

Cloud-Native Applications On-Prem: Motivations, Challenges and Alternatives

In the past ten years, the public cloud has revolutionized the way enterprises develop, run and scale applications. Developers have grown to expect the self-service experience and advanced automation, making cloud-native the de facto standard for modern applications.

Cloud-native has been synonymous to the public cloud. But, as cloud strategies evolve, enterprises continuously evaluate their strategies and have started considering expanding their cloud-native strategies to additional environments, including the enterprise data center, edge sites, managed environments, etc. There is a wide range of motivations to expanding cloud-native strategies to on-premises environments, and they vary based on enterprise-specific challenges, industries and business requirements.

Based on deep discussions with our customers, there are three main categories of challenges for enterprises wishing to implement and expand cloud strategies: security and compliance, edge computing and data sovereignty.

► Edge Computing

Big data, machine learning, IoT and other data-heavy workload have been gaining traction in many enterprises over the last couple of years, as a means to boost competitive advantage.

However, data-gravity and latency challenges often arise due to the distance between the source of the data, where it is generated, and the public cloud (the relevant region to which the data is sent). Furthermore, the cost structure of public cloud storage has been known to cause data-gravity concerns that may severely impact long-term TCO.

By enabling cloud-native applications to run on-prem in edge sites, enterprises can mitigate latency and performance concerns. Data can be effectively processed and analyzed at its' origin without the need to move it to off-premises locations and by doing so also reducing storage costs, which can often rely on commodity storage, the TCO.

Based on its' AWS-compatibility, Stratoscale enables enterprises to run cloud-native applications on-prem without any need for adjustments or re-writes. Stratoscale also helps enterprises expand their DevOps practices to various on-prem environments, while maintaining full consistency with existing AWS practices, to support true agility and optimal efficiency.

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► Security & Compliance

Regulated industries, such as banking, pharma, finance and healthcare, are subject to strict regulations and compliance policies, which together with the fear of loss of control, make moving workloads and data to the cloud, extremely problematic. While cloud vendors continue to evolve, they haven't matured their security operations to a level with which all organizations feel comfortable with. In addition relying on security rules of an external vendor has proven to be challenging.

Stratoscale enables enterprises to leverage advanced cloud-services and accelerate their cloud adoption while maintaining full control over policies and regulations as data and workloads remain "behind the firewall". This leverages customer security measures already in place while taking full advantage of the benefits of the cloud.

► Data Sovereignty

Businesses across the globe need to adhere to the various regulations, rules and laws in the countries in which they do businesses, and each country has its own data sovereignty rules and laws. If they don't have the resources to spend on it, organizations may have a difficult time navigating the requirements needed to deliver cloud services within each country. Just as the benefits of moving to the cloud are enormous, the legal and technical challenges of data sovereignty may also be significant.

Stratoscale's solutions, including AWS-compatible IaaS and cloud-services, for building, running and scaling cloud-native applications on-prem offer all the benefits of moving to the cloud, but eliminates the technical and legal challenges of data sovereignty by keeping the data on-prem under full control. Furthermore, there is no need to evaluate each vendor's specific offerings and policies, as all data runs under one consistent policies which are governed directly by the enterprise.

About Stratoscale

Stratoscale delivers robust cloud building blocks to modernize and future-proof the enterprise on-prem environment, aligning it with the public cloud. Stratoscale's comprehensive software solution, enables enterprises to run and scale applications anywhere by transforming the data center into an agile, flexible and scalable environment. Driven by innovation and advanced cloud practices, Stratoscale provides development teams and IT the building blocks, managed services and tools to automate and simplify the entire life-cycle, ensure fast time-to-market and meet evolving business needs.

For more information visit:

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