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2010 Virtualization and Cloud Computing Survey

Presented by Zenoss, Inc.

The results of this survey were collected during the 2nd quarter of 2010 from the Zenoss open source systems management community with regards to their usage of virtualization and cloud computing.

Executive Summary

Zenoss conducted this survey in the second quarter of 2010 to determine usage trends among IT professionals who participate in the Zenoss open source management community. The results are collated from responses of 204 individuals as to their usage of virtualization and cloud computing technologies.

- 40.7% indicated that they *preferred to deploy servers virtually*, 29.3% indicated they used virtualization *whenever possible*
- The leading virtualization technology used by respondents was VMware that was in use by 79.3% of survey respondents who were using virtualization
- Xen was the second most popular virtualization technology with 32.7% of users indicating their usage of the Citrix sponsored hypervisor, Oracle VirtualBox was third with 22.0% and Linux Kernel-Based Virtual Machines (KVM) was fourth with 21.3%
- 43.3% of participants indicated flexibility as the **reason for using virtualization** while 33.3% indicated hardware savings as a reason for using the technology
- The number one stated goal with regards to virtual infrastructure was **Cost Savings** (64.7%) followed by Deployment Control specifically controlling virtual sprawl.
- 20% of Virtualization users indicated the need for **accounting and chargeback** of virtual resources
- 70.7% *preferred tools that managed all infrastructure* rather than point solutions that were virtualization specific.
- The vast number of virtualization users don't utilize automation In managing virtual environments only 39.3% of virtualization automate the starting and stopping of virtual machines based on operational conditions
- 73.3% have not made a decision on their virtualization management solution
- 49.2% of respondents indicated they planed to deploy hosted Linux servers in 2010 while 32.6% indicated that they would be deploying hosted Microsoft Windows.
- 25.8% indicated they would be deploying hosted data services
- The *most popular cloud hosting provider was Amazon* with 43.9% of participants indicating the use of the online giants hosting services. 28% indicated their use of Google AppEngine and 22.7% indicated plans to use Microsoft Azure followed by 15.9% using Rackspace's cloud offerings.
- 50.8% indicated they used no specific management tools for cloud computing, 33.3% indicated using tools provided by their hosting provider
- **Security was the number one concern** for cloud computing followed by management and monitoring
- Only 28.8% *indicated that they used automation* to start and stop cloud instances

Introduction

Cloud computing and virtualization are two of the major IT trends of this decade. The Zenoss 2010 Virtualization and Cloud Computing survey was designed to collect information on the use of virtualization and the cloud computing technologies among enterprise users.

The goals of the survey were to ask questions with regards to:

- Virtualization technology usage
- Motivations for using virtualization and cloud computing
- Leading vendors in the cloud and virtualization markets

Methodology

Zenoss provides content free to the Zenoss community, including documentation, newsletters, forums and videos. Users within the community were asked to volunteer their preferences with regards to their use of virtualization and cloud computing technologies. This information helps Zenoss to prioritize features for the benefit of the Zenoss user community.

This survey was conducted during the second quarter of 2010 and users were asked to volunteer information about their virtual infrastructure usage patterns.

Zenoss is deployed globally in over 180 countries on all seven continents with over 10,000 organizations in a wide variety of industries – financial services, service providers, manufacturing, new media, professional services – and in government. This enables Zenoss to offer a unique insight into a wide variety of industries.

Sample

The survey sample is derived from 207 members of the Zenoss Open Source community and was conducted by open participation and advertised to users in the Zenoss user community via blogs and newsletter.

About Zenoss, Inc.

Zenoss is the leading provider of Dynamic Service Assurance to the next generation datacenter. Zenoss Enterprise is a purpose-built Dynamic Service Assurance product that assures IT service delivery to applications, business services and real-time physical, virtual and cloud-based infrastructures. With a community of over 85,000 users, Zenoss products monitor over one million network and server devices daily and have been used in over 25,000 organizations in 180 countries around the world. Commercial customers include leading companies such as Rackspace, VMware, LinkedIn, Carlson, Motorola and Deutsche Bank. To learn more about Zenoss' award-winning IT operations management software, visit <http://www.zenoss.com>.

2010 Virtualization and Cloud Computing Usage

The following information indicates the usage patterns of enterprises with regards to virtual infrastructure both within their data centers and hosted in the cloud.

I. Size of Managed Infrastructure and Organizational Role of Participants

The following questions were used to establish the background of the participants and the infrastructure they manage. The largest demographic of participants were those in an IT management role.

Figure 1.1 – Results derived from the request, “How many data centers do you manage?”

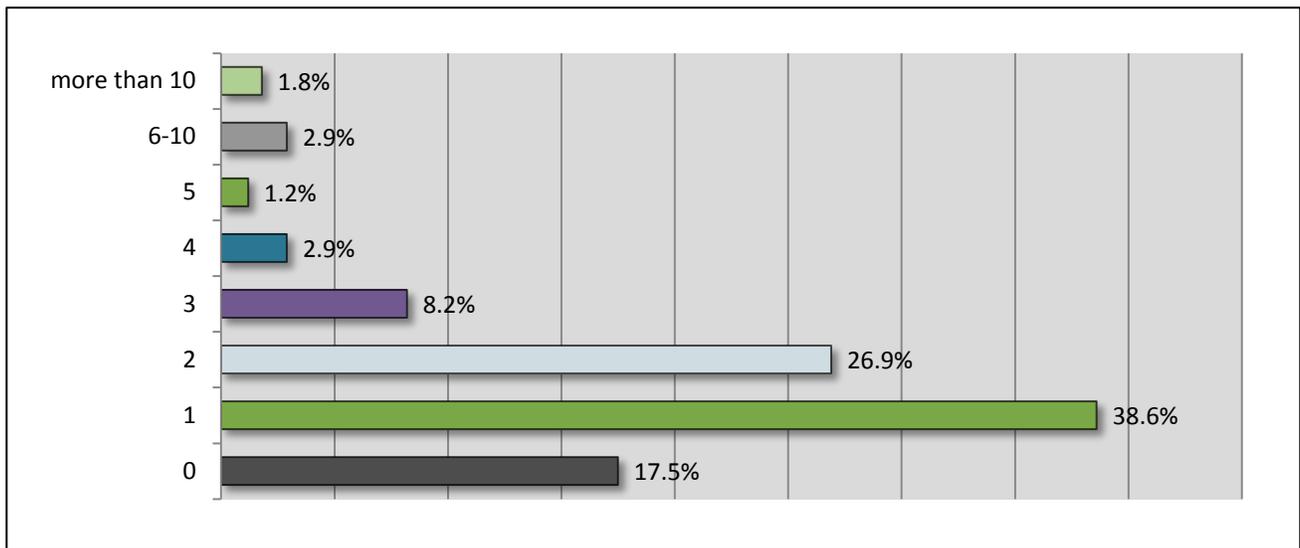
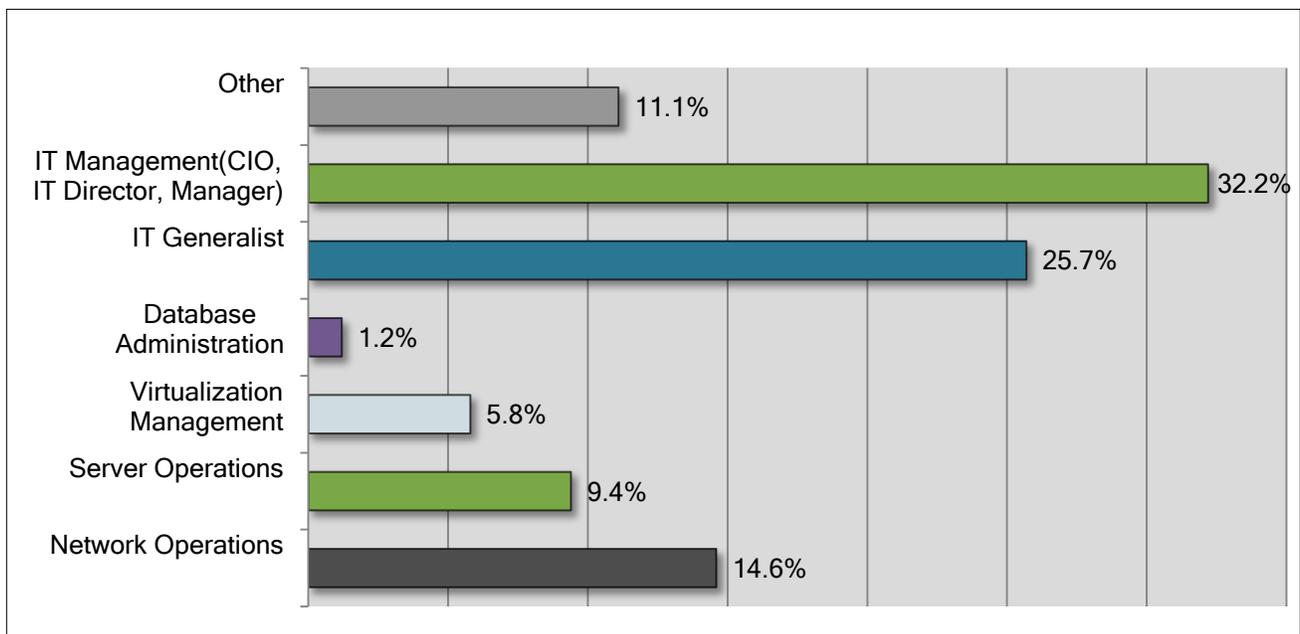


Figure 1.2 Results derived from the request, “What is your role in the organization?”



II. Virtualization Trends for 2010

The following series of questions were asked to determine participant's stance on using and managing virtualization technologies.

Figure 2.1 Results derived from the request, "What is your organization's stance on using virtualization technologies?"

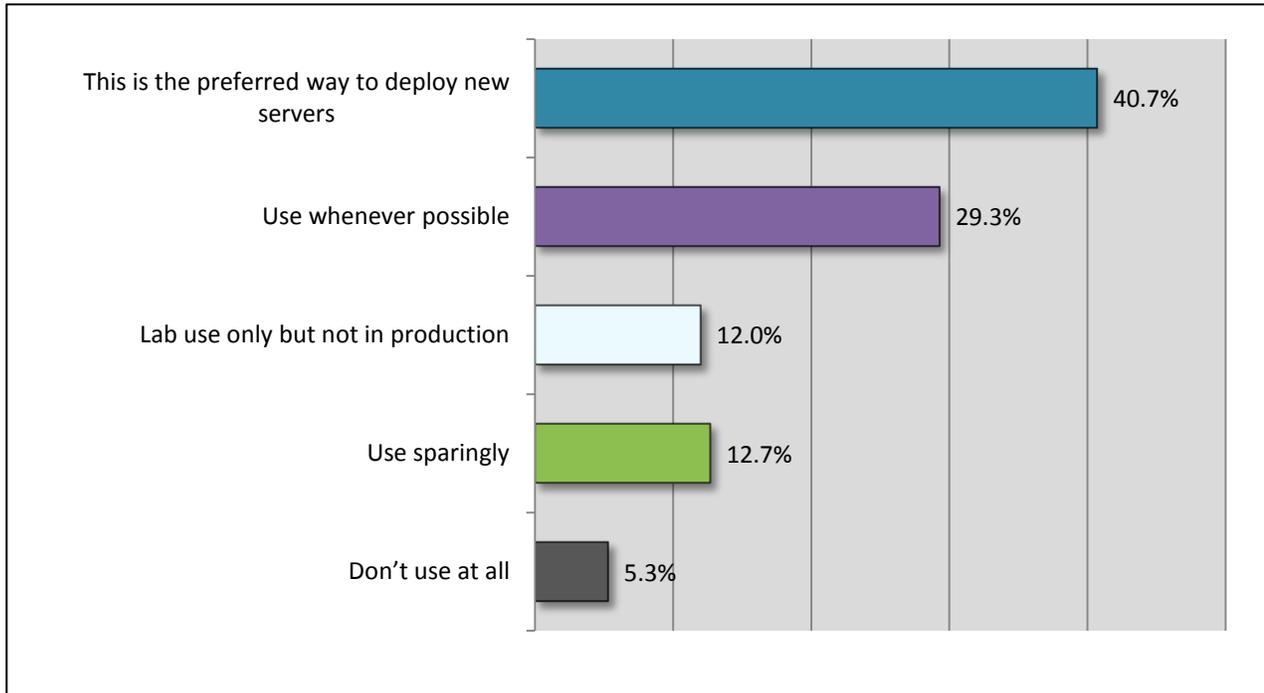


Figure 2.2 Results derived from the request, "What virtualization technologies do you use?"

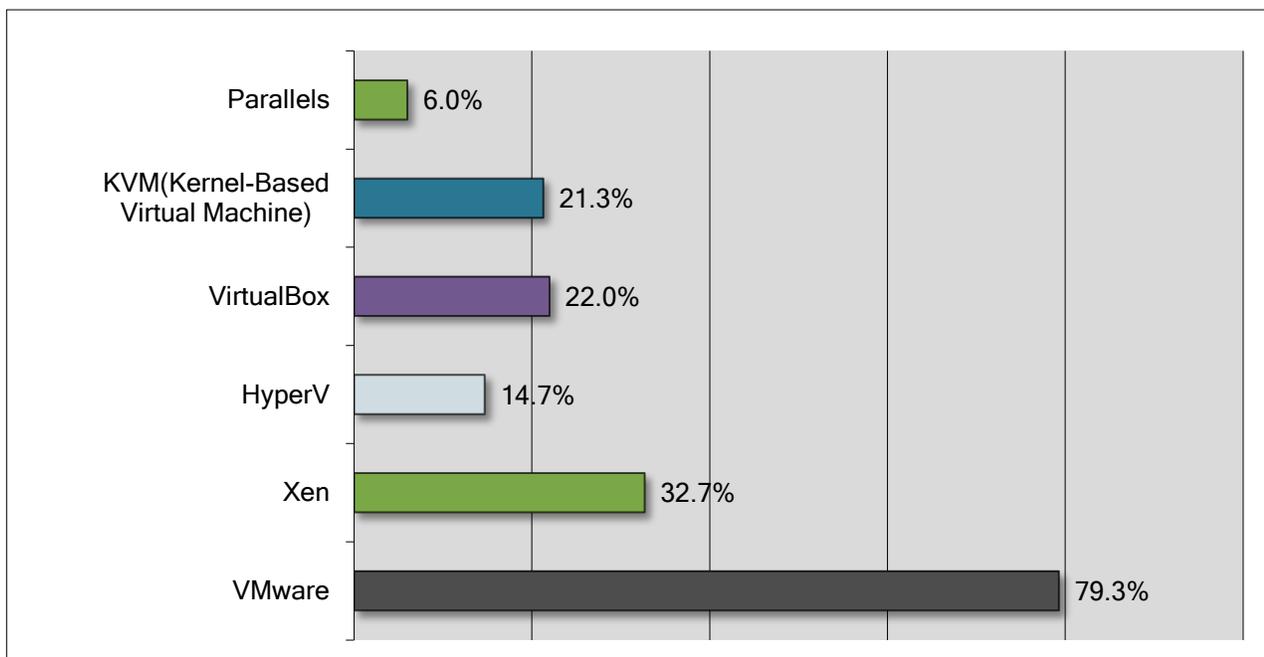


Figure 2.3 Results derived from the request, “What is the main reason you choose to use virtualization software?”

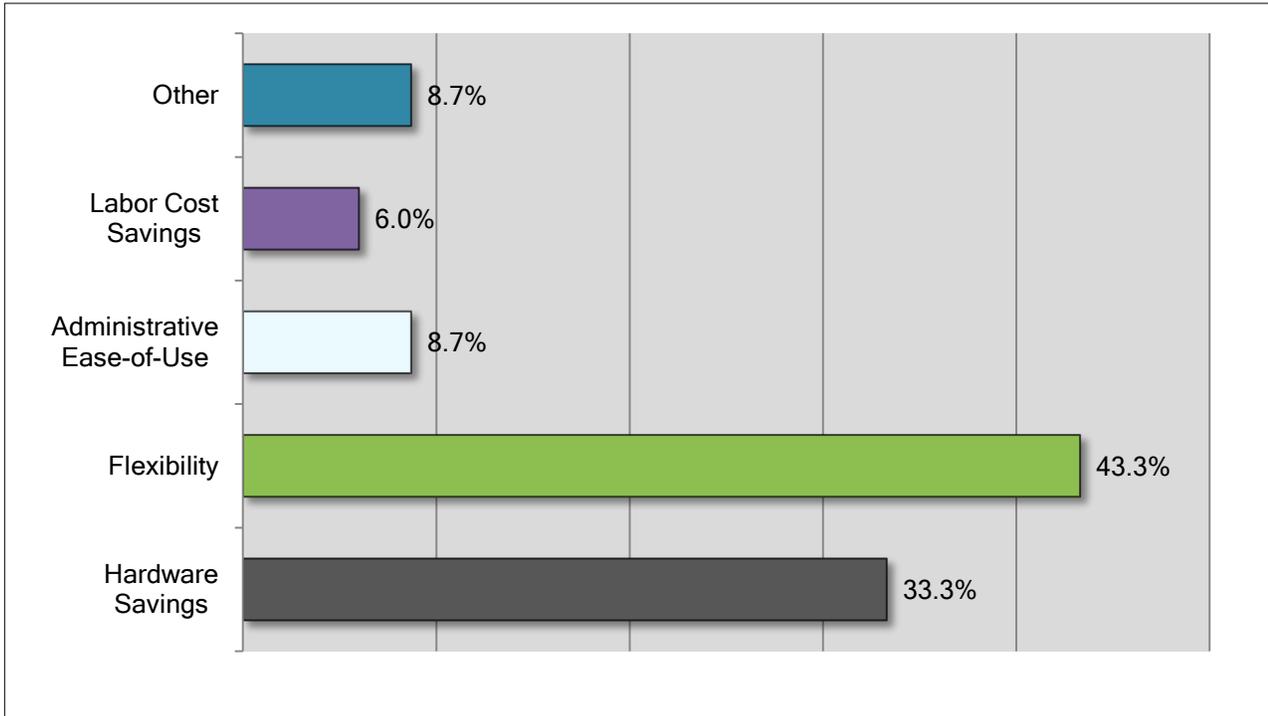


Figure 2.4 Results derived from the request, “What are your goals for improving your virtual infrastructure?”

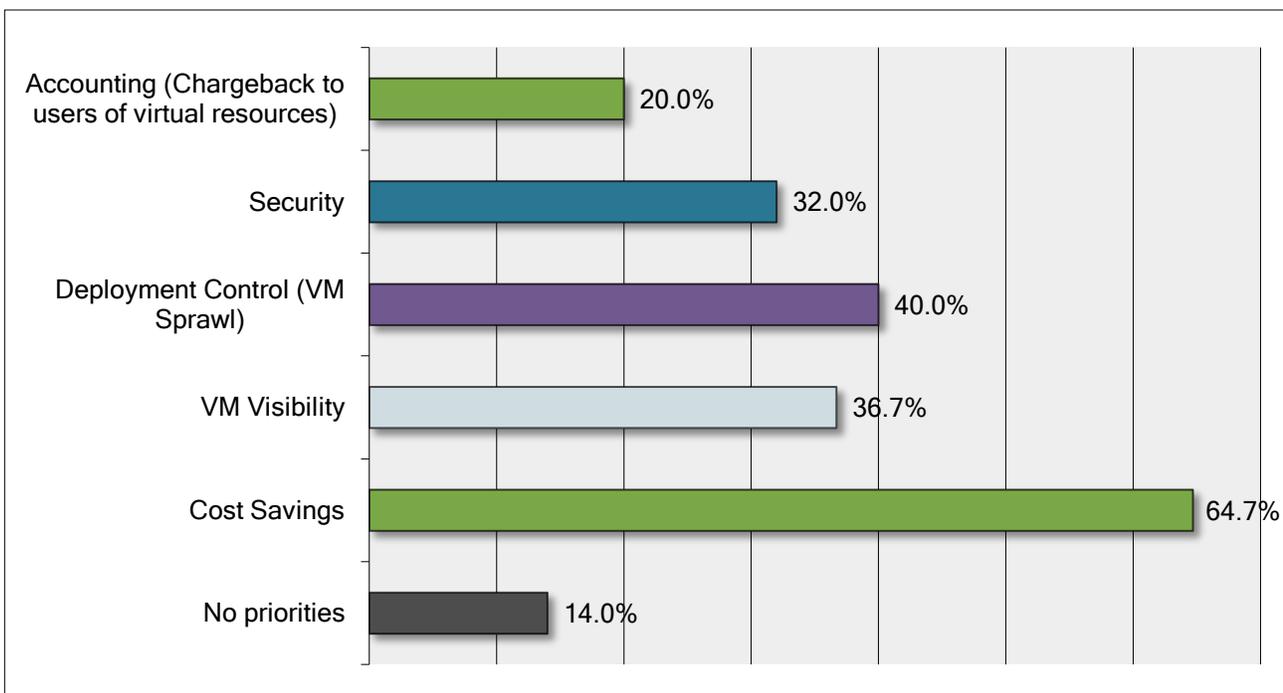


Figure 2.5 Results derived from the request, “Do you prefer specialized virtualization tools or do you prefer that your existing tools have the capability to manage virtual infrastructure?”

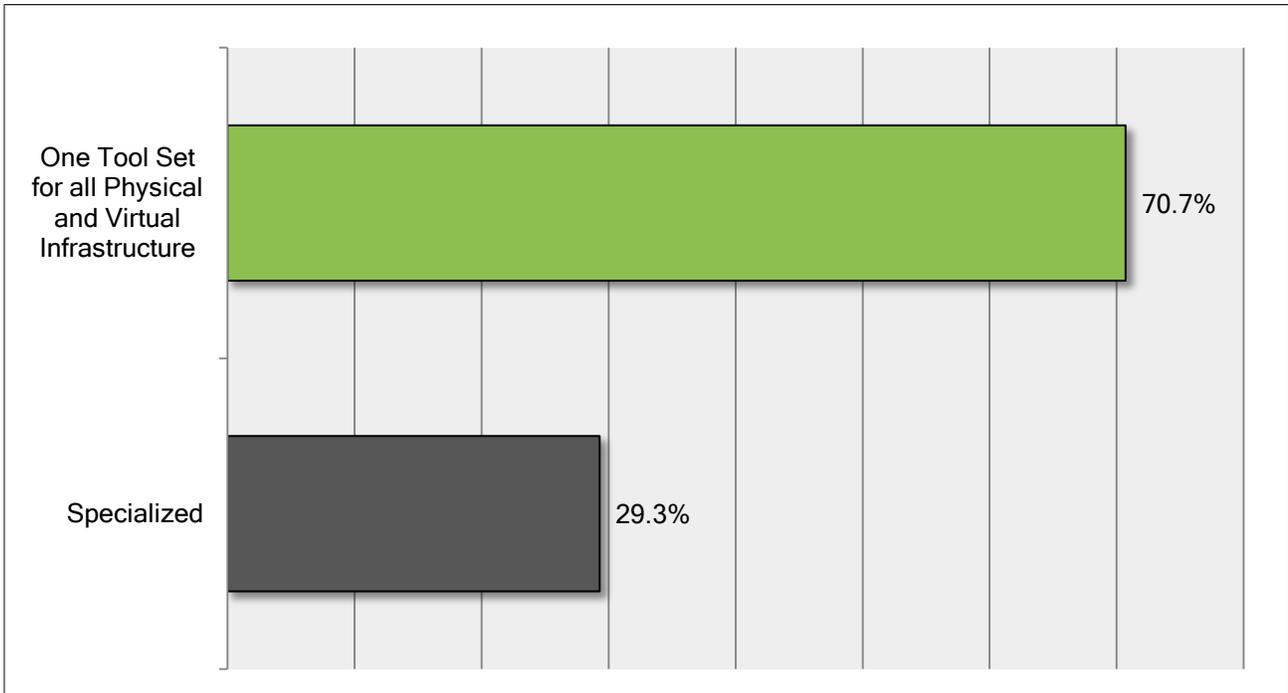


Figure 2.6 Results derived from the request, “Are you challenged by “virtualization sprawl” (the unaccounted for proliferation of virtual infrastructure)?

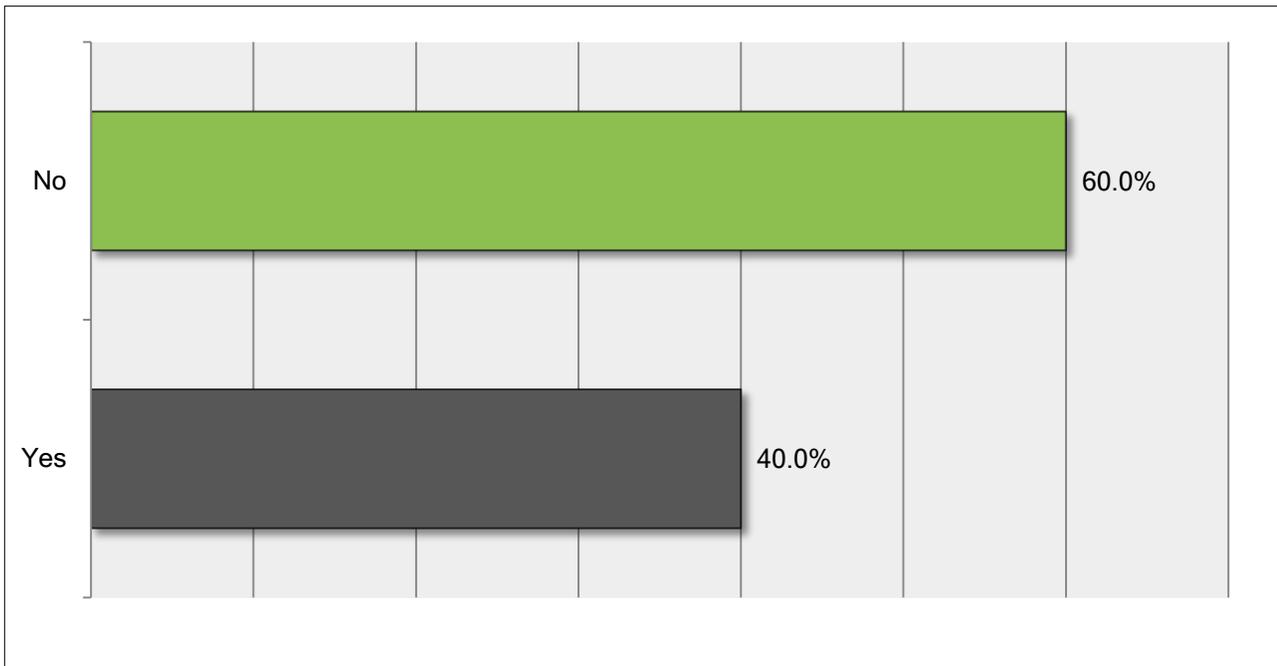


Figure 2.7 Results derived from the request, “Do you automate the starting and stopping of virtual machines based on operational conditions (server load, errors)?”

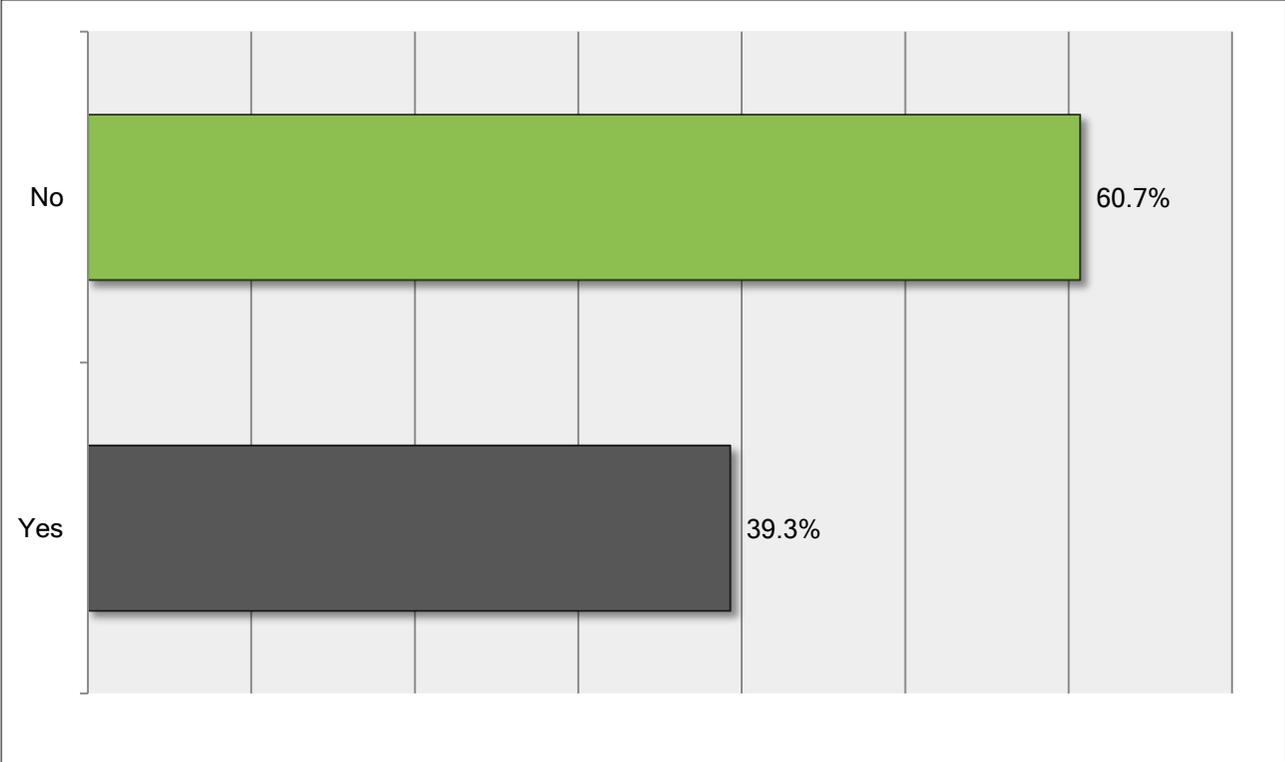
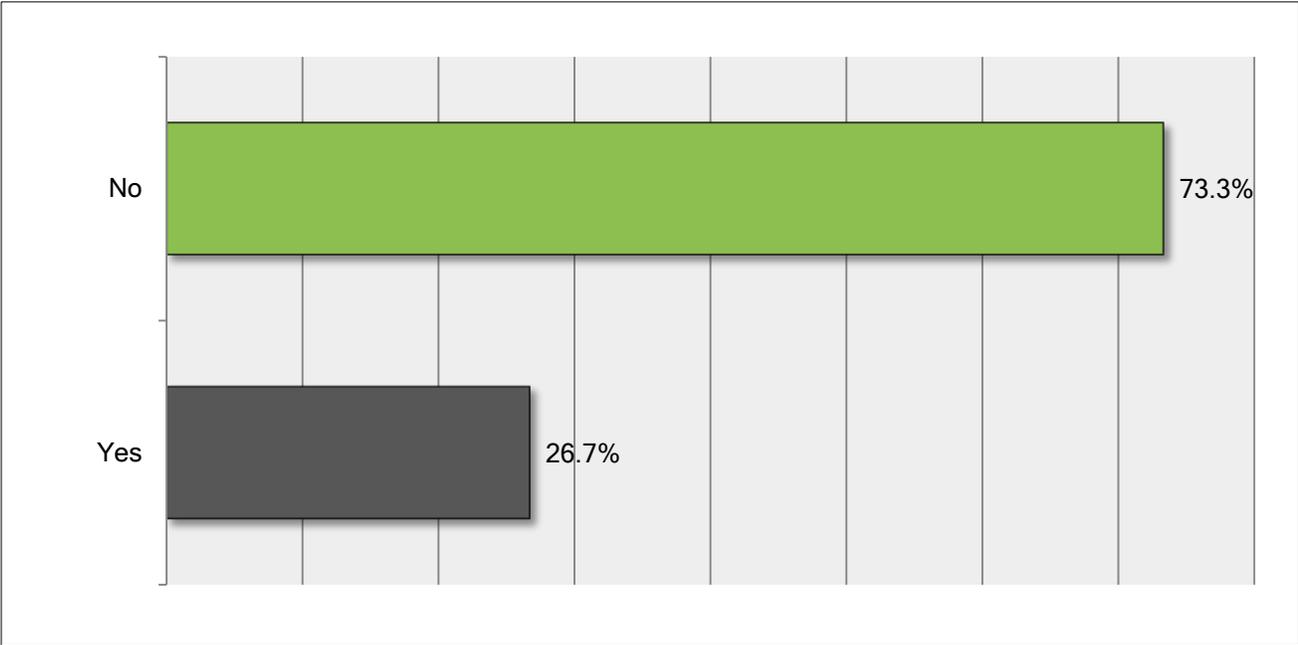


Figure 2.8 Results derived from the request, “Have you decided on a virtualization management solution?”



III. Cloud Computing Trends for 2010

The following section deals with trends in the use and management of cloud computing by enterprise users in 2010.

Figure 3.1 Results derived from the request, "What are your cloud computing and virtualization plans for 2010? (Hosted indicates 3rd party infrastructure hosting)

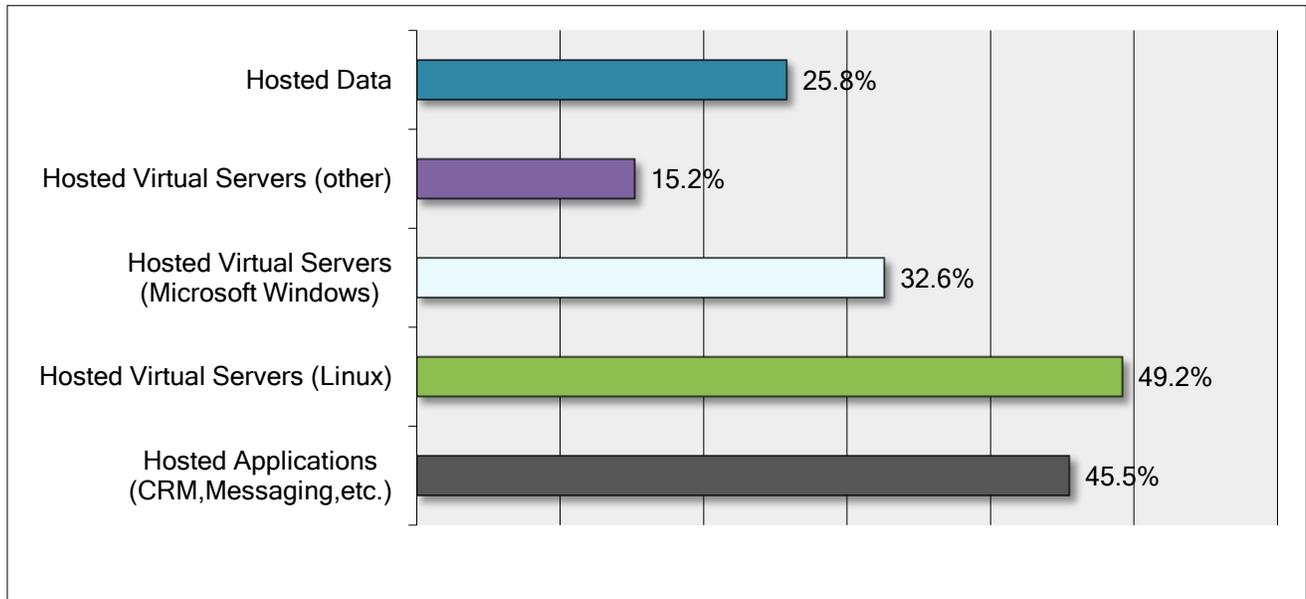


Figure 3.2 Results derived from the request, "What are your cloud computing and virtualization plans for 2010?"

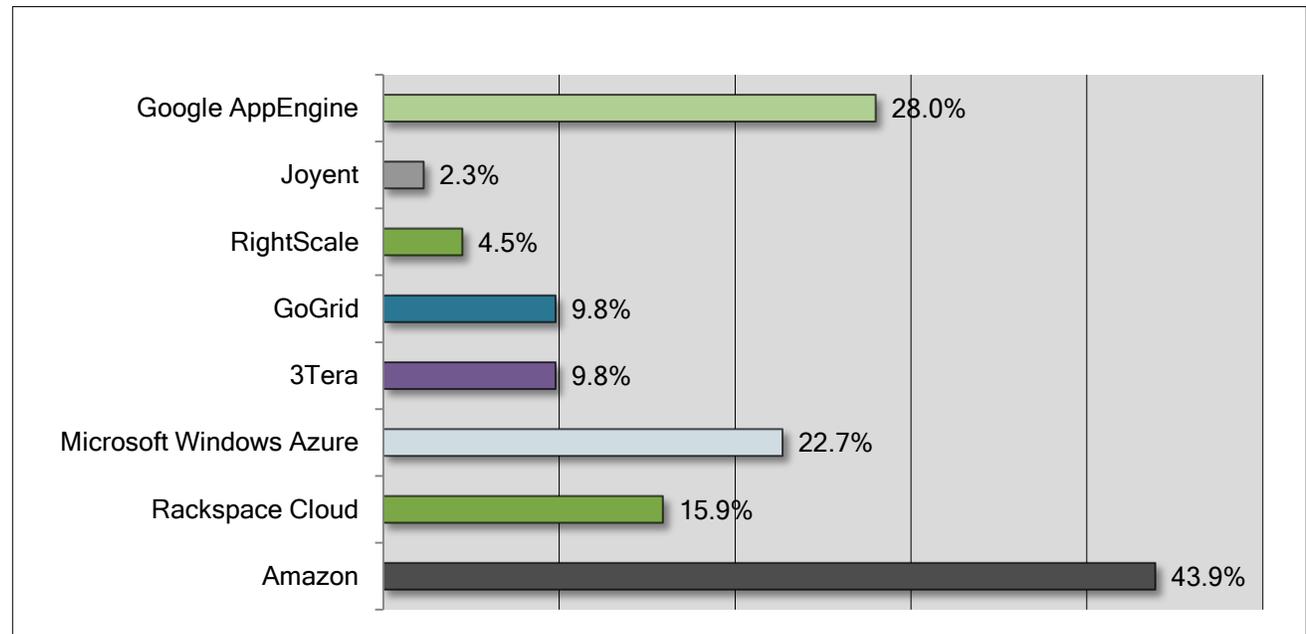


Figure 3.3 Results derived from the request, “What tools are you using to manage your cloud infrastructure?”

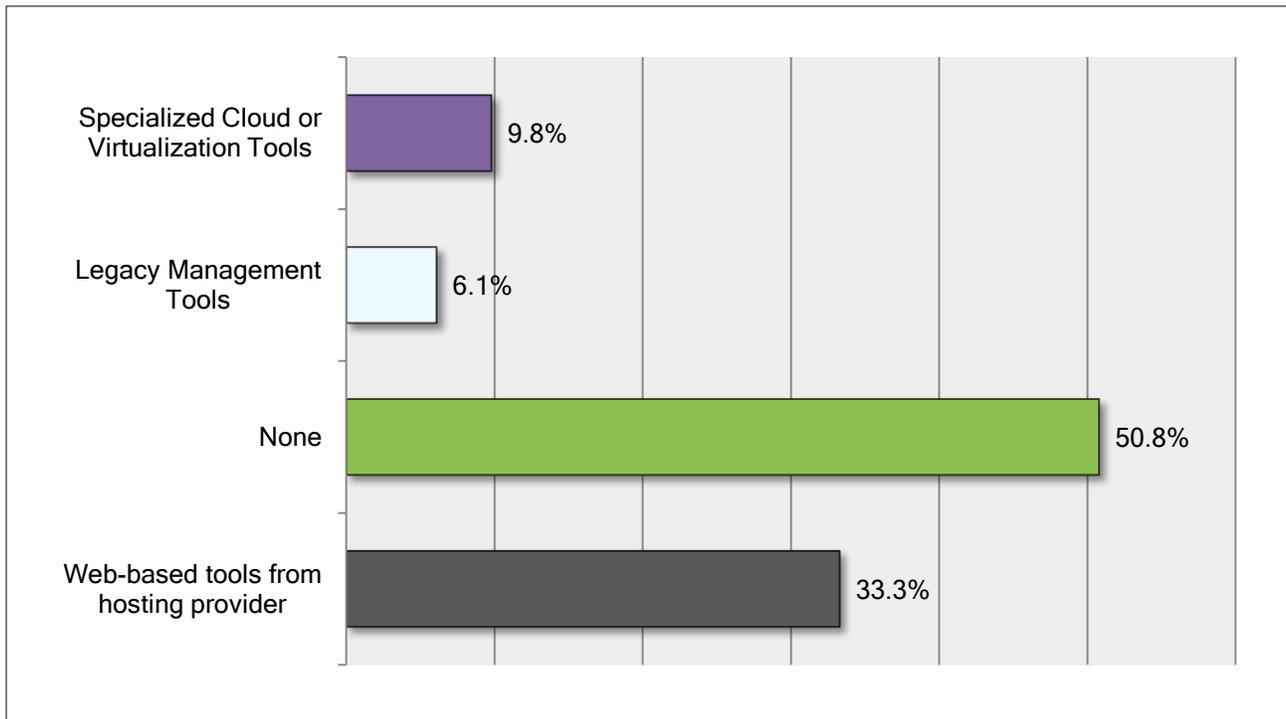


Figure 3.4 Results derived from the request, “What is your biggest concern when it comes to cloud computing?”

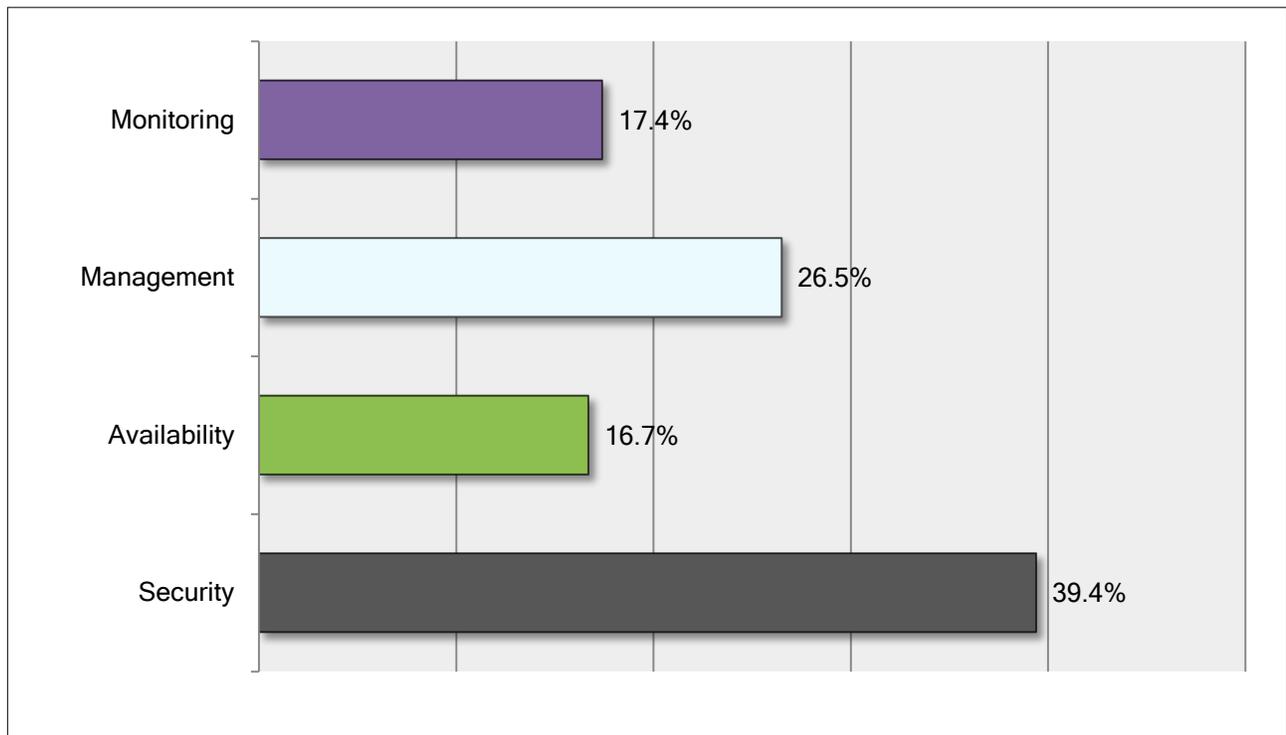


Figure 3.5 Results derived from the request, “Do you automate the start-up and shut-down of cloud instances?”

