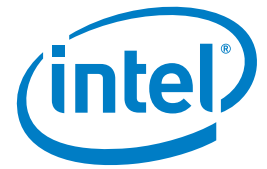


## CASE STUDY

### Intel® Core™ 2 processor with vPro™ technology

Predictive Enterprise Messaging Security and Manageability



# Transforming business efficiency

## Market-leading Spanish energy group turns to Intel® Core™ processor with vPro™ technology for remote PC management

Gas Natural is one of the ten primary multinational energy companies in Europe, and a leader in the vertical integration of gas and electricity in Spain and Latin America. It is also the main global operator of LNG (liquid natural gas) in the Atlantic, and one of the principal operators of combined cycles generating plants in the world.

It is also an important operator in the generation and commercialisation of electricity in Spain, and in the commercialisation of other energy products and services. In the Spanish electricity market, the company has more than 3.5 million customers and it is the third largest operator according to the National Energy Commission CNE, the Spanish industry's regulatory body.

In order to maintain its leading position in the sector (in terms of operative efficiency) at the same time as supporting the growth of its customer base and a major diversification of its services, Gas Natural has recognised the necessity of adapting its IT environment



### CHALLENGES

- **Improve service.** Wanted to enhance service delivery to distributed workforce by ensuring optimal system operating time in desktop PC environments and enhanced service continuity to different departments
- **Improve operational continuity.** Aimed to strengthen security across the PC network and introduce industry-leading risk mitigation
- **Improve operational risk control.** Make on-site PC administration more robust by galvanising workstation security and minimising the risks associated with remote PC management

### SOLUTIONS

- **Establish proof of concept.** Following market research of remote management technology the company wanted to evaluate the remote management capability and security features of Intel® Core™2 processor with vPro™ technology

### IMPACT

- **Greater strategic potential.** Anticipated 20 per cent reduction desk-side visits generated by software incidents means that IT administrators have more time to spend on strategic IT initiatives and projects
- **Remote power-up.** The ability to power up or down PCs from a remote location saves time and energy, improves business productivity as updates can be made at any time and even the BIOS can be updated without administrators being present
- **Organisation roll out.** Aims to roll out Intel® Core™2 processor with vPro™ technology to 1,500 desktop PCs with further plans to implement the technology across Gas Natural's entire desktop fleet

### Identifying areas for improvement

Gas Natural identified three key IT service areas that it wanted to develop. Firstly it aimed to improve service by ensuring optimal business process efficiency. In practice this meant providing optimal system operating time in its desktop environments as well as the delivery of enhanced continuity of IT services to branches operations. For example, the reduction of the time taken to implement platform services and the resumption of desktop activity following a failure. The second area earmarked for improvement was operational efficiency. This, the company believed could be achieved by strengthening its PC network through the delivery of industry-leading operational risk mitigation via an end-to-end secure desktop infrastructure. The final area was the improvement of operational risk control. By increasing workstation security and management control it aimed to reduce the operating risk associated with on-site administration and the costs involved in performing centralised remote administration.

### Developing a laboratory

Following an evaluation of available technologies Gas Natural joined forces with Intel to establish the efficacy of Intel® Core™2 processor with vPro™ technology, which is characterised by sophisticated hardware-embedded remote management and security technologies. Gas Natural wanted to develop a proof-of-concept (POC) for the Intel Core2 processor with vPro technology, specifically its hardware-based security, remote management features, and remote power on/off capabilities. The ultimate aim was to see how effective it would be in enabling the remote recovery for individual PCs and PC groups across the enterprise, including remote locations.



CONSULTING > SOLUTIONS > OUTSOURCING



"Energy-efficiency will improve while end-user productivity rises."

"A considerable reduction in desk-side visits will lead to significant cost savings."

José M Boixeda de Miquel  
Director de Planificación Tecnológica  
y Arquitecturas, Gas Natural



## Gas Natural preparing for sweeping benefits thanks to sophisticated remote PC administration

The testing quickly demonstrated that the IT administration team could remotely take inventory, troubleshoot and restore systems even when PCs were powered down, the operating system wasn't working or software agents were missing. Furthermore, the ability to remotely access, run or delete processes, access files, administer devices, send or receive files was extremely valuable. Enhanced hardware security capabilities were also leveraged to help stop threats and protect critical information.

### Drilling down

The tests focussed on three specific areas. The first concentrated on checking the operation of the Intel® Active Management Technology (Intel® AMT), a component of Intel Core2 processors with vPro technology. This was to establish the ability of remote PC updates via BIOS and without administrators needing to be present. The second area assessed remote system power on/off, enabling not only use for remote updates but also energy saving. Finally, the proof-of-concept tests showed that the time taken to restore PCs after failure was considerably reduced with Intel Core2 processor with vPro technology.

By using the new capabilities and following the installation of Microsoft System Center Configuration Manager\* as management console for Intel Core2 processor with vPro technology, the time spent restoring remote machine operation is expected to reduce to less than two hours, from an initial value of around 24 hours. This is due to the embedded remote restart capabilities that enable access to any PC regardless of operating system status.

The automatic provisioning of PCs was tested by using certificates which ensured security and automation of the whole process with zero-touch provisioning. Provisioning is ensured by using two modes: provisioning scripts, and, for outdated

PCs scattered through the organisation, by using the Intel Core2 processor with vPro technology Activator Utility. This was distributed across the network via an IBM Tivoli\* software system and activated using a logon script.

The POC led Gas Natural to conclude that it could significantly reduce operational efforts and the costs associated with software incidents in desktop PCs. In fact, it anticipates a 20 per cent reduction in desk-side visits. For hardware incidents, administrators can diagnose incidents remotely and also reduce desk-side visits, which translate into reduction in costs and increased end user satisfaction because there is less downtime, fewer threats and critical information is protected.

### A raft of benefits

Given the large number of desktop PCs in Gas Natural and the complexity of its IT environment, the time savings enabled by Intel Core2 processor with vPro technology remote power up feature will have a significant impact on current maintenance and desktop management processes.

By cutting the turnaround for PC reinstall and restart from 24 hours to only two, employees' productivity will be considerably enhanced and IT problems will no longer be a hindrance to service levels and business productivity.

Remote management features also mean that software updates and security or virus patches can be run at night, so that employees' performance during business hours is not affected. This remote power on/off feature combination will also allow the company to implement energy saving policies because administrators power up each client only when required.

Desktop incident management is currently the most demanding and costly task for the IT administration team. Even minor hardware and software issues require desk-side visits, meaning that remote management features will enhance the global productivity of administrators thanks to the expected 20 per cent decrease in these visits. The time saved can be spent on more important strategic IT projects, such as developing new services for continuous improvement of business processes and customer service.

### Spotlight on Gas Natural

Gas Natural is a leader in Spain's natural gas industry, with 10 distribution companies – which operate in 13 autonomous communities – and two market development sales companies. It focuses its activity on the supply, distribution and commercialisation of natural gas in Spain, Latin America, Italy and France, with 11 million customers.

### Looking ahead

Gas Natural intends to initially activate 1,500 existing workstations with Intel Core2 processor with vPro technology and will continue to implement this technology over the coming years until the entire PC network features the technology.

As a result, the IT team is planning implementation and installation of management features using Intel Core 2 processor with vPro technology in branch infrastructures as part of its management strategy. It is expected that this sweeping implementation will provide a considerable return on investment, both in the short and the medium term.

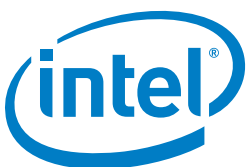
Other savings are also foreseen in the future as additional Intel Core 2 processor with vPro technology features are implemented. For example, Gas Natural plans to add inventory features and to improve inventory precision and energy saving with remote power-off capabilities.

It also plans to use disk redirecting to create an image of necessary BIOS updates in order to run them remotely from a central system using a free tool, Commander. This is one of the utilities bundled into Intel® AMT. This is expected to lead to time savings for field technicians as the number of required on-site visits will fall. In turn this will improve cost efficiency and organisation and operational control.

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