



RoZetta Technology DataHex SaaS platform sits at the convergence of a series of mega trends within Capital Markets:

- (1) powerful cloud computing
- (2) data science
- (3) scalable platform as a service
- (4) explosion of new sources of data
- (5) buy side power shift

Significant investment in cloud infrastructure, new analytics and new data sources leave an enormous unmet need to bring it all together. There is a clear need for proven solutions to manage complex time series data across asset classes, wrangle, combine and enable Data Science Consumers with analytics ready data.

Activating analytics ready data is key to the value chain in Data Science Data Management: activation involves, modeling, ingesting, validating, cleaning, enhancing, curating and preparing pre-model metrics for analysts.

Bespoke legacy systems are creating data bottlenecks while participants seek to upgrade to a modern data technology stack to ensure they remain competitive.

DataHex SaaS Platform meets the need by providing:

- Scalable, repeatable, purpose built cloud platform and managed service specialized for data creators, distributors and data science consumers.
- Proven platform that de-risks and eliminates bottlenecks in managing large scale time series data for capital markets.
- Streamlined data access via search engine, data mapping, API connectivity and cloud delivery, enhancing the overall consumer experience.
- Powerful analytic discovery enabling more Data Science time to be spent on analysis rather than cleansing and preparing raw data



The DataHex Data Management SaaS Platform provides users with the ability to search, find and select data and schedule delivery directly to the environment or application required.

## DATA MANAGEMENT

- Supports multiple data types - structured and unstructured
- Ingestion, Validation, enrichment and Normalisation
- Ultra-fast storage and retrieval
- Preview & extraction via Data Library
- Custom templates
- Optimal/world-class security

## CUSTOMER MANAGEMENT

- Entitlement management
- Subscription management
- User Management
- 24/7 support

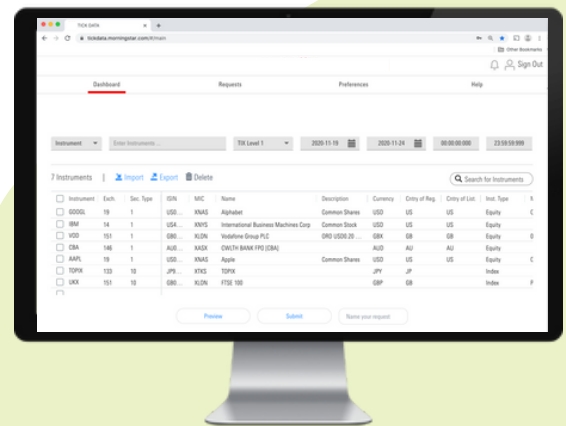
## CONNECTIVITY

- RESTful API
- React User Interface
- Data direct to s3, SFTP
- Direct to kdb+, Databricks, Snowflake, Google BigQuery, AWS Redshift

## ANALYTIC FEATURES

Empowering data-driven innovation

- Pre-calculated catalog of metrics
- Scheduling of data refresh
- User defined reporting dashboards
- Support multiple programming languages (Python, Scala, R, SQL)
- User controlled scalable clustered compute
- High performance distributed query processing using Apache Spark
- RoZetta managed or client managed options



**WINNER**

**RoZetta Technology**

**Best Tick Data Management Platform**

## DATA PROFILE

Platform supports:

- 450+ Exchanges
- All Asset Classes - Equities; Fixed Income; Forex; Money Markets; Futures; Options; Commodities; Cryptocurrencies; Precious metals; Indices
- >20 years of historical data
- Data available 2 hours after exchange close; hourly or within 15 mins
- Consistent format across all venues
- OTC/Third party contributed data are grouped into dedicated exchange codes(numeric) for easy navigation
- Level 1 - Trades and Quotes
- Level 2 & 3 - Market Depth & Full Order Book
- Nanosecond timestamps (supported from source)
- Corporate actions integrated
- End of Day prices
- Index Chains
- Client configurable custom time bars
- Derived market metrics such as VWAP, MA's, Quote to Trade ratio, intra-day volatility
- Cross assets class support

## FEATURES

- Ability to validate a symbol/ instrument based on various industry standard codes (e.g., ISIN, CUSIP, SEDOL, FIGI, etc...)
- Import a portfolio of instruments from a CSV
- Search across exchanges using various attributes to build a portfolio/mine instruments from a security master database
- Add the list of instruments from the portfolio search to the request panel
- Apply filters on search results to derive the required list
- View meta-data for instruments
- Create view of subsets of data based on rules (e.g., Trades, Quotes, MarketDepth etc)
- Reference & Corporate actions data as message types
- Configure the data onboarding pipeline to build derived metrics (e.g., 1m timebars, 5m timebars, end of day bars, custom VWAP calculations etc)
- Build reference database & security master as part of data onboarding
- Preview/request data in Slice / Contiguous mode
- Predict the size of results for a request to inform users of their consumption
- View all requests submitted, re-load a request, modify and resubmit
- Name a request to differentiate it from others
- Create schedules - daily, weekly or monthly
- View, modify & update schedules
- Set preferences on requests to change - date format display, merge results, GMT vs local time etc.
- Create / modify / update templates
- Download daily exchange top-ups direct to your destination
- Entire historical data pushed to clients destination choice
- Supports multiple data types - structured and unstructured
- Ingestion, Validation, enrichment and Normalisation
- Ultra-fast storage and retrieval
- Preview & extraction via Data Library
- Custom templates
- Data extraction manager

## CONNECTIVITY

- RESTful API
- Compliant with Open api 3.0 standards
- Data direct to s3, SFTP
- Modern reactUI
- Direct to kdb+, Databricks, Snowflake, Google BigQuery, AWS Redshift
- Configure the data delivery destination - ftp / sftp / s3 / big query / snowflake / redshift / databricks / kdb+

## SECURITY MASTER

- 52m+ Instruments
- Identifiers/Alternative codes - ISIN, SEDOL, CUSIP, Valor, German WKN, FIGI, Country/Share class FIGI
- Additional fields - Root code, Expiry day, Expiry, month, Expiry year, Strike price, Currency, Symbol name, Description, ISIN, Instrument type, Market tier, Symbol name, Description, Country of registration, Expiry date, Expiry date, Instrument type, MIC, Instrument type, Instrument type, Shares outstanding, Expiry date, Instrument type, Coupon rate, Country of registration, Country of listing, Industry Name, Group Name FIGI Code, Fund Global Category Name

## PLATFORM ADMIN

- Entitlement management
- Subscription management
- User Management
- 24/7 L2 & L3 support
- Configurable permissioning interface to cater to various client packages - Entire exchange/group of exchanges; Specific asset classes on an exchange/ groups of exchanges; Defined instrument list
- Configurable data download limits - per month limit to restrict the amount of content.
- Configurable reporting module to generate reports for compliance purposes - based on instruments /exchanges touched, data downloaded
- Ability to allocate custom compute for high value clients.
- Configurable processing queues for client jobs.



Utilize our extensive delivery capabilities to access, query and extract exactly the data you want and empower your teams to reduce data wrangling and improve speed to analysis .

## RESTFUL API - ATTRIBUTES

API is based on REST. Compliant with Open API 3.0 standards, has resource-oriented URLs - returning JSON-encoded responses and returns and standard HTTPS response codes. We provide modern, secure and feature rich portfolio of API's which facilitate delivery of the right data, in the right way, when and where you need.

API calls support - custom requests (for a portfolio of instruments) or entire exchange downloads to meet different demands.

### DATA DISCOVERY

| Symbol Validation API   | Symbol Search API   | Entity Search API  | Discovery API  |
|---|---|--|--|
| Provides ability to validate codes and returns metadata for valid codes | Provides search capabilities across exchanges and asset classes | Provides search by company name capability that returns results on parent and subsidiaries | Provides data content availability for a specific instrument or company name |

### MARKET DATA

| L1 Data API   | L2/3 Data API   | EOD Data API  | Timebar Data API   |
|---|---|---|--|
| Provides Time & Quote data for instruments across exchanges | Provides market depth and full order book data for instruments across exchanges | Provides end of day summary data for instruments across exchanges | Provides 1m time bar data for instruments across exchanges |

### DATA ELEMENTS

| Reference Data API  | Symbology API  | Corporate Actions API   | Fundamentals API   |
|---|--|---|--|
| Provides rich reference data for instruments across exchanges | Provides symbol rename data for instruments across exchanges | Provides rich corporate actions data for instruments across exchanges | Provides fundamental data for instruments across exchanges |

Contact us to discuss your delivery requirements and to view the API specification file.



RoZetta Technology employs a 3 phased high-level methodology when onboarding data and client functional requirements for a data management solution. With extensive experience in deploying complex data management infrastructure we appreciate the need to focus on delivering short-term goals through a minimal viable client solution.



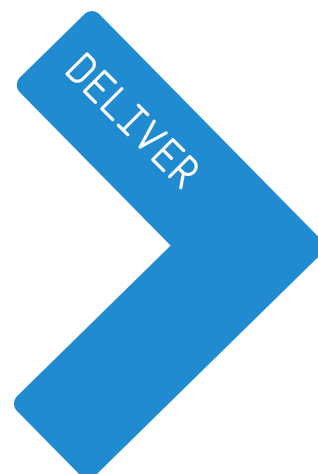
## CURRENT STATE ASSESSMENT

- Dataset(s) coverage
- Reference data coverage
- Corporate actions data coverage
- Symbology challenges
- Storage environment
- Existing documentation
- List of known issues
- Pain points



## DESIGN REQUIREMENTS

- MVP Definition
- Feature list specifics
- Prioritized data sets
- Market data rule definition
- Roadmap
- Go to market
- Service Level Agreements



## DATAHEX CONFIGURATION

- Ingestion pipeline
- Extraction pipeline
- Entitlements
- Permissioning
- Reporting

# UNLOCK THE FUTURE