



## New \$3M Data Center Decreases Downtime to Zero

### OVERVIEW

Over the span of 15 years, our client — a successful tech startup — grew from a company with only a handful of people to a global operation employing over 2,000 employees with annual revenues totaling \$450 million.

### The Challenge

Despite their phenomenal success our client's IT infrastructure had not kept pace with their rapid growth. High turnover in the IT department had created a critical loss of institutional knowledge. As a result their previous data center had not received the attention it needed. To begin with, the existing design would have been more appropriate for a much smaller company. But more importantly, the majority of the equipment in the data center had long ago reached end of life, i.e., would no longer receive support from the manufacturer. The data center began to crash on a weekly basis, halting production and reducing productivity throughout the organization. The unpredictable power losses also meant that the servers could not shut down gracefully, increasing the risk of corrupt data files.

Ensunet was hired when a business impact analysis conducted by an independent auditing firm identified the data center as the second highest risk to the operational stability and continuity. Our goals were to:

- Direct the design, procurement, and implementation of new highly available IT Infrastructure.
- Identify a co-location provider to securely house the new IT Infrastructure equipment.
- Oversee the migration of key enterprise-level applications onto the new data center.

### The Strategy

**Redesign a state-of-the-art IT infrastructure from the ground up.** The majority of the equipment in our client's data center had long ago reached end of life and become increasingly unreliable. The ensuing threat of data corruption compromised the productivity and the stability of the company as a whole. Ensunet assumed responsibility for executing a Data Center Optimization plan that would completely overhaul and modernize their IT infrastructure.

## DATA CENTER DESIGN CASE STUDY

### Identify a reliable co-location provider for their new data center.

The previous data center was located inside their main headquarters in a location that did not offer sufficient safeguards to ensure the integrity of the equipment and data. Our client agreed to move their data center operations to a secure offsite facility. We developed the criteria to identify a reliable co-location provider that could satisfy our client's critical need for high availability. We then interviewed several providers and made the final selection.

## The Results

### Led a successful \$3M RFP vendor selection process.

To augment their IT department with such a large-scale project, our client hired us to conduct a thorough analysis of their data center needs. In addition to ascertaining their equipment needs and setting an estimated purchasing budget, we identified the top manufacturers and value-added resellers (VARs) that could help us design, install and implement a new data center infrastructure solution. We also administered the Request For Proposal (RFP) process and directed the different vendors this project required.

### Redesigned the new data center to ensure business continuity.

The business impact analysis stressed the importance of relocating the new data center to a facility that could provide critical, round the clock security features. After narrowing down our options and interviewing several providers, Ensunet selected a Tier 1 co-location provider located in an area that was relatively free from environmental hazards (such as tornados, earthquakes and hurricanes).

To help ensure "high availability" we took the precaution of designing the infrastructure with two stacks, or identical equipment that could mirror each other. If the main stack failed for any reason, the secondary stack—located in a separate building—would immediately assume production workloads. This would ensure that our client would always have immediate access to their data.

### Successfully migrated critical systems to the new data center.

Transferring the information contained in the old data center to the new data center required meticulous planning. Our client depended on hundreds of different applications to run their operations. However, migrating their ERP to the new data center was particularly critical since losing access to the ERP would cost them an estimated \$1 million per day. The careful months of planning paid off: the migration was executed with zero data loss and zero corruption of data. We continued to successfully migrate all the applications required by their different lines of business until the migration process was completed within the agreed upon timeframe.



## ENSUNET TECHNOLOGY GROUP

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