

## EXECUTIVE SUMMARY

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### **Developing the Linux Ecosystem: Opportunities and Challenges for Application Software Vendors**

Sponsored by: Microsoft

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### **IDC OPINION**

Among the cross section of all independent software vendors (ISVs) offering applications is a relatively small but growing percentage that has adopted Linux as a supported platform. IDC forecasts that the majority of Linux platform revenue will be generated in two software submarkets through 2009: (1) infrastructure and (2) application development and deployment. Over this time period, IDC also expects that the application submarket (e.g., content applications, CRM, and ERM) will experience strong growth on the Linux platform from a small base.

IDC expects the decisions made by application software vendors regarding their support for and commitment to the Linux platform will be driven largely by economics. While the overall Linux revenue growth expectations of application software vendors surveyed by IDC for this document were conservative, respondents and interviewees varied greatly in their future revenue projections for the Linux platform based on application and target market. An application software vendor's decision to offer a solution on Linux should be led by solid evidence of customer demand or competitive pressure to justify the incremental development, marketing, and support costs.

Application software vendors face some complex decisions regarding which Linux distribution(s) to support. The distribution selection challenge is mitigated somewhat by the fact that a few distributions have gained significant market share. However, other distributions may be more popular with a targeted market segment. Ultimately, application software vendors may be required to support multiple Linux distributions, which would increase support and maintenance costs for their products.

Establishing a strong partner ecosystem is critical for the application market on Linux to reach and possibly exceed forecast growth rates. Although partnering initiatives exist, they are largely technical in focus and lack the go-to-market and business support that ISVs are seeking. Application software vendors with strong Linux practices will push Linux platform vendors to offer more go-to-market support to help them drive more revenue on this platform.

## METHODOLOGY

In July 2005, Microsoft sponsored a Web-based survey with 310 United States-based ISVs that currently offer (or plan to offer in the next 12 months) applications that run on the Linux platform. This research was designed to provide insight regarding software vendors' application business on the Linux platform, including current practices, future expectations, vendor allegiances, and partner program requirements. To provide additional qualitative insight, IDC conducted in-depth interviews with nine ISVs in August 2005.

## SITUATION OVERVIEW

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### **Background: Why Application Software Vendors?**

All vendors active in the Linux ecosystem recognize that customer adoption of application software on the Linux platform is critical to the health of the overall Linux community. To date, sales of layered software on Linux have been primarily in the application development and deployment submarket (e.g., database, application server) and infrastructure software submarket (e.g., systems, network, security, and storage management). In 2004, revenue on the Linux platform for the application software submarket was approximately \$630 million worldwide, representing approximately 17% of all software sales worldwide on the Linux platform and less than 1% of all worldwide application software revenue. IDC forecasts high growth in application revenue on the Linux platform, with a compound annual growth rate (CAGR) of 48.9% from 2004 to 2009 compared with a CAGR of 5.6% for all platforms during the same forecast period. Even with this impressive expected growth rate, the share of application software on the Linux platform is expected to represent less than 4% of the total worldwide application revenue by 2009.

As such, there is a tremendous amount of activity among players in the Linux ecosystem to foster Linux adoption and advocacy among the application software vendor community. Top-tier vendors have launched extensive initiatives to help application vendors adopt and succeed on the Linux platform. The Linux initiatives typically include enablement assistance such as access to virtual and hands-on innovation centers, technical support, free software, conversion road maps, workshops, forums, access to research, and sizing guides. Leading vendors are also providing go-to-market support in the form of templates to support collateral development and demand generation opportunities for application vendors developing on the Linux platform.

This IDC document takes a closer look at the community of application software vendors supporting the Linux platform and examines the unique opportunities and challenges this community faces as the Linux-based application market expands and matures.

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## Respondent Demographics

Sixty-six percent (66%) of the study respondents were primarily executives, senior IT professionals, or IT managers. The majority of companies were larger firms; 86% of respondents reported annual worldwide revenue of \$5 million or more, and 67% of respondents indicated that their companies had five or more packaged software applications. Most companies reported a distributed business model in which multiple operating systems contributed to their overall revenue streams. Three-quarters focused on larger customers — those with 500 or more employees. Vertical markets targeted by these ISVs included financial and business services, manufacturing, and telecommunications.

Executive interview respondents were selected by IDC from those ISVs tracked by the IDC Software Research team, were United States-based, had annual worldwide revenue of less than \$100 million, employed fewer than 500 associates, and focused on larger customers. Seventy-eight percent (78%) of respondents were C-level executives or vice presidents.

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## Key Findings

### *Current Linux Practices*

The majority of these application ISVs have adopted a distributed platform model — offering commercially licensed applications on multiple platforms. Almost 50% of respondents rely on two or more operating systems to drive revenue. One-quarter (25%) of survey respondents generated half or more of their companies' revenues from application software on Linux in 2004.

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Most of these ISVs consider Linux to be a "primary development platform." Nearly three-quarters currently offer their primary application on the Linux platform. About half of the applications not currently available on Linux will be ported to Linux by the end of 2006.

A number of respondents do not have concrete plans to port their primary application to Linux. In general, we believe these applications tend to be desktop focused as opposed to server focused or are in markets where Linux adoption is lagging that of the market adoption rate.

Market demand and performance are the primary reasons for offering an application on the Linux platform. Market demand for Linux-based applications varies greatly by target market. Interviewees identified the following customer segments as particularly focused on Linux:

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- ☒ **European market.** According to interviewed partners, this geographic market tends to have higher Linux adoption rates than that of North America.
- ☒ **Internet service providers (ISPs)/software-as-a-service (SaaS) providers.** These firms are focused on lowering the cost of ownership and increasing security.
- ☒ **Government organizations.** These organizations are focused on increasing security, lowering the cost of ownership, and supporting the open source platform.

Interviewees who identified Linux performance as an adoption driver specifically approved of the security, speed, and ease of bug fixing and patch management on the Linux platform. Linux in general tends to benefit from its association with Unix ("Unix halo" effect), which leads to an assumption that Linux offers the same benefits that Unix offers, particularly reliability, security, scalability, and performance. This perception, plus the fact that hackers tend to target the Linux platform less often than other platforms, may account for some of the perceived performance excellence of the platform.

Respondents indicated that relative to other platforms, the Linux platform doesn't offer any significant technical challenges. In fact, these ISVs said that trained resources are readily available and are already on staff if the ISV currently offers Unix-based applications. There is a rich and open Linux knowledge base because of the open source community. However, the existence of multiple Linux distributions has created significant challenges for some companies. The numerous Linux distributions complicate product development decisions and can increase customer/product support and maintenance costs for ISVs unable to limit the number of distributions they support. Other ISVs have standardized on either one or a select number of distributions to reduce the development, support, and maintenance costs associated with multiple Linux distributions. Some ISVs, particularly those that are smaller, tend to be sales focused and will support a new distribution if it seems profitable at the time of sale. Larger ISVs tend to evaluate market size and sales potential and make their distribution choices based on those metrics.

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On average, survey respondents experienced 2% revenue growth on the Linux platform between 2003 and 2004. This marginal growth rate can be attributed to the fact that key workloads on Linux are system infrastructure and application development and deployment software products (e.g., database, Web serving, application development, email, and file serving), not applications (e.g., ERM/SCM, collaboration, and CRM/SFA). However, companies that have a strong commitment to Linux experienced growth of 7.6% on their revenue sold on the Linux platform.

### ***Future Linux Expectations***

Overall, survey respondents expect a 1.6% increase in revenue from the Linux platform between 2004 and 2005. As with historical growth rates, the growth expectations of Linux application vendors vary greatly. Some vendors, primarily those with a stronger commitment to Linux, are projecting zero to negative growth in their Linux businesses. This lack of growth could be attributed to the fact that these vendors are having difficulty expanding their already significant Linux revenue bases. Other respondents are projecting higher growth rates. ISVs with a more limited current commitment to the Linux platform (i.e., expanding a relatively small Linux revenue base) and those that focus on specific markets where Linux is making or expected to make significant inroads are much more bullish about growth of their Linux-based revenue.

Will Linux ever become the dominant platform? Application vendors supporting the Linux platform tend to be divided on this question, with slightly more than half of respondents suggesting that Linux will never become the dominant platform for their companies. Interview candidates were more evenly divided in their responses.

Some predicted that, for their businesses, Linux-based sales will exceed those of all other operating systems in the next two years. Others were equally vigorous in their responses of "Highly doubtful." Perhaps some of the best responses came from respondents who said, "It depends." These ISVs typically centered their responses on the growth of their server-based application businesses and the share of Linux in these markets. Again, the specific market an ISV targets will most likely determine the expected growth of Linux-based application revenue relative to that of other platforms.

### ***Partner Program Participation and Requirements***

Fifty-eight percent (58%) of application software vendors supporting the Linux platform are members of their key vendors' partner program. This result is consistent with other research that IDC has conducted. Interview results suggest these firms typically have a technical-level relationship with their key Linux suppliers, providing technical enablement of the vendors' applications. Surprisingly, very few respondents leverage partnerships with their key Linux suppliers to expand their businesses. In IDC's opinion, this situation is typical of most partnerships between top suppliers and ISVs. The value of an ISV to a supplier is typically more challenging to quantify than that of other partner types such as systems integrators and VARs. While most suppliers view the proliferation of their platform as important, it is difficult for them to forge the links between their go-to-market personnel and their ISV partners. Some suppliers have built programmatic marketing and sales benefits for ISV partners, but these offerings tend to be relatively new and have yet to be broadly leveraged by the ISV community.

According to application software vendors supporting the Linux platform, Linux suppliers should focus their partnering efforts on helping ISVs better position their products, driving sales through lead generation activities and sales collaboration, and actively promoting ISV partners' products through OEM activities. In addition, these vendors want their OEM or Linux distribution vendors to provide access to the supplier's customer base and the ability to disseminate best practices among application software partners.

## **FUTURE OUTLOOK**

The profile of Linux evaluation and deployment continues to mature. The focus four years ago was primarily on end-user testing and evaluation of the platform. Today, the focus of the end-user community has shifted more toward deployment, on Linux or other appropriate platforms, and the number of net-new Linux evaluators has declined. An opportunity exists for both migration to and consolidation on Linux from other platforms. However, before such a movement can take place, the migration needs to be relatively painless and low cost, or the movement will need to be part of a larger corporate initiative to change architectures or operating systems.

IDC believes that Linux has established a solid foothold and that it will continue to shape customer and ISV decision making around platforms going forward. We believe application software vendors will be responsive to market demand and gravitate toward the operating environments and suppliers most favored by the market. Linux distribution suppliers are expected to try to cultivate a strong ISV community to help propagate their platform with Linux-specific partner initiatives that focus primarily on enablement.

## OPPORTUNITIES/CHALLENGES

As the market for Linux expands and matures, ISVs that offer Linux-based applications will be in a position to capitalize on this market opportunity. But to truly capitalize on this opportunity, ISVs need to ensure that the relationship with their preferred Linux supplier(s) evolves from a strictly engineering-focused partnership to a business-focused partnership. Both Linux suppliers and the application software vendor community can support the expansion and maturation of the market through an expanded business development-focused relationship.

However, the ISV community as a whole seems to be somewhat reluctant to fully engage with Linux distribution suppliers and develop the type of expansive partnership typically seen with the service and resale partner communities. In general, partnering models for ISV-focused programs and initiatives that include valuable go-to-market benefits, on a "one-to-many" scale, are relatively new. Suppliers are struggling to effectively address the ISV community. The ambiguity of the ISV community's contribution to suppliers' results makes it difficult for suppliers to justify higher-dollar expenditures on sales and marketing benefits/support.

Developing a strong ISV community is a current focus of top-tier suppliers of all platforms. IDC expects that supporting the application software vendor community will be a particular focus for those Linux distribution suppliers that wish to increase their market share and position. Application software vendors will have the opportunity to leverage the programs and initiatives offered by Linux distribution suppliers to expand their market share and Linux revenue stream. Given that the expertise required to develop and support Linux-based applications is readily available, the challenge highlighted by application software vendors in our research is to identify the most profitable distributions of Linux to support in both the short and longer terms. The decision criteria will most likely involve the economics of offering applications and support for a platform, the dynamics of their competitive landscape, and most critically, the magnitude of market demand.

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