

G-Cloud 15

Database Modernisation



AtoS

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1. What is Database Modernisation?

Database Modernisation modernises legacy, self-managed databases into cloud- and AI-ready data platforms that improve scalability, resilience and time-to-insight. The service migrates suitable workloads to hyperscaler-managed database services to reduce operational overhead while increasing availability and elasticity. Where beneficial, we convert commercial-licensed databases to open-source (e.g., PostgreSQL) to reduce licensing costs, avoid vendor lock-in, and improve contractual flexibility. We also optimise database fit-for-purpose, moving from general-purpose engines to specialised database technologies where performance or niche capabilities are required. The offering includes a fully managed hybrid PostgreSQL platform with cloud-like provisioning that can run on-premises, in public cloud or at the edge.

Customer benefits:

- **Lower total cost of ownership (TCO):** Reduces licensing spend and day-to-day operational effort by shifting from self-managed databases to managed services and/or open-source options.
- **Improved scalability and elasticity:** Resources can scale up or down with demand, avoiding overprovisioning and supporting peak workloads reliably.
- **Higher resilience and availability:** Managed cloud services and modern architectures reduce single points of failure and improve recovery options.
- **Reduced operational overhead:** Automated patching, backups, monitoring and maintenance frees teams from routine DBA work.
- **Reduced vendor lock-in:** Moving from commercial licensing to open-source and portable architectures increases negotiation leverage and flexibility.
- **Better performance and fit-for-purpose:** Aligning workloads to mission-specific database engines improves latency, throughput and specialised capabilities.
- **Faster provisioning and time-to-change:** Cloud-like provisioning and standard patterns speed environment setup and delivery of enhancements.
- **Stronger security and compliance:** Standardised controls, hardened configurations and audit-ready processes improve governance and risk management.
- **AI/analytics readiness:** Modernised platforms improve integration with data lakes, streaming and analytics services for real-time insights.
- **Hybrid deployment flexibility:** Enables consistent operations across on-prem, public cloud and edge to match data, latency and sovereignty needs.

It involves:

Migration: Moving databases to modern platforms—either homogeneous (same engine to cloud) or heterogeneous (cross-engine)—to reduce vendor lock-in and leverage open-source technologies.

AI-Ready Platforms: Consolidating structured and unstructured data into modern data lakes to support Generative AI and machine learning workloads.

Real-Time Intelligence: Adopting event-driven architectures for instant insights, faster decisions, and improved customer engagement.

Cloud Benefits: Enhancing speed, cost efficiency, and compliance through public/hybrid cloud adoption and managed services (DBaaS).

Key Drivers: Licence pressure, scaling limits, cloud-first strategies, GenAI adoption, compliance needs, and infrastructure refresh cycles.



2. What does it deliver?

Database Modernisation delivers:

- **Enhanced Performance & Resilience:** Optimised workloads through alignment with mission-specific database engines (e.g. relational, NoSQL, in-memory, and cloud-native DBaaS), improving latency, throughput, and availability for business-critical services. Modernisation includes implementing high-availability and disaster recovery patterns (active-passive, active-active, multi-region replication, and automated failover), significantly improving resilience compared to legacy, self-managed platforms. Standardised architectures and wave-based migrations reduce service disruption and support predictable performance outcomes across production environments
- **Cost Efficiency:** Transition from commercial licences to open-source, reducing vendor lock-in and licensing costs. Reduced total cost of ownership through a structured transition from proprietary, licence-heavy platforms to open-source and managed cloud database services, where appropriate. This includes homogeneous and heterogeneous migrations that mitigate vendor lock-in, optimise infrastructure consumption, and shift cost models from CapEx to OpEx. By adopting managed DBaaS services, customers benefit from reduced operational overhead, lower licensing exposure, and improved cost transparency aligned to usage and scaling needs
- **Operational Simplicity:** Automated patching, backup, monitoring, and disaster recovery. Simplified day-to-day operations through the adoption of managed database services and automation frameworks covering patching, backup, monitoring, and recovery. Standard operating models replace bespoke legacy practices with repeatable, audit-ready processes, reducing manual effort and operational risk. Post-migration hypercare and stabilisation ensure service continuity while enabling teams to focus on higher-value activities rather than routine database maintenance
- **Scalability & Flexibility:** Fully managed cloud services across AWS, Azure, GCP, and hybrid environments. Elastic scaling and deployment flexibility across public cloud, hybrid, and on-premises environments, enabling workloads to be placed according to performance, latency, sovereignty, and regulatory requirements. Database Modernisation supports AWS, Azure, GCP, and hybrid architectures, allowing customers to scale capacity on demand while maintaining consistent operational controls. This flexibility supports evolving business demand, cloud-first strategies, and future adoption of analytics and AI-enabled services

- **Security & Compliance:** Built-in adherence to ISO27001 and government cybersecurity standards. Improved security posture through standardised, hardened configurations and governance controls embedded into modern database platforms. Modernisation enables consistent implementation of access controls, encryption, backup policies, and audit mechanisms, supporting alignment with ISO27001 and public-sector cybersecurity requirements. Centralised monitoring and compliance-ready operating models reduce risk and simplify assurance activities across complex database estates
- **Proven Expertise:** Atos modernisation factories and accelerators ensure structured, low-risk transformation. Delivered using Atos modernisation factories, accelerators, and phased delivery methodologies, providing a low-risk, repeatable approach to transformation. Services include strategic assessment, roadmap definition, target architecture design, migration execution, and post-migration optimisation. Proven tooling, wave-based execution, and quality gates ensure controlled delivery, while experience across Oracle, SQL Server, PostgreSQL, MySQL, MongoDB, and DB2 environments underpins successful outcomes for complex, large-scale estates.



3. What technology does it use?

Atos uses the following platform and tools to modernise Database and host Databases on highly scalable, fault-tolerant and resilient

- **Cloud Platforms:** AWS RDS/Aurora, Azure Managed SQL, GCP AlloyDB, Cloud SQL. Database Modernisation leverages hyperscaler-managed database services to provide automated high availability, elastic scaling, patching, monitoring, and built-in disaster recovery. These platforms also enable migration paths for both homogeneous (engine-to-engine) and heterogeneous (cross-engine) transitions, reducing operational overhead while improving availability and elasticity
- **Migration Tools:** AppMod Data Voyager, Cloudamize Studio, DMS Fleet Adviser, SCT/DMS for automated assessment and migration. Atos employs a structured migration toolkit that supports discovery, schema conversion, compatibility assessment, and automated data movement. Tools such as AWS SCT/DMS enable offline, online, or near-zero downtime migrations, while Atos' own AppMod data tools assist with dependency mapping, risk identification, and migration readiness. These tools are used during phased, wave-based execution to ensure predictable and low-risk cutovers
- **Modernisation Accelerators:** ACAT, AppMod tools for estate assessment, application refactoring, and DevOps enablement. Atos modernisation factories utilise accelerators such as ACAT and wider AppMod toolkits to conduct estate-wide assessments, analyse database/application dependencies, and identify optimal modernisation paths (rehost, refactor, replace, retire). These accelerators support automated schema transformation, code remediation, and standardised delivery patterns, thereby shortening transformation timelines and reducing migration risk
- **Security Frameworks:** ISO27001-certified processes, encryption, and compliance with UK government cyber standards. All modernisation activities align with hardened configurations, encryption-by-default models, and standardised governance frameworks. Atos applies ISO27001-aligned processes, audit-ready operational controls, and infrastructure patterns consistent with public-sector security requirements. This includes improved access governance, enhanced monitoring, and compliance-ready HA/DR configurations
- **Hybrid Options:** PostgreSQL solutions that run on-premise, in the cloud, or at the edge for flexibility. The service supports multi-platform deployments, including on-premises, hybrid, and multi-cloud PostgreSQL. This provides flexibility for workloads that require data locality, latency-sensitive processing, or sovereign hosting models, while maintaining a consistent operations framework across environments. Hybrid deployment models are a key component of Atos' approach to ensuring modernised platforms meet regulatory and performance constraints.



4. What terms apply?

To the fullest extent permitted under G-Cloud 15 Framework Agreement and the Call-Off Contract, Atos will provide the Services in accordance with the Atos Supplier Terms (which will include, but may not be limited to, the Supplier Acceptable Use Policy, Supplier Data Processing Agreement, Supplier Specific Shared Responsibility Model, Supplier SLAs and Supplier Licence Terms and any applicable Third-Party Terms outlined in this Service Description document and the Order Form) and this Service Description document.

For clarity:

- Atos Supplier Terms may be modified in accordance with the provisions of the Call-Off Contract, and remain effective except where expressly overridden.
- Hyperlinks included in the Atos Supplier Terms and Service Description document remain effective where they point to Atos' or the relevant Third-Party Terms or documents. Should a hyperlink cease to function, Atos will work with the client to update it through the agreed procedure.



5. Termination

Termination shall be in accordance with:

- The G-Cloud 15 Framework terms and conditions
- Any terms agreed within the Order Form of the relevant Call-Off Contract
- For this specific service, by default Atos ask for at least thirty (30) days prior written notice of termination without cause.

Atos commits to the continued provision of services for the duration of the Call-Off Contract subject to the terms and conditions of the G-Cloud 15 Framework Agreement, the Call-Off Contract, the Atos Supplier Terms and the applicable Third Party Agreements (as defined in the Atos Supplier Terms and indicated in the Order Form) related thereto.



6. How do I order?

Please contact our team at: gcloud@atos.net

- We will prepare a quotation for your review, including any applicable volume discounts.
- Once the quotation is agreed, we will issue the necessary documentation (as required by the G-Cloud Framework) and request a purchase order from you.
- Upon receipt of your purchase order, we will configure the services in line with the agreed requirements. Where applicable, you will also receive access to our self-service portal to begin provisioning services.
- If you are a new customer, you may need to complete additional 'new supplier' forms.
- Invoices will be issued to you and to Crown Commercial Service (CCS), quoting the purchase order number, for the services procured.
- We will also submit the required monthly management information reports to Government Procurement.



7. Why Atos

Atos has been a trusted partner on every G-Cloud iteration since the framework began, helping public sector organisations modernise with confidence. We combine global expertise with deep UK experience, delivering secure, scalable cloud solutions that meet the highest government standards.

As Europe's leading provider of cloud and cybersecurity services, Atos offers end-to-end capabilities - from migration and hosting to SaaS and consultancy - supported by UK delivery centres and strategic partnerships with hyperscalers.

Our focus on innovation, sustainability, and social value ensures that customers not only achieve operational excellence but also contribute to a greener, fairer future. With Atos, you gain a proven partner committed to driving efficiency, resilience, and transformation across public service.



About Atos

Atos Group is a global leader in digital transformation with c. 67,000 employees and annual revenue of c. €10 billion, operating in 61 countries under two brands – Atos for services and Eviden for products. European number one in cybersecurity, cloud and high-performance computing, Atos Group is committed to a secure and decarbonized future and provides tailored AI-powered, end-to-end solutions for all industries. Atos Group is the brand under which Atos SE (Societas Europaea) operates. Atos SE is listed on Euronext Paris.

The purpose of Atos Group is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Learn more at: atos.net