



QTS Switchboard service delivers diverse connectivity at a 60% savings for Markel Corporation

Self-service connectivity solution connects to multiple locations from a single port

Markel Corporation is a diverse financial holding company headquartered in Richmond, Virginia. In addition to its core insurance and reinsurance business, which has 64 offices in 16 countries, Markel encompasses investment and ventures operations, including 18 ventures businesses. In each of the Company's businesses, it seeks to provide quality products and excellent customer service so that it can be a market leader. To do this, the company needs a high-availability IT environment with resilient connectivity that can scale as it grows.

Rapid provisioning of multi-site and multi-cloud solutions at a significant cost savings

Visibility into network configuration optimizes performance

One-bill, one-provider structure simplifies solution management



Redundant connections carry a hefty price tag

Markel's relationship with QTS began in 2014 when the specialty insurance provider outgrew its on-premise data center and needed a colocation provider with the space, power and connectivity options to keep pace with its dynamic growth trajectory.

QTS' expansive Richmond data center campus provided the space and power Markel needed for its production environment—now and into the future. Serving as a Network Access Point (NAP) for the region, the connectivity-rich facility offers access to 21+ network providers and the MAREA and BRUSA cables, which terminate at the facility. Catering to the Federal market, the Richmond site also provided an intense level of physical security that was unmatched by the other data centers Markel evaluated.

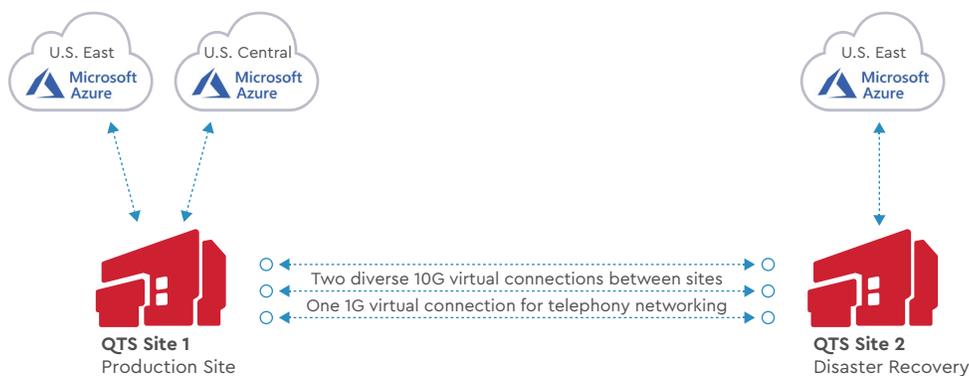
To achieve the necessary level of resiliency, Markel also established a disaster recovery (DR) site at QTS Atlanta, using diverse connections between the sites to safeguard its data and ensure uninterrupted availability. However, this redundancy came at a considerable cost as the configuration required multiple ports, cross connects and diverse circuit paths terminating on diverse equipment ports, to achieve the desired solution.

When QTS introduced its new Switchboard product, an on-demand connectivity service that promised easy, self-service connectivity in less time and for less money, Markel signed on.



Switchboard offers easy, self-provisioning of multiple connections from a single port

Using Switchboard, Markel was able to simplify its connectivity strategy, replacing its complex multi-circuit configuration with 10 Gb connections with QTS. The company used Switchboard to self-provision, two 10 Gb long-haul virtual connections between the Richmond and Atlanta sites for replication and an additional 1 Gb virtual connection between the sites to support its IP telephony network timing. The automation built into Switchboard enabled Markel to quickly and easily establish these secure, diverse connections, condensing deployment time from months to days.



Seamless integration into cloud platforms gives Markel visibility and control

Because of the ease and cost-efficiency of these long-haul connections, Markel also uses Switchboard to connect to Azure cloud in different regions with diverse virtual connections.

The Switchboard service includes end-to-end integration between QTS' SDP digital platform and AWS, Azure and Google cloud platforms – providing a secure and seamless experience. SDP's user-friendly interface enables 24/7 online ordering and provides Markel's network engineers with visibility and control of its connections.

Users also have at-a-glance, color-coded insight into the health of the connections on the SDP Dashboard and can view each circuit's configuration via the Switchboard Network Diagram. The interactive interface also allows Markel's network engineers to click on a port for more granular details into statistics to better understand the

performance of its port. This level of information was not available with Markel's traditional carrier solution.

The automation and inherent redundancies built into the software-defined network service also minimize disruptions and improve performance by seamlessly rerouting circuits during a network failure.

60% cost savings and accelerated speed of deployment are a winning combination

Switchboard has provided Markel with the diverse, redundant connections it needs to continue to service its customers and build its business. Even more striking than the ease and speed of establishing these secure connections is the cost savings Switchboard delivers. With Switchboard, Markel's redundant configuration actually improved the cost-efficiency of the solution with a 60% savings over their previous configuration.



“This is a tremendous savings,” said Mark Baltz, Senior Director, Global Technology Services at Markel Corporation. “To achieve this level of cost savings in addition to rapid self-provisioning capabilities and on-demand visibility provides a new level of value.”

The ability to quickly and easily self-provision the diverse connections it needs is a clear differentiator for the Markel team.

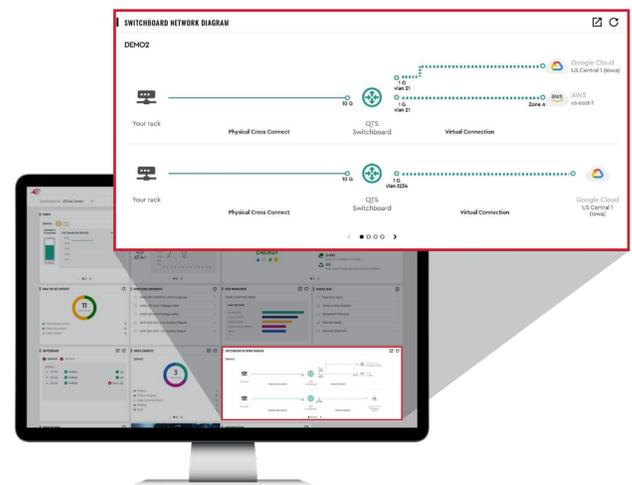
“Being able to configure our connectivity on our own and then see that we are utilizing diverse circuits on diverse access switches provides a piece of mind,” said Mark Baltz. “We appreciate this flexibility and insight, not to mention the speed at which we can provision new connections.”

Switchboard's integration with SDP also offers Markel's network engineers access to a number of network statistics, including the number of errors, where errors are occurring and if circuits are up. Network engineers can also assess if circuits are nearing saturation points. The ability to view these network details from the

carrier's perspective offers a new layer of visibility, allowing Markel to better gauge performance to control and optimize the environment.

Switchboard also eliminates the need to manage multiple vendors. Instead, the company can continue to strengthen its relationship with QTS, knowing it has a single partner to rely on to address any concerns or support its evolving needs. QTS further simplifies the management process by providing Markel with a single, consolidated invoice that aligns new orders with the company's existing contract and eliminates the need to create a new work order for every connection.

The enhanced capabilities Switchboard delivers has helped Markel save money, optimize and control its network performance, and speed connectivity. As Markel continues to grow, QTS' IT ecosystem can adapt to its changing needs by providing the company with the flexibility to scale its infrastructure and connect to anywhere it needs to be.



Switchboard services are customer-provisioned and managed via QTS' award-winning digital platform, SDP.

About QTS

QTS Realty Trust, Inc. (NYSE: QTS) is a leading provider of data center solutions across a diverse footprint spanning more than 7 million square feet of owned mega scale data center space within North America and Europe. Through its software-defined technology platform, QTS is able to deliver secure, compliant infrastructure solutions, robust connectivity and premium customer service to leading hyperscale technology companies, enterprises, and government entities. Visit QTS at www.qtsdatacenters.com, call toll-free 877.QTS.DATA or follow on Twitter @DataCenters_QTS.