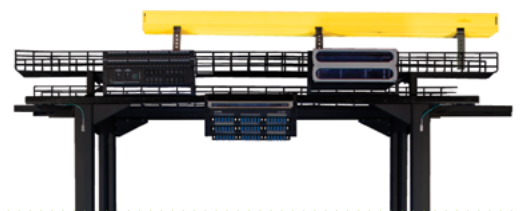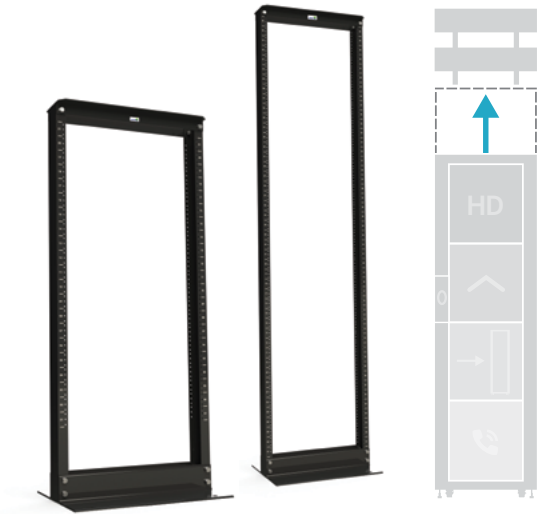# 7 Ways to
Create
MORE SPACE
for Network Patching

Many IT managers face physical space constraints, with limited room for additional network infrastructure. And the large majority of those running out of capacity need make due by consolidating servers and upgrading their facilities' infrastructure. Here are seven ways to do more with the space you have.

Take Advantage of Space Above Racks

Many network installations have unused space above racks and cabinets that could be used for additional cable management and patching with help from overhead platforms. These platforms can carry the load of cable pathways while supporting fiber or copper patching, power, lighting, and other infrastructure, freeing up more space underneath.

Install Taller Racks

While standard 42U racks currently make up 60% of the market, more vendors are offering 48U and 51U racks, in a response to data center managers consolidating facilities and looking for more efficient ways to use space. These taller racks currently make up 10% of the market, but that number is expected to grow to 20%, according to analyst firm TechNavio.
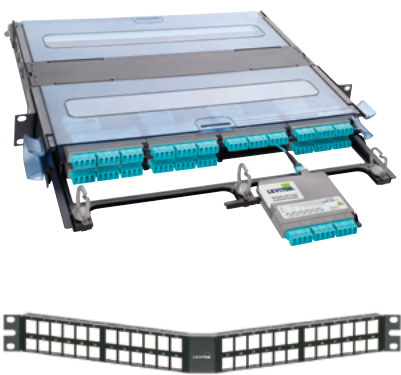
Use High-Density Enclosures and Patch Panels

The latest in fiber enclosures use compact cassettes or adapter plates that can maximize port density and create a scalable platform for enterprise and data center applications. For example, Leviton HDX cassettes and adapter plates with MPO/ MTP connections can patch up to 48 fibers per cassette or 144 fibers per adapter plate. This type of density translates into over 1,150 fibers in a 1RU Opt-X HD Enclosure.

High Density Patch Panels are an efficient way to increase copper port density in zone enclosures, racks, and cabinets. While standard patch panels offer 24 ports in one rack unit, high-density panels can double that amount with 48 ports per rack unit.

Install Angled Patch Panels

One of the best ways to maximize rack space is through angled patch panels. With angled panels, you can still achieve proper cable bend radius without needing horizontal cable managers typically found above and below traditional flat panels in the rack. Recessed-angled panels have a unique dual-angle design that can also route cables directly into vertical cable management, while keeping a lower profile within the rack or cabinet.
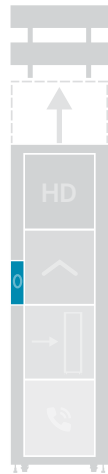
Find Places for Zero-U Patching

Zero-U enclosures or panels are an innovative way to add copper and fiber connectivity in a limited space. Ideally suited for data center server and equipment cabinets, these solutions don't take up any rack space, as they can mount vertically in the back of the cabinet. The result: easy access to connectivity, improved airflow, reduced patch cable routing complexity, and more space to manage active equipment.

Consolidate Fiber Patching into a Distribution Frame

Fiber distribution frames are often used in central office facilities, large enterprises, and cloud data centers. They are typically installed in the main distribution area of a data center, and act as a main cross-connect or interconnect patching frame for all fiber channels. Since they don't require the use of standard 19" cabinets which often require additional width and depth, they can consolidate patching into an incredibly small footprint. For example, the Leviton HDF3168 Fiber Distribution System takes up one tile of data center floor space and has the capacity for patching more than 3,168 LC fibers, or up to 15,552 fibers when using 24-fiber MTP® connections.

Get Design Help

Network infrastructure consultants and data center specialists can offer guidance with your topology, layout, elevations, and pathways to make the most efficient use of space.

Need help with your network?
Call 1-800-824-3005 for assistance.

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