

Single Source for Multiple Platforms

Best practices for ensuring quality and reducing costs when migrating applications

Development for multiple platforms

Keen to benefit from Linux's lower total cost of ownership (TCO) and the Intel® Xeon® processor's superior performance and energy efficiency, many network equipment and software solution providers are migrating their development platforms.

Similar business needs are driving their customers to migrate telecoms and call-center applications to heterogeneous environments.

The result is a growing need to develop, maintain, and support applications on multiple platforms while minimizing time to market, improving quality, and increasing operational efficiency.

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For telecoms and call-center applications coded in C or C++, at least 90% of the code is identical between the Sun™ Solaris™ and Linux versions¹. Migrating applications to new platforms can, however, still be a lengthy, costly, and risky endeavor.

HP and Intel propose easy-to-use, cost-effective tools and services, backed up by teams of experts, to help their customers and partners successfully migrate applications.

¹ "HP's SLPK and SHPK Tools: Enabling rapid migrations from Solaris to Linux and HP-UX", p.17

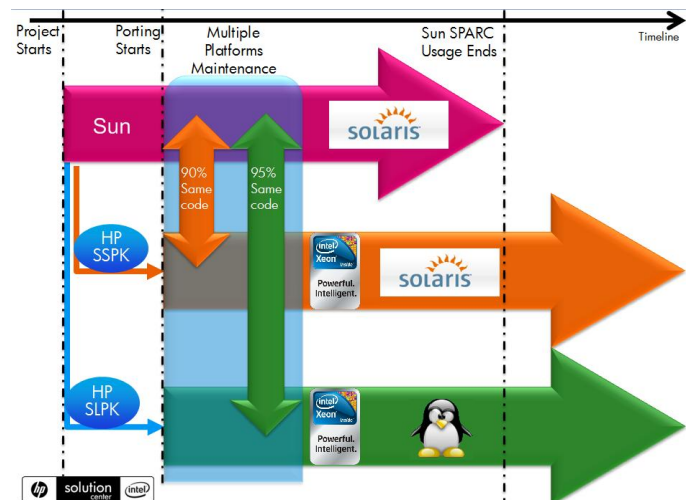


Figure 1: Porting and maintenance progression

HP and Intel's support for migration

The HP Lazer team consists of Oracle database experts working closely with project leaders on infrastructure management, provisioning, deployment, imaging, and other related activities.

The HP System Technology and Software Division (STSD) team applies its expertise to developing the Solaris to Linux Porting Kit (SLPK). HP Enterprise Services (HPES) offers porting and consulting services, as well as outsourcing ported systems and infrastructure.

Intel contributes a team of experts in subjects as diverse as database integration, Java™, compilers, and ported infrastructure tuning.

The development process

Developing applications that run on multiple platforms requires specialist tools at key stages of the development process.

Code translation

The SLPK automates much of the porting process while identifying potential issues and providing guidance on resolving them. The HP Intel Communications, Media, and Entertainment (CME) Solution Center team of experts can assist with the porting process and act as a single point of contact between the SLPK team and the customer's development team.

Software packaging

The HP Intel CME Solution Center actively contributes to the open source project-builder.org project. This project includes tools to help generate packages for an application and keep in common the build metadata from package management. Macro and virtual machine features simplify the creation of native packages for any particular distribution.

Continuous packaging of intermediate deliveries (such as functional testing, integration, validation, and so on) allows for dependency checks and potential conflict checks to be performed in the same way as for a final delivery. This approach minimizes risk and maximizes code reuse, while ensuring the quality of the migrated application.

These tools will soon be united into a single tool supporting both code development and software packaging.

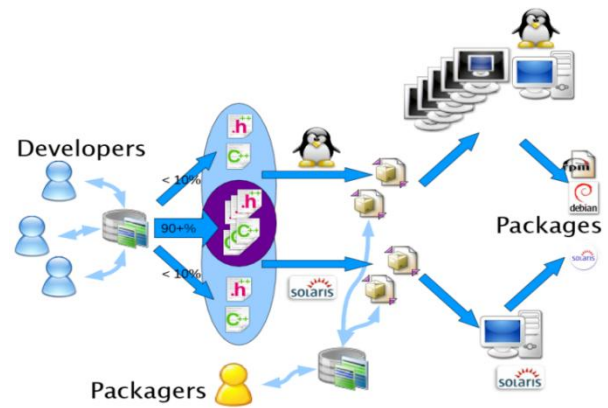


Figure 2: The application development process

HP Intel CME Solution Center's team and facilities

The HP Intel CME Solution Center comprises teams of experts from both HP and Intel, and offers a comprehensive application migration program specifically targeted at telecom operators and service providers. The program includes the following tools and services:

- Innovation workshops
- Migration roadmaps and workshops
- Proofs-of-concept and performance tests using the latest [HP ProLiant G6 servers](#) and the [Intel Xeon processor 5500 series](#)
- Porting kits
- Development of build environments for multiple targets
- Migration project management

Demonstrations and workshops are available at both our premises and customer sites.

Key HP & Intel hardware components

HP Blade System c7000 Enclosure



The BladeSystem c7000 enclosure provides all the power, cooling, and I/O infrastructure needed to support modular server, interconnect, and storage components today and throughout the next several years. The enclosure is 10U high and holds up to 32 servers or 16 storage blades plus optional redundant network and storage interconnect modules.

Intel Xeon processors

The Intel® Xeon® 5500 processor series is built using the latest 45nm Nehalem micro architecture with up to eight cores in a two-processor configuration. This new micro architecture delivers more performance on the same platforms and at the same power consumption, giving customers the flexibility to match performance, power, and cost requirements and delivering advantages beyond just pure performance.



The HP Intel Solution Centers provide complete telecom infrastructures for demonstrating the Communications, Media, and Entertainment solution portfolio to HP customers and partners. The centers are located in the three regions: Grenoble, France for EMEA; Plano, Texas, USA for the Americas, and Shanghai, China for APJ. These unrivalled technical facilities offer our customers and partners a unique opportunity to evaluate new services in real-world environments, test new technologies, and select the solutions most likely to succeed.

Technology for better business outcomes

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