

Local, secure, sovereign: Advantages of regional data centers

The AI boom is changing the demands placed on digital infrastructure. For companies in Germany and neighboring countries, local data centers are moving from a niche segment to a core strategic option. And there are good reasons for this.

For years, "cloud first" was the motto. Scalable, cost-efficient, globally available was the mantra. Today, this picture no longer holds true. Geopolitical uncertainties, increasing regulatory pressure and the real-time requirements of an AI-driven economy are forcing companies to rethink their strategies. Those who fail to reassess their infrastructure risk losing control of their data and jeopardizing their business.

Regional data centers, especially colocation providers, are at the heart of this reassessment. They offer what hyperscale clouds cannot structurally provide: physical data control, low latency, local contacts and verifiable compliance within the German or European legal framework.

Demand and capacity are rising

According to Bitkom, the total capacity of all German data centers grew by 9 percent to 2,980 megawatts in 2025. The market for edge data centers is gaining momentum, driven by increasing demands for computing power, AI workloads and availability.

With its National Data Center Strategy, the German government is sending a clear signal: By 2030, data center capacity is to be at least doubled and capacity for high-performance computing and artificial intelligence quadrupled. A high-performance digital infrastructure is essential in global competition, and this is precisely where Germany is lagging behind.

AI Needs an Adapted Infrastructure

AI is changing the rules of the game for data centers. GPU-based AI workloads, model training, e-government solutions and language models require significantly higher performance densities than traditional enterprise IT.

AI-supported systems no longer process data overnight, but in real time. Image recognition systems in quality control, diagnostic AI in hospitals, risk models in the banking sector, e-government solutions for public authorities: all are latency-critical. This is a structural problem for hyperscale clouds. Their data centers are located in countries like Ireland or the USA. Even with optimal connectivity, latencies occur that are many times higher than with regional data centers. This can mean the difference between a functioning and a non-functioning system.

Compliance Made Easy

The regulatory environment is rapidly intensifying. The GDPR prohibits data transfers to third countries without an adequate level of protection. However, the CLOUD Act allows US authorities access to data under certain circumstances, even if a US provider operates its servers in Frankfurt, for example.

In addition, there are industry-specific regulations such as the NIS2 directive. Violations can result in fines amounting to millions of euros. Banks and insurance companies have been required to comply with DORA since January 2025. Automotive suppliers are subject to TISAX and hospitals are governed by the BSI's KRITIS regulation. For all these sectors, compliance is significantly easier to implement in a local, certified data center than in an international multi-tenant cloud model. This is also true for all other sectors.

Data sovereignty and digital sovereignty

Bitkom CEO Dr. Bernhard Rohleder summed it up perfectly some time ago: "Without data centers, there is no digital sovereignty." Because it's not just a political buzzword, but an operational issue.

Geopolitical developments make it clear: Operating business-critical IT infrastructure outside one's own legal jurisdiction carries strategic risks. For many companies that process sensitive customer, research and transaction data daily, this is simply not an option.

Colocation: Flexibility Meets Cost-Effectiveness

Operating their own data center involves significant effort and expense for many companies, from certifications and operational reliability to energy supply and qualified personnel. Colocation offers a genuine alternative: Companies operate their own hardware in professional data centers and obtain space, power and connectivity without having to maintain their own infrastructure.

Colocation is growing accordingly. According to a Bitkom study, the segment will exceed 50 percent of Germany's total capacity for the first time in 2025, with growth of 17.5 percent compared to the previous year.

Key advantages at a glance:

Connectivity and Latency: Colocation sites have multiple carrier connections and direct access to Internet Exchange Points, minimizing latency and maximizing bandwidth.

Scalability: Whether it's a regulatory-driven capacity increase or system integration following an acquisition, additional capacity is available within days or weeks, without construction projects. Growth is predictable.

Security: Certified operation (e.g., ISO 27001) with access controls, redundant power supplies and 24/7 monitoring—a level rarely achieved by internal server rooms.

Data sovereignty: Owned hardware ensures full control over data and access, without shared resources. Data sovereignty becomes a verifiable operational state that can be demonstrated at any time through audits and certifications.

Digital sovereignty: Providers headquartered and owned in Europe are subject to European law and are protected from access by third countries.

Regional proximity: Local providers know the region and its regulatory requirements, offering shorter communication channels and direct contacts.

Sustainability: The use of renewable energies, waste heat recovery and efficient cooling make measurable contributions to ESG goals.

Portus Data Centers: Maximum security, minimal latency

The Portus Data Centers Group offers carrier-neutral edge colocation services at locations in Hamburg, Munich and Luxembourg. Data processing takes place close to the point of origin, with low latency, high availability and full data sovereignty within the German and European legal framework.

All locations feature redundant power supplies, state-of-the-art cooling systems, physical access control and 24/7 monitoring. With ISO 27001 certification and additional site-specific awards, the data center operator meets high standards for security, compliance and sustainability. Locally located yet internationally connected.

Conclusion

The decision to use regional infrastructure is not a technical detail, but a strategic decision for compliance, sovereignty and the company's future. Local colocation data centers provide a more secure foundation for innovation and competitiveness.