## graylog

# MARKETAXESS INNOVATES WITH GRAYLOG ENTERPRISE

to bring Real-Time Data Intelligence to Electronic Trading Platform

X Market Axess

*Industry:* FinTech

#### *Data Volume:* 2–3 Terabytes daily

*Global Reach:* MarketAxess' trading, market data, and regulatory reporting solutions are reshaping the way the institutional fixed income markets operate.

#### **ABOUT MARKETAXXESS**

MarketAxess is the leader in electronic trading of global credit products. Their electronic platform offers trading in the broadest range of credit and credit derivatives for global institutional investors and broker dealers. Over 1,800 firms including the world's leading asset managers and institutional broker-dealers, leverage MarketAxess' patented trading technology to efficiently trade bonds. "Graylog had the functionality, scalability, flexible pricing and most importantly the willingness to enter into a collaborative partnership there was no 'bait and switch', no marginal sales tactics. Graylog's team connected with my team. As a mid-size company, we wanted a partnership, not a vendor-customer relationship."

 Dan Lelewski, Head of IT Systems and Automation

## THE NEED FOR CENTRALIZED LOG MANAGEMENT

With a trading volume of \$567.9 billion (June 2021), MarketAxess generates close to two to three Terabytes of log data per day and needed a centralized log management system that could keep tabs with the volume of MarketAxess trading, troubleshoot failed trades and quickly remediate.

In 2018, MarketAxess was using a 'home grown' logging tool that quickly outgrew its usefulness. MarketAxess required a purpose-built solution to ingest all application logging into a centralized repository and correlate application issues across many different tiers to find the ultimate root cause of issues.

Graylog Enterprise won the bake-off after MarketAxess evaluated multiple products including Splunk, ELK Stack, and decided against building another home-grown tool. Dan Lelewski, head of IT Systems and Automation at MarketAxess led the in-depth evaluation and chose Graylog based on its functionality and the collaborative partnership he formed with the Graylog team.

### **POWER SEARCHES FOR REAL-TIME INVESTIGATION**

MarketAxess soon moved from its home-grown tool to the Graylog log management platform with one immediate goal — consolidate all application and firewall log data into one large repository where it is normalized, and power searched with search results rendered through a unified console.

Graylog Enterprise is used daily by approximately 14 advanced users in the IT Systems and Automation group with another 400 developers and 15 security executive team members who have access to the Graylog platform. Company-wide, all log data is fed into Graylog Enterprise centralized log management platform.

"While it took time to get everyone acclimated to a new platform, the company saw the value in searching 60 servers instantly to view events and incidents versus logging into each server and running individual commands," commented Lelewski. "We are working smarter and that enables us to quickly troubleshoot and get to the root cause of issues."

For example, if an application is not connecting to a remote host, instead of digging individually through 7–8 firewall logs in response to a trouble ticket, the team can use powerful searches to identify the problem, review the firewall logging rejects and pinpoint what is blocking the specific flow.

#### **DECREASING SUPPORT CASE RESOLUTION TIMES**

The product support and development teams also see the value and benefits from Graylog Enterprise.

The MarketAxess trading platform has more than 1,000 users at any given time with more that 50+ applications interconnected. When a trading error occurs, the first call is to product support. Instead of sifting through thousands of logs, product support launches its investigation in real time. It searches on the Trade ID to build a better picture of the issue and immediately notes that the 'trade hit Connection Server 40 but then hit Presentation Server X and that's where it 'broke''. Product support shares this information with the Trader, resolves the issue and provides visibility into the incident for developers to further address.

With a unified console and dashboards, key stakeholders can interpret and take action without starting from ground zero. MarketAxess continually looks for ways to automate manual tasks to increase productivity and empower its team — whether by developing and incorporating additional in-house or community-driven functionality or collaborating with the Graylog team on features and functionality.

"I'll often call my Graylog team direct and say, 'this is what I'm thinking, this is what I'd like to do' and we'll have an in-depth discussion about the best approach and discuss upcoming Graylog feature releases, added Lelewski, "That partnership is what's important to me and what enables MarketAxess to continue to innovate with Graylog Enterprise."

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#### **ABOUT GRAYLOG**

Log management done right. Deployed in more than 50,000 installations worldwide, Graylog is an award-winning centralized log management solution built for speed and scale in capturing, storing, and enabling real-time analysis of terabytes of machine data. Graylog enables hundreds of thousands of users to explore their data every day to solve security, compliance, operational, and application development issues.

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