



Hitachi Storage at Work


Euronext.liffe

Industry

Financial Services

Infrastructure

Hitachi Lightning 9960™
Hitachi Lightning 9980V™ multi-cabinet enterprise storage
Hitachi TrueCopy™ remote replication software
Hitachi ShadowImage™ in-system replication
Cisco MDS 9509 switches and FCIP blades



"Euronext.liffe entrusts over €1,000 billion of business a day to the electronic trading system, LIFFE CONNECT®. Underpinning this is the storage solution provided by Hitachi, Cisco and BT."

Allan Mycroft
Director Account Management
Euronext.liffe Market Solutions

Euronext.liffe optimises business continuity

Downtime is simply not an option

Euronext.liffe is the world's leading electronic derivatives exchange by the value of contracts traded. Their electronic trading platform, LIFFE CONNECT®, delivers the Euronext.liffe market to over 670 member locations in 29 countries, across five continents.

The global reputation and continued success of LIFFE CONNECT® relies upon its ability to provide Euronext.liffe customers with reliable access to the real-time trading information and functionality it provides.

By 2002, substantial growth in LIFFE CONNECT® contract levels and the trend towards longer opening hours was placing massive demands upon the existing IT infrastructure. Data demands were doubling year on year and the window for performing data back-up procedures was reducing. They also sought to significantly enhance their business continuity and disaster recovery capabilities, improve scalability and simplify storage management.

Euronext.liffe was formed in 2002 when Euronext acquired LIFFE (the London International Financial Futures and Options Exchange). As a result of the acquisition, Euronext.liffe gained access to LIFFE CONNECT®: a single, widely accessible trading platform that supports electronic transactions for all of the Exchange's products. LIFFE CONNECT® has a truly open architecture which allows customers to access the market via standard PCs using the front-end trading software available from a range of Independent Software Vendors (ISVs). LIFFE CONNECT® is developed and implemented by Euronext.liffe Market Solutions, the technology division of Euronext.liffe.

By October 2003, Euronext.liffe recorded an average daily volume of over 2.8 million trades per day. The reputation of LIFFE CONNECT® was further enhanced when NQLX, TIFFE and then the Chicago Board of Trade (CBOT®) decided to adopt LIFFE CONNECT® as their preferred trading platform.

Accelerated growth demands a more robust and efficient storage infrastructure

Euronext.liffe's existing SAN, located in their London data centres, was based around two Hitachi Lightning 9960s. By 2002, accelerated and substantial growth in LIFFE CONNECT® contract levels and the trend towards longer opening hours was placing massive demands upon the existing IT infrastructure. Data demands were escalating and the window for performing data back-up procedures was reducing. However, the major driver for change was the need to significantly enhance their business continuity and disaster recovery capabilities while improving scalability and simplifying storage infrastructure management.

Euronext.liffe decided to relocate its second data centre to Paris with a core network interconnection linking it to London. This would provide the desired out-of-region disaster recovery capability, a prerequisite for compliance with new securities industry regulations. Responsibility for either production or back-up and recovery services is regularly alternated between the two sites.

Euronext.liffe selects Hitachi Data Systems and its solutions partners

Euronext.liffe chose to work with Hitachi Data Systems because they were the only storage solutions provider that offered a 100% data availability guarantee. Furthermore, Hitachi Data Systems had a strategic partnership with Sun Microsystems, who offered Euronext.liffe higher availability guarantees when combining Hitachi storage arrays with Sun enterprise servers.

Hitachi Data Systems also had a worldwide reseller agreement with Cisco who offered Fibre SAN switching as well as the FCIP technology needed to link to the remote data centre in Paris.



"The performance and functionality of the LIFFE CONNECT® electronic trading platform, and the reliability of the underlying technology provided by Hitachi Data Systems, Cisco and BT, has enabled Market Solutions to expand both its business and worldwide reputation. The CBOT migration has further strengthened our position as the leading supplier and implementer of electronic trading solutions for exchanges."

Peter Shepherd

Director Sales & Marketing

Euronext.liffe Market Solutions



In addition, Cisco's director-class switches provided next generation features which were not available elsewhere at that time. Selecting Hitachi Data Systems and Cisco allowed Euronext.liffe to work with a single solutions partnership rather than disparate technology vendors.

Hitachi Data Systems provided Lightning 9960 and 9980V storage systems, plus Hitachi TrueCopy and ShadowImage to manage data replication between sites. Four Cisco MDS 9509 multiprotocol switches were installed at each data centre, with FCIP blades for connectivity to the remote data centre in Paris. Cisco and Hitachi worked together with BT to provide Euronext.liffe Market

Solutions with the most innovative solutions in both technology and project financing. Ultimately, through close collaboration, the three vendors delivered much more than any single solutions provider.

The new infrastructure is extremely robust and highly scalable. Storage management has been simplified and Euronext.liffe now has out-of-region disaster recovery capability. Allan Mycroft, Director of Account Management at Euronext.liffe Market Solutions, is delighted with the outcome: "Euronext.liffe entrusts over €1,000 billion of business a day to the electronic trading system, LIFFE CONNECT®. Underpinning this is the storage solution provided by Hitachi, Cisco and BT".

The Chicago Board of Trade adopts LIFFE CONNECT®

The growing reputation of the LIFFE CONNECT® trading platform, and its supporting IT infrastructure, for both reliability and functionality has enabled Euronext.liffe to expand its business in substantial leaps. In January 2003, The Chicago Board of Trade (CBOT®) announced that it would also adopt LIFFE CONNECT® as its new electronic trading platform. The CBOT® completed the seamless, phased transition, which involved migrating 31 CBOT® futures and options products to the LIFFE CONNECT® platform, in January 2004.

On its first full day of trading, total volume on the new platform reached 426,750 contracts. Users for the CBOT's new electronic platform, which include 121 firms in 191 locations, have gained the ability to trade the CBOT's full suite of products on the exchange's premier electronic trading system. Increased speed, reliability and functionality are among the highlights of the exchange's new platform.

Peter Shepherd, Director, Sales & Marketing, Market Solutions said: "The CBOT project implementation was a fast, but well-maintained, delivery programme, reflecting Market Solutions' experience and tried and tested approach to market migration."

Hitachi Data Systems: the solution with a 100% data availability guarantee

Hitachi Data Systems' solution comprised Lightning 9960 and 9980V storage systems, plus Hitachi TrueCopy and ShadowImage to manage data replication between London and Paris. Four Cisco MDS 9509 multiprotocol switches were installed at each data centre, with FCIP blades for connectivity to the remote data centre in Paris. Technical consultants and engineers from Hitachi Data Systems and Cisco worked closely together, while British Telecom provided project procurement services.

The new data storage and IT infrastructure is extremely robust and highly scalable. Storage management has been greatly simplified and back-up and recovery procedures now take a fraction of the time needed previously. They have also achieved a significant reduction in the real estate footprint required. Most important for Euronext.liffe and its customers, the exchange now has out-of-region disaster recovery capability.

Corporate Headquarters

750 Central Expressway
Santa Clara California 95050
USA
Phone: +1 408 970 1000
info@hds.com
www.hds.com

European Offices:

European Headquarters

Hitachi Data Systems
Sefton Park
Stoke Poges
Buckinghamshire SL2 4HD
Phone: +44 (0) 1753 618000
Fax: +44 (0) 1753 618550
info.eu@hds.com
www.hds.com

United Kingdom

Hitachi Data Systems
Sefton Park
Stoke Poges
Buckinghamshire SL2 4HD
Phone: +44 (0) 1753 618 989
Fax: +44 (0) 161 928 4243
info@hds.co.uk
www.hds.com

Hitachi Data Systems
Hamilton House
Church Street
Altrincham WA14 4DR
Phone: +44 (0) 161 928 4243
Fax: +44 (0) 161 928 8461

Hitachi Data Systems
100 Park Avenue
Aztec West
Almondsbury
Bristol BS32 4TT
Phone: +44 (0) 1454 625 511
Fax: +44 (0) 1454 625 502

Hitachi Data Systems
6220 Bishops Court
Solihull Parkway
Birmingham Business Park
Birmingham B37 7YB
Phone: +44 (0) 121 717 4000
Fax: +44 (0) 121 717 4001

Hitachi Data Systems
11 Rutland Square
Edinburgh EH1 2AS
Phone: +44 (0) 131 228 4343
Fax: +44 (0) 131 228 5573

Hitachi Data Systems
St Martins House
16 St Martins Le Grand
London EC1A 4EN
Phone: +44 (0) 20 7397 8670
Fax: +44 (0) 20 7397 8676

Austria, Central & Eastern Europe

Hitachi Data Systems GmbH
Praterstraße 62-64
1020 Wien
Phone: +43 (0) 1 245 82 0
Fax: +43 (0) 1 245 82 250
info.at@hds.com
Hitachi Data Systems GmbH
Feriheimer Str. 13/4
4040 Linz
Phone: +43 (0) 70 / 711 011-0
Fax: +43 (0) 70 / 711 011-350

Hitachi Data Systems GmbH
Eduard Bodem Gasse 5
6020 Innsbruck
Phone: +43 (0) 0512 / 396830
Fax: +43 (0) 0512 / 396830

Belgium

Hitachi Data Systems Belgium
SA/NV
Woluwedal 28
B-1932 Sint-Stevens-Woluwe
Phone: +32 2 643 45 50
Fax: +32 2 643 45 51

Denmark

Hitachi Data Systems
Egebækgård
Egebækvej 98
2850 Nærum
Phone: +45 4558 1000
Fax: +45 4558 1001
info.dk@hds.com
www.hds.dk

Finland

Hitachi Data Systems
Lars Sonckin Kaari 16
02600 ESPOO
Finland
Phone: +358 (0) 9 5406 5900
Fax: +358 (0) 9 878 8113

France

Hitachi Data Systems
81 rue Marcel Dassault
92514 Boulogne Billancourt Cedex
Phone: +33 (0) 1 46 10 14 00
Fax: +33 (0) 1 47 61 94 24

Germany

Hitachi Data Systems GmbH
Im Steingrund 10
63303 Dreieich-Buchsschlag
Phone: +49 (0) 6103 804 0
Fax: +49 (0) 6103 804 1111
info.de@hds.com
www.hds.de

Hitachi Data Systems GmbH
Kurfürstendamm 22
Im Neuen Kranzler Eck
10719 Berlin
Phone: +49 (0) 30 8877 2630
Fax: +49 (0) 30 8877 2640

Hitachi Data Systems GmbH
Franz-Rennefeld-Weg 5
40472 Düsseldorf
Phone: +49 (0) 211 43 835 0
Fax: +49 (0) 211 43 835 202

Hitachi Data Systems GmbH
Valentinskamp 24
20354 Hamburg
Phone: +49 (0) 40 31112 900
Fax: +49 (0) 40 31112 200

Hitachi Data Systems GmbH
Mozartstrasse 2
85622 Feldkirchen bei München
Phone: +49 (0) 89 905 06 0
Fax: +49 (0) 89 905 06 599

Hitachi Data Systems GmbH
Industriestrasse 28
70565 Stuttgart
Phone: +49 (0) 711 782 61 0
Fax: +49 (0) 711 782 61 111

Israel

Hitachi Data Systems GmbH
Corex Building
27 Maskit St
Herzliya 46733
Phone: +972 (0) 9 9704 500
Fax: +972 (0) 9 9704 511
info.israel@hds.com

Italy

Hitachi Data Systems
Via T Gulli 39
20147 Milan
Phone: +39 02 40 30 92 1
Fax: +39 02 40 30 92 80
info.italy@hds.com
www.it.hds.com

Hitachi Data Systems
Via A Cruto 8
00146 Roma
Phone: +39 06 55 34 08 1
Fax: +39 06 55 85 75 3

Hitachi Data Systems
Via T Aspetti 248
35133 Padova
Phone: +39 049 600432
Fax: +39 049 615002

The Netherlands

Hitachi Data Systems Nederland BV
Crown Building North
Hullenbergweg 373
1101 CR Amsterdam Zuidooost
Phone: +31 (0)20 650 9000
Fax: +31 (0)20 650 9199
info.nl@hdsbv.nl

Norway

Hitachi Data Systems AS
Strandveien 18
1366 Lysaker
Norway
Phone: +47 67 51 84 40
Fax: +47 67 51 84 59

Poland

Hitachi Data Systems (Polska) Sp. z o.o.
Al Jana Pawla II 12
00-124 Warszawa
Phone: +48 22 850 99 00
Fax: +48 22 850 99 09

Russia

Hitachi Data Systems
Business Center
Millennium House
Office 6G
Ul Trubnaya 12
Moscow 103045
Phone: +7 095 787 2793
Fax: +7 095 787 2793

Spain

Hitachi Data Systems SA
Avda. Diagonal 605 6ª planta
08028 Barcelona
Phone: +34 933 634 100
Fax: +34 933 634 111
Hitachi Data Systems SA
C/Capitán Haya 38-8ª Planta
28020-Madrid
Phone: +34 914 491 100
Fax: +34 914 491 111

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