



## Hewlett-Packard and HP-UX: Reducing the Risks

RFG believes Hewlett-Packard Co. (HP), its customers, and its partners face continuing, daunting challenges regarding the future of the HP-UX computing environment. While many enterprises may perceive continued investment in HP-UX as necessary or unavoidable, IT executives should realize the risks involved, and take steps now to reduce the cost and complexity of their Unix deployments. In many cases, business requirements and goals may offer strong arguments in favor of alternatives to HP-UX that are less fraught with risk.

### Business Imperatives:

- **The Need for Predictable Technology Directions** – After sustained confusion over the future of its AlphaServer and PA-RISC hardware platforms, HP has reversed itself and embraced [Advanced Micro Devices, Inc.](#) (AMD)'s Opteron architecture. While HP claims it will support both Opteron and Itanium, recent history may make it difficult for some to have confidence in those claims as truly predictable statements of technology direction. As a result, IT executives at many enterprises that had relied on HP's commitment to Itanium now face increasing pressure to consider, and perhaps immediately migrate to, alternative platforms.
- **The Need for Risk Mitigation** – In the face of these developments, the very future of HP's flagship HP-UX software platform is now a serious question. The platform has been plagued by delays, and may be unable to sustain or expand support among the independent software vendors (ISVs) critical to HP's success and that of its enterprise customers. IT executives at enterprises reliant upon HP-UX applications must take all possible steps to ensure future enhancement and support of those applications, or begin now to explore alternatives and possible migration strategies.
- **The Need for Vendor Reliability** – This is a critical time for IT executives and departments at many enterprises. After months to years of slow or no growth in IT investments, enterprises are cautiously considering and funding numerous significant IT initiatives, many long delayed. At such a critical juncture, IT executives need all the reliable help they can get in moving their enterprises into the future. IT executives should review all of their enterprises' key IT vendor relationships in this light, and focus their attentions on those vendors able to credibly offer stable, yet innovative technologies and trustworthy future road maps. IT executives should also focus on vendors able and willing to back up promises with proven solutions and strong service level agreements (SLAs).

### Introduction

IT executives are increasingly challenged to demonstrate and deliver business value from every initiative they undertake. Growing numbers of enterprises are cautiously funding major IT initiatives, from client system upgrades to data center consolidation and disaster recovery and business continuity (DR/BC).

RFG believes the ultimate goal of most such initiatives is **enterprise elasticity**, the ability to respond gracefully to changes in business or technological conditions, without breaking anything or seriously disrupting business operations. Enterprise elasticity is a direct result of optimal, continuous IT-business alignment, as reflected by IT initiatives such as those mentioned above, driven by business requirements and goals.

In some cases, this is taking place after years of little to no investment in IT beyond maintenance. IT executives leading such initiatives are therefore insisting or being urged to insist by senior management colleagues, on reliability, stability, and other strengths from their chosen solutions, strategies, and vendors.



Some such IT executives are at enterprises that rely upon solutions that rely, in turn, on HP's HP-UX operating environment. This Research Note begins by summarizing recent developments at and affecting HP, and the challenges these developments may present to IT executives. The Note then discusses the issues raised by the uncertainty surrounding HP's stated and apparent plans for the future, and offers suggestions for coping with these issues while delivering business benefits.

### ***More Challenges For and From HP***

HP has apparently gone from having a single, albeit questionable road map for the future to having several potentially troubling future paths in mind for its enterprise customers and partners. This is a problem that began in the hardware arena, but has spread to include middleware and, most important to many enterprises, HP's leading software platform as well.

For years, HP issued repeated statements of of unflagging commitment to the troubled Itanium architecture co-developed by HP and [Intel Corp.](#) Now, HP has suddenly embraced AMD's Opteron chips, while claiming continued commitment to Itanium for certain unspecified niche and specialized markets.

Meanwhile, Intel itself has announced 64-bit extensions to its highly popular Xeon 32-bit chips, perhaps sounding an even louder death knell for Itanium. Intel continues to claim growing industry support for Itanium 2, and to tout the architecture's ability to deliver higher performance and to help enterprises implement consistent hardware architectures. However, Itanium is fundamentally different from other Intel processors, and current published reports show little to no widespread uptake of Itanium to date among enterprises. Thus, Intel's long-term commitment to Itanium seems questionable at best.

HP, meanwhile, has also killed the EV79 version of its Alpha processor. This upgraded processor was supposed to give AlphaServer users a long-desired performance increase while they waited to divine the true future of their chosen computing platform. While many such users have already begun making end-of-life plans for their AlphaServer deployments, not all have developed or implemented the transition plans they will soon need. IT executives at such enterprises should prepare for possibly higher support costs and/or reduced support availability as the end of AlphaServer looms closer, and support providers shift their limited resources to newer, more profitable platforms.

In addition to suffering from continuing Itanium and AlphaServer uncertainty, HP has exited the middleware software business. Middleware is often the foundation of connections that link diverse systems. HP's exit from the middleware business therefore leaves the company unable to control, and its customers and partners unable to predict, future product development and solution interoperability. This uncertainty, in turn, leaves IT executives and their teams at affected enterprises highly challenged to predict accurately their abilities to deliver support or new services, or the costs likely to be involved.

In short, HP has confused, then all but abandoned, enterprise customers and partners with millions of dollars and scores of years invested in what was believed to be a secure future. Now, the future of HP-UX, the company's flagship UNIX platform, is equally unclear and potentially threatening to HP's enterprise customers and industry partners.

### ***The Future of HP-UX: More Uncertainty***

Based on original statements from HP and subsequent published reports, delivery of HP-UX 11i v3 has slipped at least 18 months. Originally anticipated to become available this year, HP-UX 11iv3 is now not expected to appear until the second half of 2005, or perhaps early 2006. A letter from an HP executive confirming the delay was posted at the Web site of [HP-Interex EMEA](#). (HP-Interex EMEA was formed via consolidation of Compaq and HP user groups in Europe, the Middle East, and Africa.)



This means a significant delay in access to advanced features many HP-UX users and development partners need and want. Among these are the TruCluster clustering and Advanced File System (AdvFS) already available for users of HP's Tru64, its UNIX variant for AlphaServer systems, as well as scalability beyond 64 processors per system. Such features are viewed as essential to many IT executives seeking to pursue initiatives related to high availability or delivery of new IT-based business services.

(An interim release of HP-UX 11i v2 for systems based on HP's PA-RISC chip architecture is expected within the next few months. However, this will do nothing for those seeking to run a newer, more advanced version of HP-UX on other HP systems, including those based on Itanium 2.)

The delay also calls into serious question the ability of HP to retain or motivate independent software vendor (ISV) partners delivering solutions for HP-UX. And HP has few if any internal software development resources to spare, given the challenges posed by its current offerings. Essentially, then, the evolution of HP-UX and related solutions has been all but frozen, indefinitely and perhaps forever, at least for hardware platforms other than PA-RISC. This limits, if not completely stymies, efforts by IT executives at affected enterprises to deliver new services or functionality, or to deliver sustained software support, except at potentially great costs.

IT executives at enterprises reliant upon HP-UX or other HP solutions have been placed in increasingly unpredictable and untenable positions. None can know the future with any certainty, and many simply cannot wait for HP to arrive at and execute upon a consistent, non-chaotic future path. Despite assurances to the contrary, for many enterprises reliant upon HP-UX solutions, HP's current road map is not that path.

### ***A Portent of Larger Issues?***

This situation arguably mirrors perceived uncertainty about HP itself as a primary enterprise IT vendor. The company appears to be far more successful at and focused on selling consumer and commercial imaging solutions and supplies. HP also appears inconsistently able to declare, then stick to road maps for major developments, such as the long-term future of business- and mission-critical platforms.

Given these challenges, IT executives have to ask carefully if they can depend upon HP's plans, road maps, and senior executives enough to literally "bet their businesses" on them. This is especially true now, given the cautiously optimistic yet fragile, fluid state of IT at many enterprises. IT executives at affected enterprises risk erosion of any achieved business benefits as the complexity and/or costs of maintain investments in HP solutions increases.

HP's ability to deliver on its promises, where future support of HP-UX solutions and their users and developers are concerned, is highly uncertain. As many have had to do regarding AlphaServer and PA-RISC, IT executives at enterprise dependent upon HP-UX applications must therefore ensure that workable alternative solutions are in place or can be put in place quickly. Enterprise competitiveness and elasticity, as well as IT-business alignment, may depend on such alternatives.

### ***The Best Defense: Reduce Cost and Complexity, Increase Efficiency and Elasticity***

The best way for affected IT executives to deal with the challenges HP has created and suffers from is to focus on the core requirements affecting almost every enterprise IT initiative. These include the need to minimize cost and complexity, and the need to maximize efficiency and elasticity, for IT and for the enterprise at large.

IT executives should view the uncertainty surrounding HP generally and HP-UX specifically as a clarion call to review and update business and user requirements. IT executives should then use these to help



decide whether the uncertainty and business risk justifies sticking with HP's strategically challenging (and challenged) software platform.

To answer such questions, where they do not exist, IT executives should create repositories that inventory and document key applications reliant upon HP-UX, and relevant services and user profiles. Such repositories are sometimes known as "business application profiles" (BAPs), "business service profiles" (BSPs), and "user application profiles" (UAPs), respectively. IT executives should also create or update "interdependency maps" that clearly show what IT resources affect and would likely be affected by temporary or permanent removal of HP-UX from the environment.

Where such information exists, it should be updated and expanded as comprehensively as possible. This information should then drive the decision of whether or not it is prudent for an enterprise to stick with HP and HP-UX.

For those IT executives who come up with a "no" or "maybe not" answer, potential alternatives must be quickly identified, then evaluated and deployed where appropriate, to maintain enterprise elasticity and avoid operational disruptions. When identifying and considering candidate alternatives, enterprise constraints and requirements as expressed in the above-mentioned repositories must again be the overriding determinants. Information about those constraints and requirements should be compared with candidate solution functionality, and with candidate vendor strengths and weaknesses, so IT executives can forge effective paths for the future of their enterprises' IT infrastructures.

Whatever path they chose, IT executives must be able to credibly justify that path. Careful consideration of alternatives is and should be a critical element of such justification. Further, to maximize the likelihood of "buy-in" and "sign-off" from senior non-IT executive colleagues and line of business (LOB) decision-makers, IT executives should focus on candidate solution providers with demonstrable positive characteristics. These should include a proven commitment to research and development (R&D), financial stability, market acceptance, and strong ISV and partner support.

### ***Worthy Candidate Alternatives to HP***

At many enterprises, the two leading candidate alternative vendors to HP will likely be [IBM Corp.](#) and [Sun Microsystems, Inc.](#) IT executives at enterprises with significant incumbent investments in solutions from either vendor should, of course, put that company at the top of its list of candidate alternatives to HP. This is especially true if those investments are supported by generally positive and favorable relationships with that vendor.

IT executives at enterprises not yet working closely with either IBM or Sun should consider carefully the overall approach of each to delivering IT-based solutions to business challenges. IBM, as part of its strategic focus on supporting "on demand" enterprises, has many solutions and services to offer. For example, the company recently launched a new slate of mainframes to celebrate the 40th anniversary of that technology, and is seriously committed to newer technologies such as Linux and Java as well.

However, the company has been publicly taken to task repeatedly for a perceived focus on delivery of enterprise solutions through its Global Services (GS) arm. (IBM has said repeatedly that it intends to generate much if not most of its future revenues via IBM GS.) This approach can be expensive, in some cases sufficiently to rob enterprises of much of the anticipated cost savings that drove a particular initiative in the first place. IT executives should therefore weigh carefully the pluses and minuses of any solutions proposed by IBM, paying particular attention to any required commitments that could threaten an enterprise's elasticity or flexibility in its IT vendor relationships.



Sun has consistently focused on open, standards-compliant, Unix-based software platforms, and like IBM, enjoys strong ISV and partner support. In addition, Sun's successes have been built on consistent architectures that are easily integrated and scaled to the capacities necessary to meet specific enterprise requirements. The company's current range of Linux and Solaris solutions, based on x86 or Sun SPARC hardware, amply demonstrate these characteristics, combining freedom of choice with consistency and avoidance of cost and complexity.

RFG believes these advantages may give Sun a significant edge over IBM at enterprises reliant upon HP-UX. IBM has historically supported and promoted multiple operating environments, including its own Unix variant, AIX. This approach that has fostered some confusion and incompatibilities over time.

Also, in contrast to IBM's, Sun's approach to professional services is more technology-centric, focused more on automation and cost reduction. This is a potentially important consideration when the definition of TCO has been changed by many from "total cost of ownership" to "take costs out."

Sun also has a well-proven historical ability to garner and maintain loyal and enthusiastic ISVs and other industry partners. Most recently and notably, Sun and [Microsoft Corp.](#) have put aside years of differences, in favor of a 10-year agreement to cooperate on key technologies. Sun and its ecosystem of customers and partners therefore have broad, deep experience in addressing challenges such as effective strategies for migration from environments with uncertain futures, such as HP-UX. (The [Sun Infrastructure Solution for Tru64 Migration](#) has helped numerous enterprises using AlphaServer platforms transition successfully away from those challenged platforms.)

IT executives at today's enterprises need solutions and vendors that are business-centric, elastically interoperable and scalable, proven, and reliable. IT executives at enterprises currently reliant on HP-UX and related applications should either recast their relationships with HP to ensure the adequate presence of these characteristics, or begin now to put alternative solutions and providers into place.

RFG believes IT executives at enterprises reliant upon applications currently running on HP-UX should strive to compel their HP representatives to provide accurate, complete, and timely information about the future of that software platform. Where such information is not forthcoming, or does not mesh well with enterprise constraints, goals, and needs, IT executives should begin immediately to seek out and evaluate candidate alternative solutions and vendors. Those solutions and vendors most closely aligned with business needs and most able to demonstrate the ability to reduce cost, complexity, and confusion in the enterprise should then be given strongest consideration.

*RFG analyst Michael Dortch wrote this Custom Research Note. Interested readers should contact RFG Client Services to arrange further discussion or an interview with Mr. Dortch.*