



Ultra-fast performance for high frequency trading and other latency sensitive environments

BACKGROUND

Deutsche Börse AG is one of the largest exchange organisations worldwide. It organises markets characterised by integrity, transparency and safety for investors, and for companies that raise capital markets on which professional traders buy and sell equities, derivatives, and other financial instruments, according to clear rules and under strict supervision. Deutsche Börse AG, with its services and systems, ensures the functioning of these markets, and a level playing field for all participants – worldwide.

As a diversified exchange organisation, Deutsche Börse AG has a comprehensive portfolio of products, brands and services, addressing various factors from different segments in the financial industry. Brands include – Eurex®, Xetra®, DAX®, EURO STOXX 50®, T7® and Clearstream.

THE CHALLENGE

Deutsche Börse AG's trading systems include matching engines, un-netted market data publishers and high-frequency gateways, which are characterised by their speed, absolute reliability and high availability, even at peak times. Today, more than 30 exchanges and marketplaces utilise Deutsche Börse AG technology and outsource IT and operations. In order to stay ahead of the competition, Deutsche Börse AG continually seeks to improve the performance of its trading systems and provide an enhanced service to its customers, who rely on the speed and consistency of such systems.

Information technology is the key to Deutsche Börse AG's success in the competitive international financial marketplace.

DEUTSCHE BÖRSE AG

AT A GLANCE

GLOBAL PRESENCE

FRANKFURT, LONDON, CHICAGO,
NEW YORK, PRAGUE,
LUXEMBOURG, ZURICH,
SINGAPORE AND OTHER
LOCATIONS WORLDWIDE

1992
ESTABLISHED

9 SERVICE AREAS

PRE-IPO AND LISTING, TRADING,
CLEARING, SETTLEMENT,
CUSTODY, COLLATERAL AND
LIQUIDITY MANAGEMENT,
MARKET DATA, INDICES
AND TECHNOLOGY

OVER 5200
EMPLOYEES

OVER 85%
SHARE TURN OVER

THE SOLUTION

BIOS IT responded to Deutsche Börse AG's performance requirements by providing custom systems that have been put through BIOS IT's accelerated methodology process 'IMPACT' (Improved & Modified Performance by Accelerating, Customising & Tuning). Featuring a custom motherboard, the specialised BIOS IT servers are designed to deliver ultra-fast performance for high frequency trading within mission critical and latency sensitive environments. Additional benefits of these BIOS IT IMPACT systems include world record performance with permanent accelerated mode, extreme expandability for versatile configurations and an optimized cooling design, providing enterprise reliability.

BIOS IT assisted with the design, configuration and testing of the solution to guarantee maximum performance for Deutsche Börse AG applications. In addition to providing on-premise systems for local evaluation, BIOS IT also replicated the environment within its lab facility, to provide remote assistance from its UK headquarters. BIOS IT Labs give customers the ability to test out products first-hand as well as remote access to servers, so that customers can run simulations on their own systems and, where necessary, using their own software.

BIOS IT also designed a custom SLA to support the infrastructure that met Deutsche Börse AG's requirements. This SLA covers the provisioning of IT services required to support and sustain the solutions supplied, and to ensure a rapid response time in the event of any faults. BIOS IT will continue to refine the way things operate for the duration of the SLA, adapting accordingly to ensure it works in the most efficient and convenient way for the customer.

THE RESULT

"In Q1/2017, Deutsche Börse AG has upgraded the majority of its core T7 servers using BIOS IT solutions for its derivatives market Eurex (matching engines, EMDI publishers and high-frequency gateways). The use of these servers enabled Eurex to reduce the median round-trip times by 60µsec from 140µsec to 80µsec - an improvement of over 40% compared to last year.

"In Q2/2017 BIOS IT servers also have been deployed for the Xetra cash market migration to T7. In this context median round-trip times have been improved by 85% from about 500µsec to about 75µsec.

"Deutsche Börse AG's T7 trading platform is one of the most efficient electronic trading platforms worldwide. The T7 trading platform is used for Deutsche Börse AG's cash market Xetra as well as for its subsidiary Eurex and the European Energy Exchange." - Source Deutsche Börse AG.

"Resilient, state-of-the-art IT systems provide the foundation for virtually all capital markets services"

Wolfgang Eholzer
Head of Derivatives and Cash
Trading
Deutsche Börse AG

"BIOS IT's highly optimised solutions are tailor made for speed and efficiency, providing customers such as Deutsche Börse AG with that imperative edge over the competition and helping to ensure they continue to lead the international financial marketplace."

Ian Mellett
General Manager, BIOS IT

GET IN TOUCH

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