

# discover the open alternative Escala linux servers

Escala Power brings leading performance and optimized TCO to customers for the most challenging Linux workloads

**The constant economic pressure to reduce IT infrastructure costs while increasing flexibility through dynamic, on-demand provisioning has driven many organizations towards standardization onto 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.**

## Performance and non-stop scalability

Power has earned a reputation for being the most powerful and scalable server architecture. Today Power8 provides highly efficient SMT threading (8 threads per core) as well as best in class IO and memory bandwidth – which makes it the ideal choice for Database, Java, Cloud and Big Data solutions.

## Virtualization options

For total virtualization management flexibility, Escala Linux models offer the choice between the highly secure and proven PowerVM and the popular and widely used Open Source KVM hypervisor.

## Atos knocks down 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 DB2, Informix, Websphere, large scale 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.

## 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.

## Market smashing 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 sophisticated 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.

## Leading VM isolation and security

Due to the deep hardware and firmware integration of the virtualization architecture, PowerVM today provides an industry leading track

## Atos and IBM: a perfect match

**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.**

record for security. Despite being on the market 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 investment. 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 services and an end-to-end approach.



## Technical specifications

OUR OFFERS	ESCALA L1-800	ESCALA L3-800
SW licensing	Small	Small
System package	2U, 19" rack	2U, 19" rack
# of processor sockets	1	2
POWER8 Processor Options GHz - # of cores	3.42 GHz - 10core 3.02 GHz - 12core	3.42 GHz - 20core 3.02 GHz - 24core
Min - max. memory (1066 MHz DIMMs)	16 GB - 512 GB	32 GB - 1024 GB
PCIe Gen3 slots <sup>1,2</sup>	4 PCIe x8 2 PCIe x16*	5 PCIe x8 4 PCIe x16
System unit disk/SSD bays with standard or split backplane	12 SFF-3 or 6+6 SFF-3	12 SFF-3 or 6+6 SFF-3
System unit disk/SSD bays with expanded function backplane and dual IOA with 7.2GB write cache	8 SFF-3 plus optional EXP24S attachment for an additional 24 SFF-2 bays	8 SFF-3 plus 6 1.8-inch SSD bays plus optional EXP24S attachment for an additional 24 SFF-2 bays
Max EXP24S storage drawers	28	28
Max total SAS bays (system unit plus EXP24S disk)	348	348
Max total TB storage (system unit plus EXP24S disk)	417 TB using 348x 1.2 TB disk drives	417 TB using 348x 1.2 TB disk drives
Linux support	RHEL 7.1 (BE, LE), 6.6 (BE) * SLES 11 (BE), SLES 12 (LE) Ubuntu 15.04 (LE)*	RHEL 7.1 (BE, LE), 6.6 (BE) * SLES 11 (BE), SLES 12 (LE) Ubuntu 15.04 (LE)*
Virtualisation	PowerVM / KVM	PowerVM / KVM

## 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.

### 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.

### 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

### Linux on Demand

Atos Linux-on-Demand is a virtualized infrastructure, fast and directly available. Based on Bull Escala servers, it is aimed at providing world class 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 the '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.

For more information: [atos.net/escala](https://atos.net/escala)

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