

Liquidnet H2O ATS

ATS-N ITM2.7d

P. Enterprise Technology Services personnel

Roles and responsibilities

Liquidnets Enterprise Technology Services (ETS) group maintains the computers, networks, databases and connectivity that comprise the Liquidnet system. ETS personnel provide services for the ATS and non-ATS portions of LNI's business.

Access to data

A subset of the ETS group (Production Support and Database Administration) has access to indication, order, execution and other trading information to troubleshoot production and system issues, when directed by the Product Support group. These ETS personnel are located in a keycard protected area and are on a separate network segment from other Liquidnet personnel for certain purposes.

Q. Software Development and Quality Assurance personnel

Roles and responsibilities

Software Development and Quality Assurance personnel are responsible for development, enhancement, and maintenance of the software components of the Liquidnet system. Software Development and Quality Assurance personnel provide services for the ATS and non-ATS portions of LNI's business.

Access to data

These personnel have access to indication, order, execution and other trading information on a real-time basis in connection with the performance of their duties.

R. Product personnel

Roles and responsibilities

Liquidnets Product group is responsible for the design and enhancement of Liquidnets trading products. Product personnel provide services for the ATS and non-ATS portions of LNI's business.

Access to data

Liquidnets Product personnel have access to indication, order, execution and other trading information for the products that they work on (for example, the Liquidnet desktop trading application, algos, TCA and commission management).

Product personnel can access and analyze trader usage data to enhance Liquidnets products. An example of analyzing trader usage data would be to identify the conditions under which a trader is more likely to respond to a targeted invitation.

Members of Liquidnets Product group have access to reports on Member and trader performance and activity through Liquidnet, as described above in the Sales coverage section. These reports are not symbol-specific and do not include symbol-level information.

In addition, designated Members of Liquidnets Product group have access to the EMS used by the LNI trading desk and Execution Consultants. This access is to assist LNI in responding to inquiries from Members and customers relating to system functionality in connection with day-to-day trading activity by Members and customers. Designated members of the Product group with responsibility for internal support tools have access to the same data as Member Services personnel.

S. Business Intelligence

Roles and responsibilities

The Business Intelligence (BI) team develops reports for use by internal groups, including Sales Analytics, Corporate Leadership, Sales, and Marketing, for use in monitoring, developing and enhancing Liquidnets products and services as well as in support of Liquidnets sales and marketing efforts. BI personnel provide services for the ATS and non-ATS portions of LNIs business.

Access to data

BI personnel have access to indication, order, execution and other trading information in the Liquidnet database that includes all order and other trading information. Reports, which can include trading information, may only be provided by the Business Intelligence group to employees in other groups if those employees are authorized, pursuant to Liquidnets policies, to have access to the associated data.

T. Legal, Compliance and SRM personnel

Roles and responsibilities

Liquidnets Legal and Compliance personnel are responsible for working with the business units to establish and enforce Liquidnets legal and compliance policies. Compliance includes the Liquidity Watch monitoring and surveillance function. Liquidnets Security and Risk Management (SRM) personnel are responsible for working with the business units to establish and enforce Liquidnets policies relating to information security. Legal, Compliance and SRM personnel provide services for the ATS and non-ATS portions of LNI's business.

Access to data

Liquidnets Liquidity Watch personnel have access to indication, order, execution and other trading information as well as commission aggregation information as part of their ongoing surveillance activity. Liquidnets Legal, Compliance and SRM personnel are permitted to access trading information in fulfilling their responsibilities, including for the conduct of investigations.

U. Finance personnel

Roles and responsibilities

Designated members of Liquidnets Finance team have responsibility for accounts payable and receivable operations in connection with the operation of Liquidnets business. Finance personnel provide services for the ATS and non-ATS portions of LNI's business.

Access to data

As part of these responsibilities, these designated members of the Finance Department have access to trading information after the end of the trading day.

V. OTAS personnel

Roles and responsibilities

OTAS personnel are involved in the development and support of the Liquidnet and OTAS analytics products, including Discovery and Best Ex Replay. OTAS personnel provide services for the non-ATS portion of LNI's business.

Access to data

OTAS personnel have access to information relating to trader usage of the Discovery, Best Ex Replay and Action Stream functionality, which are provided through the Liquidnet desktop trading application. Discovery provides analytics to traders relating to individual stocks. Best Ex Replay provides analytics to traders to assist with best execution analysis. Action Stream provides notifications to a trader relating to a trader's activity through the

system or information that a trader could otherwise see or have seen through the Liquidnet desktop trading application. The analytics provided by Discovery are based on overall market activity and not based on Liquidnet-specific activity. The sending of analytics or a notification to a trader can be based on the indications provided by the traders firm to Liquidnet or the traders activity through Liquidnet.

In addition, product personnel can engage OTAS personnel to assist in conducting an analysis of trader usage data for other products. When performing this function, OTAS personnel are provided access to trader usage data but without identifying trader or participant names. OTAS personnel access this data through Liquidnet systems.

Qtech

Liquidnet outsources development and support work relating to the OTAS analytics products (including Discovery and Best Ex Replay) to Qtech (UK) Limited, a UK-formed technology consulting firm, and its affiliate, Qtech Analytics Private Limited, a company organized in India (Qtech India). Qtech personnel work in London and in India. Qtech employees work in a data center in India that includes employees of MSBC Group (Qtech Indias parent company) and employees of other companies owned by MSBC. Qtech employees can access information relating to Liquidnet and OTAS analytics products and participant usage of such products in connection with their development and support roles. Qtech support personnel can access indication information for all indications of Members that are enabled for Action Stream or Discovery. This data is recorded on specific servers to which Qtech personnel have access; these servers are located in Liquidnet data centers in the US and Europe. These servers also record indication information of a participant during any period of time when a participant has the blotter window open in Liquidnet 5, even if the participant is not enabled for Action Stream or Discovery. The data above includes Member and user names. Qtech personnel may provide development and support services for other companies owned by MSBC Group and their clients.

W. Management personnel access to aggregated liquidity information

To assist Liquidnets Corporate Leadership and Sales management personnel in evaluating Liquidnets business performance, these personnel have access on a next-day basis to reports that include aggregated quantity of Member liquidity, broken out between buy and sell liquidity. This data is aggregated, and is not broken out by Member. The aggregated categories are as follows: country; sector; index and market cap (e.g., large, mid, small and micro). Liquidity information is based on the order quantity from a Members OMS or other indication quantity communicated by a Member to Liquidnet. Management personnel provide services for the ATS and non-ATS portions of LNIs business.

X. Aggregated data

In addition to the above, Liquidnet can provide trading data to employees where the data is not symbol-specific. In particular, Liquidnet can provide trading data to any employees broken out by the following categories and similar aggregated categories: country; sector; index and market cap (e.g., large, mid, small and micro). This data is used for business planning, sales and marketing purposes.

Y. Salesforce CRM system

Liquidnet personnel, other than LCM personnel, have access to the primary version of Liquidnets Salesforce CRM (customer relationship management) system. Liquidnets CRM system contains standard CRM information relating to participants, including participant contact information, participant actual and target revenue information, participant trading volume information (not symbol-specific), the status of support incidents, and reports on participant meetings and calls. Through Salesforce, Liquidnet personnel can receive alerts relating to participant PAR, realization rate and similar performance metrics; these metrics are not symbol-specific. The CRM system does not contain symbol-specific information, but users can enter specific symbols into the CRM in connection with the resolution of trade errors and other trading incidents. LCM personnel have access to a separate instance of Salesforce specifically created for the LCM team containing standard CRM information relating only to LCM customers, including contact information, the status of support incidents, and reports on LCM customer meetings and calls.