

2007

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WINNER 2007

Best Data Centre Project of the Year



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AWARDS****WINNERS REVIEW 2006**

**Best Data Centre Project of the Year****Winner: Unicredit UGIS – Unicredit Global Information Services****Project: Basson Datacenter****The Company**

UniCredit holds leading position in one of the richest areas in Europe, including Bavaria, Austria and Northern Italy. This area is the source of stability for the Group.

UniCredit is also outright leader in Central & Eastern Europe (CEE), an area featuring faster rates of economic growth than "Old Europe" and also featuring the world's fastest growth rates for banking revenues.

UniCredit is truly a European Bank having been formed following the merger of two of Europe's largest banks. The new company has more than 7000 branches across 19 countries and employs 140,000 people.

The Project

As the very first Unicredit datacenter Basson was designed to accommodate the merged company. It covers 3000sqm distributed over 24 rooms.

The first of three poles spanning Munich, Verona, and Vienna, lay down a unique infrastructure delivering common services.

Basson datacentre provides a common framework for some logical entities within Unicredit. It delivers a multiple customer environment, multiple IP address plan support, and it consolidates network devices through virtualization.

The technology implemented enables the datacenter to develop and to accommodate this the most sophisticated solutions have been adopted:

MPLS-VPN on the backbone

VRF-Lite within the datacenter

Virtualized application load balancing services via ACE providing a consolidated infrastructure shared by different logical entities

Storage virtualization using MDS-9513 and VSAN.

Business continuity and disaster recovery using FCIP towards the others datacenters.

Using the multi-ten gigabit interconnections between Basson, Milan, Munich, and Vienna allows Unicredit group to perform a sophisticated SAN extension over IP at hundreds of kms for very different solutions; disks and tapes for open systems and mainframes.

Finally, WAAS technology provides storage consolidation and applications optimization.

Innovative use of Technology

One single platform, spanning diverse technologies such as Ethernet, Fiberchannel, and Ficon, is shared by several logical entities. The virtualization is then completed by adopting virtualized server technology by physical and logical partitioning, IP being the common denominator connecting these elements.

The innovation in the datacenter derives from the recognition that the network is the platform driving integration. Virtualization has been adopted consistently at all levels.

Functionality and Features

- Core Routing MPLS-VPN over Cisco 7609. Multiple 10G connectivity towards the carriers for reaching Milan, Munich, and Vienna
- Virtualization is extended within the Datacenter using VRF-LITE features on Catalyst 6509. OSPF is the chosen internal routing protocol. OSPF is also used in conjunction with IBM Mainframes Z-series for load balancing and redundancy.

- ACEs virtualization performs L4 and L7 SLB including SSL-offloading in truly Active-Active HA multi-context design.
- High speed Non Blocking access 10/100/1000 is achieved using Catalyst 4948-10G. VLANs continue access virtualization and Rapid PVST+ ensures fast convergence.
- MDS9513s provide local SAN connectivity @ 4Gbps serving FC and Ficon end points. VSAN features provide fabric virtualization for different environment. Remote copies for EMC SRDF-A protocol and for remote Tapes and Ficon tape copy (STK) is achieved using MDS FCIP features.
- WAEs 7326 for WAAS provides central site NAS consolidation for the main sites as well as applications optimization.
- Detailed Traffic Monitoring is achieved by NAM-2 installed in every Catalyst 6500 and Cisco 7600 chassis.
- A disaster recovery room provides 150 emergency seats for critical employee. The room is fully equipped with Cisco Unified IP Communications.

Successful implementation - successful business

IT played a significant part in a financial target set for the end of 2008, which involved savings of 310 million Euros. The key business drivers included initiatives to ensure this target is met. These were identified as: datacenter consolidation; improved productivity in all IT operations; IT platform convergence; the merging of the International network; and the combination of UniCredit and HVB's back-office operations.

Basson is the Italian HUB for the MPLS backbone. The project has achieved cost savings made possible by a single datacenter resulting from the three main banks sharing single elements. The MPLS network provides local connectivity to each countries banking division.

Service activation and ongoing administration tasks have become more manageable. The unified multi-protocol infrastructure allows faster provisioning of resources.

A standard-based architectural approach allows Unicredit to define simpler operational procedures; there is no longer a local geography constraint.

The end-user can now take advantage of a more resilient, secure, and powerful infrastructure with all data always available and stored securely. A single front-end application for the whole group makes service delivery easier. Employees also benefit from a consistent solution.

Operations Excellence, scalability, and replicability.

The design process combined customer and Cisco expertise at every stage. Cisco supported UniCredit architects in the high level design process through consultation and Cisco's professional services assisted in achieving a quick and smooth implementation.

During production the architecture has been successfully verified for delivering the highest redundancy.

Every company within the UniCredit Group can share the entire infrastructure. The large capacity of the virtualisation ensures that the model can be scaled to any other entity that the datacenter needs to host in the future. Additionally the model can be applied to other datacenters extending UniCredit's capacity to serve new geographies.

A modular design allowing sub-module replication has helped achieve scalability. The datacenter is now able to double its connectivity and traffic capacity.

Clear identification of Hw-Platforms (7609 for WAN, 6509, MDS 9513) and hierarchical design allows a partial or a complete replication of the datacenter.

Based on recognisable building blocks the end to end solution allows Unicredit to replicate the single block or the whole solution according to the addressed need.

Impressing the judges.....

Competition for the Best Data Centre Project was intense and the judges had tough choices to make before deciding on an overall winner. The entries involved incredibly complex and ambitious projects. UniCredit addressed all technologies in the data centre and the judges were particularly impressed by the scalability and high functionality of the project.

