Revolutionizing Data Center Networking

Axians Cloud Services Provider France, a leading ICT solutions provider, has partnered with rBlox, a startup developing innovative data center networking software. This collaboration aims to address key challenges in the data center industry, including network inefficiency, high costs, and security vulnerabilities.

rBlox

rBlox is a pioneering technology company developing next-generation network solutions. Our innovative approach challenges traditional networking norms, offering a more efficient, flexible, and secure alternative to existing protocols. rBlox's technology is designed to adapt to growing enterprise needs and the rapid pace of innovation in the digital age.
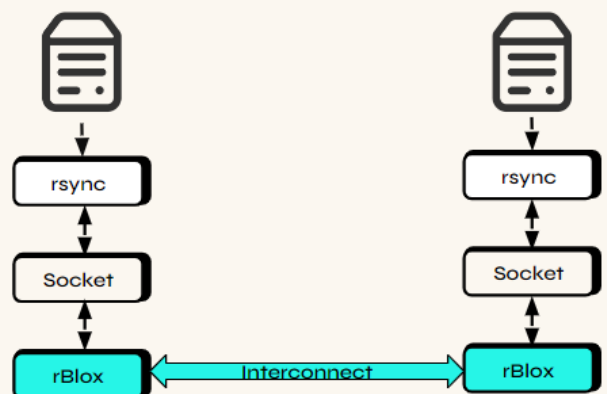
Axians

Axians, a brand of VINCI Energies, is a leading provider of ICT solutions and services. With a presence in 27 countries and a workforce of 12,500 employees, Axians specializes in telecommunications infrastructure, cloud and data centers, enterprise networks, digital workspace, business applications, and cybersecurity. Their expertise spans various sectors, including transport, energy, and smart cities.

A Networking Revolution Born from Chance

During the Eurosatory exhibition, rBlox's Hayk Mnatsahanyan CEO and Wesley Mazure, Axians Cloud Services Provider France's Business Development Manager, initiated a strategic partnership. The discussion focused on rBlox's innovative networking technology, which aligned with Axians Cloud Services Provider France's interests in advanced IT solutions. The collaboration agreement includes Axians Cloud Services Provider France providing server infrastructure for rBlox's technology demonstrations. In return, rBlox will deliver proof of concept for their solution's capabilities. This partnership also opens the possibility for potential integration of rBlox's technology into Axians Cloud Services Provider France product portfolio. By combining their respective strengths, both companies aim to address emerging challenges in data center networking and expand their market offerings.

Use case

Project Scope and Implementation: The project focuses on validating key features designed to enhance network flexibility, security, and robustness, particularly in how rBlox operates over Ethernet. Unlike traditional overlay protocols, rBlox is tightly integrated with Ethernet, enhancing its native functionalities without adding significant overhead. Our goal was to create a real-world scenario to benchmark our technology's performance, specifically evaluating how rBlox improves network operations at the Ethernet level.

Technical Execution: Our team deployed rBlox on Axians Cloud Services Provider France's infrastructure, utilizing 2 servers for our testing environment. We conducted a

series of file transfer tests to simulate typical data center operations. These tests involved transferring files of various sizes, ranging up to 1GB, between the two servers. Multiple iterations of these transfers were performed to ensure a comprehensive performance evaluation and to gather statistically significant data.

From Concept to Reality

Key Findings: Initial tests have shown promising results compared to traditional networking protocols:

- → 30% faster protocol processing time
- → Instant application discovery time
- → 16-bit hierarchical addressing system, twice as light as IPv4 and seven times lighter than IPv6
- → Reduced network complexity due to smaller routing tables and data packets
- → Enhanced overall network efficiency and performance

These outcomes demonstrated significant improvements in network efficiency and performance.

Looking Ahead

Encouraged by the promising initial observations, both companies are planning to expand their collaboration. The next phase of testing will involve a larger server infrastructure, potentially scaling up from two servers to a more comprehensive setup. Plans include scaling up testing from two to five servers and conducting comprehensive measurements of bandwidth, throughput, and jitter.
The partnership is also moving beyond technical testing. rBlox is preparing to present their solution to Axians' sales and business development teams, with the goal of integrating into Axians Cloud Services Provider France's product catalog.

This collaboration between rBlox and Axians exemplifies how innovative partnerships can drive significant advancements in network technology, potentially reshaping the future of digital infrastructure. As we progress, we will continue to validate our findings and adjust our approach based on the results of each phase of testing.

| Disaster recovery | High-speed data propagation | High speed data migration | Secure data sync |

Axians Cloud Services Provider France Testimonial

"Based on the initial proof of concept (POC) results generated by rBlox in the lab hosted within our infrastructure, we are excited to continue the collaboration and expand the scope of implementation. rBlox has clearly demonstrated its value in interconnect environments, offering a more flexible networking stack that significantly reduces complexity while boosting performance. We are eager to move forward with the next phases of our partnership and also to be able to promote this solution to our clients who are seeking optimization of their networking layer."