

Global Bank Achieves Business Continuity Goals Using Vertiv™ Liebert® Busway Solution



A Vertiv Case Study



Background

Banks are the engines that help modern society achieve accelerated economic growth. The ability of banks to make quick, informed decisions and to execute faster project appraisals and loan approvals is crucial to remaining competitive in our technology-driven marketplace. One global bank that has thrived in this more automated environment has assets totaling approximately \$1.3 trillion dollars and 84,000 employees. It conducts business in 58 countries with a large presence in Europe, the Americas and Asia. The bank focuses on providing its customers with corporate, investment, and private bank services including asset management.

One of the centerpieces of the strategic plan unveiled by the bank's chief executive officer last year was to cut costs through automation and better technology. As a result, technology teams at the bank accelerated efforts to modernize legacy IT infrastructure while reaping the benefits of cloud computing — higher efficiency, lower cost and less risk.

The bank's upgraded technology platforms are now redefining how it develops and offers innovative new products and allows for more digital engagement with clients. For example, new cutting-edge cloud services are enabling access to world-class data science, artificial intelligence (AI), and machine learning that support a range of new operational possibilities. Potential use cases include helping treasury clients with day-to-day tasks such as cash flow forecasting, improved risk analytics, and advanced security solutions to protect clients' accounts.

Challenge:

Ensure the bank's colocation-hosted applications run in a reliable, safe, secure and highly available environment

Solution:

Vertiv™ Liebert® MBX power distribution busway system for 50 racks

Results:

- Power distribution flexibility with rapid and simple installation of busway and receptacles
- Enhanced safety with touch-safe components that eliminate inadvertent electric shock
- Scalability with minimal up-front investment
- Redundancy for maximum uptime

Benefits of cloud include cost savings and flexibility

Migration of selected applications to the cloud is helping this global bank reduce the overhead of managing legacy IT infrastructure. The bank's engineering community, for instance, can now spend more time coding, increasing developer productivity, and reducing time-to-market for new applications. Moving applications to the cloud also provides the bank with a number of additional benefits:

- **Scalability** – The ability to scale helps to deliver the right amount of IT resources when needed, within the right geographic location.
- **Reduced maintenance effort** - Cloud providers manage all IT-related administrative tasks and deliver up-to-date, regulatory-compliant environments including data back-up, replication, and disaster recovery services.
- **Cost control** - Colocation center price structures are flexible, allowing the bank to only pay for the data processing capacity it uses.
- **Security** - Cloud providers invest heavily in cyber security capabilities, preserving the confidentiality, integrity, and availability of both the bank's internal propriety information and the data of its clients and business partners.

Challenge

For the bank's colocation provider, availability is a top concern

After moving key applications to the cloud, the bank now relies on the host colocation provider to deliver 24x7 availability to run its global operations.

Besides putting its brand reputation at risk and increasing the chance of customers switching to other financial service providers, unanticipated downtime in banking environments can result in direct loss of revenues.

According to [Statista](#), the cost of server downtime in banks and financial services industries averaged \$9.3 million per hour in 2017. Colocation clients like the bank reduce their risk by signing service level agreements regarding the required level of uptime.

In order to mitigate the risk of downtime, the bank works with a number of colocation partners. One of those partners, [Digital Realty](#), supports the data center, colocation, and interconnection strategies of customers across the world. One of its facilities was selected by the bank to support key cloud applications.

Since this bank required a high degree of reliability, redundancy, resiliency, and scalability, Digital Realty knew it had to assemble a team of top partners to provide both the IT and physical infrastructure (power, cooling, racks, etc.) it needed to guarantee a high-availability solution.

Solution

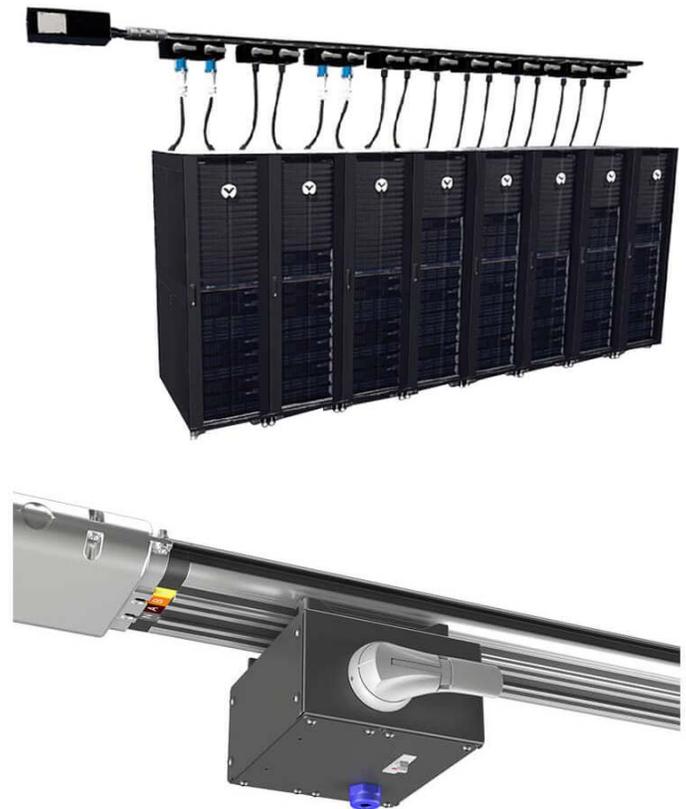
Vertiv emerges as a partner of choice for colocation facility power distribution

The Digital Realty facility is home to numerous tenants, and therefore, the colocation provider has implemented multiple successful deployments in the past using established resellers, systems integrators, and providers of high-tech services. For this project, Digital Realty again used one such reseller as the prime contractor.

With \$13.4 billion in annual revenue and more than 30 years in business, this reseller was keenly aware of the need to deploy a simple yet reliable approach for distributing incoming utility power to the bank's racks within its facility.

Keeping high availability as its focus, the reseller turned to the local Vertiv representative, [Joe Powell and Associates](#), having a number of engineering discussions on power system design, configuration, deployment and installation. A well-respected installer, Ken Nix and Associates, was also enlisted as part of the project team.

After reviewing the business requirements, IT bill of materials, and power and cooling specifications, the decision was made to utilize the Liebert® MBX power distribution busway system to power the data center racks.



Liebert® MBX busway with closeup view of plug-and-play tap-off box

Results

Busway benefits mirror the global bank's business goals

The bank had selected a colocation space at the Digital Realty facility big enough to support approximately 50 racks of IT equipment, laid out in two rows. The purpose of the Liebert® MBX busway was to distribute power from above the racks to the rack power distribution units (rPDUs) in each of them. By studying the load capacity, the Vertiv team was able to ascertain the proper voltages, amperages, and receptacle sizes that were needed in the busway.

As the technology installation within the data center space progressed, project stakeholders experienced a number of benefits related to the Liebert MBX busway equipment that helped the project move forward more quickly:

- **Ease of installation** – The busway is lightweight and easy to install. Also, upfront installation cost of the overhead busway is much lower than traditional, under-the-floor power distribution. Post installation, if the owner decides a different amperage rPDU is needed, a new tap-off box can simply be snapped into the busway, which takes less than a minute.
- **Redundant design** – Each row of racks in the colocation space has two overhead runs of busway mounted vertically back-to-back. Tap-off boxes are located on each side of the actual busway. This allows for deployment of both A and B power feeds, thereby providing redundancy at the rack power distribution level.
- **Electrical safety** – The busway is architected to provide current protection from the incoming power and over current protection on each receptacle. The busway is also touch-safe. Anyone who inadvertently touches it is safe from electrical shock. Because the Liebert MBX busway is IP2X certified, local IT technicians and electricians experience a higher level of comfort when it comes to expanding or adding more tap-off boxes or receptacles.
- **Maintenance-free care** – The solution consists of only busway and the receptacles that snap into it. Each receptacle has a 15-, 20-, 50-, or 60-amp outlet into which users can plug. Outside of basic visual inspections, the solution is essentially maintenance free.

- **Scalable architecture** – During upgrades and buildouts, expanding the busway is simple. Connected systems do not have to be taken offline. This makes it easy for colocation providers who are unsure of how fast their installations will be growing. They avoid the expense of overbuilding upfront with a solution that is easily right-sized to the existing IT capacity.

The bank was pleased with the results of the installation and have decided to deploy Liebert MBX busway for some of its upcoming colocation facility expansion projects..

"The busway was an ideal solution for this project. It has proven to be highly reliable and the technology benefits align perfectly with the bank's goals of increased application uptime, infrastructure expansion flexibility, and rapid technology deployment."

- Tim Chamanzad, Channel Sales Representative
Joe Powell & Associates

Go online to learn more about how the Liebert® MBX busway solution can easily adapt to power distribution changes and support your business continuity goals.