Construction firm increases business agility and manages rapid growth with virtualization from datacentre to desktop

- **Data consolidation and management**
- **Flex computing**
- **Green efficiency**
- **Migration**
- **Virtualization**

"Dell technology ensures we can achieve significant savings in this area and reduce our carbon footprint. Our new consolidated virtual server environment is helping us cut our energy consumption by around 60 per cent."

Metin Erkamoglu, Information Technology Co-ordinator, Rasen

Customer profile

Company:	Rasen
Industry:	Construction
Country:	Turkey
Employees:	150
Website:	www.rasen.com.tr

Business need
Rasen wanted to increase business agility and support growth, while reducing the costs associated with systems management, energy consumption, IT and licensing.

Solution
The IT team worked with Dell consultants to deliver a virtualized environment from the datacentre to the desktop with Dell™ PowerEdge™ servers and EqualLogic storage.

Benefits
- **Flexible working helps employees boost their productivity**
- **Rasen achieves ambitious plans for business and revenue growth**
- **Company manages employee expansion of up to 300 per cent**
- **Systems deliver high availability of 99.999 per cent**
- **IT department cuts energy consumption and improves green efficiency**
- **New system helps meet future requirements without time-consuming deployments**

One of the first industries to feel the effects of the global recession, construction is now beginning to re-emerge after the downturn of recent years. But these new opportunities demand a far more agile approach, something that Istanbul-based construction business Rasen is keen to apply to its own organisation.

> "For new recruits, we just select the most cost-effective PC or notebook on the market. As a result, we save around 60 per cent on our PC investments."
>
> *Metin Erkamoglu, Information Technology Co-ordinator, Rasen*

The company focuses on delivering projects rapidly and within budget, while taking into account the environment and well-being of people who occupy or live near its buildings. Most recently, Rasen has undertaken some of the most prestigious global projects in the Russian Federation, including the Russian Standard Vodka Distillery Plant, the Michelin Tyre Plant and the Mercury City Tower.

Metin Erkamoglu, Information Technology Co-ordinator at Rasen, says: "It's no longer enough just to talk about agility in the construction sector. We need to ensure that our operations and technology support the business and its employees when creating proposals for a new building, maintaining relationships with contractors and managing the construction itself. It is also essential that these systems are always available to ensure employee productivity and outstanding client service."

Facing the challenge

Rasen saw a period of rapid growth based on sudden demand for its services outside Turkey. "Much of this new business came from the Russian Federation," says Erkamoglu. "Supporting these remote offices was a big challenge when it came to answering users' questions, and conducting software upgrades and patches."

Erkamoglu and his team discussed the technology options available. "We knew that virtualization might be an option, but the people that deliver our systems are just as important as the technology itself," he says. In the past, Rasen had worked successfully with Dell. "The Dell Consulting team is a trusted adviser to us, so we approached it for advice first," says Erkamoglu.

Building an agile business

Erkamoglu and his colleagues looked in detail at offerings from a number of suppliers. Dell, along with Dell Certified Partner Devoteam, delivered a proof of concept that gave Rasen the opportunity to study the impact of the system. In addition, the Rasen IT team got hands-on experience of how the technology simplifies IT management and the implications of migrating to a virtual datacentre and desktop architecture. "This was a big decision that underpinned the future of the business. We were impressed with the commitment of Dell and Devoteam and the technology they presented," says Erkamoglu.

Technology in practice

Services

Dell Support Services
– Dell ProSupport with Mission Critical

Dell Consulting Services

Hardware

Dell™ PowerEdge™ R510/R710 servers with Intel® Xeon® processors 5500 series

Dell EqualLogic PS6010XV storage area networks

Software

VMware® vSphere™ 4 server software
– VMware vCenter™

Citrix® XenApp™

Citrix XenDesktop™

Citrix XenServer™

Windows Server® 2008

This willingness to go the extra mile – along with the expertise of the Devoteam personnel – won Dell the business. But it also meant that with the contract signed, Dell could quickly help Rasen move to a virtual desktop infrastructure, supported by equally efficient servers and storage. The deployment includes Dell™ PowerEdge™ R710 servers and a Dell PowerEdge R510 server, both with Intel® Xeon® processors 5500 series and running VMware® vSphere™ 4 server software and the Windows Server® 2008 operating system. The updated servers offer lower power consumption, higher memory and faster performance with Intel Xeon processors 5500 series. "We were really impressed by the speed and low power consumption of the Dell servers. In addition, we could measure the way that the Intel processors accelerated critical datacentre processes," says Erkamoglu.

The solution also includes two Dell EqualLogic PS6010XV storage area networks (SANs), which deliver high-end datacentre performance based on a 10 gigabit per second iSCSI architecture. "This is a really strong product," says Erkamoglu. "Dell EqualLogic storage is quick to install, and can be expanded when necessary, in a matter of minutes. It also has a simple licensing model. All-inclusive SAN management software helps to reduce costs."

The final component of this end-to-end virtualized environment comprises Citrix® XenServer™, Citrix XenDesktop™ and Citrix XenApp™. This means Rasen employees now have a highly secure, virtualised desktop environment on their existing laptops and desktops.

All Dell hardware in the project is covered by Dell ProSupport Mission Critical with four-hour onsite service, and Rasen can also call on Dell support teams for software issues. Until now, the Rasen team hasn't needed to escalate any problems, but Dell ProSupport gives it peace of mind and confidence in the new technology.

Supporting up to 300 per cent business growth

Construction firms must be able to scale their businesses and IT activities in response to new contracts – and Rasen is no exception. Although the company currently employs 150 people, it hopes to expand to around 600 employees over the next year.

Dell EqualLogic is ideal for these rapid bursts of growth, thanks to peer provisioning, which supports virtual expansion. This includes automatic load balancing that spreads workloads across all the arrays in the SAN. This, in turn, prevents under- or over-utilisation.

Erkamoglu says: "We're a dynamic company that invests heavily in diverse business areas. Our IT infrastructure needs to be flexible enough to support our constantly growing capacity, performance and availability requirements. Dell PowerEdge servers and EqualLogic storage provide all this."

A flexible and secure system for employees

Rasen's solution demonstrates how virtualized desktop environments can be just as secure as other client-server architectures. The system sends a text message to the employee's mobile phone with a password, which he or she uses to access the system.

The move to virtualized desktops supports greater employee productivity, with individuals being able to log on faster to their laptops and desktops. Erkamoglu says: "Dell virtualization has the potential to transform the way we work. It means that I can hotdesk if I need to work near a particular team, for example. Alternatively, it's easier to log on somewhere a bit quieter if I need to focus on a particular document or project."

Another feature is on-the-go access to the virtualized desktop using a smartphone such as an iPhone or BlackBerry® device. As a result, employees have another way of accessing files, email and other information on the move and can be more productive.

"With the Dell and Citrix virtualized environment, we get the best of both worlds. Technology that's secure and robust, but agile enough for the needs of today's employees. It's a great balance," says Erkamoglu. "We also get the high levels of security we need when we're dealing with confidential information such as budgets, building designs and contract bids."

Reducing the cost of hiring employees

But there's more to growth than just infrastructure. As the company expects to increase the number of employees by 300 per cent in 12 months, it's essential that it can bring people on board quickly and cost effectively. The desktop virtualization environment means that whenever someone joins Rasen, it only takes a few clicks to get his or her laptop or PC connected to the system.

The use of a virtualized desktop environment also helps drive down the cost of desktop hardware because much of the processing now takes place at the central datacentre. "We no longer need to upgrade our PC hardware before putting another CPU or line-of-business application in service. For new recruits, we just select the most cost-effective PC or notebook on the market. As a result, we save around 60 per cent on our PC investments." says Erkamoglu.

Now, applications are stored and run centrally rather than on the desktop. Erkamoglu says: "It all adds up to a more productive environment that's pleasant to work in, and also delivers better return on investment."

In addition, Rasen is able to reduce its IT costs thanks to Dell's flexible licensing model, which ensures that the overall cost of hiring an employee is minimised.

Systems management is also greatly simplified by VMware vCenter™ and Citrix Desktop Delivery Controller, which further support fast, centralised management of the datacentre and desktop virtualized environments. "We get a perfect blend of management solutions. Dell, Citrix and VMware are all easy to use and require little training for our IT team," says Erkamoglu.

Cutting the cost of IT management with reliable, centralised technology

"The use of central, virtualized technology is significantly cutting the cost of IT management because the majority of desktop maintenance is carried out remotely so we no longer need to maintain separate teams at multiple sites. This has enabled us to reduce our support costs by around 50 per cent, while increasing service quality," says Erkamoglu.

Rasen is also benefitting from the 99.999 per cent reliability of the Dell PowerEdge servers and Dell EqualLogic storage. "This new approach has dramatically reduced our administrative load and maintenance costs. We're a more agile and productive organisation than ever before," says Erkamoglu.

Reducing energy consumption

Dell technology is also helping to cut energy consumption at Rasen. Dell EqualLogic storage includes thin provisioning, a process that adds virtual storage volumes to applications and controls costs by improving utilisation, and reducing provisioning, power and cooling costs.

"In every aspect of the business, we're looking to cut costs and energy consumption. Dell technology ensures we can achieve significant savings in this area and reduce our carbon footprint. Our new consolidated virtual server environment is helping us cut our energy consumption by around 60 per cent," says Erkamoglu.

Rapid acceptance of technology in around two weeks

Any deployment requires time and training for both IT staff and other employees, to familiarise themselves with the systems. Erkamoglu was impressed by how quickly staff adapted to the Dell environment.

"It took end users about two working weeks to get used to the virtualized desktop environment. It was the same for the IT staff. They quickly saw the benefits of the system and the extent to which it eliminated many of the time-consuming, manual processes involved in the existing system – for example, having to visit multiple sites to fix problems, support users and manage updates," says Erkamoglu.

For more information go to:
dell.com/casestudies/emea

View all Dell case studies at: dell.com/casestudies