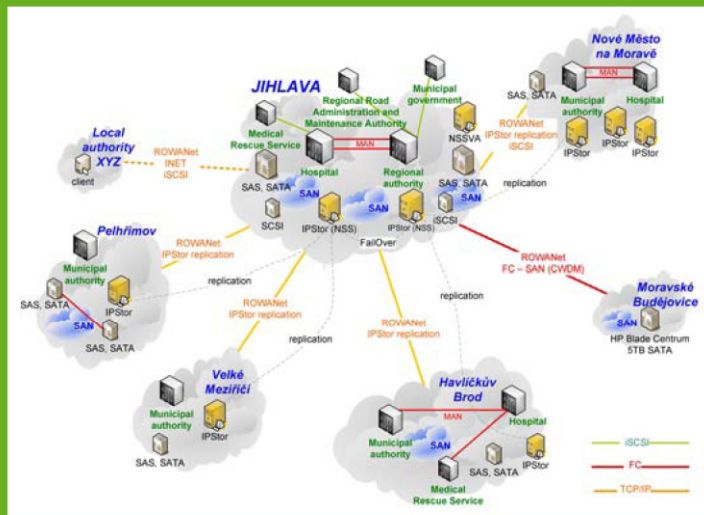# The Vysočina Region Data Centre – A Regional SAN

SAN by rowanet

In 2007, work commenced on developing a long-term comprehensive solution for data storage and security, out of which developed the concept of the Vysočina Data Centre.

Project goals:
- A platform for long-term and safe data storage.
- A standardised technological solution with an option of transferability to other public administrative entities.
- A Storage Area Network (SAN) on the municipal and regional level with maximum redundancy (metro cluster, regional cluster).
- A network of partners cooperating on the data storage issue.
- An infrastructure environment for the implementation of other projects in data security, sharing, and archiving (regional PACS, regional trustworthy archive of electronic documents, digital regional archive, regional data store, and a regional CRM).
- The foundation of a solution for a long-term problem of public administration: electronic document archiving.
- Maximum use of the regional optic infrastructure of the project ROWANet (see www.rowanet.cz).
- A simple solution for high-quality data archiving for individual municipal authorities and even the smallest municipalities.
- A system for educating the employees and managers of self-governing authorities in data security and value.

Pursuant to the pilot project outcome (the Regional Authority and the Jihlava Hospital), the possibility of the integration of other local government authorities was proposed. Implementation was also supported by subsidy titles: CZK 10 million was divided among 13 entities. The data was implemented on the basis of data store virtualisation technology and a fully redundant SAN metro cluster.

Technologies of the Jihlava metro cluster:
- 2× FalconStor NSS IPStor – cluster, failover, snapshots, mirroring (s/sync), disk system virtualisation, the possibility of extension with remote replication.
- 2× Promise disk fields – a total of 50 TB of data, SATA and SAS disks.
- 6× FC switches (Brocade, HP) - 4 Gbps connectivity, operating 60 km FC CWDM connection (Moravské Budějovice – Jihlava).
- SW FalconStor - DiskSafe (mirror and snapshot DAS), SnapShot agent (consistent VSS backups), DynaPath (dynamic failover to FC HBA, loadbalancing).
- The supplier Gapp System s.r.o.
- Integrated systems: MS-SQL, Oracle, MS Exchange, VMWare ESX 3.5.

Project partners:
- The Vysočina Regional Road Administration and Maintenance Authority
- The City of Jihlava
- The Town of Chotěboř
- The Town of Ledeč nad Sázavou
- The Town of Moravské Budějovice
- The Town of Nové Město na Moravě
- The Town of Pelhřimov
- The Town of Velké Meziříčí
- The Town of Žďár nad Sázavou
- Havlíčkův Brod Hospital
- Jihlava Hospital
- Nové Město na Moravě Hospital
- Třebíč Hospital
- The Vysočina Region Medical Rescue Service

For more information, see: www.rowanet.cz/san