Case Study:

Plan | Design | Deploy | Manage

Sylectus Partners with Next Dimension for Infrastructure Consolidation

Sylectus is a cloud-based Application Service Provider (ASP) whose software improves productivity and communication in the transportation industry. By late 2008, hundreds of companies had grown to depend on this software 24 hours a day, 7 days a week. This growth, coupled with increased customer requirements for higher availability systems, had introduced a number of business challenges:

Increased collocation costs

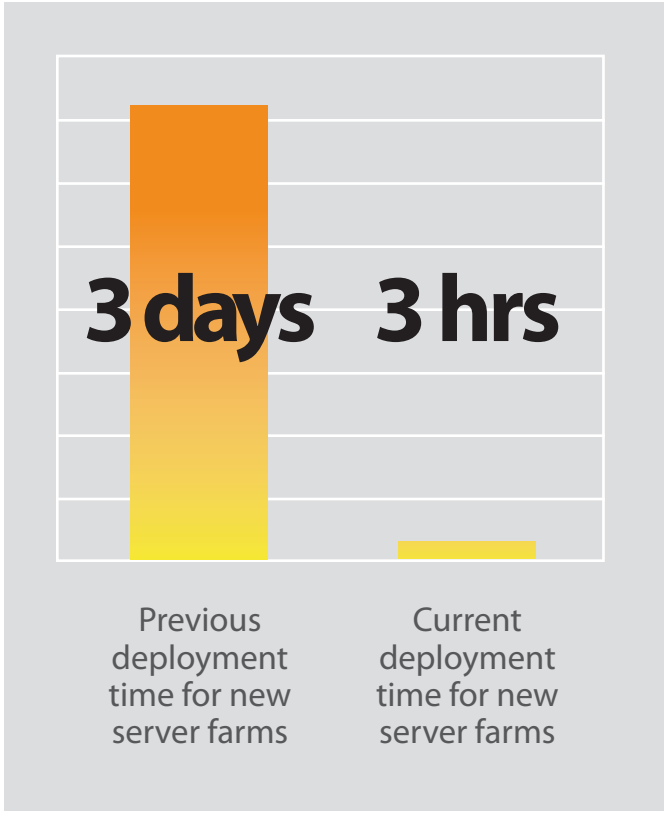
The existing environment had grown to over 70 servers, along with all of the associated networking and power-protection equipment required to connect it all together. All of this equipment required 4 full racks at the collocation facility.

Under-utilized hardware

The average utilization rate of any given server in any given application group at any given moment was under 10%. Occasional spikes in demand required that servers be over-provisioned to deal with these edge cases, leading to a lot of wasted power, cooling and processing cycles, not to mention the cost of the purchasing and maintaining the equipment itself.

Multiple single points of failure

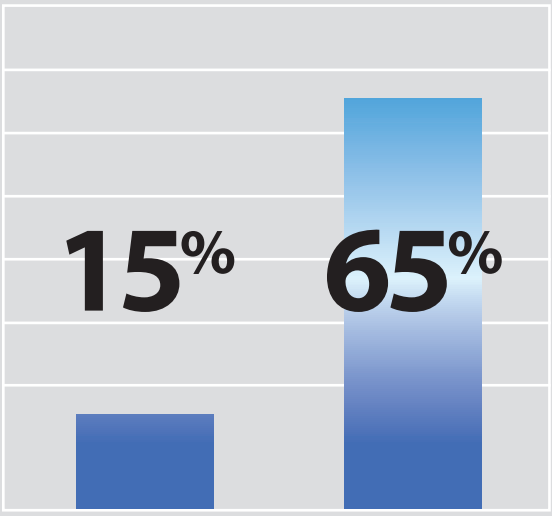
Despite dedicated redundancy measures in every single server, such as fault-tolerant disk arrays and secondary power supplies, the failure of any one server in an application group (consisting of a web server, database server and reporting server) would bring down the entire application for the customers connected to those servers. Furthermore, in the event of a non-recoverable server failure, disaster recovery efforts could take anywhere from 8 to 24 hours or more, as each member server was tightly bound to the original hardware.



next dimension Inc. www.ndinc.ca

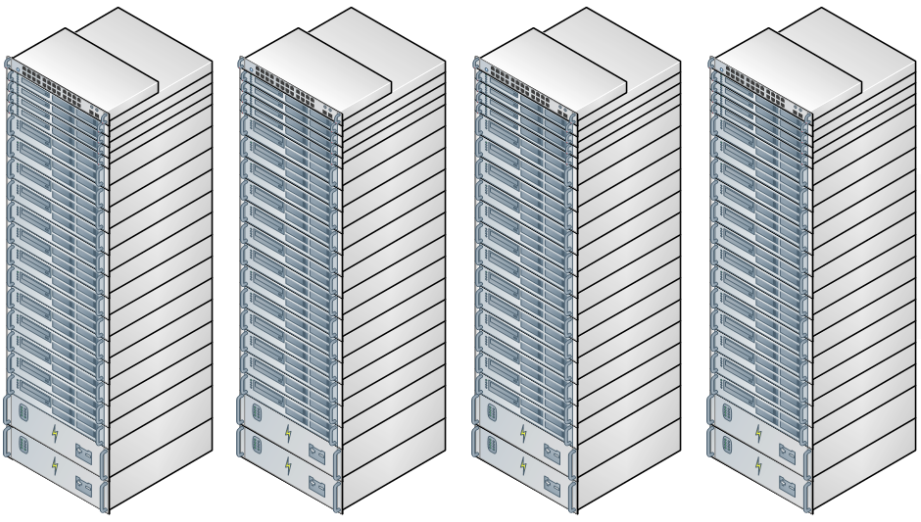
The Solution

The team at Sylectus knew that server virtualization and infrastructure consolidation was the key to addressing these challenges, but needed a partner with the right experience as well as a demonstrated track record of managing these kinds of transitions successfully. They chose Next Dimension to guide them through this process, from the initial performance analysis of their existing systems, to the design of a robust, cost-effective solution and finally to a cooperatively executed implementation, with members of the Sylectus team gradually assuming full responsibility for the project mid-way through the conversion process.



The Results

The results of the Sylectus server virtualization and consolidation effort exceeded expectations. Four racks of equipment were reduced to less than one. 70 physical servers were reduced to only 5. Average server utilization rates quintupled. Many single points of failure were eliminated, and fault tolerance has increased significantly. Provisioning time for new application groups went from several days to several hours. And finally, the cost of bringing aboard new customers is now a fraction of what it previously was.



75%

Reduction in rack space requirements at colo facility