

THE REAL BENEFITS FROM CONNECTED INFRASTRUCTURE EXAMPLES OF CUSTOMER SUCCESSES

Connected Infrastructure Delivers Real Customer Benefit



The real proof of value for any technology solution is the actual benefits it provides to customers. The examples in this document detail a number of different benefits that real customers have gained by implementing a Connected Infrastructure approach in their data centers.

Connected Infrastructure is Legrand's approach to optimizing the data center that targets five key elements of data center operations: performance, time, space, experience, and sustainability. This approach is strongly aligned with the real-world issues and management challenges that nearly every data center faces—and delivers real-world benefits.

Performance

Demands on data center performance have increased substantially as a result of virtualization and cloud infrastructure, coupled with new, bandwidth-hungry applications. The importance of extremely reliable and higher-performing structured cabling systems to meet the evolving demands on the data center cannot be understated.

Examples of Connected Infrastructure Delivering Performance for Customers

- A well-known financial services firm had to support faster network connections to the desks of individual traders to ensure that they were not working with older and obsolete financial market information. The increase in speed had to be accomplished with minimal disruption to the IT infrastructure. The decision was made to provide 10Gbps network speed to the desktop using Legrand's Clarity® SNAP™ pre-terminated copper wiring solutions that deliver above-standard performance. Legrand delivered custom lengths to facilitate low cost and rapid installation. This Legrand solution provided the needed 10Gbps network speed to the desktop while using Cat 6A cable, and the network speed upgrade was accomplished without reconfiguring any network equipment in the data center or the IDFs.
- Legrand also improved the overall performance of a large organization's data center network due to increasing and more demanding workloads and new applications. However, network performance became a noticeable bottleneck due to an excessive amount of signal loss in the data center fiber network. The customer needed improved performance, but without the cost of re-cabling the data center. Legrand was able to help redesign the solution using LC adapters and fiber cable, generating 3dB of additional headroom without making substantial changes to the rest of the fiber network.

Time

Time is a resource that is in short supply within most data centers. Staff numbers are shrinking while the workload is growing. Connected Infrastructure provides customers with demonstrable and significant time savings for many routine tasks within the data center, such as reducing the amount of time required for new installs, or for moves, adds, and changes.

Examples of Connected Infrastructure Saving Time for Customers

- A national REIT that operates several properties, including shopping malls, wanted to implement a wireless network system within each of its mall properties that could send coupons and offers to shoppers in the mall based on their geographic location. This required additional network infrastructure for each property. Because there were a very high number of properties, the cost and time to do these installations individually was not acceptable. To complete this solution each location needed seven wall-mount cabinets connected by a fiber ring. Working with Anixter, Legrand developed a “kitted” solution that utilized a consistent set of equipment and infrastructure that could be preloaded with fiber and copper components inside each cabinet. This preconfigured solution allowed for nearly complete infrastructure in these cabinets to be shipped to each property for local installation. This both simplified installation for the local contractor and dramatically shortened the time required to do the work. The consistency of the solution also simplified ongoing support for this project.
- A well known consulting company had to deploy high speed Ethernet and build a better-performing cable plant to support the latest Cisco/Brocade switches. Using Legrand’s pre-terminated cables and multimedia patch panels, the customer was able to make the migration to this high-speed network without major changes to existing infrastructure, and saved 35% of the staff time needed for cable upgrades.

Space

Optimizing data center space is critical since the cost of a redesign or a substantial change can easily reach six figures. Connected Infrastructure provides a number of ways to optimize an existing data center space to provide more growth potential. This approach includes optimizing

power and cooling, increasing rack density, using open space outside the rack for patching to free up space within the rack for active equipment, and “going vertical.” Connected Infrastructure aligns the space-saving vision of Gartner’s [“Infinite Data Center”](#) approach.

Examples of Connected Infrastructure Optimizing Space for Customers

- A top cloud and applications provider faced a number of space issues. Its use of numerous colocation facilities was driven by a cost-per-square-foot calculation. Using Legrand Mighty Mo® 9-foot-tall racks allowed this service provider to substantially increase density per square foot, typically by 38% or more. Prior to using the Legrand solution, the provider was custom-building racks to try to increase density which was a far more expensive approach and did not have the optimized cooling capability of the Mighty Mo solution. The air flow issues using the custom approach limited rack density and resulted in the need for more space at the colocation sites. Moving to Mighty Mo racks solved these problems.
- A further example of Legrand’s capabilities of space optimization was when an organization was in need of more usable space in its data center. Using the Mighty Mo Overhead Cable Pathway Rack, 5RU, the organization was able to move all connectivity from the cabinets to the overhead rack. This Legrand solution saved a substantial amount of space and freed up 86 total cabinets in the data center, allowing this company to meet current demands in addition to providing room for future growth.

Experience

Improving the ownership and customer-vendor experience also provides efficiency gains, but it is often overlooked. Legrand has dedicated resources and staff, along with world-class processes designed to improve customer interactions, complete projects more quickly, and simplify the coordination of multisite or global projects.

Examples of Connected Infrastructure Providing the Best Customer Experience

- A global insurance company was implementing a complex project concurrently at a number of different locations around the world. The incumbent vendor could not meet the deployment schedule, so the customer turned to Legrand. Using Q-Series pre-terminated products and a locally based account team, managed by a single point of contact, Legrand

was able to deliver all of the cabling in four weeks at numerous worldwide locations. Further, the timing to deliver these cable products was coordinated to meet the schedule for when the wiring contractors would be on-site. All of the cabling met consistent specifications around the world, simplifying deployment of new data center equipment.

- In a second example, a prominent global media organization had multiple locations that housed IT infrastructure. Because the organization's business is quite complex it was utilizing its own data center and a number of colocation sites. Making the situation more difficult, each department had its own IT staff. This resulted in a very poorly documented and complex cabling implementation. To bring order to the chaos and gain control, Legrand delivered solutions that had each cable uniquely numbered for detailed tracking as to usage type, location, date of installation, and other key parameters. In addition, Legrand provided a set of standard cable options to limit permutations. Finally, this customer had a large number of older power connections that were too long. Legrand cut down and re-terminated these cables, saving the customer a substantial amount of time and money.

Sustainability

Legrand has made a corporate commitment to sustainability for its own activities, as well as to support its customers' efforts. A leadership position in both

the manufacturing process and the products built has been developed using this process. Legrand is often recognized by the U.S. Department of Energy (DOE) for its sustainability efforts and achievements.

Examples of Connected Infrastructure Supporting Sustainability and Saving Energy

- A project for an entertainment and gaming organization was being driven by a need for documented energy efficiency for a new corporate location being built in conjunction with Green Wizard. As part of this project, there was a requirement that the data center infrastructure provide points toward LEED certification for the building. Using the cabling solution co-engineered by Legrand and Superior Essex®, with its nCompass warranty, it was possible to generate LEED points and meet the Healthcare Product Declaration (HPD) standards, an additional demand on the project.
- A nationally recognized non-profit research and development center was renewing its data center space, but quickly realized that it would not be sufficient to meet its future needs for data center cooling, even when running these systems at maximum levels. The organization needed more effective cooling that also met its green initiatives. The solution was to use Legrand and OptiCool® jointly for close-coupled cooling. In addition, when this solution is fully installed, the expectation is that data center cooling power will be cut by 90%. Using OptiCool, the organization was also able to free up substantial space in the existing data center for even greater efficiency—without an increased carbon footprint.



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