



Corvil 

# Intelligence Hub

For Electronic Trading



# OVERVIEW

CORVIL INTELLIGENCE HUB IS AN ADVANCED DATA ANALYTICS AND BUSINESS INTELLIGENCE SOLUTION TO IMPROVE THE PERFORMANCE, AGILITY, AND CLIENT EXPERIENCE OF TODAY'S ELECTRONIC TRADING BUSINESS.

Firms that have the best information and react the fastest have an advantage. While managing and optimizing speed is a critical aspect in Financial Markets, it is only one dimension of what trading businesses require to perform optimally.

It is information about client and desk activity, securities, venues and counterparties, order types, etc. correlated with information about plant performance, response time and similar dimensions that are necessary to:

- Capture and maintain trade flow levels
- Optimize execution strategies and order routing
- Manage technology performance and cyber risk
- Manage risk and maintain compliance

Intelligence Hub delivers fast, easy access to valuable insight to improve:

- ✓ Execution Quality
- ✓ Operations
- ✓ Client Experience

## VISUALIZE, EXPLORE, AND ANALYZE

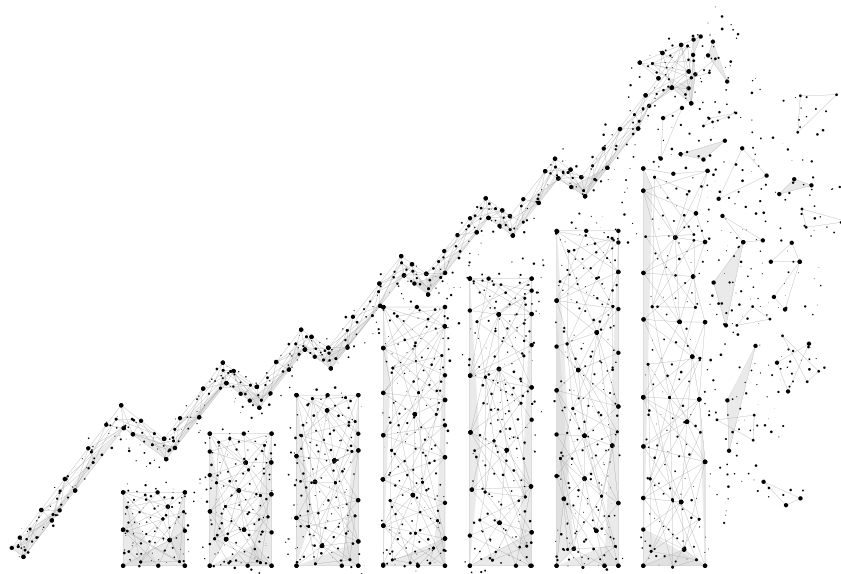
Quickly and easily deploy effective visualizations and perform multi-dimensional data analysis to explore patterns of activity at scale to answer the difficult questions.

## ACCURATELY IDENTIFY ANOMALIES

Triangulate meaningful anomalies by leveraging multiple machine learning algorithms. Gain rapid actionable insight – often proactively.

## PREDICT CONDITIONS

Use historical trending as well as predictive analytics to evaluate how conditions will change over time to enable improved planning and decision-making.



# BETTER DATA, BETTER INSIGHT

Intelligence Hub complements Corvil Analytics appliances to maximize existing investment and leverage rich transaction data to rapidly deliver the power of big data analytics to business, operations, and compliance teams without the high costs and lengthy timelines.

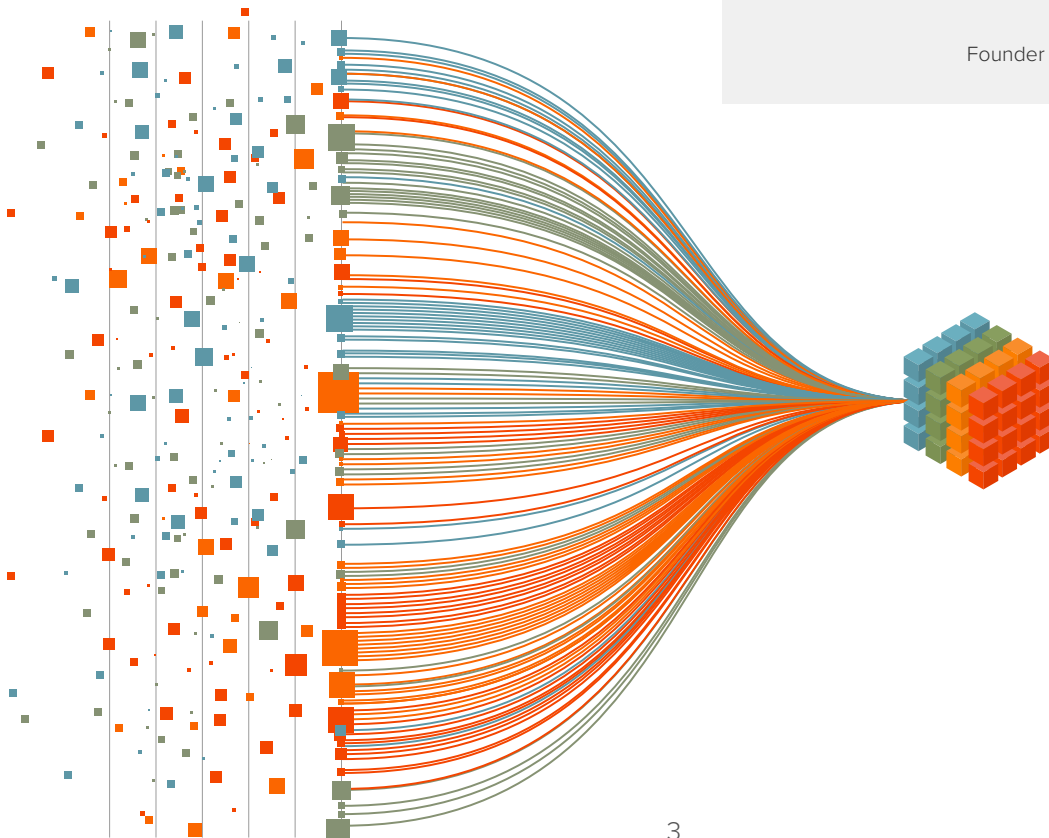
Corvil network data engines passively acquire and stream in real-time, granular, precision-sequenced information to Intelligence Hub. This data serves as a canonical source of what is happening and uniquely correlates dimensions of transaction information with technology performance characteristics.

Users can introduce external reference and other data to enrich the analysis and to provide the most consumable, intuitive output.

By tapping a ready, rich, accurate, and live source of data, Corvil mitigates the common challenges of identifying, acquiring, normalizing, validating and ingesting the right information from which to derive actionable intelligence.

“As trading becomes increasingly electronic it becomes possible and increasingly imperative to measure and analyze virtually every electronic interaction,” said Larry Tabb founder and Research Chairman of TABB Group. “As this process matures it becomes imperative to measure and analyze trading data in increasingly finer grain increments and at increasingly greater analytical depth **for better execution quality and counterparty management.**”

**Larry Tabb**  
Founder and Research Chairman, TABB Group



# ADVANCED ANALYTICS & ANOMALY DETECTION

Intelligence Hub incorporates an integrated data cube for multi-dimensional analysis and aggregation of data as well as multiple machine learning algorithms and a neural network.

Users can easily apply anomaly detection and predictive analysis to key metrics and data points without needing data science expertise. By correlating these diverse machine learning approaches, Intelligence Hub reduces the noise in detecting and presenting anomalies for reporting and action.

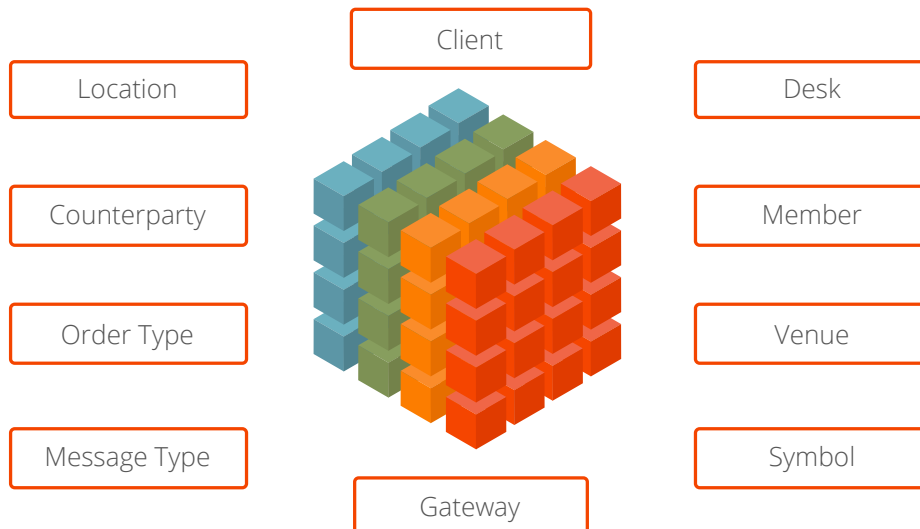
Intelligence Hub provides:

- High quality information -- delivered the way you want to use it
- Intuitive analytics and visualizations – to find the answers you need
- Intelligent alerting -- to tell you when conditions are changing

“Given the massive trade and order messaging rates that keep growing both in volume, speed and across asset classes, capital market players need to better understand the state of their orders/fills/data with nanosecond precision. The cost of downtime, venue or counterparty issues, and the associated risks are so great, trading and operations need to understand, analyse, and predict these immediately. These data sets are fertile ground to leverage machine learning to the utmost in the capital markets.”

**Brad Bailey**  
Research Director, Capital Markets, Celent

Financial, trading, customer, and performance metrics are extracted from order flow messages for multi-dimensional analysis by any data element – for example:



## USE CASES

- ✓ **QUALITY OF EXECUTION ANALYSIS**
- ✓ **CLIENT AND DESK INTELLIGENCE AND ACTIVITY ANALYSIS**
- ✓ **COUNTERPARTY AND VENUE ANALYSIS**
- ✓ **INTRADAY RISK MANAGEMENT**
- ✓ **CLIENT AND DESK TRADE SUPPORT**
- ✓ **SELF-SERVICE BUSINESS INTELLIGENCE AND REPORTING**

“The FX markets have reached a high water mark in penetration, with nearly 80% of market participants trading in an electronic environment. For firms to excel over the competition going forward, they will have to optimize their access to data and the analytics needed to put that data to work. Products such as Corvil’s Intelligence Hub offer the potential of providing performance data across a spectrum of e-trading metrics.”

**Dan Connell**  
Managing Director, Greenwich Associates



# KEY BENEFITS

## **OPEN, SCALABLE, RESILIENT PLATFORM**

REST APIs enable easy data extract. Clustered technology provides resiliency and recovery from outage. Easily scalable by adding nodes to accommodate more data or longer data retention times.

## **FAST IMPLEMENTATION**

An integrated software stack that deploys quickly on prem or in AWS, that seamlessly ingests data streams from Corvil appliances, and includes trading analytics, dashboards and reports enabling users to focus value creation instead of combining multiple data sources.

## **INTUITIVE & RESPONSIVE USER EXPERIENCE**

Analytics performance is optimized for interactive use and flexible data exploration, slicing, pivoting and correlation, with dozens of visualizations from which to choose. Easy to execute queries, visualize patterns, and see correlations – creating a convenient and productive user experience.

## **GRANULAR TRANSACTION DATA**

Corvil Analytics streams precision-timestamped, granular data about transactions, customer experience and infrastructure performance data into Intelligence Hub for long term storage and analysis to empower business, compliance, customer support, and even security teams – without the data preparation and integration effort.

## **ANOMALY DETECTION POWERED BY MACHINE LEARNING**

Continually identify anomalies ranging from simple static thresholds, to deviations from baselines deviations detected by behavior modeling, to temporal anomalies detected by a neural network, to predictive analytics.

## **INTELLIGENT ALERTING**

Detected anomalies are automatically correlated, deduplicated, consolidated and filtered to provide actionable alerts to stakeholders while minimizing noise and alert fatigue. Customizable management policies deliver complete control over alert propagation and workflows.



# Intelligence Hub



For more information please contact [marketing@corvil.com](mailto:marketing@corvil.com) or go to [corvil.com](http://corvil.com)