A sail-away success in desktop virtualization

Piri Reis University cuts electricity bills by US$280,000 a year while delivering maximum uptime for cutting-edge maritime simulators – and does it all with zero clients

Educators understand the advantages of virtualized client machines. Particularly in universities where faculties need large numbers of distinct applications, virtualized client infrastructures are far more efficient.

Piri Reis University in Turkey saw the benefits of a virtualized desktop infrastructure (VDI) for its campus. The university was set up to train cadets to become Marine Officers to work in the world maritime industry. Its faculties cover engineering, economics and administrative services, sciences, and maritime transportation. The university also houses simulators to help teach students how to manoeuvre ships on the water.

Historically, the university ran a PC-based client infrastructure. However, it was proving increasingly expensive to manage and had become a hurdle to expansion. Serdar Dundar, IT

Director at Piri Reis University, says: "We managed around 65 different applications. Faculties sometimes needed different versions of the same application on their machines and the desktop infrastructure required a lot of manual intervention. It could take hours to rebuild a desktop image, plus the environment consumed a lot of power."

The university looked at both Citrix and VMware for its VDI software solution, as well as thin and zero clients from multiple vendors. "We chose a combination of VMware and Dell Wyse zero clients," explains Dundar. "Quite simply, we found the Dell Wyse devices to be the most user-friendly and easiest to configure with Dell Wyse Device Manager. What's more, the assistance from the Dell Cloud Client-Computing team was excellent from the start."

Customer profile

Company	Piri Reis University
Industry	Higher Education
Country	Turkey
Employees	280 staff
	2,000 students
Website	www.pirireis.edu.tr

Business need
With student numbers expanding and the institution thriving, Piri Reis University wanted to improve the efficiency of its desktop environment.

Solution
The university rolled out a virtualized desktop infrastructure across campus with Dell Wyse zero clients as the endpoints.

Benefits
- Reduces spend on electricity by US$280,000 a year
- Boosts IT efficiency to support a 400 per cent increase in endpoints
- Maximises simulator uptime, resolving issues 97 per cent faster
- Rolls out desktops in minutes instead of hours
- Enables continued growth of student numbers

Solutions at a glance
- Cloud Client-Computing

"We have a student intake of 900 a year. We can expand our Dell VDI infrastructure to meet the growth in student numbers in a cost-effective and environmentally friendly way."

Serdar Dundar, IT Director, Piri Reis University

Dundar and his team rolled out Dell Wyse clients across campus and also to support the university's marine simulators in two separate projects. The university deployed 500 endpoints – a combination of Dell Wyse 5030 and 7030 zero clients. "We rolled out Dell Wyse 5030 clients to our laboratories and to provide features on the simulators, such as its navigation controls. We used the Dell Wyse 7030 endpoints to support the simulators' visualization software," says Dundar.

Reduces spend on electricity by US$280,000 a year

The university has significantly lowered spend on powering its desktop estate. This is of particular significance because the university is Turkey's first accredited "green campus." Dundar says: "The great news for Piri Reis University is that we've cut the power consumption on desktops by US$280,000 a year by adopting Dell Wyse technology. These are resources that can be reinvested into the university's infrastructure in order to provide better services."

Increased IT efficiency to manage 400 per cent more endpoints

The effectiveness of the university's IT has increased as a result of the Dell Wyse solution. At one time, the IT team had five personnel managing 100 desktops as part of their IT duties. Today, the team is administering hundreds more desktops despite having just one extra IT administrator. "We're a team of six, but we've been able to handle a 400 per cent increase in desktops because we've moved to Dell Wyse zero clients," says Dundar.

Maximises simulator uptime, resolving issues 97 per cent faster

Since the university has been using zero clients to support the simulators, uptimes have improved. When the the simulators are running, all client devices need to be working for the solution to function correctly. Dundar says: "If there's a problem with one of the zero clients, we can usually fix it in less than 15 minutes. Before, it could take us up to a day to fix one PC. Essentially, we resolve issues around 97 per cent quicker with Dell Wyse endpoints."

Rolls out new desktops in minutes instead of hours

The university can also roll out desktop images much faster. Before, the IT team needed hours to rebuild a desktop if, for example, there was a malfunction or virus attack. Today, it can be done in 10 to 15 minutes. "The amazing thing is how quickly people revise their expectations," says Dundar. "We can normally rebuild a desktop in 10 minutes with our Dell Wyse solution. That's a massive improvement on the past with standard PCs."

Enables continued expansion of university

Student numbers are increasing, and the university can meet that growth without exceeding the current budget. "We have a student intake of 900 a year. We can expand our Dell VDI infrastructure to meet the growth in student numbers in a cost-effective and environmentally friendly way," comments Dundar.

Products & Services

Hardware

Dell Wyse 5030 and 7030 zero clients

Software

Dell Wyse Device Manager

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