EQUINIX®

Manufacturing

Stadler scales performance 10x and enables all things digital for faster train customization

Global train manufacturer doubles IT infrastructure with zero downtime, while gaining greater sustainability on Platform Equinix®

Case Study

STADLER

Founded in Switzerland in 1942, Stadler is a global manufacturer of customized trains (more than 9,500 sold to date) with a workforce of over 13,000 in various production, engineering and service facilities around the world. Its customers include SBB, the Swiss national railway company; Deutsche Bahn; Bay Area Rapid Transit (BART); and FGV, a public railway company in Valencia, Spain. Stadler consolidated various distributed corporate data centers across Europe in two Equinix International Business Exchange™ (IBX®) facilities in Zurich, where it houses all of its IT infrastructure and applications for greater and more reliable performance, scalability, security and sustainability.

Challenge

Stadler needed to make its corporate data centers more resilient in the face of climate issues and unreliable infrastructure. Its distributed local data center model made it difficult for the company to efficiently share business-critical applications (e.g., SAP®, Microsoft® Exchange, manufacturing lifecycle processing, scale-out filers) among global users and quickly expand its production of customized trains. In addition, Stadler hoped to gain access to a wider ecosystem of network and cloud service providers. It needed interconnection capabilities to connect with those providers quickly and securely, thus increasing flexibility to scale network bandwidth and accelerate its digital transformation.

Solution

With seven production, five component and more than 70 service locations distributed around Europe and the U.S., Stadler needed a more reliable and secure data center IT infrastructure, where it could deliver consolidated and orchestrated access to all its systems and applications for its global users. Two centrally located Equinix IBX facilities in Zurich gave Stadler the robust data center infrastructure it required. The IBX data centers were connected together for active/active high availability using a high-speed, redundant dark fiber ring. Stadler leverages a virtualization cluster to mirror data in real time between the data centers, one of which houses a separate file backup room to guard against any loss of valuable information.

Greater scalability and flexibility for growth

Stadler required greater scalability and flexibility to grow not only its IT infrastructure footprint but also its network connectivity between users, partners and applications, such as its centralized SAP hub. Equinix gave Stadler the space and power to double its hardware infrastructure and a choice of network providers to quickly scale its bandwidth speed from 1 Gbps to 10 Gbps. Also, the company leveraged Equinix Smart Hands® for round-the-clock, on-site operational support service to scale and supplement its data center staff as needed.

Future-proof IT infrastructure

Partnering with Equinix also gave Stadler a path toward future-proofing its IT infrastructure and rapidly scaling its global digitalization, as it considers leveraging innovative, cloud-based manufacturing technologies such as AI, IoT and digital twins. Looking forward, Stadler sees Equinix as a way to gain a fast and secure on-ramp to cloud providers (e.g., Microsoft Azure and AWS) via Equinix Fabric® software-defined interconnection. The company envisions Equinix providing the same robust data center infrastructure reliability and security around the world, particularly in regions where Stadler would like to expand, such as in the Americas and Asia-Pacific.

A platform that supports sustainability

Stadler is conscious of its social responsibility for sustainable mobility and therefore stands for innovative, sustainable and durable trains. At Equinix, we design, build and operate our data centers with high energy-efficiency standards and a long-term goal of addressing power usage across our global platform with 100% clean and renewable energy. Since 2022, we have achieved 96% renewable energy coverage for our global data center energy consumption, with 239 sites covered by 100% renewable energy. Companies around the world can drive their business advantage and grow their digital infrastructure sustainably with Equinix.

"To effectively deliver customized trains to our expanding global customer base, we required a robust data center infrastructure with fast connectivity to our applications. Equinix gave us a reliable, secure, scalable and sustainable global platform that exponentially increased our resiliency, performance, security and customer satisfaction."

Georg Friedrichkeit, Head of Data Center & Operations, Stadler

Result

Greater resiliency and security

Increased average uptime as well as data and application security.

Increased network performance

Gained access to a network provider ecosystem and multiplied bandwidth speed by 10.

Expanded scalability and sustainability

Doubled IT capabilities on a digital infrastructure platform committed to sustainability.

Faster digital adoption time-to-market

Accelerated adoption of manufacturing digital technologies and time-to-market.

Greater user satisfaction

Gained more effective delivery of custom train manufacturing services.

Instant geographic reach

Enabled global expansion via digital services to quickly open new markets.

Solution components

Equinix International Business Exchange (IBX) data centers

The world's most expansive and secure data center platform, deeply committed to sustainability.

Equinix Smart Hands

On-site, operational 24/7 support for remote management, installation and troubleshooting.

Benefits

With Equinix, Stadler was able to meet its global reliability, security, scalability and sustainability requirements for its data center IT infrastructure and connectivity to deliver a higher level of user satisfaction.

Greater resiliency and security

On Platform Equinix, Stadler went from 99% to 99.99% average systems uptime with no outages and increased its application and data security.

Increased network performance

Inside Equinix data centers, Stadler had a choice of a greater number of network providers and increased its on-demand bandwidth speed tenfold, allowing its users to access business-critical systems, applications and partners much faster.

Expanded scalability and sustainability

Equinix gave Stadler the room to expand its power capacity to 200 kilowatt-hours (kWh)—10 times its former capacity—enabling the company to double its hardware infrastructure and leverage clean and renewable energy.

Faster digital adoption and time-to-market

Equinix's global digital infrastructure platform gave Stadler the flexibility to better plan for the future in terms of adopting innovative digital technologies and quickly bringing to market new tailor-made manufacturing services and locations.

Greater user satisfaction

Stadler's consolidated data center strategy on Platform Equinix has greatly enhanced the IT experience for its employees, partners and customers, as it can more quickly respond to new business opportunities and effectively deliver its custom train manufacturing services with greater performance, scale and sustainability.

Instant geographic reach

As Stadler expands its presence to new regions, such as North America and Asia-Pacific, it can quickly deploy digital services without new hardware purchases while supporting its sustainability goals across a global digital infrastructure platform with Equinix.

By partnering with Equinix, Stadler doubled its IT operations' reliability from 99% to 99.99%, enabling the company to deliver tailor-made trains to global customers more efficiently and effectively, with greater customer satisfaction.

About Stadler

Stadler has been building customized trains for over 80 years. The provider of mobility solutions in rail vehicle construction, service and signaling is headquartered in Bussnang, Switzerland. Its product range comprises mainline railways and city transport systems, including high-speed, intercity, regional and suburban trains, metros, and tramways and trams. Also, Stadler manufactures mainline and shunting locomotives, as well as passenger carriages. It is the world's leading manufacturer in the rack-and-pinion rail vehicle industry.

Stadlerrail.com

About Equinix

Equinix (Nasdaq: EQIX) is the world's digital infrastructure company. Digital leaders harness Equinix's trusted platform to bring together and interconnect foundational infrastructure at software speed. Equinix enables organizations to access all the right places, partners and possibilities to scale with agility, speed the launch of digital services, deliver world-class experiences and multiply their value, while supporting their sustainability goals.

Equinix.com

Learn more

To learn how you can create a more reliable, high-performance and scalable IT infrastructure for your manufacturing business, contact your Equinix account manager.

Contact us

"At Stadler, we are going through a digital transformation. The aim of this completely renewed environment is to increase the efficiency of the entire value chain. Partnering with Equinix has given us a future-proof digital infrastructure platform that we can innovate and expand on."

Michael Hutab, Chief Information Officer, Stadler

Drive your future forward on Platform Equinix®

Platform Equinix is where digital businesses bring together all the right places, partners and possibilities to create the digital infrastructure they need to succeed. It's the trusted foundation for digital infrastructure, enabling businesses to innovate and create value through our digital ecosystem of tools, technologies and capabilities from the most valuable partners and communities in the world.