

HP AlphaServer Tru64 UNIX® Platform to Sun Migration

Get Business Value from IT.
Take the Easier Road with Sun



Issues Addressed

- > Legacy platforms made End-of-life (EOL)
- > Total cost of ownership (TCO) increasing
- > Operations management more complex
- > Business continuity through committed support and solid technology roadmaps

Objectives

- > Improving service levels
- > Consolidating IT
- > Enhancing flexibility

Sun Solution™ Program Benefits

- > Lower TCO
- > Greater performance, scalability, flexibility and resilience
- > Legacy application investment protection
- > Enhanced ROI through creative financial options
- > Business continuity through ongoing support, solid roadmaps and once-only migration



Delivering long-term business value and competitive advantage is the ultimate goal for IT organizations. However, solving technical issues, especially ones caused by a vendor's technology roadmaps, can actually impede business value. Sun helps out by providing a stable technology roadmap that supports long-term IT ROI. Compared to HP, it:

- > Guarantees compatibility of applications across hardware platforms and OS versions, rather than forcing migrations
- > Truly protects hardware investments with standards-based, upgradeable products and supportive services and finance, rather than demanding costly hardware changes
- > Offers wide Independent Software Vendor (ISV), and community support, rather than leaving you with orphaned, unsupported technology
- > Delivers proven, record-setting technology performance. You get true choice of processor architectures and operating systems, rather than untested platforms and restricted hardware options.

Over the last few years, HP has continued to change its technology roadmap and has end-of-lifed (EOL) the AlphaServer Tru64 system. Many committed Tru64 users are faced with either continuing to run an EOL platform, or making the transition to a new platform.

What is the impact of a legacy AlphaServer Tru64 system environment?

Running an EOL'd HP AlphaServer system until 2011, when support will cease, raises a number of issues:

- > A cut in HP support and engineering resources as it focuses on investment in Intel's Itanium and HP Integrity platform, raising the costs of operations and application support
- > Difficulty obtaining upgrades, expertise, new application versions and patches – difficulties that will only increase over time
- > Increasingly uncompetitive performance, extended system downtime and eroding service delivery as the product ages and support is withdrawn.

Options for HP AlphaServer Tru64 UNIX® Platform customers

1. Keep running on legacy HP AlphaServer platforms

Although AlphaServer customers will eventually be faced with a forced migration to Itanium, they can decide to postpone that decision. This is valid when the current server environment is meeting user service level needs and there is no desire to reduce costs and complexity in the data center. However, the uncertainties of quality of service, higher costs and application availability may force customers to consider alternatives.

2. Migrate to the Itanium-based HP Integrity platform

Migration of your Tru64 environment requires a structured, smooth and cost-effective approach. There are significant costs and risks associated with migration to the HP-UX Itanium platform — for example: lack of available ISV applications, porting and development issues with Itanium compilers and tools, testing, integration and retraining of administrator and developer skills.

3. Migrate to Sun

Replace the uncertainty of HP's roadmap with one that's established, predictable and that emphasizes compatibility and investment protection. Sun has the vision, technology innovation, relationships and the choice of business models to help you:

- > Keep up with the high service expectations of today's and tomorrow's enterprise
- > Meet your objectives to provide secure, high-quality IT services in line with business cost expectations
- > Ensure alignment with your business's strategy

Sun helps HP customers migrate and consolidate EOL systems, often resulting in a TCO reduction of up to 50%, savings in hardware and software support costs, up to 4 times increase in application performance, and 100% return on investment on migration projects within 3 years.

Migrating to the Solaris™ 10 Operating System

Sun's UNIX platform-based Solaris™ 10 Operating System, the most advanced OS on the planet, is the risk-free platform of choice for those migrating from AlphaServer Tru64. Key advantages for moving from Tru64 include:

- > **Improved performance.** The Solaris 10 OS delivers performance advantages as well as massive scalability. Industry-leading virtualization features like Solaris Containers maximize utilization and let you safely consolidate, isolate, and protect thousands of applications on a single server, making migration and testing as smooth as possible
- > **More open platform choice.** The Solaris 10 OS is fully supported on more than 500 SPARC® processor-based and x64/x86-based systems from top manufacturers, including systems from Sun, Dell, HP and IBM. Solaris is a proven 64-bit platform that runs on your choice of hardware—whether 32- or 64-bit, Intel, AMD or Sun UltraSPARC® processor. The OpenSolaris™ project makes Solaris 10 open to enhance and broaden support
- > **Application Investment Protection.** Full binary compatibility helps ensure your applications are protected between versions, lowering costs and simplifying upgrades. Over 10,000 ISV software applications are available for Solaris. Oracle has even selected the Solaris 10 Operating System as its preferred open-source 64-bit development and deployment environment. Linux application compatibility is also available on Solaris x86
- > **Higher availability levels.** New Solaris 10 OS features, such as Predictive Self Healing, maximize system uptime

- > **Quality support and services.** Sun can help you extract maximum value from the Solaris 10 Operating System. We'll support your choice with our 14 years' experience performing UNIX® platform migrations.

“Consolidating on a single consistent Solaris platform powered by Sun servers and storage systems made sense to us. What made the completion of the complex project impressive, besides the excellent performance offered without any compromise, was the expertise and teamwork shown by Sun and its partners, completing it very smoothly in the planned schedule.”

**S. B. Djatnika, IT Engineering Manager,
PT. Excelcomindo Pratama**

TruCluster to Sun™ Cluster Software

Businesses today demand application service continuity at a low cost. Sun Cluster software is the industry's premier availability platform for improving the predictability and resilience of business critical applications. It is also the industry's leading platform to manage other applications such as databases, application servers and web servers. Sun Cluster software has a comprehensive portfolio of applications supported through agents from Sun, including pre-made agents for popular applications such as Oracle, Siebel, SAP, Sybase, Sun middleware and many others. For customized application creation, the SunPlex Agent Builder can be used.

At Sun, Sun Cluster software has gained momentum with tens of thousands of cluster nodes, hundreds of ISV applications enjoying HA, and key storage players participating with Sun for cluster interoperability. Sun Cluster software has delivered many features over the last 4 years, and will continue to deliver integration/interoperability with new features in Solaris 10, and other virtualization and automation products. Sun is committed to innovation in technology and pricing/business

models to offer the best and most cost-effective HA solution in the industry. With the release of the Java Availability Suite, part of the Sun Java™ Enterprise System, Sun now offers HA Clustering configurations ranging from single node local clusters to Global Disaster Recovery configurations with Sun Cluster Geographic Edition.

Sun Fire™ Servers

According to Gartner, 80% of data centers are constrained by heat and power; 40% need to upgrade their HVAC. Hardware heat load density has more than quadrupled over the past 5 years. To respond you must deploy servers that are better designed to support modern-day workloads, and consolidate workloads onto fewer servers. As organizations rely on each server to support multiple workloads, servers need to be ever more reliable and efficient in their use of space and power to manage growing costs. Sun understands the issues, and Sun servers, using SPARC™ or AMD Opteron™ processors, deliver.

Sun Fire Servers with CoolThreads™ Technology

Based on Sun's Chip Multi-Threading processor technology, the UltraSPARC T1 processor, Sun Fire T1000 and T2000 servers offer the highest levels of computing power available in their class today. CoolThreads Technology servers have set records in major independent benchmarks.

They deliver:

- > **Massive performance improvements** on common application workloads — up to 5x that of competitor's servers
- > **Power and heat efficiency.** The UltraSPARC T1 processor, with CoolThreads Technology, supports up to 32 CPU threads and consumes under 80 Watts per thread. In just three years, 100 Sun Fire servers with CoolThreads Technology could save you more than \$370,000 in power and cooling costs alone

- > **Space efficiency.** Each Sun Fire Throughput server fits in a compact footprint, as small as a quarter the size of equivalent servers, cutting facilities costs
- > **Higher reliability.** These servers use up to 60% fewer parts than competitive servers and have sophisticated RAS features.

Sun Fire Servers using CoolThreads Technology servers bring dramatic performance improvements to thread intensive tasks, while supporting future growth and improving service reliability. Measured in terms of power consumption, space and performance, these servers are one of the best Web Tier and application servers on the planet.

UltraSPARC IV+ Processor-Based Servers

Sun has an excellent record for long-term binary and hardware compatibility, providing investment protection, reduced TCO and greater operating efficiencies than competitive environments. Sun is also the only vendor to offer three generations of OS within the same system range. The UltraSPARC IV+ processor is the next generation in a roadmap of processors particularly well suited to data facing workloads. The UltraSPARC IV+ processor doubles performance relative to its predecessor within the same power envelope. These midrange and high-end servers boast the following unique characteristics:

- > Has a 5-7 year hardware lifecycle where the chassis does not have to be replaced
- > Provides fault-isolated and dynamic system domains, dramatically improving system availability and increasing utilization.
- > Allows non-disruptive addition of new, faster CPUs to a running system, with the Dynamic Reconfiguration Technology
- > Allows mixing of CPUs of different generations running at their maximum native speeds in the same chassis
- > Benefits from Sun's experience as the leader in worldwide UNIX® platform server shipments (Source: IDC Worldwide Quarterly Server Tracker, Q3CY05, November 2005)

Sun x64 Systems

Companies have been increasingly deploying industry-standard x86 systems in their IT infrastructure to lower costs. Now these businesses are discovering hidden costs and complexity in their x86 infrastructure. The reality is that more racks and floor space were required, power and cooling costs were higher and management complexity has increased.

Sun's x64 (64-bit x86) servers, based on AMD Opteron processor and Sun system technologies, are an alternative that provide faster, more reliable and energy efficient computing platforms for your enterprise. The Sun Fire x64 servers offer a choice of operating system, including, Linux, Solaris 10 and Windows for your existing workloads — all supported by Sun Services. For EOL AlphaServer Tru64 customers considering a migration to Xeon-based HP ProLiant systems, Sun and VMware offer you the ability to migrate and consolidate your existing IT infrastructure, with up to a 5:1 server reduction ratio.

Migration Services

Sun offers the services, tools and methodologies you need to help complete your migration project and reap the benefits of predictable service levels, reduced costs and improved manageability. With a proven methodology, tools, and 14 years UNIX platform migration success, Sun can help you minimize the time, risk, and costs of the migration process from AlphaServer Tru64 UNIX platform to Sun platforms. Components include:

- > Migration TCO calculation tools and assessments
- > Consultancy and design services
- > Tools for UNIX platform system code parsing and conversion, data migration and migration services from Sun and specialized partners
- > Sun Technology Transfer
- > IT skills educational training courses
- > Sun Managed Services, delivered on-site by highly skilled Sun consultants

- > Financial enablers
- > Sun Solution Centers
- > Access to Sun experts for your developers, providing technical advice, resource guides, porting tools and planning strategies.

Sun will work with you to architect and implement your migration project, including application and data migration. A detailed assessment of management tools and processes, and people skills will also be conducted and specific recommendations will be made to complete the migration successfully. Once the implementation is complete, Sun offers a range of services to optimize ongoing management.

SunSM Managed Services

Sun Managed Services gives you choice, flexibility and control. Sun manages only what you want managed, and only for the length of time you want it managed. Our solutions encompass product, people and process options across security, storage, operations management and more—from the smallest to the most complex jobs. We work with you to configure a package of services to meet your business needs. And you can adjust the scope at any time as your business needs change. Unlike traditional outsourcing models, with Sun Managed Services you remain in full charge of your IT resources.

Sun Solution Centers

At the global network of the Sun Solution Centers, you can access solutions and Sun Partner Advantage Program business offers to help solve your business problem. You can try out new concepts before buying any products, which enables you to find out what works now in a risk free environment. In the Sun Solution Center, your IT staff can leverage the community expertise of Sun engineers, consultants, world-class Sun Advantage partners—including system integrators,

solution providers, ISVs, service providers and OEMs—all working together to share ideas and knowledge, and to focus on helping to minimize your business and technical risks, costs and implementation time for solutions. Sun Solution Centers can give you the ability to get it right the first time.

For more information about Sun Solution Centers and Sun's Partner Advantage Program visit <http://www.sun.com/partners/resellers/centers.html>

Financial Enablers

Sun offers a wide range of financial options for HP AlphaServer platform customers to help them acquire new Sun technology in the most cost-effective way. These include:

- > Trade-ins. Attractive trade-in offers are available for qualifying systems through the Sun Upgrade Advantage Program (UAP). The Sun UAP offers:
 - Flexible, comprehensive trade-up allowances
 - Up-front trade-in allowances
 - 90 days to migrate and test new Sun hardware
- > Leasing: cost-effective operational lease programs and payment plans are also provided
- > TCO review and justification services

Take the next step

For more information about migrating from AlphaServer Tru64 to Sun visit

www.sun.com/datacenter/migration/tru64/

Migration to Sun Platforms for Developers HP Tru64 UNIX Platform to Sun Solaris OS—a clear path

Porting your applications to Sun platforms is a simple choice. When migrating from HP Tru64 UNIX platform to Solaris OS, your first advantage is staying within the UNIX platform environment. Since both Tru64 UNIX platforms and Solaris are 64 bit UNIX, comply with industry standards and specifications, and use similar tools, APIs and Libraries, it's easier for you to make a transition. Equally important, Sun offers comprehensive migration offerings to lighten your load. Developers gain access to tools, resource guides, Sun experts and more to ease the migration process.

HP-UX Migration Benefits from Sun:

- > The C/C++ libraries and other libraries and tool kits available for Solaris OS allow dynamic linking to new code, meaning HP-UX migrated code is feasible to run on Solaris OS
- > Sun migration tools streamline the porting of C/C++ applications, Java applications, and scripts from HP-UX to Solaris OS
- > Integrated development environment (IDE) tools for Solaris OS enable developers to quickly adopt new technologies.

For Application Migration Guides and Papers, please visit:

<https://partneradvantage.sun.com/partners/migration/do.html>

For Application Migration Tools, please visit:

<https://partneradvantage.sun.com/partners/migration/tools.html>