



NETMedia collocation

Member of M+ group

NETMedia
www.netmedia.hr

Solution overview

Country: Croatia

Industry: IT development and services

Company Profile

Established 10 years ago, NETMedia is an IT company specialized in complex analysis, development, deployment and integration of Internet / Intranet / Extranet / Multimedia effective business solutions. Our 30 employees work to deliver quality projects for more than 200 Clients.

Case summary

NETMedia needed new collocation to host its clients' applications. Since our clients needs are much higher than in past, new collocation had to be more secure, more scalable and more redundant and all that with better performance. Microsoft solutions helped us improve our efficiency and build innovative solutions with no restrictions. Security solutions are now part of all our business offerings.

Solution description

We chose IBM for hardware and storage solution, and Cisco for networking. Since we wanted best performance and scalability on our disk subsystem, we chose IBM's FASTT SAN storage. Best redundancy and performance are reached on SQL cluster server. Two devices are clustered with MSCS in multiple-instance Cluster. On that powerful hardware we placed Windows 2003 Server - Standard and Enterprise editions.

NETMedia delivers quality Solutions for the Internet Community using Microsoft Solutions for our own and client's business needs

"Before our new collocation we already had very good experience with Microsoft systems, but now, we really want the best for our clients and us"

Mario Curic, System Administrator, NETMedia

NETMedia is a leading Croatian based IT company specialised in complex analysis, development, deployment and integration of Internet / Intranet / Extranet / Multimedia effective business solutions. Renowned domestic and European companies from various industries, regions and business situations have placed their confidence in us. We have a comprehensive Portfolio of references - including Splitska Banka, Slobodna Dalmacija, Brodomerkur, Jaguar NL, and Volvo NL.

Since our main mission is to understand our client's needs and requirements, we wanted to find a solution that would fit our clients' critical needs for continuous improvement of performance. All of them wanted to have good hosting collocation. When we say "good" we mean maximum security, maximal redundancy and great performance. We had this in mind as starting point when we started to design our new collocation. Six months later we migrated to new equipment.

With new collocation, our clients' applications run much faster and the security of their databases is ensured since SQL is now in multiple-instance cluster (MSCS).

For better security, first line of defence is entrusted to Cisco PIX firewalls and we use Site-to-site IPSEC VPN to access our collocation from company.

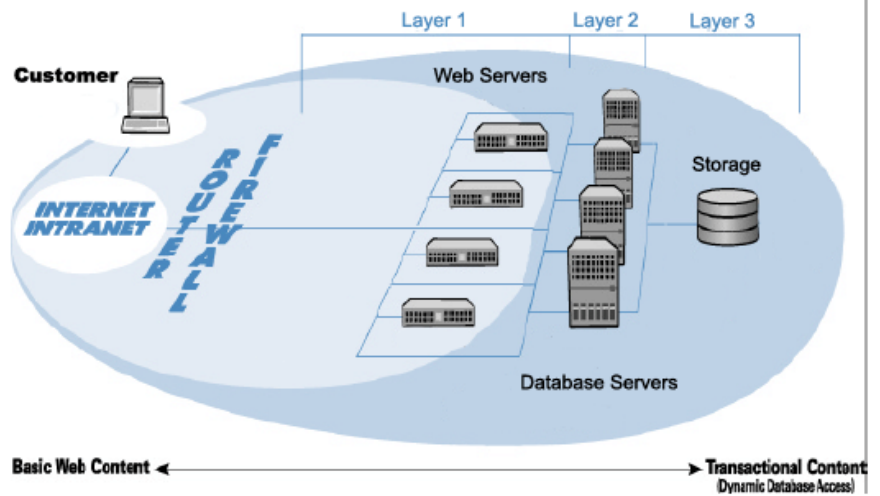
Our client's needs are growing rapidly. We kept that in mind while designing new collocation. Everything has to be scalable so that's why we chose SAN storage system. IBM's FASTT SAN system has completely met our and clients needs.

Mario Curic, System Administrator, NETmedia

Design

When we were designing our network, best practice ordered us to use 3 layers infrastructure. Layer 1 was to be all DMZ servers - web server, mail server and DNS server. Layer 2 was for all database servers and all other infrastructure, like backup server, AD server etc. This second layer consisted from 2 servers (IBM x345, 4GB RAM, Dual 2.8GHz Xenon, HBA directly connected to SAN) which would be our main SQL cluster. Cluster would be made with MSCS – a multiple instance cluster with databases evenly distributed to both nodes of cluster. Layer 3 was to be IBM FASTT SAN storage - twelve 73GB 15000 rpm SCSI disks in RAID 5 array. SQL cluster, backup server and backup unit would be directly connected to SAN storage by HBA, and web, mail and DNS server would use Gigabit Ethernet to the iSCSI storage router, and then by fibre to SAN array.

In front of all this we wanted to have a pair of redundant Cisco PIX's. On PIX's we were DMZ with 3 web server and one mail server, and we have internal LAN with database server's, backup server, 2 Active Directory servers, backup unit etc., all connected to common SAN storage.



Our web, mail and DNS server's are IBM x335, 1GB RAM, 2.8GHz Xenon and with Gigabit Ethernet over Cisco 5428-2 Storage router and iSCSI is connected to SAN storage. With this we have centralized storage which is more redundant, more faster, more scalable and easier to manage.

Solution

For our server and storage vendors we choose IBM and for networking CISCO.

For web servers we used:

- IBM x335
- 1GB RAM
- 2.8 Xeon Processor
- 1 Gigabit Double NIC (for iSCSI to SAN)

SQL Cluster is powerful:

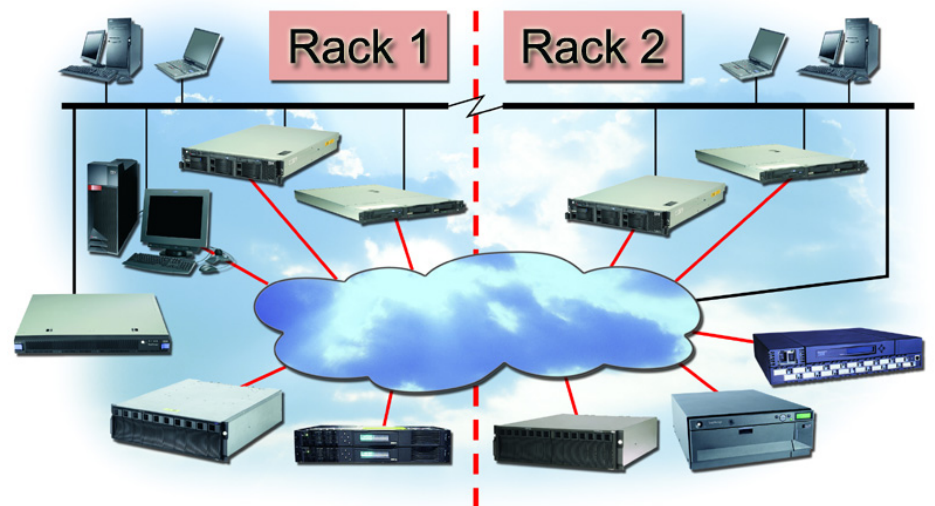
- IBM x345
- 4GB RAM
- Dual 2.8 Xeon
- 1 Gigabit Double NIC
- 2 HBA for SAN

For networking we chose the best which is Cisco:

- 2 Cisco PIX firewall
- 2 Cisco 3550 -24 (24x 10/100 UTP)
- 4 Cisco 2970G -24TE (24x 10/100/1000)
- 2 Cisco 5428-2 Storage router

Storage is also IBM:

- FastT 600 with twelve 73GB 15000rpm SCSI disks
- LTO Ultrium Tape Library 3582 – 21 Tape in library



For More Information

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For more information about Microsoft products and services in Croatia, call the Microsoft Center at (800) 300 300. For more information on this solution, call Microsoft Croatia at +385 1 4802 500. To access information using the World Wide Web, go to: <http://www.microsoft.com/croatia>

For more information about NETmedia services, call +385 21 430 030 or visit the Web site at: <http://www.netmedia.hr/>

Benefits

We offered our new collocation to our clients and they were more than willing to acknowledge our big step forward in hosting technologies. Since meeting the client's needs and requirements in best possible way is a part of our mission, we were happy to find a solution that was a best fit to our mutual requirements.

New collocation offered us a chance to prove that NETMedia is an excellent partner for any company who needs to improve its performance. It offers maximum security (when Cisco PIX in DMZ comes to the front), maximal redundancy and reliability (client's databases are secure of failover on SQL cluster and with daily backup to LTO tapes) and great performance (here comes IBM servers in conjunction with SAN storage array). Of course, there is also one big advantage in terms of future development and scalability.

For NETMedia it is already great benefit if clients are satisfied but we benefit even more. With Active Directory infrastructure and Group Policy's, with use of various Microsoft's tools like Microsoft Operations Manager and Software Update Service it makes administration of servers much easier and more secure. Connection from NETmedia to collocation is made trough Site-to-site IPSEC VPN tunnel, witch is both secure and easy to use for developers inside of NETmedia.

Software and Services

- Products
 - Microsoft Windows 2003 Standard
 - Microsoft Windows 2003 Enterprise
 - Microsoft Operations Manager
 - Microsoft SQL server 2000 Enterprise
 - Microsoft Software Update Service
 - Ipswich IMail
 - Ipswich What's Up Gold

Hardware

- IBM x335
- IBM x345
- IBM FastT 600
- IBM LTO Ultrium Tape Library 3582
- Cisco Networking