

Kapsch, your ICT service partner.

Partnership with Global Solutions for OMV Petrom's network infrastructure

22.03.2012



Agenda

- **Introducing ourselves**

- **Kapsch Group, an introduction,**
- Kapsch BusinessCom a member of Kapsch Group,
- OMV Petrom Global Solutions, an introduction,

- **Network Infrastructure for datacenter and campus of OMV Petrom, PetromCity**

- Business requirements for the network infrastructure,
- Technical solutions to meet business requirements,
- Kapsch BusinessCom contribution.



Kapsch Group - Our milestones

1892

Company founding in Vienna.

1930

First demonstration of a television with complete transmission and reception system in Austria at the Kapsch pavilion of the Vienna Trade Fair.

1946

Important role in reconstruction of the telephone network.

1950

Founding of branch offices in Austria.

1955

Leading in the production of black and white TV sets.

1966

Production of desk telephones with low-noise dial plates.

1978

Crucial role in the introduction of digital telephony in Austria

1984

Entry into the mobile telephone business.

As of 1989

Founding of foreign subsidiaries and representation offices in Hungary, the Czech Republic, Poland, Slovakia, Ukraine, Russia, Slovenia and Croatia.

1994

A number of European railways are equipped with train communications from Kapsch.

2002

Repositioning of the Kapsch Group with three strategic business fields and three independent companies: Kapsch TrafficCom AG, Kapsch CarrierCom AG and Kapsch BusinessCom AG.

2003

Erection of the world's largest comprehensive, fully electronic toll system in Austria.

2006

Erection of the electronic truck toll system for the Czech Republic in record time and assumption of system operation duties.

2007

Successful flotation of Kapsch TrafficCom AG in Vienna; Founding of branch offices in Serbia and Belarus.

2009

Listing of the Kapsch TrafficCom AG stock in the VÖNIX sustainability index; Expansion of the leading position of Kapsch BusinessCom as a Cisco Gold Partner; Strengthening of the strategic position of Kapsch CarrierCom through additional acquisitions in Central and Eastern Europe.

2010

In addition to the GSM technology for EMEA and Taiwan, Kapsch CarrierCom acquires Nortel's entire GSM-R technology, becoming a world market leader in this product segment.





Always

For us, the **future** has
always been a family matter.

The Kapsch Group in numbers

¹⁾ in Mio. EUR	Kapsch Group 2010/11	Kapsch TrafficCom Group 2010/11	Kapsch CarrierCom Group 2010/11	Kapsch BusinessCom Group 2010/11
Revenues¹⁾	829,9	388,6	243,6	231,9
EBIT ¹⁾	66,6	48,9	11,3	5,5
Employees	4.096	2.167	743	1.112

1) Calculated according to the International Accounting Standards (IAS)

fiscal year April 2010 – March 2011

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The Kapsch BusinessCom Portfolio Building

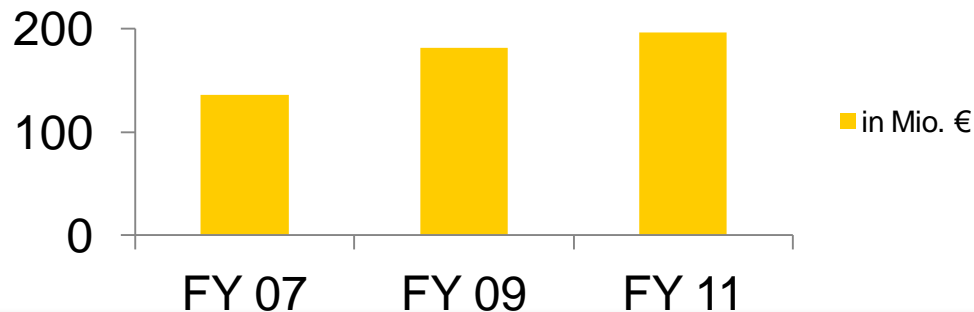


Kapsch BusinessCom Austria in numbers

Continuous and long-term expansion of sales and employees.

¹⁾ in Mio. EUR	Actuals 2006 /07	Actuals 2007 /08	Actuals 2008 /09	Actuals 2009 /10	Actuals 2010 /11
Turnover ¹⁾	136	160	181	167	196
Employees	636	828	894	841	871

Turnover development over the past 5 years



Calculated according to the International Accounting Standards (IAS)
fiscal year April 2010 – March 2011

International presence of Kapsch BusinessCom

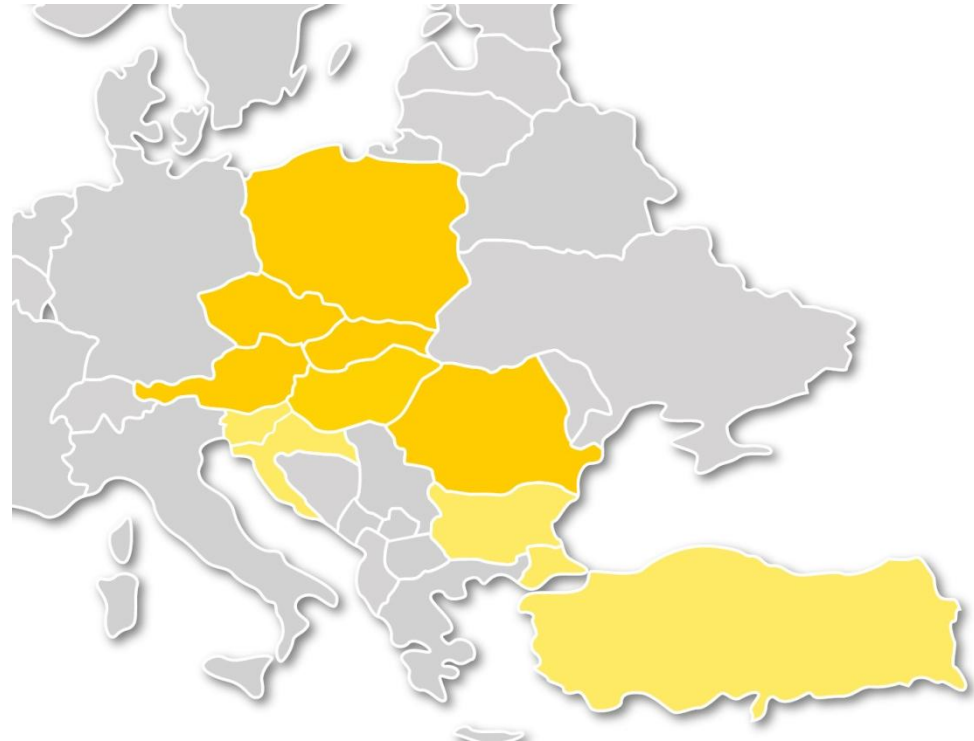
Kapsch BusinessCom is located in these countries:

- Austria
- Hungary
- Poland
- Slovakia
- Czech Republic
- Romania

Kapsch BusinessCom References:

- Croatia
- Slovenia
- Bulgaria
- Turkey

“Follow the customer” – With global account management, we support our customers as they expand around the world.

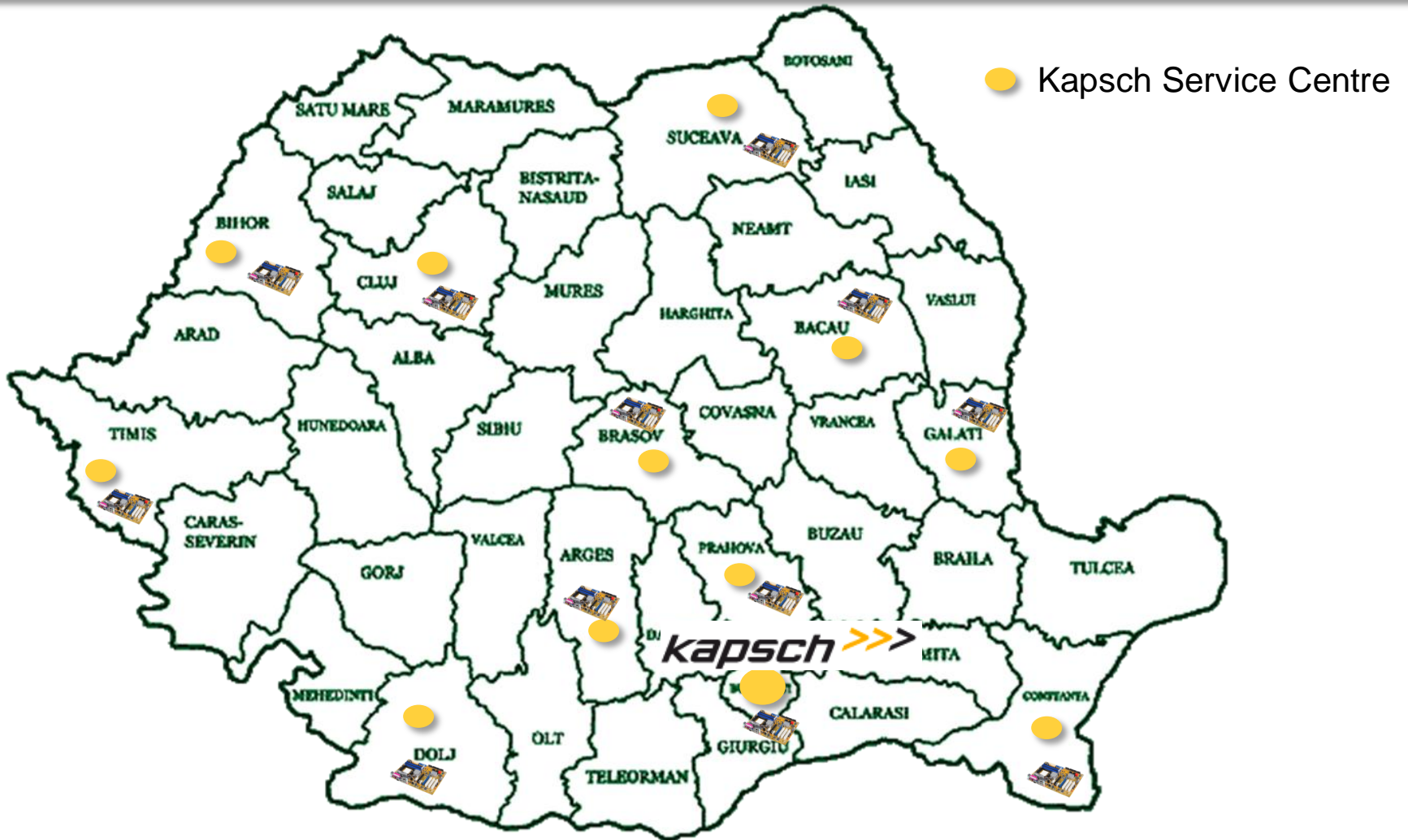


Kapsch BusinessCom România

- ❑ **Kapsch Romania** started as an extension of the **BusinessCom** delivery organization in Austria, applying *“Follow the customer”* philosophy, to support the local offices of the regional customers,
- ❑ **Kapsch Romania** extended its operations in 2011 and is contiguously growing,
- ❑ In Feb 2012 **Kapsch Romania** acquired Squario IT Solutions, an Oracle partner specialized in ERP and CRM solutions.



Kapsch BusinessCom Service Network in Romania



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OMV Petrom Global Solutions

- **Global Solutions** is the **integrated Competence Center** of the OMV Group and optimally services the business of the individual group companies,
- **Global Solutions** has three business units, **IT, Finance** and **Business Support**,
- **Network, Telecomm & Security department** is part of **Global Solutions IT Infrastructure service line** and provides *design, maintenance* and *support* for all network, telecomm and security infrastructure needed for group communications.



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Business requirements for network infrastructure

- High availability >99,99%,
- Future proof technology,
- Hi speed and QoS enabled,
- Scalability and flexibility.

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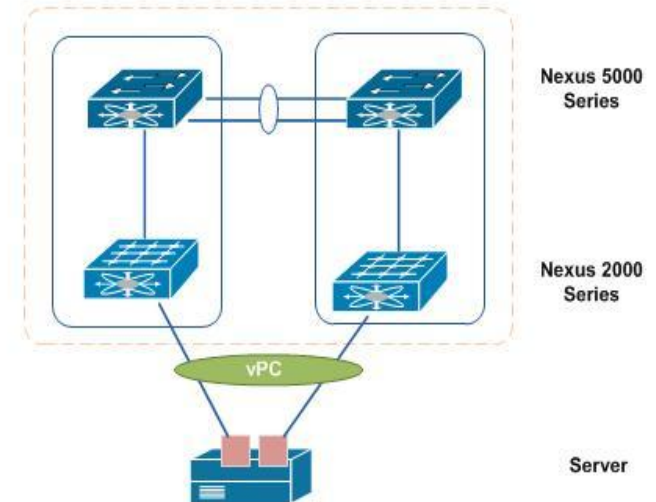
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Technical solutions to meet business requirements

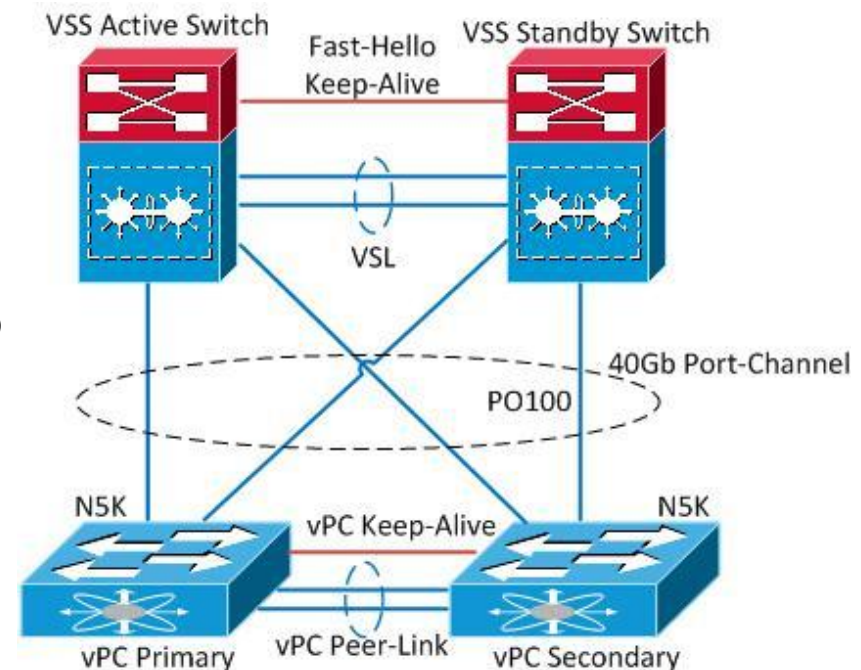
- VSS unifies two Cisco 6500 switches into one logical switch with one active control plane and two active forwarding planes
- vPC (Virtual Port-Channel) makes two Cisco Nexus switches look like a single entity for another switch, server or Nexus 2000 fabric extender that connects to them.
- Nexus 2000 top of rack architecture and vPC provide a modular, highly flexible, virtualization ready alternative for server connectivity



Technical solutions to meet business requirements, continued

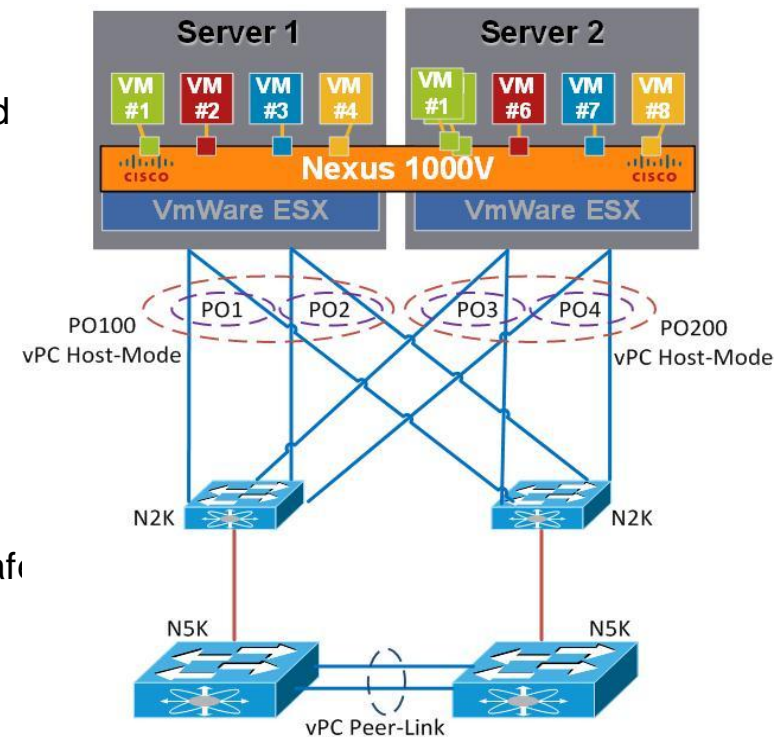
- VSS unifies two Cisco 6500 switches into one logical switch with one active control plane and two active forwarding planes
- vPC (Virtual Port-Channel) makes two Cisco Nexus switches look like a single entity for another switch, server or Nexus 2K fabric extender that connects to them.

- Combining the two technologies results in a redundant, high bandwidth, scalable and spanning-tree free topology for aggregation to core connectivity



Technical solutions to meet business requirements, continued

- Nexus1000v is a software switch that brings all the great features of NX-OS to the virtualization world
- Nexus1000v was chosen because:
 - Physical and virtual servers network connections needed to have the same configurations across the DataCenter
 - The distributed linecard model with centralized control plane of Nexus1000v made the centralized network management of all virtual servers in a domain a reality
 - Complex QoS policies can now be applied also to virtual servers ports and move together with vMotion
 - The high availability architecture with Active/Standby Supervisors makes the virtual servers environment as safe as the physical one.



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Kapsch BusinessCom contribution

- Low level design and implementation services for Data Center Network using Cisco Nexus 5000, Nexus 2000, Nexus 1000V and Cisco 6500 switches,
- Low level design and implementation services for the Campus Network using Cisco 6500 and 3560 switches for a total of around 3000 users,
- Functionality and Performance testing of the Data Center and Campus Network before going into production,
- Data Center migration planning and execution with minimum downtime,
- Data Center and Campus Network maintenance and changes implementation
- Documentation of the network infrastructure

Kapsch BusinessCom and Global Solutions; one team

- In complicated projects within complex organizations service providers try to define **clear responsibilities and deliverables**, this way setting a clear delimitation between supplier and client.
- Global Solutions needed a partner who is willing to **share the responsibility** of the project in front of the end client, OMV Petrom business units,
- Kapsch team was and is **a trusted partner** that was embedded in the Global Solutions team and had the responsibility of delivering the project as well as **sharing the responsibility** for operations,
- We, at Kapsch, consider that proper definition of deliverables is important, but **attitude** towards our client needs is **more important**,
- Understanding our **client needs and constraints** and establishing **proper communication** enabled us to be up to the challenge and deliver as expected.

KAPSCH & SÖHNE

Thank you for your attention !



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