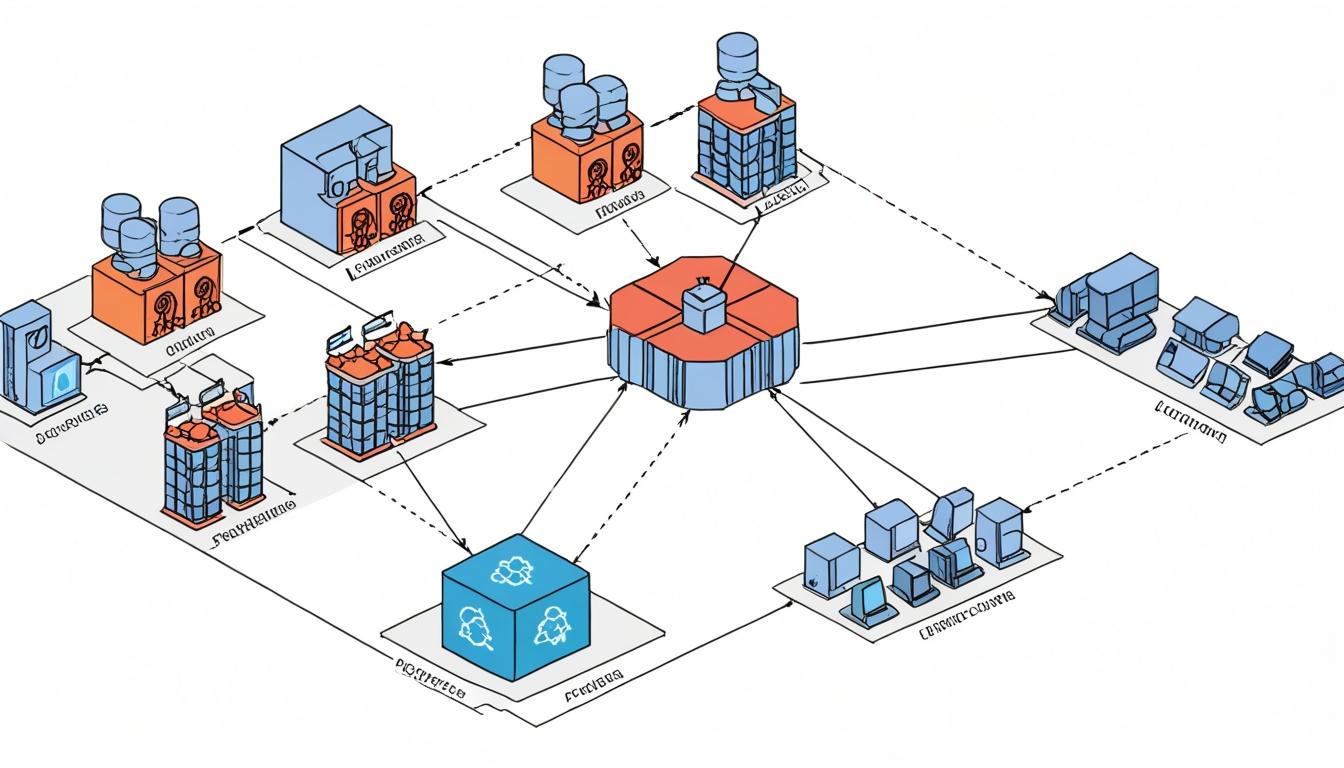
# European enterprises embrace Kubernetes for secure, sovereign infrastructure control



Kubernetes adoption is experiencing significant growth across Europe as enterprises accelerate their containerisation strategies, with a strong focus on security, compliance, and sustainable computing practices. This trend reflects a maturation of the Kubernetes ecosystem, moving beyond initial deployment phases towards production-scale implementations.

According to Sean Saperstein, a leadership executive at Sidero Labs, European companies are increasingly cautious about relying on U.S.-based infrastructure. Speaking to Techzine.eu at the recent KubeCon CloudNativeCon conference in London, Saperstein noted, “European businesses are also increasingly wary of relying on U.S.-based infrastructure, especially if it means putting themselves into situations where their own infrastructure and data may end up out of their control, or threatened with increasingly unfavourable terms.”

Sidero Labs provides a platform that automates Kubernetes installation and security, simplifying the process of deploying and managing bare metal infrastructure and multiple clusters across diverse locations while maintaining security and integrity.

Saperstein emphasised the distinct approaches between European and U.S. companies in infrastructure strategy. “European technology decision-makers have long demonstrated a fundamentally distinct (and many would argue more balanced and cautious & strategic) approach to assembling crucial infrastructure,” he said. “U.S. companies have, by and large, viewed the cloud as the default path, so have been quicker to put all their eggs in that proverbial basket by aligning with a singular hyperscaler of choice. In contrast, European businesses have tended to leverage a more diversified set of infrastructure types and providers, realising the advantages of spreading workloads across a more mixed architecture.”

This divergence is leading European organisations to take deliberate steps to reduce their dependence on U.S. infrastructure. Saperstein explained that recent geopolitical and economic changes have intensified the European tendency to control their own technological destiny independent of U.S. providers. “Many would argue that the U.S. is focusing on its own domestic interests as the prime mover for any strategic decision-making by equal (if not greater) measure,” he added.

European firms are increasingly scrutinising their current infrastructure and data protection frameworks to identify and reduce dependencies on U.S.-based technology that could pose future liabilities. Scandinavian countries, in particular, are at the forefront of this movement, with companies actively replacing U.S.-connected infrastructure with local or fully controlled alternatives.

Some businesses opt to use European data centres operated by U.S. providers—such as Microsoft Azure’s facilities in Germany—while others transition to wholly on-premises or hybrid infrastructures to reduce exposure. Saperstein highlighted that many firms are employing tiered data privacy frameworks, allowing general data to remain in U.S. cloud environments while more sensitive information is stored on-premises for enhanced security and sovereignty. This approach is distinct from edge deployments, which primarily address latency or availability concerns, and instead directly addresses data sovereignty.

The shift towards on-premises Kubernetes deployments offers several strategic benefits. Running Kubernetes on bare metal infrastructure provides direct access to physical hardware without virtualisation layers, thereby improving performance, flexibility, resilience, and data security. Saperstein emphasised the importance of adopting Kubernetes operating systems designed specifically for bare metal environments to maximise these advantages while maintaining compatibility with hybrid and cloud setups.

He further advocated for solutions that use API-based management rather than traditional interfaces like SSH, stating, “API-based functionality enforces consistency by taking human error out of the equation, while also making it easier to avoid security vulnerabilities and to bolster data sovereignty protections.” Selecting Kubernetes management systems that integrate seamlessly across on-prem, edge, and cloud nodes can offer a uniform, scalable architecture suited to evolving business needs.

Automation and simplified cluster management are key components of an effective Kubernetes strategy, reducing operational complexity while enhancing scalability and security. Saperstein concluded, “Businesses in Europe have only so much control over the macroeconomic climate or global trade policies. What they can do is pull their infrastructure closer to ensure a secure grip on the data and key technologies they depend on most. Organisations that make this relocalisation of infrastructure an opportunity to streamline operations when it comes to business-altering technologies like Kubernetes, or even to harness an optimal mix of on-prem, edge and cloud infrastructure, can move forward with a more efficient, scalable and secure posture, better prepared to weather challenging conditions ahead.”

While Kubernetes adoption faces typical technical challenges such as over-provisioning and misconfiguration, emerging geopolitical dynamics appear to be influencing strategic infrastructure decisions in Europe, pushing firms toward greater autonomy and control of their technological environments.

Source: [Noah Wire Services](https://www.noahwire.com)

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