

Fast Network for the Stock Exchange

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After the merger of two stock exchanges in Croatia, new, powerful cabling was needed to meet the massively increased trading volume. R&M partner Combis installed a Cat. 6 network which provides a data rate of 10 Gigabits per second.

The Zagreb Stock Exchange (ZSE) started operations on September 1, 1997. Today, it is the central Croatian trading place for securities. It thus continues the tradition of the Zagreb Commodity and Stock Exchange which operated from 1918 to 1946. The firm is a market place for the members of the stock exchange who trade in the name of their customers, the securities owners. The traders are spread out over the 14 most important Croatian cities. Trading with securities (stocks and bonds) takes place via an electronic trading system. The traders are connected to the stock exchange via a special telecommunications system which they use to place their buy and sell orders and thus perform their transactions. The electronic trading



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Vjekoslav Lovrovic, R&M Instructor and ZSE Project Manager (Combis); Ivan Sardelic, Head of IT (ZSE); Ivan Kobal, Planner.

system provides traders with all information on the market offers in progress in real time, that is, without any delay. Consequently, there is no physical, but only a virtual trading place.

10 Gigabits for 10000 transactions

Recently, the Zagreb Stock Exchange was merged with the Varazdin Stock Exchange. To handle the greatly increased trading volume arising from the merge, the company moved into new offices and a new electronic trading system was installed. Via the Swedish OMX system installed in a server room on the 22nd floor in the Zagreb Euro Tower, up to 10000 transactions are processed daily.

Combis d.o.o., an R&M partner in Croatia, planned and installed this sophisticated server room in an area of just 22 square meters. The project was complex because the daily stock exchange business needed to remain operational and not be disturbed by the creation of the new server room. 217 LAN links and 240 server links were installed in the server room. Fully redundant LAN links and power supply were installed with two parallel USVs and a generator on the roof of the office tower. Thus, R&M is also making an important contribution to guaranteeing maximum operational reliability. This is an essential factor because the Zagreb Stock Exchange records an average daily trading volume of over 50 million US dollars.



ZAGREBAČKA BURZA
THE ZAGREB STOCK EXCHANGE



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Server racks in the system room with blue LED lighting.

10 Gigabits per second

The network was implemented with R&M Cat. 6 components and is thus appropriate for 10 Gigabit Ethernet. It includes PCs, printers, multimedia screens, security devices and access control, UPS as well as AC monitoring. With this powerful cabling, the Zagreb Stock Exchange has a state-of-the-art infrastructure, which will fulfill the highest requirements for years to come and meet all requirements regarding operational reliability.

Zagreb Stock Exchange project Facts & Figures

- New electronic OMX trading system required a highly-available, efficient network
- R&M Cat. 6 components
- 10 Gigabit Ethernet for 10000 transactions a day
- 217 LAN links
- 240 server links
- Fully redundant installation



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Euro Tower.