

Revolutionizing AI deployment through intelligent infrastructure

Core42's revolutionary AI adoption, powered by Dell Technologies' infrastructure, scales with purpose and sustains with impact, transforming global industries.

Business needs

The goal is ambitious: make AI a real-world utility that is accessible, sovereign and sustainable. Its Intelligence Grid embodies this mission, delivering AI-driven insights on demand across healthcare, finance, energy, transportation, public safety and government. Building such a grid requires responsible scaling with data sovereignty and environmental efficiency as top priorities. As compute demands surge and regulations evolve, high-performance infrastructure must be deployed across key regions in the UAE, Europe and the US, without compromising trust, compliance or innovation.

Business results



40% boost in energy efficiency through liquid cooling and optimized compute platforms.



3x scalability increase with sovereign cloud platforms.



Handles over 70 MW of power across US and global data centers.



Accelerates AI adoption in regulated industries.

Solutions at a glance

- [Dell AI Factory](#)
 - [Dell PowerEdge XE-Series servers with NVIDIA accelerated computing](#)
 - [Dell PowerFlex](#)
 - [Dell PowerScale](#)



40% boost in energy efficiency through advanced cooling and optimized compute platforms.

Revolutionizing AI infrastructure

Core42, a G42 subsidiary, is building the future of AI infrastructure. At the heart of its vision for AI lies the Intelligence Grid, a globally connected system that treats AI like electricity: invisible, indispensable and everywhere. This grid powers hospitals, financial systems, emergency services and national operations with real-time, AI-driven insights, securely and sustainably.

Founded to address the challenge of data sovereignty, the Intelligence Grid ensures that data remains under national control, free from foreign jurisdiction, especially critical in regions like the UAE and Europe where privacy and compliance are paramount.

Driving AI innovation across critical sectors

From genomics to fraud detection, the Intelligence Grid is transforming industries. In healthcare, it supports the Emirati Genome Program, securely storing hundreds of petabytes of sensitive data. In finance, energy, transportation and public safety, it enables real-time fraud detection, powers safety-enhancing simulations, supports smart traffic systems and predictive maintenance and aids emergency response through real-time analytics.

Globally, the grid helps countries achieve digital sovereignty, accelerate economic diversification and close the digital divide. In the UAE alone, AI is projected to contribute \$100 billion to GDP by 2030, or 14% of the total economy.

“Core42 was established to address a growing global concern around data sovereignty and privacy,” says Adrian Hobbs, chief technology officer at Core42. In regions where compliance is critical, the company sets the standard for sovereign AI systems that respect borders, laws and human rights.

Sovereign AI gives governments and enterprises enhanced control over data, infrastructure and AI systems, supporting compliance, security and autonomy. Dell Technologies delivers trusted, policy-aligned infrastructure that supports data residency, governance and national digital sovereignty goals.

“Our AI grid ensures that data sovereignty is not only met but also free from foreign jurisdiction access,” says Hobbs.

Innovation meets sustainability at scale

Energy efficient AI is a Core42 priority, and the Intelligence Grid is a model of sustainable, secure AI infrastructure, driven by its deep collaboration with Dell Technologies. Using Dell PowerEdge XE-series servers with NVIDIA accelerated computing with liquid cooling and rear door heat exchange technology, Core42 has achieved a 40% boost in energy efficiency.

“We put energy efficiency as a top priority for datacenter development,” Hobbs shares. With nuclear and solar energy powering operations and Dell’s energy-efficient technologies reducing overhead, the company is leading the charge toward more efficient AI.

Transforming industries through generative AI

The Intelligence Grid was also designed to be scalable and secure to support AI workloads across public, private and sovereign cloud environments. Dell PowerFlex and Dell PowerScale enable petabyte-scale data storage that can be securely and efficiently accessed to support mission-critical applications across industries.



Our AI Intelligence Grid powered by Dell PowerEdge servers with NVIDIA GPUs ensures data sovereignty while enabling globally connected AI platforms.



Adrian Hobbs
Chief Technology Officer, Core42



Partnering with Dell Technologies allows us to deliver scalable AI platforms while prioritizing sovereignty—technology, operational control, and data.



Adrian Hobbs
Chief Technology Officer, Core42



To put that into perspective, the Emirati Genome Program securely stores hundreds of petabytes of sensitive genomic data, which is more than three times the size of the largest streaming video library, but instead of movies, it's highly personal genetic information requiring the highest levels of protection and performance.

"Dell PowerFlex and PowerScale enable us to deliver petabyte-scale storage that's both resilient and cost-effective — essential for powering generative AI across regulated industries," states Hobbs.

Looking ahead to a smarter, greener future

The path forward is to expand access to AI while ensuring it remains secure, scalable and built to last. The partnership with Dell Technologies, anchored by PowerEdge with Nvidia GPUs, PowerScale and PowerFlex, is the foundation of this success.

"This is an exciting time for AI development," Hobbs emphasizes. "Dell's innovations in infrastructure unlock countless possibilities to sustainably scale AI across enterprises." Core42 isn't just keeping pace with the future, they're helping shape it.



PowerScale's scalable storage architecture is critical to supporting data-intensive AI workloads across healthcare, finance and energy.



Adrian Hobbs
Chief Technology Officer, Core42

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