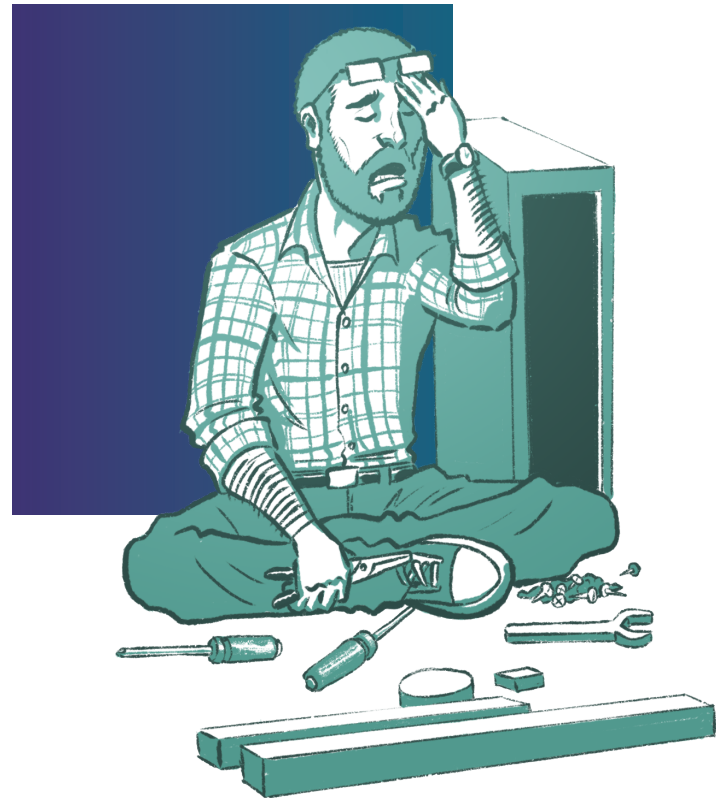


Packing a Powerful Punch in a Small Space

See How Instor Lowered Costs and Made Better Use of Existing Space for a Web Hosting Client



The Problem

With locations on both the East and West coasts of the United States, our client offers business hosting solutions that include unlimited disk space, free SSL, free server management and “all nines” network uptime.

Our client’s services have been so popular that an expansion became essential, despite the recent addition of a second data center suite in West Coast hub. A nice problem to have, no doubt, but it still remains a challenge.

The servers our client utilized were very unique at a hardware level, featuring custom 3D printed faceplates, specialized brackets, and more. They had spent a great deal of time searching for appropriate, commercially available rack and power solutions. Finding nothing, they took a DIY approach, modifying racks designed to hold audio equipment for the purpose.

The custom approach functioned well, but constituted a great deal of overhead in the form of

Executive Summary:

- Web hosting company was outgrowing its existing data center space.
- Client was looking for solution that utilized existing space.
- Instor engineered a solution involving smaller servers and more efficient PDUs.
- This resulted in a monthly cost savings of \$300 per rack/per month.

additional parts orders and handwork. Soon, it became apparent this approach would scale poorly as the company's customer base continued to rapidly grow. The client needed a flexible solution that made far more efficient use of its limited, existing space.

The Solution

After visiting with the client, Instor's Mark Hoffert was confident the problem could be solved, but the client remained highly skeptical, having already searched high and low. Mark quickly assembled a plan featuring specially designed AFCO cabinets from Legrand to accommodate these servers for a more compact footprint.

Each of the custom cabinets allowed the client to house 48 servers each, up from 40 with their previous solution. The racks themselves had a smaller footprint, permitting the company to house 104 racks where only 45 had fit before. All in all, the client was able to house 300% more servers within the same space.

Then, Instor turned its attention to the client's power needs. Working with our partners at Server Technology, we persuaded the client to upgrade their existing, dual 120 volt power strips to single 208 volt PDUs. The new solution was far more efficient, subsidizing the cost of the upgrade in 6 months, and saving them money on power every month after.



Results

By moving to smaller servers and specialized cabinets, the client went from 44 racks to 104, with each rack now holding 48 servers as opposed to 40.

By switching to Server Technology PDUs, the client also realized a \$300 per month/per rack cost savings – a number that added up very quickly, helping to pay for the project in the long run.

The client is so pleased with the work that they have plans to implement this same solution in their east coast data center very soon. In fact, when the client had an emergency that called for more PDUs in its East Coast data center, Instor was able to turn around the order in just six days, leading to a very pleased client.