-TWD | (3,194,957) | (5,470) | (0.03%) |
| TAIWAN MOBILE EQUITY/ORDINARY CFD | CFD-3045.TW-TWD | (3,194,957) | (5,347) | (0.03%) |
| SINGAPORE POST LTD EQUITY/ORDINARY | SPOS.SI | (3,194,957) | (5,338) | (0.03%) |
| TELKOM INDONESIA EQUITY/ORDINARY | TLKM.JK | (3,194,957) | (4,929) | (0.02%) |
| BANK OF CHINA EQUITY/ORDINARY | 3988.HK | (3,194,957) | (4,611) | (0.02%) |
| BHP BILLITON | BHP.AX | (3,194,957) | (3,784) | (0.02%) |
| LINK REIT EQUITY/ORDINARY | 0823.HK | (3,194,957) | (3,446) | (0.02%) |
| UOB LTD EQUITY/ORDINARY | UOBH.SI | (3,194,957) | (3,349) | (0.02%) |
| HUANENG POWER EQUITY/ORDINARY | 0902.HK | (3,194,957) | (3,056) | (0.01%) |
| CHINA MOBILE EQUITY/ORDINARY | 0941.HK | (3,194,957) | (1,932) | (0.01%) |
| SHIN CORP PCL.NVDR | INTUCHN.BK | (3,194,957) | (1,543) | (0.01%) |
| CHINA CITIC BANK CORP LTD EQUITY/ORDINARY | 998.HK | (3,194,957) | (1,535) | (0.01%) |
| MAPLE TREE COMMERCIAL TRUST | MACT.SI | (3,194,957) | (1,511) | (0.01%) |
| COWAY CO LTD EQUITY/ORDINARY | 021240.KS | (3,194,957) | (1,307) | (0.01%) |

Country Limit Report

| Description | Delta Gross | Country Limit | Country % FUM | % Utilization | Country Status |
|----------------------------|------------------|------------------|---------------|---------------|----------------|
| AUSTRALIA | 6,743,834 | 8,519,886 | 40.00% | 79.15% | OK |
| AUSTRALIA | 6,743,834 | 8,519,886 | 40.00% | 79.15% | OK |
| AGL ENERGY | | 8,519,886 | 40.00% | 0.00% | OK |
| AMCOR LTD | 448,355 | 8,519,886 | 40.00% | 5.26% | OK |
| AMP LTD | 417,948 | 8,519,886 | 40.00% | 4.91% | OK |
| ANZ BANKING GROUP | 418,666 | 8,519,886 | 40.00% | 4.91% | OK |
| AUSTRALIAN PIPELINE | 456,958 | 8,519,886 | 40.00% | 5.36% | OK |
| BHP BILLITON | 392,039 | 8,519,886 | 40.00% | 4.60% | OK |
| CHALLENGER LTD | 386,583 | 8,519,886 | 40.00% | 4.54% | OK |
| LEND LEASE CORPORATION | 417,712 | 8,519,886 | 40.00% | 4.90% | OK |
| MACQUAIRE GROUP LTD | 406,916 | 8,519,886 | 40.00% | 4.78% | OK |
| SCENTRE GROUP LTD | 429,353 | 8,519,886 | 40.00% | 5.04% | OK |
| SPOTLESS GROUP HOLDINGS L | 415,383 | 8,519,886 | 40.00% | 4.88% | OK |
| SUNCORP | 412,710 | 8,519,886 | 40.00% | 4.84% | OK |
| SYDNEY AIRPORT UNITS | 434,752 | 8,519,886 | 40.00% | 5.10% | OK |
| TELSTRA CORPORATION | 438,913 | 8,519,886 | 40.00% | 5.15% | OK |
| TRANSURBAN GROUP | 449,125 | 8,519,886 | 40.00% | 5.27% | OK |
| WESFARMERS LTD | 420,794 | 8,519,886 | 40.00% | 4.94% | OK |
| WESTFIELD RETAIL TRUST | | 8,519,886 | 40.00% | 0.00% | OK |
| WOODSIDE PETROLEUM | 397,627 | 8,519,886 | 40.00% | 4.67% | OK |
| CHINA | 2,245,391 | 8,519,886 | 40.00% | 26.35% | OK |
| CHINA | 2,245,391 | 8,519,886 | 40.00% | 26.35% | OK |
| ABC EQUITY/ORDINARY | | 8,519,886 | 40.00% | 0.00% | OK |
| BANK OF CHINA EQUITY/ORDI | 500,728 | 8,519,886 | 40.00% | 5.88% | OK |
| CHINA CONSTRUCTION BANK H | | 8,519,886 | 40.00% | 0.00% | OK |
| CHINA MOBILE EQUITY/ORDIN | 435,522 | 8,519,886 | 40.00% | 5.11% | OK |
| CHINA MOBILE EQUITY/ORDIN | | 8,519,886 | 40.00% | 0.00% | OK |
| CHINA PETROLEUM-H EQUITY/O | | 8,519,886 | 40.00% | 0.00% | OK |
| CHINA RESOURCES POWER HO | | 8,519,886 | 40.00% | 0.00% | OK |
| CNOOC EQUITY/ORDINARY | | 8,519,886 | 40.00% | 0.00% | OK |
| COUNTRY GARDEN HOLDINGS | | 8,519,886 | 40.00% | 0.00% | OK |
| GREAT WALL MOTOR CO | | 8,519,886 | 40.00% | 0.00% | OK |
| HUANENG POWER EQUITY/ORD | 470,420 | 8,519,886 | 40.00% | 5.52% | OK |
| IGBC EQUITY/ORDINARY | | 8,519,886 | 40.00% | 0.00% | OK |
| LENOVO GROUP LTD EQUITY/O | | 8,519,886 | 40.00% | 0.00% | OK |
| PETROCHINA EQUITY/ORDINAR | 416,587 | 8,519,886 | 40.00% | 4.89% | OK |
| PICC PROPERTY & CASUALTY - | 422,134 | 8,519,886 | 40.00% | 4.95% | OK |
| SANDS CHINA LTD | | 8,519,886 | 40.00% | 0.00% | OK |
| SHENZHO INTERNATIONAL | | 8,519,886 | 40.00% | 0.00% | OK |
| SKYWORTH DIGITAL HLDGS | | 8,519,886 | 40.00% | 0.00% | OK |
| TRAVELSKY TECHNOLOGY LTD- | | 8,519,886 | 40.00% | 0.00% | OK |

Liquidity Report

| Description | Symbol RIC | Qty | Exp Current (%) | Avg Volume | Liquidity 1 Day Limit | Liquidity 5 Day Limit |
|--|------------|---------|-----------------|------------|-----------------------|-----------------------|
| UCITS | | | 91.52% | | 2.35% | 0.47% |
| PUBLICCBK FOREIGN | PUBMe.KL | | 0.00% | | NaN | NaN |
| WESTFIELD RETAIL TRUST | WRT.AX | | 0.00% | | NaN | NaN |
| COWAY CO LTD EQUITY/ORDINARY | 021240.KS | 5,800 | 1.88% | 187,849 | 3.09% | 0.52% |
| TEST_INELIGIBLE | TEST_INELI | 100 | 0.01% | 221,197 | 0.05% | 0.01% |
| SIAM CEMENT PCL | SCCF.BK | | 0.00% | 301,517 | 0.00% | 0.00% |
| PHI LONG DIST EQUITY/ORDINARY | TELPS | | 0.00% | 335,994 | 0.00% | 0.00% |
| HERO MOTORCORP LTD CFD | HR0M.NS | 8,950 | 1.88% | 646,845 | 1.38% | 0.28% |
| MACQUAIRIE GROUP LTD | MQG.AX | 8,450 | 1.76% | 1,172,854 | 0.72% | 0.14% |
| STARHUB EQUITY/ORDINARY | STAR.SI | | 0.00% | 1,432,322 | 0.00% | 0.00% |
| SIAM COMMERCIAL BANK WDR | SCBn.BK | 83,200 | 2.07% | 1,466,841 | 5.67% | 1.13% |
| SIAM COMMERCIAL BANK NVDR | SCBn.BK | | 0.00% | 1,466,841 | 0.00% | 0.00% |
| SHENZHOU INTERNATIONAL | 2313.HK | | 0.00% | 1,563,405 | 0.00% | 0.00% |
| STANDARD CHARTERED PLC | 2888.HK | 29,250 | 1.89% | 1,680,730 | 1.74% | 0.35% |
| YUE YUEN IND EQUITY/ORDINARY | 0551.HK | | 0.00% | 1,832,313 | 0.00% | 0.00% |
| UOB LTD EQUITY/ORDINARY | UOBH.SI | 24,750 | 1.84% | 2,005,711 | 1.23% | 0.25% |
| AGL ENERGY | AGL.AX | | 0.00% | 2,083,231 | 0.00% | 0.00% |
| MAPLE TREE COMMERCIAL TRUST | MACT.SI | 428,000 | 2.10% | 2,215,778 | 19.32% | 3.86% |
| LEND LEASE CORPORATION | LLC.AX | 34,050 | 2.03% | 2,341,591 | 1.45% | 0.29% |
| AUSTRALIAN PIPELINE | APA.AX | 85,266 | 2.36% | 2,375,472 | 3.59% | 0.72% |
| POWER ASSETS EQUITY/ORDINARY | 0006.HK | | 0.00% | 2,418,053 | 0.00% | 0.00% |
| WESFARMERS LTD | WES.AX | 12,550 | 1.93% | 2,430,869 | 0.52% | 0.10% |
| TRAVELSKY TECHNOLOGY LTD - HEQUITY/ORD | 0696.HK | | 0.00% | 2,439,427 | 0.00% | 0.00% |
| MAPLE TREE INDUSTRIAL TRUST | MAPL.SI | | 0.00% | 2,502,000 | 0.00% | 0.00% |
| WOODSIDE PETROLEUM | WPL.AX | 12,650 | 1.69% | 2,941,952 | 0.43% | 0.09% |
| MAPLE TREE LOGISTICS TRUST | MAPL.SI | | 0.00% | 3,045,378 | 0.00% | 0.00% |
| NAGACORP LTD | 3918.HK | | 0.00% | 3,487,005 | 0.00% | 0.00% |
| CHEUNG KONG HLDG LTD | 0001.HK | | 0.00% | 3,571,648 | 0.00% | 0.00% |
| CHALLENGER LTD | CGF.AX | 76,750 | 1.79% | 3,637,639 | 2.11% | 0.42% |
| DBS GRP HLDGS EQUITY/ORDINARY | DBS.M.SI | | 0.00% | 3,661,608 | 0.00% | 0.00% |
| BDO UNIBANK INC | BDO.PS | | 0.00% | 3,707,617 | 0.00% | 0.00% |
| PUBLIC BANK BERHAD | PUBM.KL | 84,600 | 1.89% | 3,708,999 | 2.28% | 0.46% |
| SUNCORP | SUN.AX | 34,750 | 1.78% | 3,860,465 | 0.90% | 0.18% |
| SPOTLESS GROUP HOLDINGS LTD | SPO.AX | 262,700 | 1.85% | 4,021,780 | 6.53% | 1.31% |
| AMCOR LTD | AMC.AX | 44,750 | 2.13% | 4,249,018 | 1.05% | 0.21% |
| SIME DARBY BHD EQUITY/ORDINARY | SIME.KL | | 0.00% | 4,259,392 | 0.00% | 0.00% |
| KEPPEL REIT | KASA.SI | | 0.00% | 4,826,022 | 0.00% | 0.00% |
| TRANSURBAN GROUP | TCL.AX | 65,983 | 2.08% | 5,440,422 | 1.21% | 0.24% |
| CHOW TAI FOOK JEWELLERY GRP LTD | 1929.HK | | 0.00% | 5,574,541 | 0.00% | 0.00% |
| KEPPEL CORP EQUITY/ORDINARY | KPLM.SI | | 0.00% | 5,607,434 | 0.00% | 0.00% |

Data Integrity Report

The data integrity report proactively reviews all security setups, transactions, and imported data to ensure that data needed to correctly monitor compliance is in place. This report will also alert designated users to missing data so that they can correct the problem in a timely manner.

UCITS HISTORICAL REPORTS:

- Audit Trail Report - The audit trail report will show the history of any changes made to any order, including pre-change values, post-change values, time of change, and user making the change. If UCITS compliance is enabled, these reports will also show any compliance restrictions and their details.

Country Limit Report

| Description | Delta Gross | Country Limit | Country % FUM | % Utilization | Country Status |
|----------------------------|------------------|------------------|---------------|---------------|----------------|
| AUSTRALIA | 6,743,834 | 8,519,886 | 40.00% | 79.15% | OK |
| AUSTRALIA | 6,743,834 | 8,519,886 | 40.00% | 79.15% | OK |
| AGL ENERGY | | 8,519,886 | 40.00% | 0.00% | OK |
| AMCOR LTD | 448,355 | 8,519,886 | 40.00% | 5.26% | OK |
| AMP LTD | 417,948 | 8,519,886 | 40.00% | 4.91% | OK |
| ANZ BANKING GROUP | 418,666 | 8,519,886 | 40.00% | 4.91% | OK |
| AUSTRALIAN PIPELINE | 456,958 | 8,519,886 | 40.00% | 5.36% | OK |
| BHP BILLITON | 392,039 | 8,519,886 | 40.00% | 4.60% | OK |
| CHALLENGER LTD | 386,583 | 8,519,886 | 40.00% | 4.54% | OK |
| LEND LEASE CORPORATION | 417,712 | 8,519,886 | 40.00% | 4.90% | OK |
| MACQUAIRE GROUP LTD | 406,916 | 8,519,886 | 40.00% | 4.78% | OK |
| SCENTRE GROUP LTD | 429,353 | 8,519,886 | 40.00% | 5.04% | OK |
| SPOTLESS GROUP HOLDINGS L | 415,383 | 8,519,886 | 40.00% | 4.88% | OK |
| SUNCORP | 412,710 | 8,519,886 | 40.00% | 4.84% | OK |
| SYDNEY AIRPORT UNITS | 434,752 | 8,519,886 | 40.00% | 5.10% | OK |
| TELSTRA CORPORATION | 438,913 | 8,519,886 | 40.00% | 5.15% | OK |
| TRANSURBAN GROUP | 449,125 | 8,519,886 | 40.00% | 5.27% | OK |
| WESFARMERS LTD | 420,794 | 8,519,886 | 40.00% | 4.94% | OK |
| WESTFIELD RETAIL TRUST | | 8,519,886 | 40.00% | 0.00% | OK |
| WOODSIDE PETROLEUM | 397,627 | 8,519,886 | 40.00% | 4.67% | OK |
| CHINA | 2,245,391 | 8,519,886 | 40.00% | 26.35% | OK |
| CHINA | 2,245,391 | 8,519,886 | 40.00% | 26.35% | OK |
| ABC EQUITY/ORDINARY | | 8,519,886 | 40.00% | 0.00% | OK |
| BANK OF CHINA EQUITY/ORDI | 500,728 | 8,519,886 | 40.00% | 5.88% | OK |
| CHINA CONSTRUCTION BANK H | | 8,519,886 | 40.00% | 0.00% | OK |
| CHINA MOBILE EQUITY/ORDIN | 435,522 | 8,519,886 | 40.00% | 5.11% | OK |
| CHINA MOBILE EQUITY/ORDIN | | 8,519,886 | 40.00% | 0.00% | OK |
| CHINA PETROLEU-H EQUITY/O | | 8,519,886 | 40.00% | 0.00% | OK |
| CHINA RESOURCES POWER HO | | 8,519,886 | 40.00% | 0.00% | OK |
| CNOOC EQUITY/ORDINARY | | 8,519,886 | 40.00% | 0.00% | OK |
| COUNTRY GARDEN HOLDINGS | | 8,519,886 | 40.00% | 0.00% | OK |
| GREAT WALL MOTOR CO | | 8,519,886 | 40.00% | 0.00% | OK |
| HUANENG POWER EQUITY/ORD | 470,420 | 8,519,886 | 40.00% | 5.52% | OK |
| ICBC EQUITY/ORDINARY | | 8,519,886 | 40.00% | 0.00% | OK |
| LENOVO GROUP LTD EQUITY/O | | 8,519,886 | 40.00% | 0.00% | OK |
| PETROCHINA EQUITY/ORDINAR | 416,587 | 8,519,886 | 40.00% | 4.89% | OK |
| PICC PROPERTY & CASUALTY - | 422,134 | 8,519,886 | 40.00% | 4.95% | OK |
| SANDS CHINA LTD | | 8,519,886 | 40.00% | 0.00% | OK |
| SHENZHOU INTERNATIONAL | | 8,519,886 | 40.00% | 0.00% | OK |
| SKYWORTH DIGITAL HLDGS | | 8,519,886 | 40.00% | 0.00% | OK |
| TRAVELSKY TECHNOLOGY LTD- | | 8,519,886 | 40.00% | 0.00% | OK |

Liquidity Report

Athena Aura

Main My Reports Tools Configuration Team Add-Ins Import Aura OMS

Design Mode Dashboard Reset Layout Refresh Data Save Report Add/Edit Views Edit Reports Data Add/Edit Columns

Account Description

| Description | Symbol RIC | Qty | Exp Current (%) | Avg Volume | Liquidity 1 Day Limit | Liquidity 5 Day Limit |
|---------------------------------------|------------|---------|-----------------|------------|-----------------------|-----------------------|
| | | | 91.52% | | 2.35% | 0.47% |
| UCITS | | | 91.52% | | 2.35% | 0.47% |
| PUBLICBK FOREIGN | PUBMe.KL | | 0.00% | | NaN | NaN |
| WESTFIELD RETAIL TRUST | WRT.AX | | 0.00% | | NaN | NaN |
| COWAY CO LTD EQUITY/ORDINARY | 021240.KS | 5,800 | 1.88% | 187,849 | 3.09% | 0.62% |
| TEST_INELIGIBLE | TEST_INELI | 100 | 0.01% | 221,197 | 0.05% | 0.01% |
| SIAM CEMENT PCL | SCCF.BK | | 0.00% | 301,517 | 0.00% | 0.00% |
| PHI LONG DIS T EQUITY/ORDINARY | TEL.PS | | 0.00% | 335,994 | 0.00% | 0.00% |
| HERO MOTOCORP LTD CFD | HROM.NS | 8,950 | 1.88% | 646,845 | 1.38% | 0.28% |
| MACQUAIRE GROUP LTD | MQG.AX | 8,450 | 1.76% | 1,172,854 | 0.72% | 0.14% |
| STARHUB EQUITY/ORDINARY | STAR.SI | | 0.00% | 1,432,322 | 0.00% | 0.00% |
| SIAM COMMERCIAL BANK NVDR | SCBn.BK | 83,200 | 2.07% | 1,466,841 | 5.67% | 1.13% |
| SIAM COMMERCIAL BANK NVDR | SCBn.BK | | 0.00% | 1,466,841 | 0.00% | 0.00% |
| SHENZHOU INTERNATIONAL | 2313.HK | | 0.00% | 1,563,405 | 0.00% | 0.00% |
| STANDARD CHARTERED PLC | 2888.HK | 29,250 | 1.89% | 1,680,730 | 1.74% | 0.35% |
| YUE YUEN IND EQUITY/ORDINARY | 0551.HK | | 0.00% | 1,832,313 | 0.00% | 0.00% |
| UOB LTD EQUITY/ORDINARY | UOBH.SI | 24,750 | 1.94% | 2,005,711 | 1.23% | 0.25% |
| AGL ENERGY | AGL.AX | | 0.00% | 2,083,231 | 0.00% | 0.00% |
| MAPLE TREE COMMERCIAL TRUST | MACT.SI | 428,000 | 2.10% | 2,215,778 | 19.32% | 3.86% |
| LEND LEASE CORPORATION | LLC.AX | 34,050 | 2.03% | 2,341,591 | 1.45% | 0.29% |
| AUSTRALIAN PIPELINE | APA.AX | 85,266 | 2.36% | 2,375,472 | 3.59% | 0.72% |
| POWER ASSETS EQUITY/ORDINARY | 0006.HK | | 0.00% | 2,418,053 | 0.00% | 0.00% |
| WESFARMERS LTD | WES.AX | 12,550 | 1.93% | 2,430,869 | 0.52% | 0.10% |
| TRAVELSKY TECHNOLOGY LTD-H EQUITY/ORD | 0696.HK | | 0.00% | 2,439,427 | 0.00% | 0.00% |
| MAPLE TREE INDUSTRIAL TRUST | MAPI.SI | | 0.00% | 2,602,000 | 0.00% | 0.00% |
| WOODSIDE PETROLEUM | WPL.AX | 12,650 | 1.69% | 2,941,952 | 0.43% | 0.09% |
| MAPLE TREE LOGISTICS TRUST | MAPL.SI | | 0.00% | 3,045,378 | 0.00% | 0.00% |
| NAGACORP LTD | 3918.HK | | 0.00% | 3,487,005 | 0.00% | 0.00% |
| CHEUNG KONG HLDG LTD | 0001.HK | | 0.00% | 3,571,648 | 0.00% | 0.00% |
| CHALLENGER LTD | CGF.AX | 76,750 | 1.79% | 3,637,639 | 2.11% | 0.42% |
| DBS GRP HLDGS EQUITY/ORDINARY | DBSM.SI | | 0.00% | 3,661,608 | 0.00% | 0.00% |
| BDO UNIBANK INC | BDO.PS | | 0.00% | 3,707,617 | 0.00% | 0.00% |
| PUBLIC BANK BERHAD | PUBM.KL | 84,600 | 1.89% | 3,708,999 | 2.28% | 0.46% |
| SUNCORP | SUN.AX | 34,750 | 1.78% | 3,860,465 | 0.90% | 0.18% |
| SPOTLESS GROUP HOLDINGS LTD | SPO.AX | 262,700 | 1.85% | 4,021,780 | 6.53% | 1.31% |
| AMCOR LTD | AMC.AX | 44,750 | 2.13% | 4,249,018 | 1.05% | 0.21% |
| SIME DARBY BHD EQUITY/ORDINARY | SIME.KL | | 0.00% | 4,259,392 | 0.00% | 0.00% |
| KEPPEL REIT | KASA.SI | | 0.00% | 4,826,022 | 0.00% | 0.00% |
| TRANSURBAN GROUP | TCL.AX | 65,983 | 2.08% | 5,440,422 | 1.21% | 0.24% |
| CHOW TAI FOOK JEWELLERY GRP LTD | 1929.HK | | 0.00% | 5,574,541 | 0.00% | 0.00% |
| KEPPEL CORP EQUITY/ORDINARY | KPLM.SI | | 0.00% | 5,607,434 | 0.00% | 0.00% |

VaR Limits Loss Limits Country Limits Liquidity Limits Counterparty Exposure

Executions - Blotter UCITS Compliance Limits - UCITS

v3.5.8.1304 32bits Connected to Aura Server Memory is 998% 0% Notification(s) received Mkt Data Error! Op Data Mkt Data ATHENA_UPG_COMP (Admin) Message

Counterparty Exposure Report

Athena Aura

Main My Reports Tools Configuration Team Add-Ins Import Aura OMS

Design Mode Dashboard Reset Layout Refresh Data Save Report Add/Edit Views Edit Reports Data Add/Edit Columns

Column Chooser Grid Properties GroupBy Filter Merge Expand All Collapse All Expand: 1

| Description | Exp Current (Base) | Exp Current (%) |
|----------------------------------|--------------------|-----------------|
| <Empty> | 19,427,894 | 91.21% |
| TEST_INELIGIBLE | 2,677 | 0.01% |
| BNP Paribas Sec | 13,299,823 | 62.44% |
| CHINA MOBILE EQUITY/ORDINARY | | 0.00% |
| DBS GRP HLDGS EQUITY/ORDINARY | | 0.00% |
| STARHUB EQUITY/ORDINARY | | 0.00% |
| BANK OF CHINA EQUITY/ORDINARY | 500,728 | 2.35% |
| LINK REIT EQUITY/ORDINARY | 496,528 | 2.33% |
| TELKOM INDONESIA EQUITY/ORDINARY | 474,875 | 2.23% |
| ASCEN REIT EQUITY/ORDINARY | 445,202 | 2.09% |
| CAPMALL TRUST EQUITY/ORDINARY | | 0.00% |
| PUBLICBANK FOREIGN | | 0.00% |
| KEPPEL CORP EQUITY/ORDINARY | | 0.00% |
| SINGTEL EQUITY/ORDINARY | 7,728 | 0.04% |
| PHI LONG DIST EQUITY/ORDINARY | | 0.00% |
| POWER ASSETS EQUITY/ORDINARY | | 0.00% |
| BOC HONG KONG EQUITY/ORDINARY | 483,000 | 2.27% |
| SUNTEC REIT EQUITY/ORDINARY | 498,033 | 2.34% |
| HSBC HOLDINGS EQUITY/ORDINARY | | 0.00% |
| ANTA SPORTS EQUITY/ORDINARY | 458,868 | 2.15% |
| MAYBANK BHD EQUITY/ORDINARY | | 0.00% |
| UOB LTD EQUITY/ORDINARY | 452,131 | 2.12% |
| CNOOC EQUITY/ORDINARY | | 0.00% |
| PETROCHINA EQUITY/ORDINARY | 416,587 | 1.96% |
| ICBC EQUITY/ORDINARY | | 0.00% |
| ABC EQUITY/ORDINARY | | 0.00% |
| YUE YUEN IND EQUITY/ORDINARY | | 0.00% |
| WYNN MACAU EQUITY/ORDINARY | | 0.00% |
| XINYI GLASS HOLDINGS LTD | | 0.00% |
| SIME DARBY BHD EQUITY/ORDINARY | | 0.00% |
| CHEUNG KONG HLDG LTD | | 0.00% |
| HUTCHISON PORT HOLDINGS TRUST | 441,677 | 2.07% |
| SJM HOLDINGS | | 0.00% |
| STANDARD CHARTERED PLC | 433,280 | 2.03% |
| SKYWORTH DIGITAL HLDGS | | 0.00% |
| SIAM CEMENT PCL | | 0.00% |
| SANDS CHINA LTD | | 0.00% |
| HUTCHISON WHAMPO EQUITY/ORDINARY | | 0.00% |
| CHINA PETROLEUM EQUITY/ORDINARY | | 0.00% |
| CHINA CONSTRUCTION BANK H | | 0.00% |

VaR Limits Loss Limits Country Limits Liquidity Limits Counterparty Exposure

Executions - Blotter UCITS Compliance Limits - UCITS

v3.5.8.1304 32bits Connected to Aura Server Memory is 0% Alerts processing is OFF Op Data Refresh Stopped! Mkt Data Stopped! ATHENA_UPG_COMP (Admin) - CLSA