loadbalancer.org

Case Study

Leading European research university maintains top-class website with Loadbalancer.org

One of Europe's leading research universities, Eindhoven University of Technology, has called on Loadbalancer.org to ensure that its main website - where students, researchers and businesses first interact with the University – is highly available and is fast to navigate.

> "While our website and web servers are not mission-critical applications for the University, nevertheless they are very important and Loadbalancer.org's Enterprise Clustered Pair performs a vital role in ensuring that our website is easy to manage, is highly available and delivers a good experience for visitors."

Mr Carel Braam
systems consultant
TU/e

Challenges

- Ensure the University's main website is fast and always available

- Make website management and maintenance simpler and more efficient

Solution

– Loadbalancer.org Enterprise High Availability Clustered Pair

Benefits

– Protects key website services against poor performance and failure

– Makes website and web services easier and faster to manage and maintain

– Helps to reduce IT support costs

TU/e
Technische Universiteit
Eindhoven
University of Technology

Challenges

Eindhoven University of Technology (TU/e) is situated in Eindhoven's technology business hub in south east Netherlands close to where businesses like Philips are located. The Intelligent Community Forum (ICF) named the Eindhoven Region of the Netherlands as the world's Intelligent Community of the Year 2011 during its annual awards ceremony.

Since it was founded in 1957, the University has developed an international reputation as a leading centre for technology education, research and innovation. It has over 3,000 teaching and administration staff providing education in engineering science and technology to 7,000 students. One of the first points of information about the University and one of the most important communication interfaces between the University, its pioneering work and the public, is its website. It is the shop window for the University and a vital way for attracting the best students. As well as providing information about the University and access to the student learning portal, it also provides information on the University's research activity.

One of the main challenges was the number of people using and accessing the website; around 25,000 visitors requesting 100,000 pages every day. TU/e uses two servers to host website data and related traffic.

Although the University was able to cope generally with this level of demand, it wanted to ensure that there was no deterioration in service during times of extraordinary demand, such as when new research is announced or when students research which university they would like to attend. The main concern of TU/e was that in case one of the web servers failed the website would not function normally.

Solution

For managing day-to-day data on its web servers, the University had already been using a load balancing solution from Loadbalancer.org. It had performed very effectively but now needed to be upgraded. The University had considered a number of other load balancing solutions. But, because of the previous high-quality performance, TU/e decided to stay with the Loadbalancer.org appliance, choosing to upgrade to the Enterprise High Availability Clustered Pair solution to provide even greater resilience for its website.

Mr Carel Braam, systems consultant at TU/e says, "While our requirement is not highly technical, it is nonetheless critical to how the University presents itself to the wider community. We decided on Loadbalancer.org's Enterprise Clustered Pair appliance because it is simple to use, very effective and it doesn't cost a huge amount of money."

Results

"Now if one of our servers was to go down, we wouldn't worry too much because we know that with Loadbalancer. org's Enterprise Clustered Pair in place it's not really going to be much of a problem," says Braam.

Besides providing the University with a simple, but robust solution for ensuring website performance and availability, Loadbalancer.org's Enterprise Clustered Pair appliance has delivered a number of other benefits. One of the most important of these is the ability to add or remove web servers quickly and easily without any disruption to website performance. The Loadbalancer.org appliance effectively sits between website visitors and the web servers. If one of the servers fails or has been switched off for maintenance, the appliance can recognise this and automatically switches traffic to the live server until the other server goes live again. The appliance manages data traffic to and from the single server so that someone visiting the TU/e website has no idea there was any change.

Another advantage of the Enterprise Clustered Pair appliance is its ability to support multiple separate websites. The University had developed a completely new website, but during its roll out, it needed to keep the old site available. Enterprise Clustered Pair was able to handle both sites simultaneously without any service deterioration. The same principle applies to managing servers. Enterprise Clustered Pair makes it much easier to share and swap data between servers so that when one server requires maintenance or upgrading, the University can carry out the work when needed and without impacting performance or availability of the website.

Braam believes that the Loadbalancer.org solution is also helping the University to save money. The appliance automates several operations that used to be handled manually, is easy and simple to use and it provides more flexibility for activities like server maintenance. This has reduced the amount of time TU/e IT staff have to spend on management and maintenance activities which has, in turn, reduced costs.

About Loadbalancer.org

Loadbalancer.org provides highly dependable, versatile and affordable load balancers, developed to improve the availability of critical IT applications. With extensive experience solving application delivery challenges for customers around the globe, you can expect honest advice and outstanding support from the Loadbalancer.org team who truly are experts.