



Ubuntu Server Edition 2009 Survey the results are in!

Almost 7000 respondents share who they are, how they use Ubuntu Server and what they are going to do next.

Executive Summary

Ubuntu Server Edition continues to move to the core of the data centre for a growing number of businesses. This report looks at almost 7000 in-depth responses across businesses of every size in many industries. Most respondents were located in Europe or North America.

The report identifies that users are primarily using Ubuntu for the common workloads of web, database, file, print, and mail serving. Security, back-up and firewalls were also important workloads being run on Ubuntu. The survey shows a correlation between these workloads and those that users consider mission critical.

To underpin these mission critical uses respondents considered simple upgrades, package management, hardware support, proven security and the lifecycle of the product as vital to their choice of platform. The report went on to ask about preferred technologies and asked users to share what applications they used on Ubuntu and Linux in their businesses.

To the future, the report asked about what virtualization technologies users were employing and sought opinions as to the readiness of cloud computing for enterprise and Ubuntu as a platform for cloud computing. Users also strongly indicated their intent to add Ubuntu servers to their data centres in the immediate and long term. Ubuntu 8.04 LTS was a clear favourite in terms of platform use.

Introduction

The Ubuntu Server community, Canonical, and the analyst house RedMonk combined to take the temperature of the market for Ubuntu Server Edition. 2008 was a significant year for the platform's maturity and acceptance. In April the second LTS (Long Term Support) version was launched and in October, the Ubuntu 8.10 release took place.

The survey sought to establish how fast the product was moving into production environments, what technology choices were people making based on the product, and fundamentally if they found Ubuntu Server Edition was a solid platform for their business.

We announced the survey through a variety of Ubuntu forums, websites and other channels (the full list of announcements is available at <https://wiki.ubuntu.com/ServerTeam/Survey/Launch>). Consequently, the results are focused on Ubuntu users and not general Linux users. The survey was only available in English so some regions are probably under represented. We believe the results are free of bias as no incentive was offered for completing the survey, although we have not verified the responses further. In total 6819 surveys were completed fully and these have been used in these results.

The separation between small medium and large businesses is based on the answer to the questions "How many employees are there in your organization" and cross filtered with a positive answer to the question "Are your Linux servers used at home or at work?" (either yes or both). Small businesses are defined as 1-50 employees, medium businesses are 51-1000 and large business are anything above 1000 employees.

Section 1: Types of users and organisations

Diagram 1 - Number of servers represented

Diagram 1 shows an interesting picture of where the bulk of the servers represented by our data reside. While there are many more individual users with single machines, the respondents representing larger organisations had many more servers under management. Throughout this document we split the data by company size to reflect the differing requirements of the groups. Diagram 2 shows that Ubuntu is represented across the data set in most (80%) of cases. We wanted to make the survey inclusive of other technologies but it is important when interpreting the rest of this data that when we refer to Linux, 80% of what we mean is Ubuntu servers so on occasion we draw conclusions for Ubuntu from Linux data. Both Diagrams illustrate the transfer of Ubuntu usage from individual to corporate use while retaining its core appeal to developers.

Please estimate how many of the following server OS' are running in your organization.

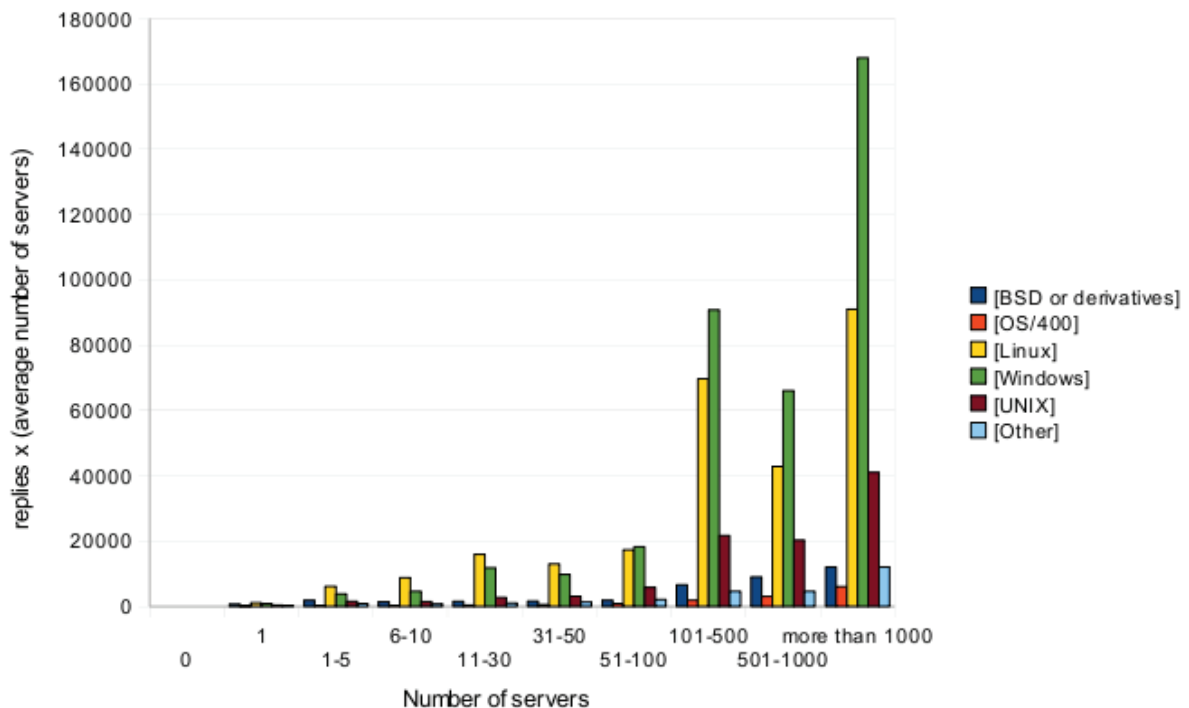


Diagram 2 - Percentage of users running Ubuntu

A multiple choices question, hence the sum is greater than 100% as many respondents use more than one version of Linux.

Which portion of respondents are running which OS?

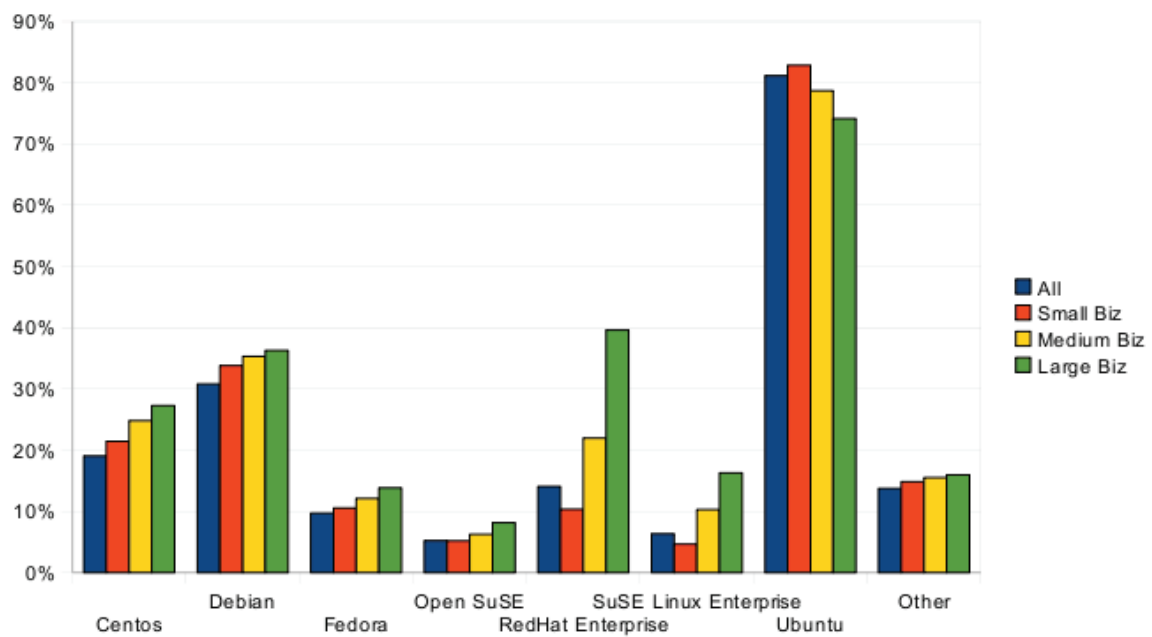


Diagram 3 – Size of organisations by number of employees

A multiple choices question, hence the sum is greater than 100% as many respondents use more than one version of Linux.

How many employees are there in your organization?

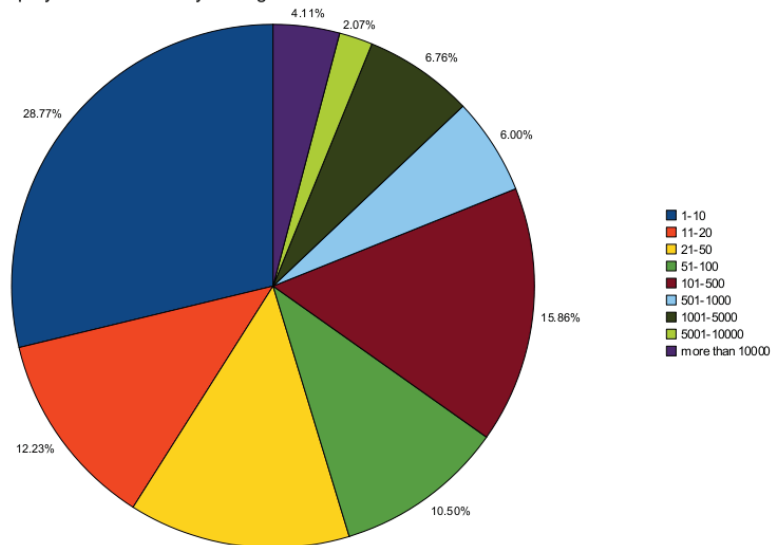
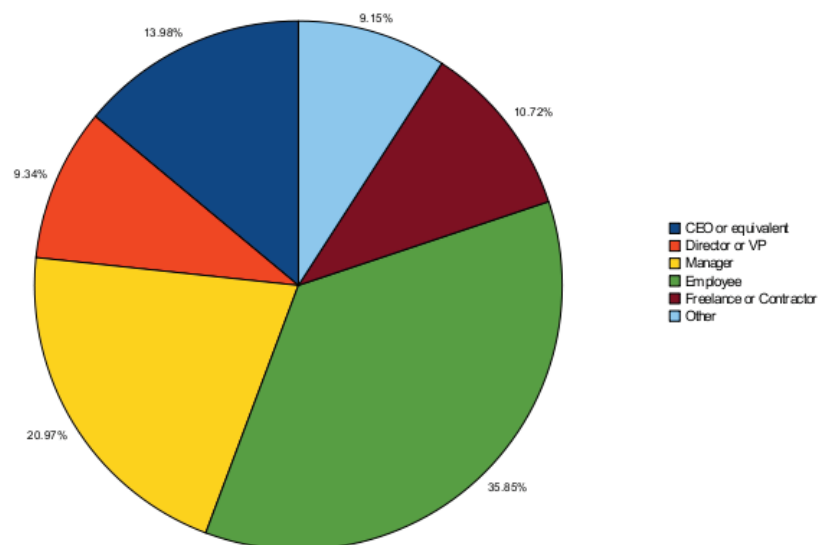


Diagram 4 - Positions within the organisation

What position do you hold in your organization?



Diagrams 3 and Diagram 4 give us more detail about the size of organisation and the positions held by the respondents regardless of the number of servers within those organisations.

Diagram 5 – Location of respondents

Which region of the world do you live in?

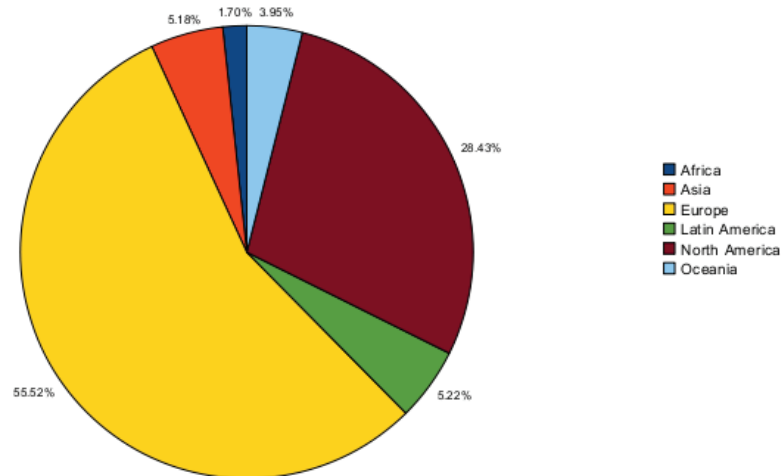


Diagram 6 - Industries represented in survey

What sector is your organization involved in?

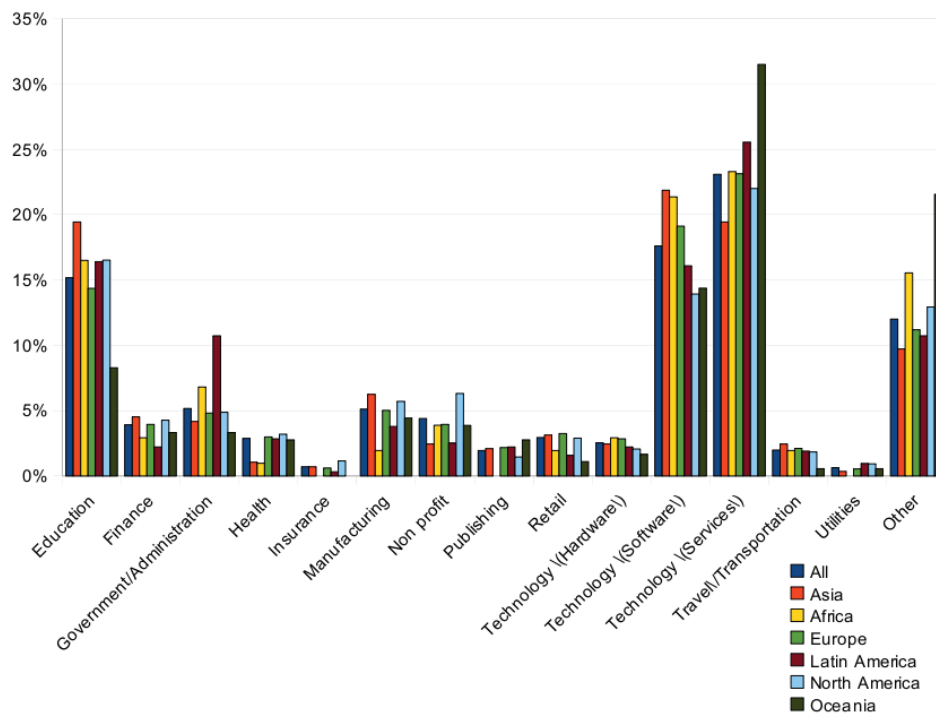


Diagram 5 and Diagram 6 show us the regions and industries of the respondents. It paints a picture of Ubuntu Server Edition in use across a variety of industries in developed economies. There is some bias of course in the self selecting nature of the respondents but this picture shows that Ubuntu on the server used extensively in North America and Europe. It also illustrates that the server platform is being used across a full range of industries.

Section 2 - Mission Critical Use of Ubuntu Server

A core developmental tenet of Ubuntu Server Edition is that it should provide an excellent choice for common server workloads. Ensuring Ubuntu is easy to install, configure, deploy and manage for large deployments are areas of focus.

A core finding of the survey is that there is a close match (Diagrams 7 and 8) between those use cases that Ubuntu is deployed in and those that businesses find mission critical. For example in Diagram 9 we expressly asked whether users considered Ubuntu mission critical ready and 90% responded positively. Diagram 10 gives a snapshot of how many mission critical applications respondents are running on Linux.

Diagram 7 - What is run on Ubuntu?

What type of applications do you have running on your Ubuntu Servers?

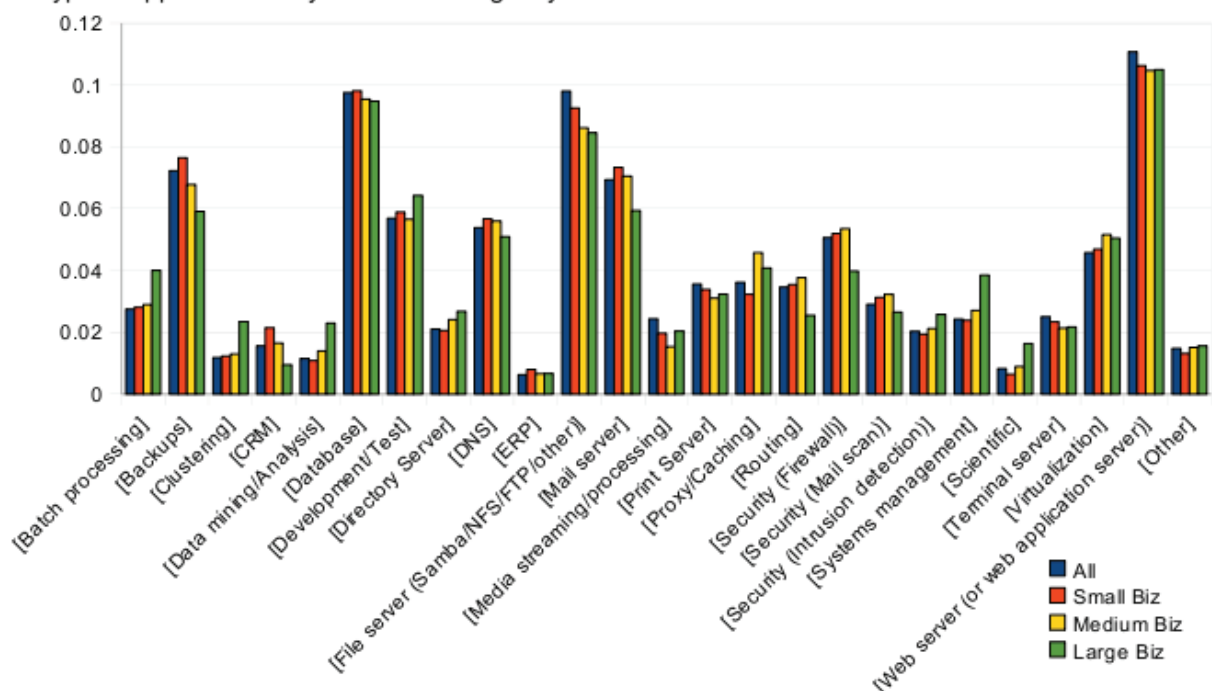


Diagram 8 – Mission critical applications

Please tell us which types of workloads you consider mission critical.

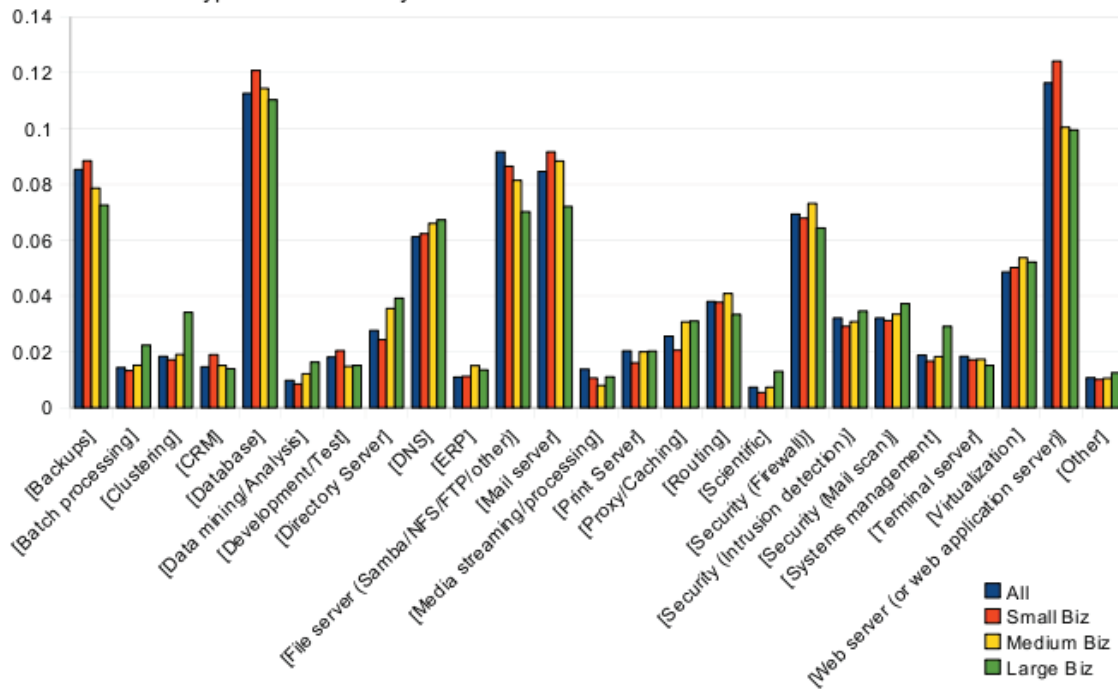


Diagram 9 – Is Ubuntu enterprise ready?

Do you consider Ubuntu ready for your mission critical deployments?

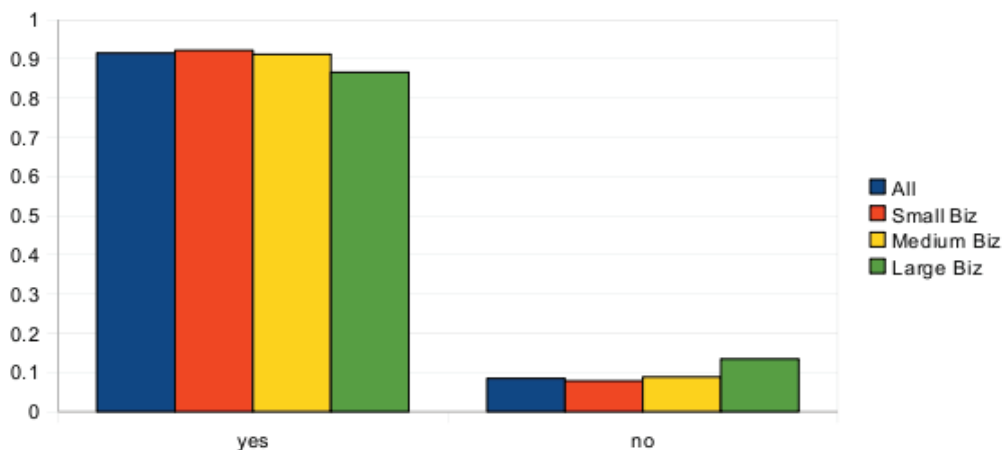
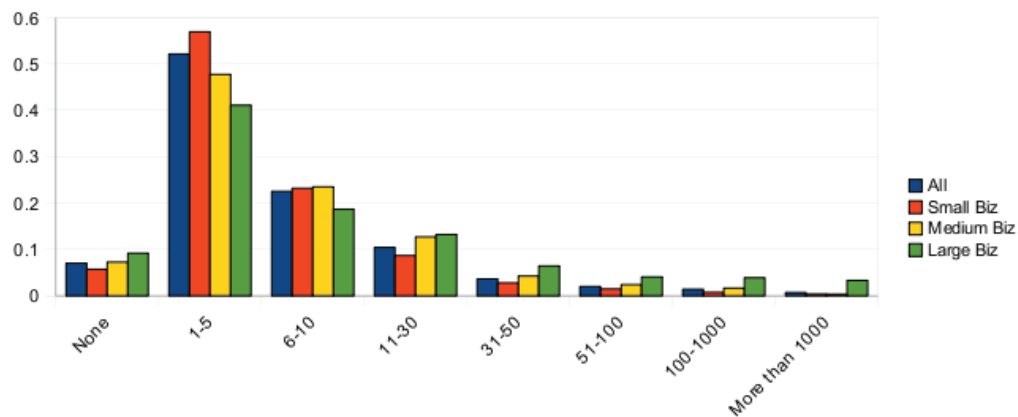


Diagram 10 - The number of mission critical applications

How many mission critical applications do your linux servers run?

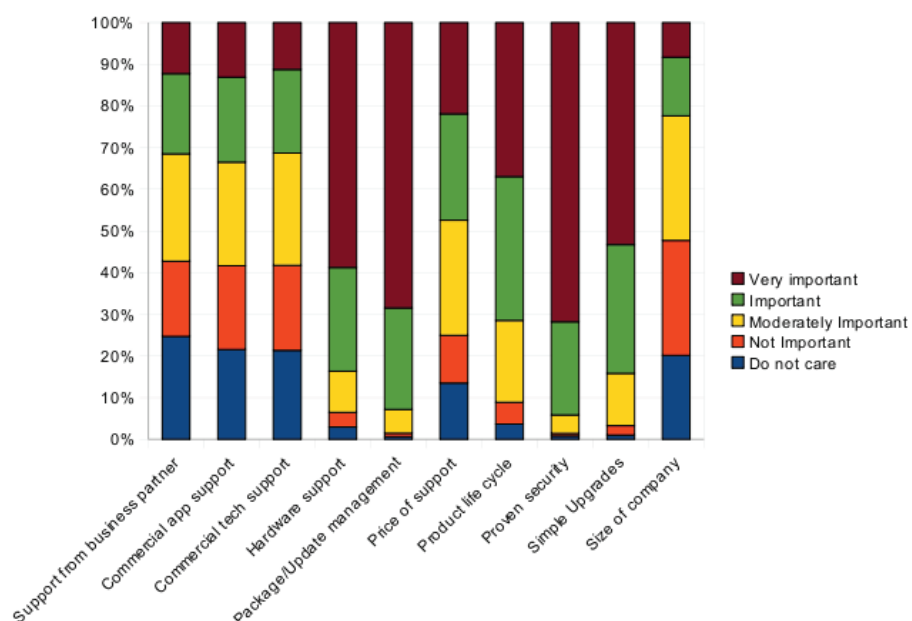


We also wanted to explore the non-product elements that users considered core to their mission critical deployments. This threw up some interesting results reflected in Diagram 11. There were five areas that were clearly of key importance – package management, simple upgrades, product life cycle, proven security and hardware support.

Diagram 11 – Important considerations for server usage

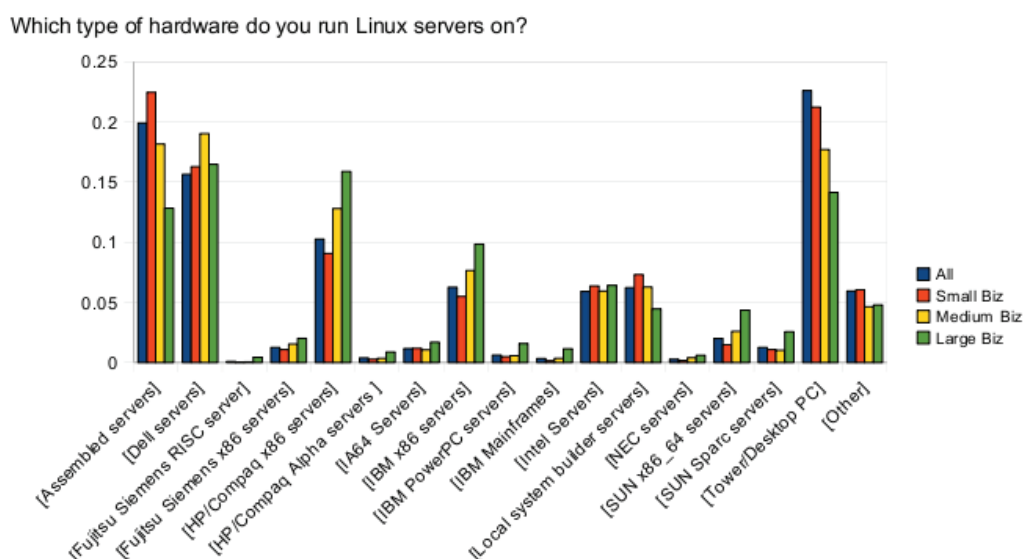
Which of this list do you consider important for mission critical deployment?

(All answers)



Hardware support was considered the third most important consideration for server deployments. A great deal of work takes place within Ubuntu and the Linux community including within the kernel community, within Canonical and with manufacturers to ensure a wide range of hardware compatibility. Diagram 12 reflects the success of that work with Ubuntu and Linux use across a wide section of hardware profiles.

Diagram 12 – Linux use by hardware profile



Section 3 – Technology Choices

We wanted respondents to tell us what technologies they used in their organisation for various tasks. We suggested the most popular applications for many of these services whether they are open source or not. It is important to note that these are preferred technologies on Linux and not all available on Ubuntu. For Canonical and the Ubuntu community in many cases they represent a target list of applications for certification. For readers of the survey it represents some key insight into what their peers are using and we have broken most results down by company size. Diagram 13 gives an overview of which features are important. The subsequent Diagrams give more detail on specific applications and technologies. There's an interesting variance between company size on a number of choices.

Diagram 13 – Importance of features

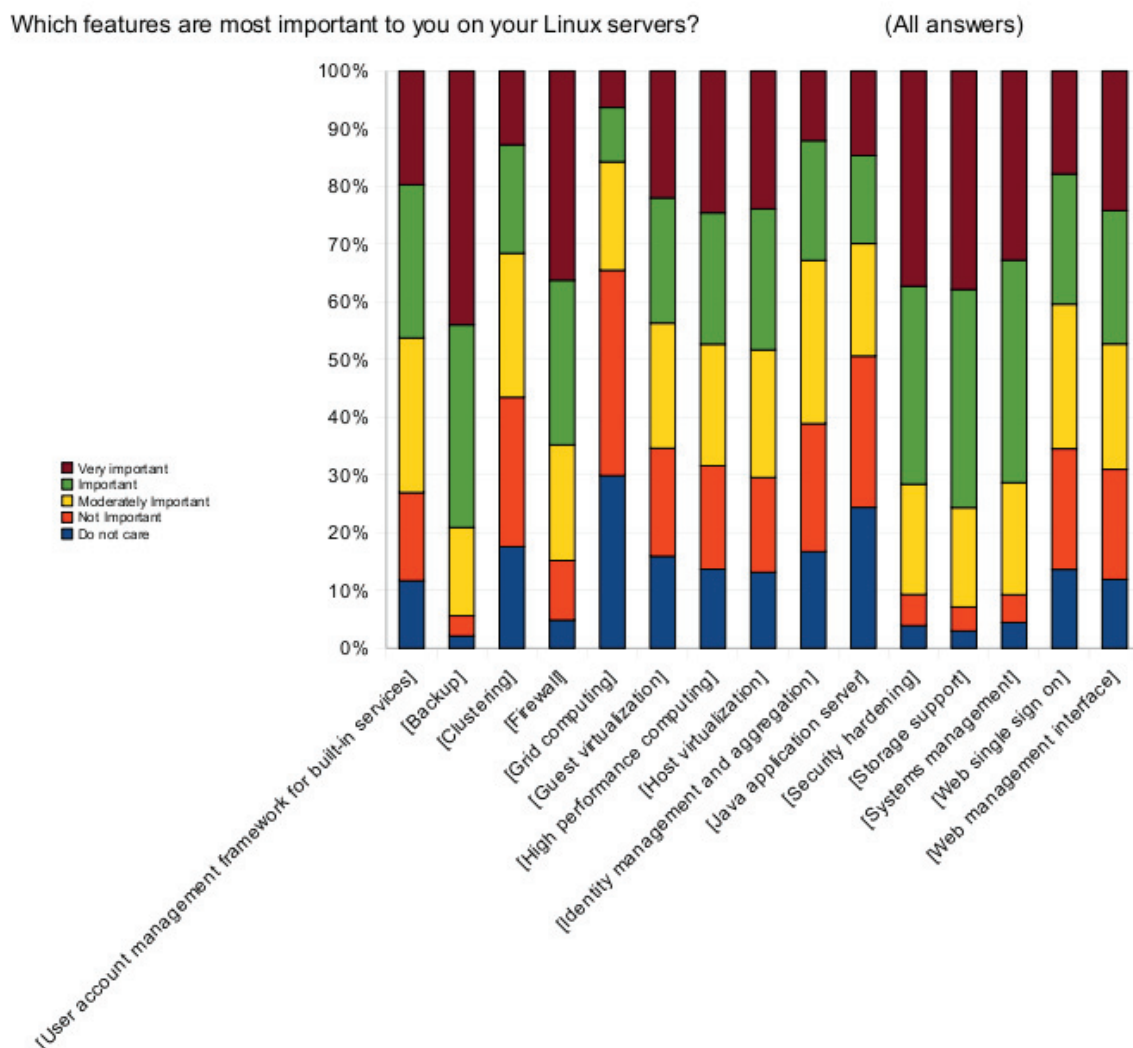


Diagram 14 - System management

Which system management software package(s) do you use?

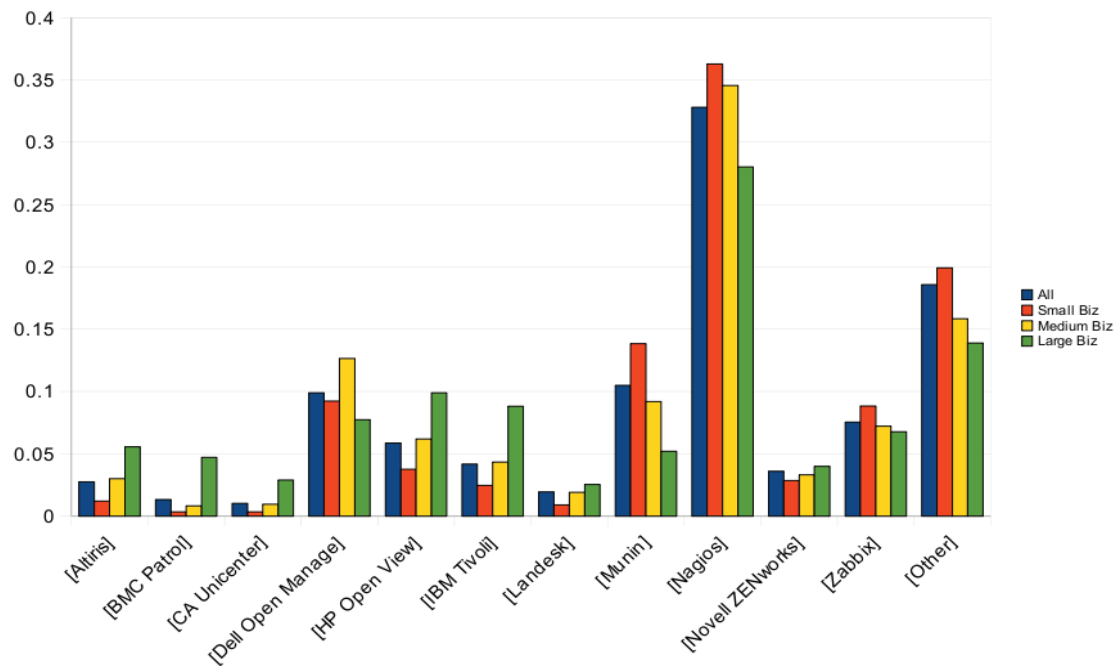


Diagram 15 – database and application servers

Does your organization run the following applications on its servers?

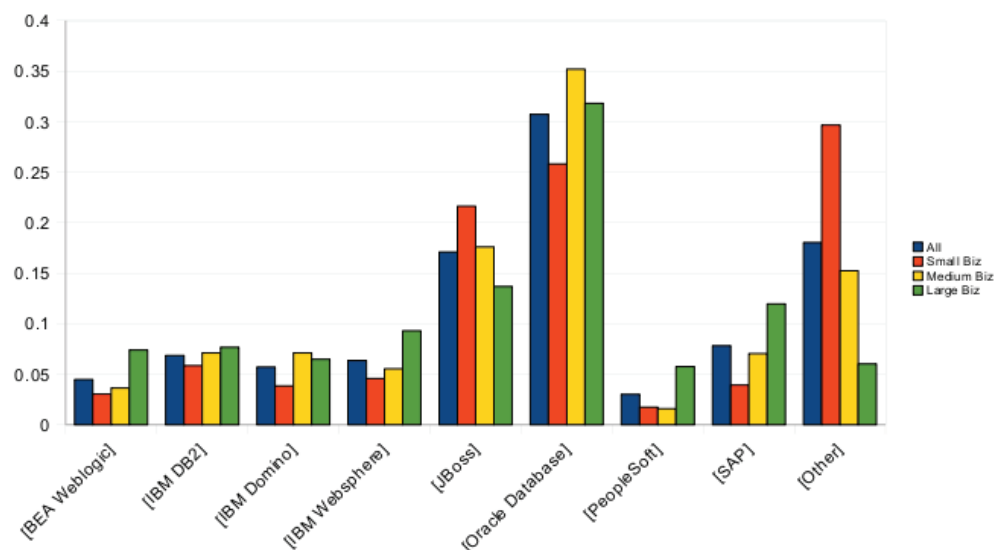
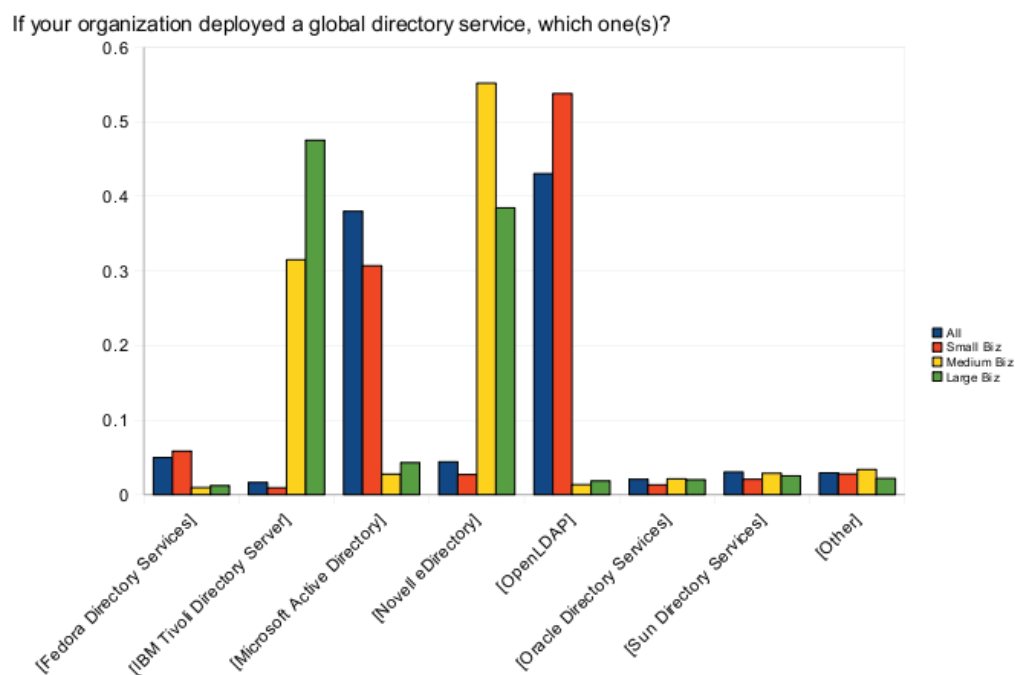


Diagram 16 – Preferred directory service



Section 4 - Virtualization and cloud computing

In addition to Ubuntu Server Edition being a platform for common workloads we work hard to make sure that organisations that want and need to take advantage of the latest technologies can use Ubuntu as a platform for innovation. One of the profound changes of recent years is the extent to which virtualization has become prominent within data centres. In Section 2, Diagrams 7 and Diagram 8 show the degree to which it is used within Ubuntu environments. While it is far from ubiquitous, it is likely to become so as the technologies to leverage it become easier to use, implement and manage. In Diagram 17 we asked about preferred virtualization technologies. Unsurprisingly we see market leader VMWare way out ahead. The two most popular open source technologies KVM and Xen are increasingly prominent across all business sizes which tells an interesting tale in terms of enterprise usage. The quick rise of KVM is important as it indicates that Ubuntu made the right choice to select it as our maintained technology. Ubuntu was the first distribution to make KVM the default fully maintained and supported technology with 8.04 LTS.

A separate but related area is the increasing visibility of cloud computing. We specifically mean here the delivery of applications and/or data processing power via the Internet either within a firewall or from an external supplier like Amazon EC2. Diagrams 18, 19 and 20 tell an interesting tale which is that many users think the cloud is ready, they believe Ubuntu would be a good platform for it but not that many have decided to deploy it yet. That's not surprising given the maturity levels of the technologies available in the market currently. We believe in Ubuntu as a platform for innovation and we will be looking at ways of delivering cloud in to businesses simply and securely on Ubuntu Server Edition along with explaining how it can provide real value to companies as an infrastructure model.

Diagram 17 – Virtualization technologies

If you use your Ubuntu servers as a host for virtualization, which product(s)/technology(ies) do you use?

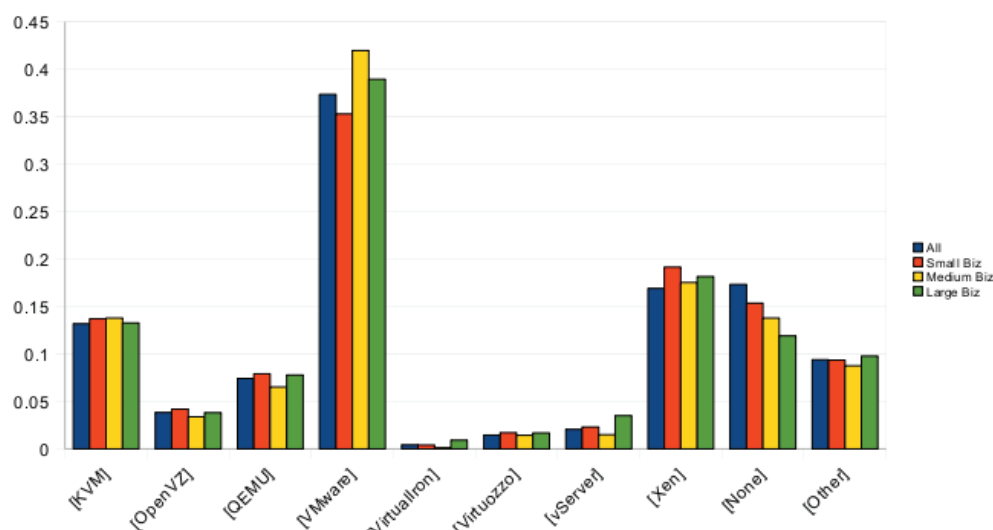


Diagram 18 – Cloud computing maturity

Do you consider cloud environments ready for mission-critical workloads?

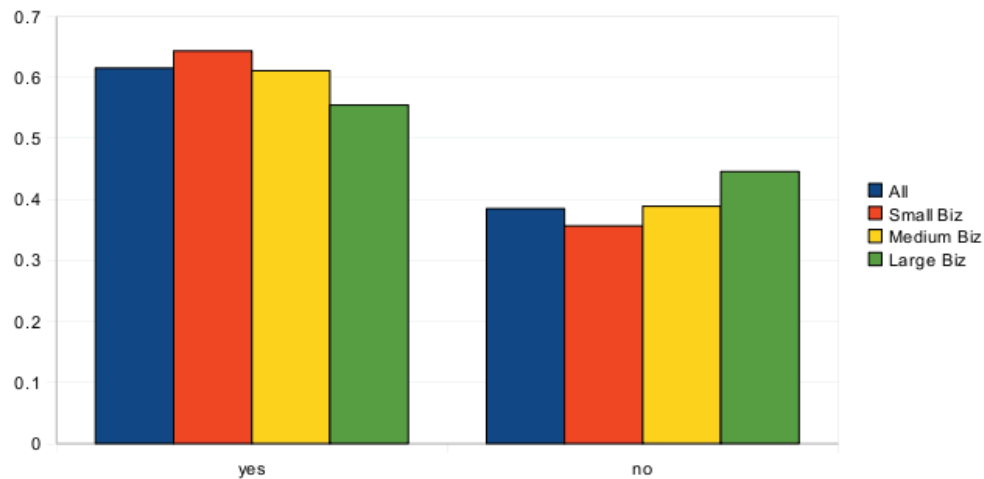


Diagram 19 – Ubuntu for cloud computing

Do you consider Ubuntu a viable platform for cloud" based deployments?"

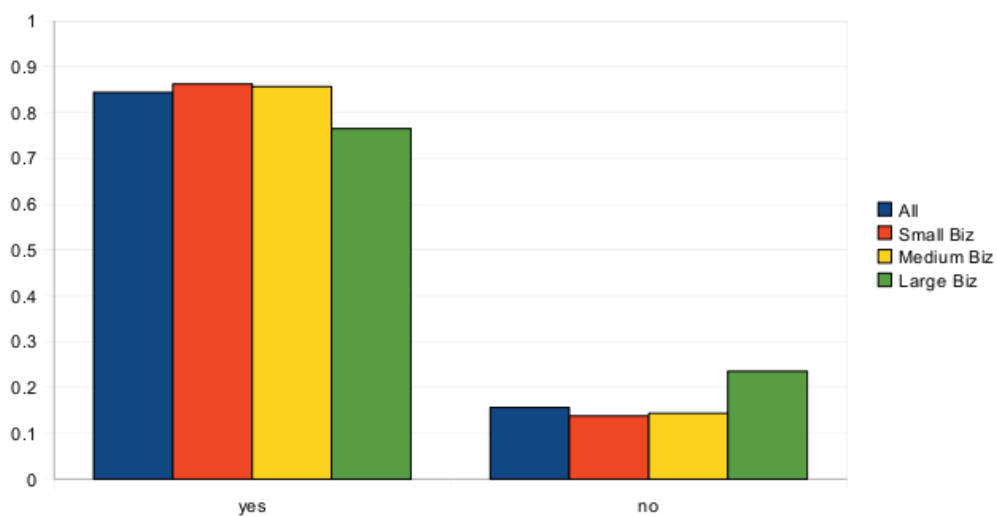
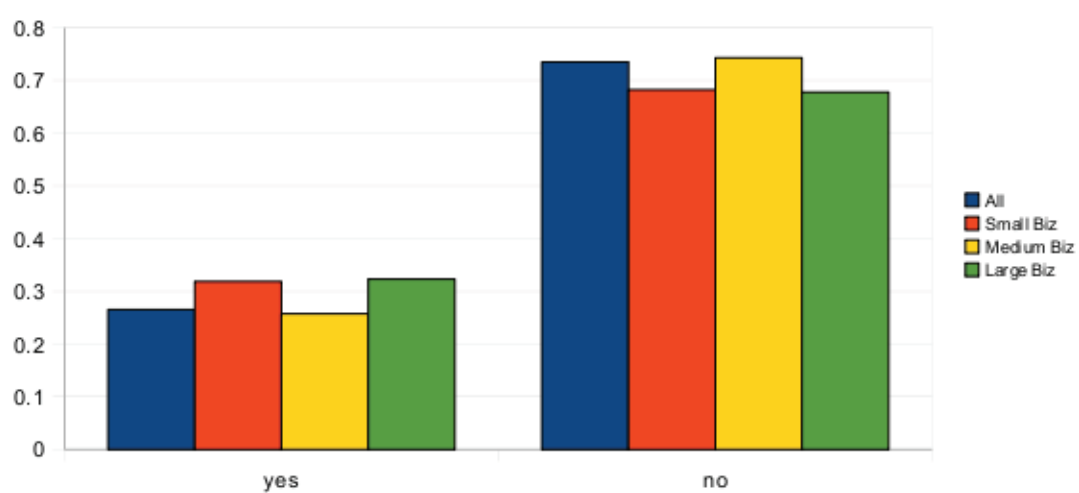


Diagram 20 – Cloud deployments

Do you plan to deploy workloads of any type to cloud" environments?"



Section 5 – Community Support

One of the oft-cited features of the Ubuntu experience is the excellence of the community. Alongside community support, the fact that users can get the full version of Ubuntu via download or CD, with free maintenance and security updates is a significant driver of the widespread adoption that we're seeing. Diagram 21 illustrates that the full range of community support options are used. While Diagram 22 and Diagram 23 shows that the majority of users have had good experiences receiving support from others in the community.

As use changes from development to deployment in more businesses the demand for commercial support and indemnification services from Canonical is increasing. We expect to see this further accelerate as Ubuntu makes its way further into mission critical deployments.

Diagram 21 – Community support

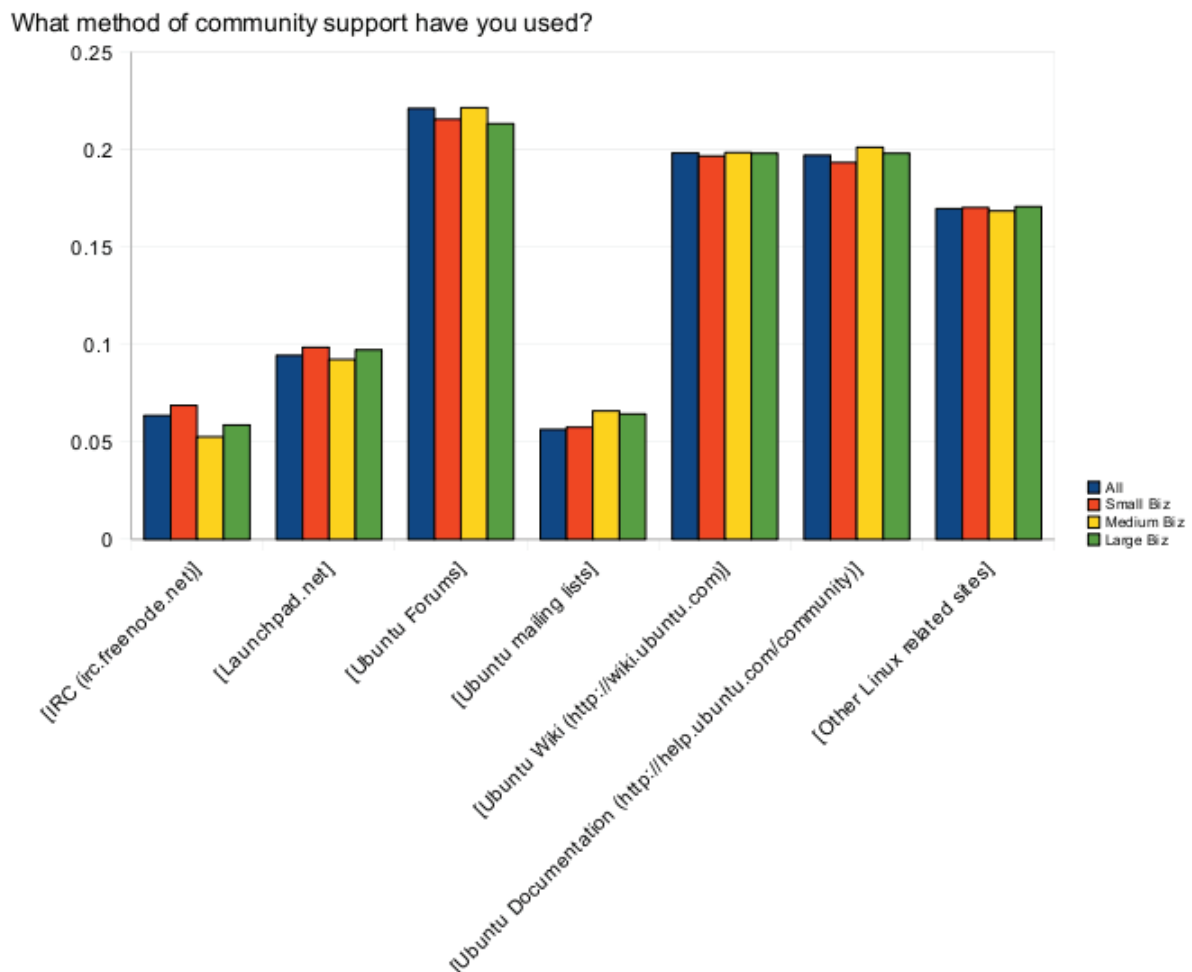


Diagram 22 – Community support experience

Were your problems resolved by the community support?

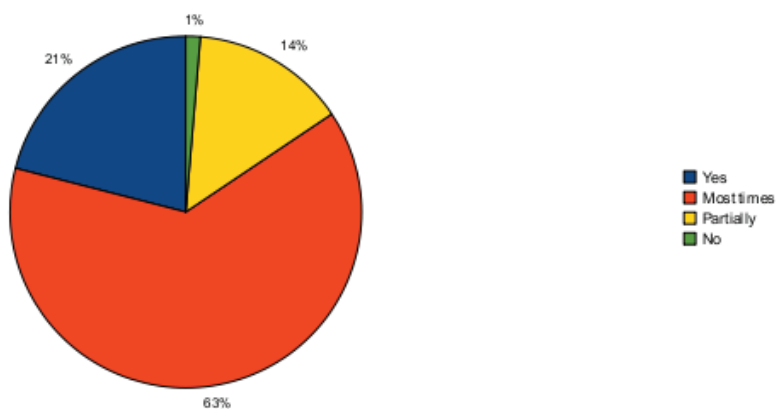
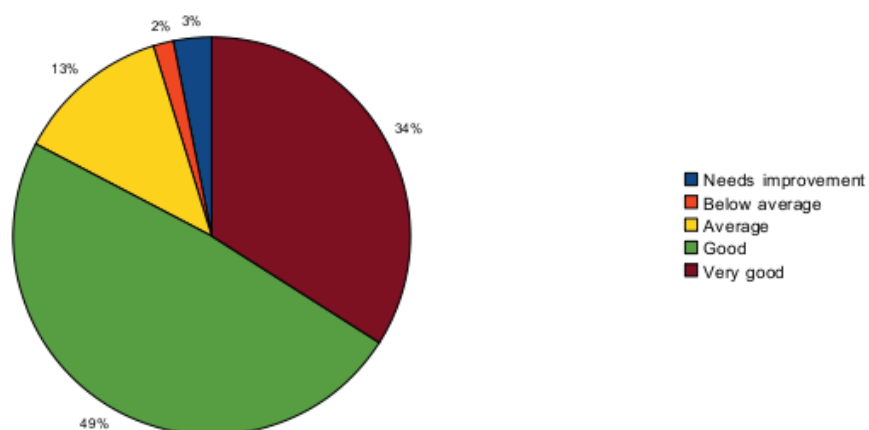


Diagram 23 – Community support satisfaction

How satisfied were you with the community support?



Section 6 – Adoption of Ubuntu Server

Diagram 24 shows the popularity of the long term release cycle, albeit we have seen significant uptake of Ubuntu 8.10 since, often running in tandem with Ubuntu 8.04 LTS. Pleasingly we are seeing very strong numbers for future deployment plans on Ubuntu with nearly all users stating their future intention to deploy on Ubuntu which of course indicates those currently using other OS's intend to add Ubuntu to their mix. Over 65% of businesses intend to add servers in the next year. This is consistent for all sizes of business.

Diagram 24 – Ubuntu Server use

When do you plan to deploy additional servers?

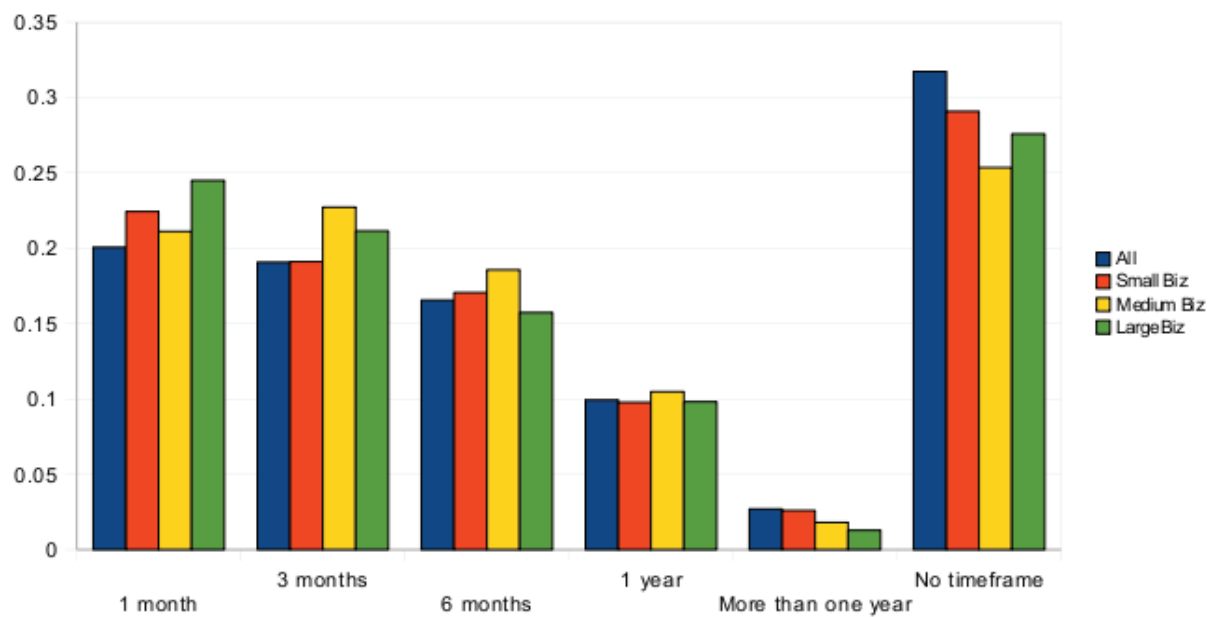
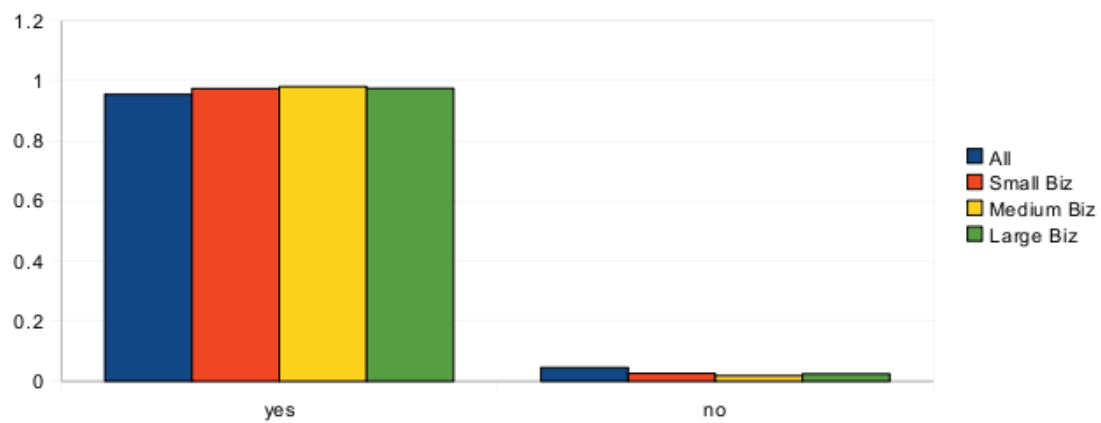


Diagram 25 – Future Ubuntu plans

Do you plan to deploy additional Ubuntu based servers in the future?



Section 7 - Integration

In Diagrams 26 and Diagram 27 users were asked to rate on a scale of 1 to 5 how they judged the integration of Ubuntu server with other servers or other clients. The responses show that Ubuntu is generally easy to integrate within an existing network, with all the ratings well above average.

Integrating Ubuntu into a Linux or Unix environment is still considered easier than integrating it into a Microsoft Windows environment. Our adoption of Likewise-Open has simplified this matter a bit as integration with Windows 2000 and above is rated higher than Windows NT.

On the client side, integration with Windows XP still rates higher than Windows Vista, which we believe is linked to the the current support level of Samba which should increase over the next few Ubuntu releases. Here again, the result do not seem to vary much based on the size of the company.

Diagram 26 – Server integration

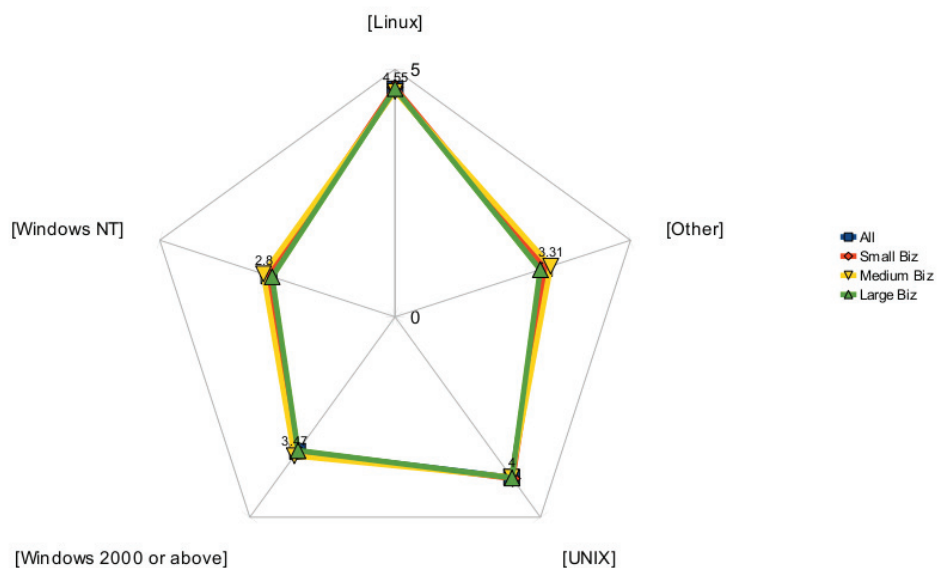
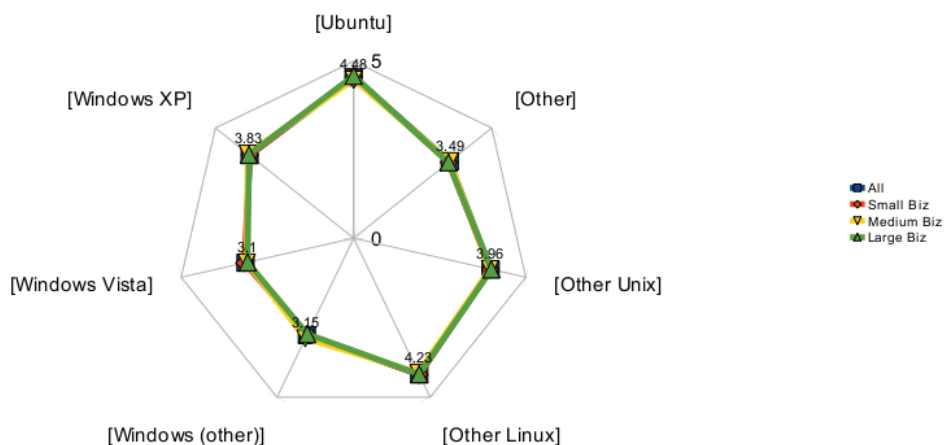


Diagram 27 – Client integration

If your network contains one or more clients, how would you rate the clients integration with Ubuntu Server per



Conclusion

2008 has proven an inflection point in the types of business using Ubuntu Server Edition and the use cases they have professed to use it in. The purpose of the survey was to provide the engineers and community the feedback on what technologies to choose for integration in future editions and what technologies to target for extension of the ISV ecosystem. It is very important to us that the design of the product stays in step with use. To this, we sought confirmation that the foci of stability and reliability were the right ones, while maintaining a rightful reputation for innovation and adoption of new technologies in the six month cycle. We think it provides that reassurance and we are very happy to be able to share this picture of how, why and where Ubuntu Server Edition is being used today and will be used tomorrow.