



*case study*  
**visus** video



## The Institution

Claranet is a Managed IT Services provider, specializing in communications networks, internet, hosting solutions and managed applications using a managed or self-managed platform, enabling its customers to reap the full benefits of current technology in communications systems and information technology.



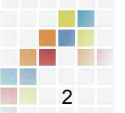
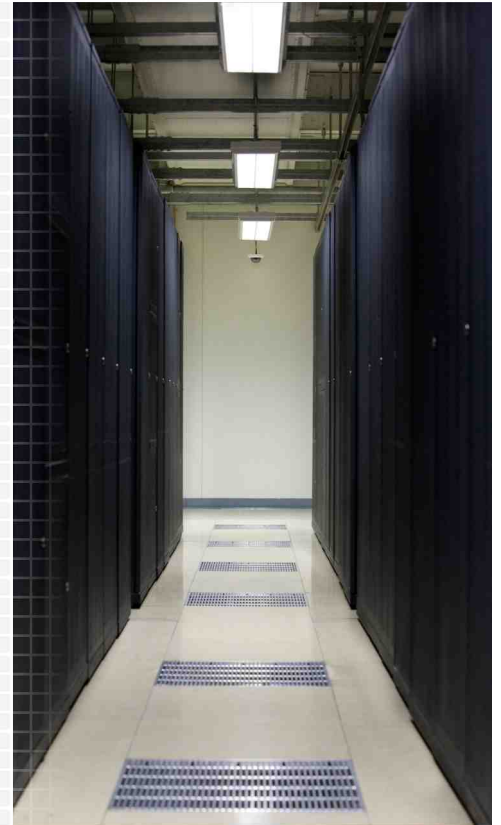
## The Challenge



Claranets Datacenter in Lisbon, is a 250 m2 space, fully prepared for the accommodation of information systems. The mechanisms of protection against fires, floods and intrusions, the constant climate and redundancy of electrical power, ensure the highest levels of availability, providing 99.999% availability of access to the information.

Although Claranet always know who is in their datacenter, they lacked the ability to view in real-time the movements in the Datacenter.

To ensure maximum reliability and security of access to the information, the system of video surveillance has completed a process of physical access to the Datacenter, which by itself is restricted, inflexible and requires multiple authentication mechanisms, allowing Claranet to have total vision control from the moment that someone gains access to the Datacenter.





## The Solution



The implemented solution is a system with voice and video surveillance cameras mainly composed of Mobotix MX-D24, which cover the entire space area.

The Mobotix MX-D24 is a fixed dome camera with direct recording, PoE and resistant to temperatures kept in a datacenter.

Its capabilities have been expanded to an intercom system through the module ExtIO from Mobotix that takes advantage of VoIP (Voice over IP), allowing to apply a direct and simple intercom to the Claranet Headquarters / Management.

The MX-D24 Night camera is supported by an infrared projector in order to monitor with or without illumination, thus ensuring 24/7 safety in all conditions.

The fields of zero vision were eliminated and the implemented system ensures all customers the security of their information. All system management (remote or local) is very simple, despite the numerous capabilities of the equipment involved.

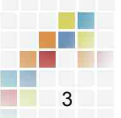
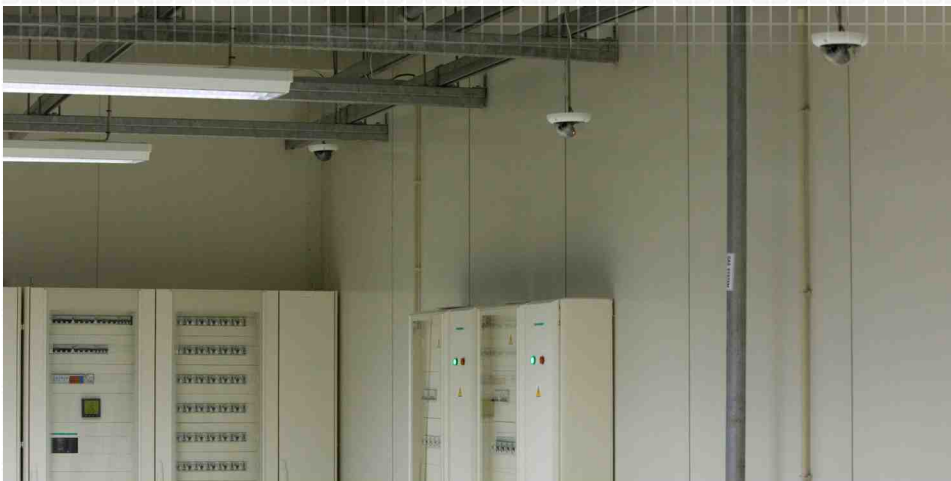
A NAS (Network Attached Storage) from QNAP supports the sharing of disks in the network for all the data captured by Mobotix cameras.

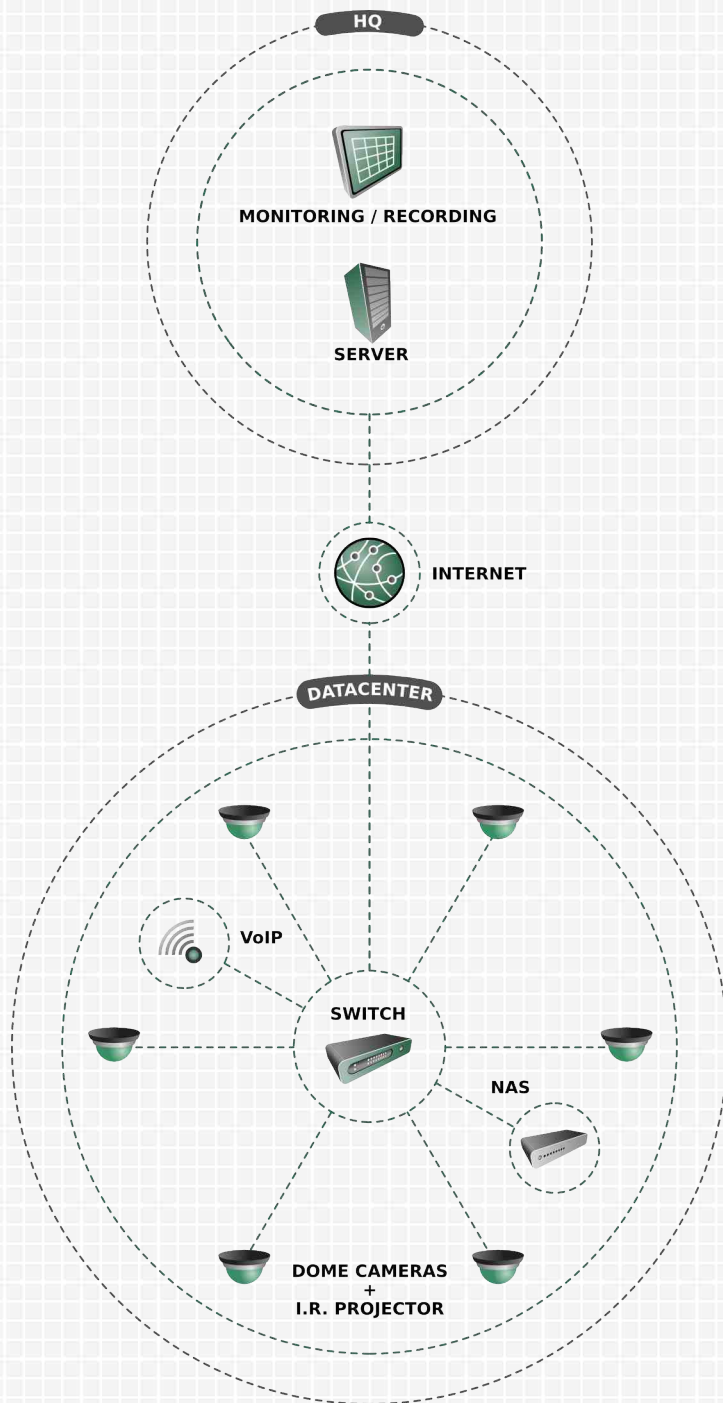
The management of the recordings in these discs is done by the cameras themselves - logic and intelligence are part of each of the installed cameras.

The cameras recordings are by event (movement, lighting variations, etc.) and act simultaneously as sensors (temperature extremes), although the entire datacenter is protected with other devices.

The expansion, mobility and stability of the network is ensured by the VigorSwitch P2260 from Draytek, which is the bridge between cameras, NAS and remote management.

The implemented solution allowed Claranet to fulfill the strict criteria of [ISO 27001](#) and [ISO 9001](#) standards.





**INSTALLATION PROJECT**



Imprint

MOBOTIX<sub>AG</sub>



MOBOTIX<sub>AG</sub>



**Mobotix**  
**MX-D24 - FixDome camera**  
Direct Recording, PoE

The Mobotix D24 is an attractively designed fixDome camera, with state-of-the-art technology that adapts perfectly to any task, featuring interchangeable lenses (color or black & white - from tele to wide-angle), with various mounting and configuration options (indoor and outdoor) including vandalism set support unlimited application possibilities - on-wall set with space for extension modules (battery, UMTS, WLAN, etc.).

It is weatherproof (IP65), with low maintenance, the recording is powered by PoE (Power over Ethernet) and managed by the camera itself into a network share - integrated DVR with high-resolution (4GB MicroSD card included).

Enables virtual PTZ (8x continuous digital zoom, pan and tilt), has visual motion detection, temperature sensor and two-way audio (VoIP) and can be upgraded to an intercom system with the ExtIO module from Mobotix.

[> Read more.](#)

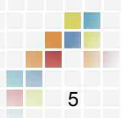
**Mobotix**  
**ExtIO module**

ExtIO module from MOBOTIX leads the way to completely new technology.

The ExtIO can be connected to a camera either directly via USB or through a network and extends the MOBOTIX camera to a high-performance audio unit with microphone and speaker, infrared motion detector, temperature sensor and additional switch in-/outputs.

Door and gate intercom systems are easy to implement using the two illuminated buttons.

[> Read more.](#)



**DrayTek**



**Draytek**

**Vigor Switch P2260**

24 FastEthernet ports with Layer 2.

PoE

The Vigor Switch series was developed ideally for workgroups and network applications running remotely, incorporating features such as QoS (quality of service) with Layer 4 classification, policy MAC address filtering, Port Mirroring, VLAN and full Layer 2 Protocol.

These advanced features allow the VigorSwitch models from Draytek to be the ideal solution for the expansion of your network.

- 24 FastEthernet 10/100 ports with PoE (Power over Ethernet) and 8.8Gb Throughput;
- 2 free Media-slots: TP (10/100/1000Mbps) or SFP fiber (1000Mbps)
- RS-232 Console Port;
- Mounting Kit, 19" Rack included;
- Q-in-Q VLAN (virtual local network) for performance and security;
- QoS Supports 4 Level Priority;
- Port Mirroring for network monitoring;
- Media slots for flexible fibre connection;
- Silence cooling fan;
- Port trunk 802.3ad band aggregation;
- 802.1x access control for security improvement;
- 802.1d and 802.1w compatible for spanning tree;
- Storm control for Broadcast/Multicast.

[> Read more.](#)

**QNAP**



**QNAP**

**Turbo NAS**

The Turbo NAS series is a rack-mount chassis network attached storage (NAS) server.

The Turbo NAS is equipped with the next-generation Intel® Atom™ Dual-Core processor delivering exceptionally high performance, yet with low power consumption for energy-saving commitment. The Turbo NAS provides versatile business applications to maximize server consolidation in the business environment.

The Turbo NAS is integrated as an advanced all-in-one application server that requires no additional time or effort to install the software. Server managers can quickly deploy NAS in numerous system integration projects or office applications. The Turbo NAS is also an affordable solution that supports server applications, enterprise-class sharing and secure data backup, and iSCSI service for virtualized and clustered environment.

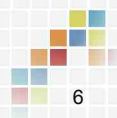
The more accessible and flexible virtualization solution: The TS-459U-RP / SP is certified and is compatible with VMware® vSphere4 (ESX 4.0 and higher) virtualization platform. The NAS can be used as a VMware shared storage network virtualization environments, and Windows cluster servers.

Compared to the traditional SAN (storage area network), Turbo NAS is a competitive alternative with much lower costs of configuration and maintenance in an IP SAN.

Feature-rich applications, integrated to the business: The NAS supports file sharing across Windows, Mac, Linux and UNIX. Versatile business applications are delivered as a file server, FTP server, print server, Web server and supports Windows AD.

The dominant features, such as WebDAV, Aggregation of shared folders (also known as DFS), IPv6 and IPv4 dual-stack, Wake on LAN, enabling / disabling scheduled, HDD S.M.A.R.T, and comprehensive registration systems block unauthorized IP with Policy-based functions are included in the QNAP NAS server.

[> Read more.](#)



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*Visus is a longtime technology partner, particularly in the communications field. The requirement of the project and the professionalism demonstrated by Visus, gave us the confidence that it would be the ideal partner for this project.*

Claranet

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## About

The **Visus Video** (OptiVisus) is a company operating in the ICT market since 1989 which is dedicated in importing, distribution and servicing of CCTV systems, IP (transmission equipment for video over IP and digital recording), Telecommunications / Networking and equipment for ISDN / ADSL and Cable, the products and brands it represents, being for several years a major company in the National CCTV market.

Optivisus:  
José Câmara and Miguel Câmara

### **Claranet Portugal.**

Built in early 1995 and being the first private ISP in Portugal, Esoterica, SA was acquired in May 1999 by U.S. multinational VIA NET.WORKS, Inc. and in July 2005 by the European Group Claranet.

Founded in 1996, Claranet has evolved organically from an ISP into a Managed Services Provider, to accompany the growing demands of its customers.

Claranet Portugal:  
João Paulo Folgado (Enginner)



## More info

Claranet: <http://www.claranet.pt>

Mobotix: <http://www.mobotix.com>

Draytek: <http://www.draytek.com>

QNAP: <http://www.qnapsecurity.com>



## Visus Vídeo

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