

champion

uptime and performance

with secure Escala servers

Escala brings leading TCO to mission critical AIX™ and Linux

The perception of Unix servers is that they are reliable but also proprietary and expensive. The constant economic pressure to reduce IT infrastructure costs while increasing flexibility through dynamic, on-demand provisioning has driven many organizations towards standardization onto low cost x86 hardware and the Linux operating system.

As price/performance has become the key measure for infrastructure purchases, TCO calculations are mainly conducted in isolated domains such as hardware, OS/virtualization and support costs. However, bigger picture aspects such as the cost impact on ISV licenses, platform reliability, OS vulnerability and VM isolation are often not factored in.

Escala delivers key advantages which can have a significant overall TCO impact such as a leading performance per core, the best reliability in the industry, superior security isolation and virtualization efficiency.

Does x86 always provide better TCO?

A key differentiator of Escala is its far superior CPU core performance which can massively impact the software TCO for 'per core' based ISV licenses. This leads to a lower TCO than x86 for most Oracle on AIX installation scenarios. Same thing when competing against fully bundled appliances that lead to high license and support expenses. The same advantage can apply to Linux/DB2, large scale Linux/JBoss deployments as to any other core-based licensed ISV solution. In terms of hardware costs, Escala Linux models are competitively priced in order to be able to compete in the 2-socket commodity server space - while providing far superior performance, uptime and security advantages.

Performance and scalability

Power has earned a reputation for being the most powerful and scalable server architecture. Today Power8 provides highly efficient SMT (8 threads per core) as well as best in class IO and memory bandwidth - which makes it the ideal choice for Database, Java and Big Data solutions. With a scalability to 192 cores and 2x per core performance advantage over competing architectures, the Escala Power8 generation remains the industry benchmark for scale-up and scale-out performance.

Market leading uptimes

Escala provides the market's most sophisticated RAS features which are deeply integrated into HW, firmware, virtualization and the service processor. The 'real-life' impact of advanced RAS is for a customer often difficult to quantify, however the measured uptime figures collected from our Escala customer base speak for themselves: today on statistical average, Escala servers provide a meantime between fatal crashes well above 50 years in standalone configurations.

Standardize on Linux

Escala supports industry standard Linux distributions from RedHat, Suse and Ubuntu along with applications optimized for emerging business challenges such as Big Data & analytics, mobile and Java platforms. The support for little endian Linux ensures easy portability for thousands of Open Source applications. Leading ISV's such as SAP also support the Linux on Power platform.

Leading VM isolation and security

Due to the deep hardware and firmware integration of the virtualization architecture, PowerVM today provides an industry leading track record for security. Despite being on the market

A powerful partnership

For more than 20 years, Atos and IBM have built a unique relationship, based on an OEM partnership and a close, highly productive technological cooperation. This solid R&D collaboration has fundamentally strengthened the AIX® ecosystem, by regularly generating innovative functionality, in areas such as scalability, RAS, virtualization and cloud enablement.

for more than 10 years and used by thousands of customers in mission-critical environments, no security vulnerabilities have been reported to date. In addition, the risk of becoming a victim of a worm and virus attack on AIX is extremely low.

OpenStack Cloud enabling / automation

The PowerVC management solution turns Escala VMs, storage and virtual networks into a OpenStack based IAAS cloud solution. PowerVC groups multiple physical servers into managed pools, greatly simplifying the creation and deployment of AIX and Linux VMs. Features like Snapshots and cloning reduce the average deployment time of applications from several hours to just a few minutes. Automation can be integrated or triggered by popular Open Source tools such as Chef or Puppet.

transform and preserve

With Escala, customers can evolve their IT infrastructure while preserving their investments. We help them overcome each and every challenge: cost efficiency, performance, security, reliability and automation. The Escala value proposition is clear and complete, with a full set of added-values and an end-to-end approach.

A comprehensive ecosystem for an end-to-end approach

Thanks to Atos' experience as a manufacturer and an outsourcer, we combine the needed resources and know-how to assist our customers in answering their needs with Atos' best AIX and Linux experts and leading added-value solutions.

Added-values

Designed & developed by Atos for Escala:

ARF - Application Roll-over Facility - is a High Availability and Disaster Recovery solution for AIX. It differentiates from competing solutions through cost efficiency and ease-of-use. ARF helps customers reduce administration complexity, the risk of human error as well as installation and training costs.

OLM - Operational Live Migration - is aimed at migrating Oracle databases from heterogeneous platforms to Escala in order to achieve better performance and cost reduction. Used in a migration project, OLM significantly shortens the migration process, manages business continuity and can compensate for lack of skills or resources.

ODB - Optimal Database Booster - is built to speed-up Oracle databases, accelerate OLTP applications with a high rate of read activity, and reduce batch time. It helps administrators to move database objects to the most appropriate storage without impacting the existing infrastructure.

Support and Maintenance

ATOS provides leading support and maintenance services to currently more than 600 AIX/Linux Power customers worldwide. With nearly 25 years of AIX/Power experience on Escala infrastructures, ATOS delivers highest levels of SLA on Escala infrastructures and is proud of its 93% satisfaction rate from European customers.

Service Assurance

Service Assurance offers end-to-end monitoring, support and operational maintenance services for mission-critical IT to guarantee the availability and performance of infrastructures and facilities. This offering consists of value-added services delivered remotely and in SaaS mode on Escala servers, such as consultancy, system supervision and monitoring, high availability and capacity planning services.

Competence Centers

AIX and Linux Experts from Atos Competence Centers help organizations, software vendors and system integrators to design and implement solutions and infrastructures. They are dedicated to helping customers optimize and improve the performance of their infrastructures in many areas, including databases, analytics, Big Data, ERP, consolidation and cloud computing. The Atos Competence Centers provide a range of services covering the entire life-cycle of your architecture, such as:

- ▶ performance optimization
- ▶ sizing, benchmarking and prototyping
- ▶ HA solutions
- ▶ DB performance optimization & tuning
- ▶ validation of applications from ISVs
- ▶ architecture consulting.

Outsourcing

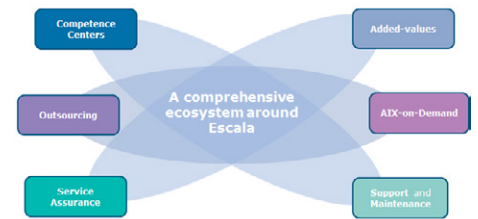
For customers who would like to outsource the administration or the entire operation of their Escala servers, Atos Server Management Services offer a wide range of solutions, reaching well beyond classical outsourcing models.

Atos proposes secure hosting facilities of Escala servers and on-demand power, as well as 24/7 monitoring, management and a full service package:

- ▶ maintenance for AIX applications
- ▶ service desk user support and hotline operation
- ▶ guaranteed service levels with fixed problem resolution times
- ▶ maintenance of the current technological state of the art
- ▶ management and transformation of IT operations and AIX production.

AIX-on-Demand

Atos AIX-on-Demand is a virtualized infrastructure, fast and directly available. Based on Bull Escala servers, it is aimed at providing world class AIX IaaS Services to Atos customers. Summarized as 'Pay-per-Use & Grow-as-you-Go', this cloud cost-based offer prevents CAPEX and allows customers to pay on a monthly basis. They are charged depending on their consumption, without fixing any contract duration.



Why Atos?

Atos is the Number 1 European provider (Number 3 worldwide) of managed infrastructure services. Atos is rated by analysts as 'Leader in the Data Center outsourcing services' for the 3rd year in a row. We develop and deliver the most cost-effective and suitable solutions leveraging market-leading providers to manage, optimize and transform data centers and infrastructure. We have early insight on new technologies, enabling us to develop new and innovative technical solutions.

Our strong global footprint, and industry heritage gives us the understanding and the flexibility to easily adapt to our clients' culture whatever industry they work in and wherever they are in the world.

With Atos, you have access to circa 1000 AIX specialists worldwide, all motivated to make your project a clear success.

For more information: atos.net/escala

atos.net

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