

# Case study

## How Méditel manages Morocco's rapid mobile network growth

»It was Fujitsu's clear understanding of our business needs, and the high-performance technology on offer that persuaded us to partner with Fujitsu for this business-critical upgrade.«

Manuel Garcia, CTO Méditel



### Fujitsu helps Méditel improve its market position in Morocco

Mobile phones are really popular in Morocco: the mobile phone market in the North African country continues to expand at an amazing annual growth rate of twelve percent. Méditel, the second-largest mobile telecommunications provider in Morocco, reported over ten million users by end 2010. In anticipation of its ambitious growth plans, Méditel decided to upgrade its ICT platform and vastly increase its processing capacity. With a complete solution by Fujitsu, the telecommunications provider can accommodate growth as well as launch new services and extended system features in the future.

### Fast and furious

As the NGIN (Next Generation Intelligent Network) solution platform is responsible for the lion's share of Méditel's monthly revenues, only a mission-critical hardware and software infrastructure could fulfill the challenging requirements. Furthermore, the implementation time was exceedingly short. Experts from Fujitsu and its partner company PTI had only six months to set up the complete solution – including implementation of hardware, installation of software and support, migration from the old to the new platform and removal of the old system. As an additional challenge, the project team had to manage implementation and the transition phase without causing any disruptions. This meant that the specialists had to do most of their work at night so that Méditel employees could do their business during regular office hours.

### Business-critical upgrade with new-generation technology

Fujitsu and PTI designed a consolidated solution with a cluster environment and high-performance PRIMEQUEST and PRIMERGY BX900 server blades. The NGIN system provides real-time unified management of data for Méditel's prepaid mobile phone service. For example, it is able to check within milliseconds whether a caller is authorized for the service requested or it can check the credit balance in the customer's account. With the new system, pre-paid service processing now takes only on third of the time it took before. The configuration allows for redundant operation across two sites, the data centers in Casablanca and Rabat. Two ETERNUS DX disk storage systems form the central storage which guarantees high capacity and performance while allowing firmware upgrades during normal operation. ETERNUS CS, the data protection appliance by Fujitsu, provides the basis for the powerful backup system. It is easy to expand with failover features between the two sites and it ensures uninterrupted business processes.

### The Customer

Country: Morocco  
 Industry: Telecommunications  
 Founded: 2000  
 Revenue: 500 million euros  
 Website: [www.meditel.ma](http://www.meditel.ma)



### The Challenge

Méditel decided to upgrade its Next Generation Intelligent Network (NGIN) platform and introduce a new, high performance NGIN software version. It had to provide the basis for offering new, value-generating services to mobile customers. Additionally, the upgrade was used to consolidate the proprietary infrastructure to support planned customer and service growth in 2011 and beyond.

### The Solution

Fujitsu and partner company PTI (Portugal Telecom Inovação, SA) have built a future-proof IT infrastructure based on 17 PRIMEQUEST mission-critical x86 servers, 40 PRIMERGY x86 server blades and ETERNUS storage systems. The new NGIN system provides highly reliable, real-time, unified management of data for Méditel's prepaid mobile phone service.

### Customer Benefits

- Maximum business continuity: hardware and software fully redundant, local failover, cross backup
- Considerably improved price/performance ratio
- Improved speed: pre-paid service processing takes only 1/3 of the time of the system replaced
- Stable communication services due to ultimate reliability and scalability: No more failures and disrupted services
- Co-located systems reducing investment costs and maintenance: resource sharing LAN, SAN, storage and power

### Products and Services

- 17 PRIMEQUEST 1800E (mission-critical core system)
- 40 PRIMERGY BX900 server blades (part of infrastructure for all platforms)
- 2 ETERNUS DX 8700 (shared storage) + 1 ETERNUS DX 80
- 1 ETERNUS CS 2000 (data protection appliance)
- 2 Scalar i500 (tape library) + EMC NetWorker (backup software)
- 4 Cisco 6509 (LAN switches) + 4 Brocade DCX4S (SAN switches)
- RED Hat Enterprise Linux 5.4 (OS) + VMware ESXi 4.0 (OS for test platform)
- Maintenance for hardware, software, LAN, database and applications

### Substantially increased performance

Delivery and installation of the new systems were executed according to a meticulously planned process. Furthermore, the staff had to be trained to be ready for mission-critical operation. The mammoth project reached a successful completion in early July 2011. The new system is capable of assuming a comprehensive range of mobile telecommunications services. It also allows Méditel to roll out innovative NGIN features and services including location-based services, carrier selection, number portability, advanced routing services and intelligent call-center re-routing. An integrated maintenance service model for mission-critical installations ensures business continuity.

Thanks to its new back-end ICT infrastructure, Méditel is able to provide the reliability and real-time performance necessary for stable communications services. With its software upgrade and high processing power, the telecommunications provider can easily handle increases in traffic: installation of the Fujitsu PRIMEQUEST mission-critical x86 servers, the ETERNUS storage systems and the disaster recovery system guarantees significantly improved network and system performance. In a nutshell, the solution boosts performance, allowing rapid growth of Méditel's user community and new mobile services in Morocco.

### More power at lower cost

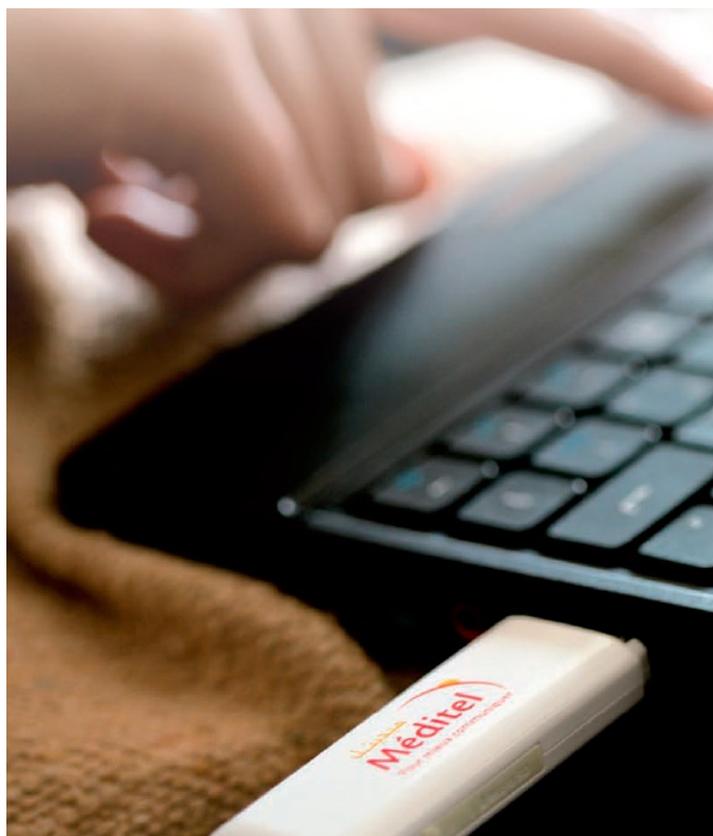
Usually, an increase in performance means an increase in cost. The opposite is true for Méditel. By using open standards-based components like Intel Xeon architecture and Red Hat Enterprise Linux, the mission-critical configuration considerably improves price/performance ratio compared to proprietary configurations. The co-located systems reduce investment costs and maintenance. Additionally, Méditel benefits from reduced power consumption and ICT equipment space requirements.

### It was absolutely worth it

The strengths of the partners, proven performance and quality of similar installations, expertise in mission critical requirements, plus backup by executive management all convinced Méditel. Their expectations were fully met. Additional joint projects are in the planning stage. The next step will be to ensure more efficient recovery in case of disaster by real-time data replication and NGIN software upgrade.

»It is very rare that projects of such dimensions and of such complexity run so well without any major issues.«

Manuel Garcia, CTO Méditel



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