



VIRTUAL DATA CENTERS

# Market Dynamics And Security Issues

*Centrify Market Survey and Analysis*

*September 2009*

**Frank Cabri**

VP Marketing  
frank.cabri@centrify.com

# Key Findings: Virtualization Market Dynamics

---

## Virtualization is widespread

- With 91% of all surveyed organizations naming a virtual host or hypervisor in use.
- VMware ESX is most popular, installed at 60% of companies.
- Microsoft Hypervisor is used by more than 1 in 4 respondents.

## Deployments are heterogeneous

- Even at VMware-customer organizations, other tools are in place: on average, two different hosts/hypervisors are in use.
- At sites that use VMware, about half (52%) cited they may evaluate other solutions in the future.
- Of all respondents, just over half are planning to increase their VMware usage (53%).

## Adoption is expected to increase

- 26% of the respondents today have virtualized at least half of their server systems. In less than 18 months, that number will double so that by the end of 2010, 51% expect to have the majority of their systems virtualized.
- By 2010, 98% of organizations will have some virtual servers in use, compared to 91% penetration today.
- No single factor emerges as a main concern to deployment, but organizations cite lack of budgets, operations and process issues, security, and compliance issues in roughly equal proportions, ranging from 40 to 48%.

# Key Findings: Virtualization Security

---

## Security efforts may be lagging

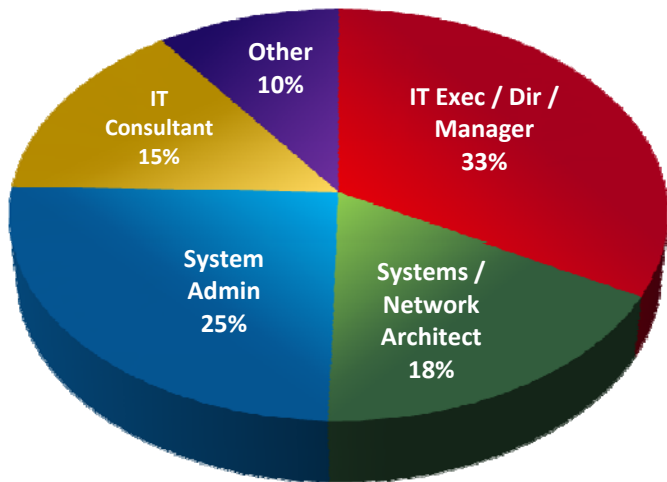
- Concerns about security were cited as top issues and potential impediments to deployment.
- About six in ten organizations can immediately turn off employee user accounts on servers - leaving 40% at risk.
- Similarly, 60% of organizations have a policy of not sharing root password access, suggesting that the remainder have more lax governance.
- In general, security is not a barrier to deploying virtualization: one in four organizations have no security concerns at all (25%), while another 55% have some concerns but are proceeding with deployment plans, albeit cautiously.

## Compliance challenges remain

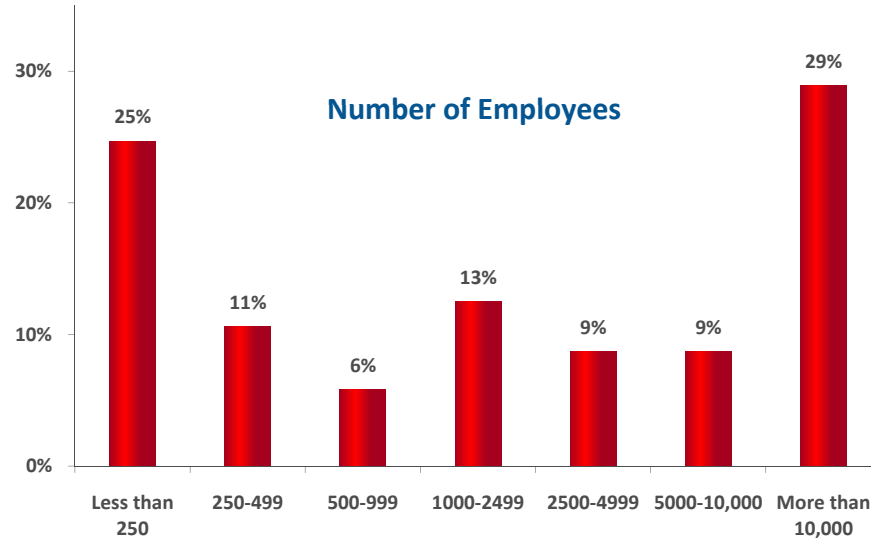
- Whether using VMware or not, organizations appear to have gaps in their compliance efforts: only one in three report they have "never failed a compliance audit."
- Not surprisingly, auditing and logging of administrative activities were the #1 concern among all respondents.
- In fact, fewer than half the organizations are very satisfied with how their logging and auditing reports meet their compliance requirements (42%).

# Respondent Demographics

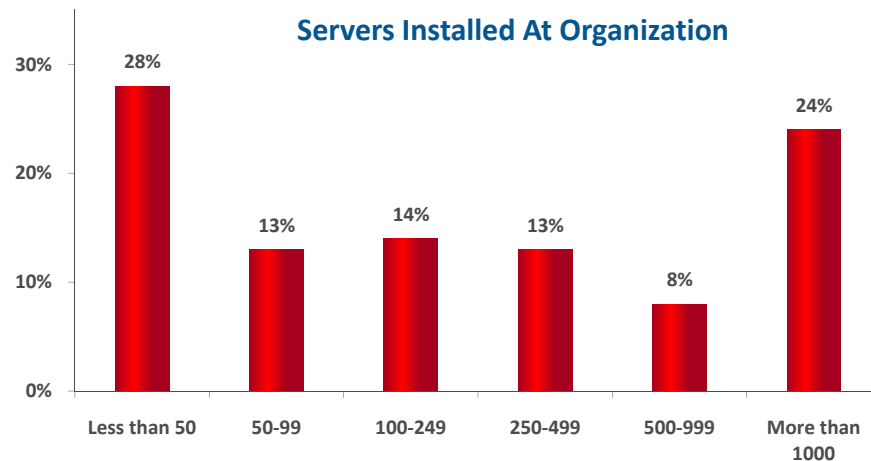
**Titles of Respondents**



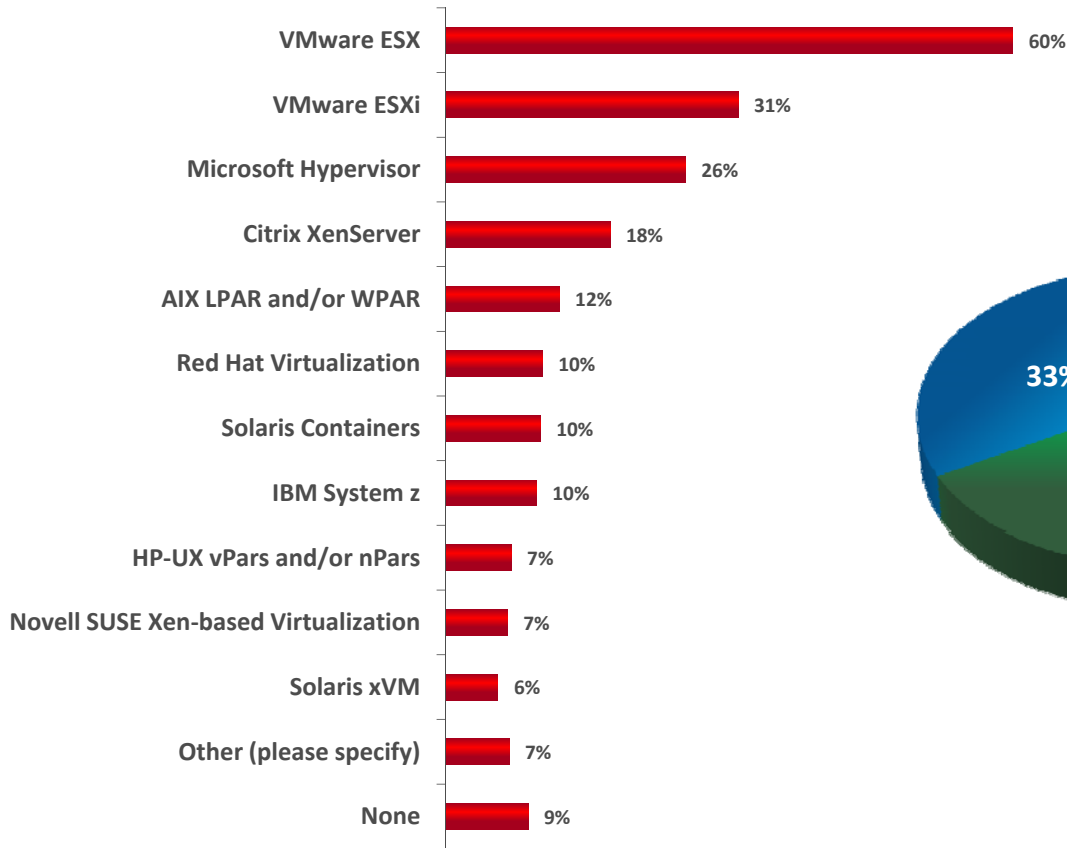
**Number of Employees**



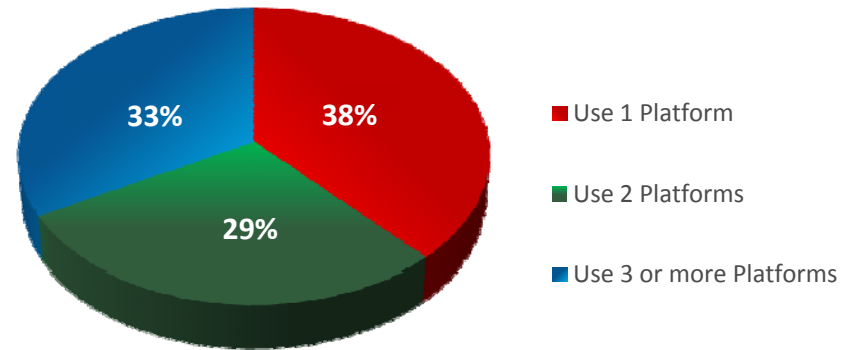
**Servers Installed At Organization**



# Today: Virtualization Hosts & Hypervisors in Use



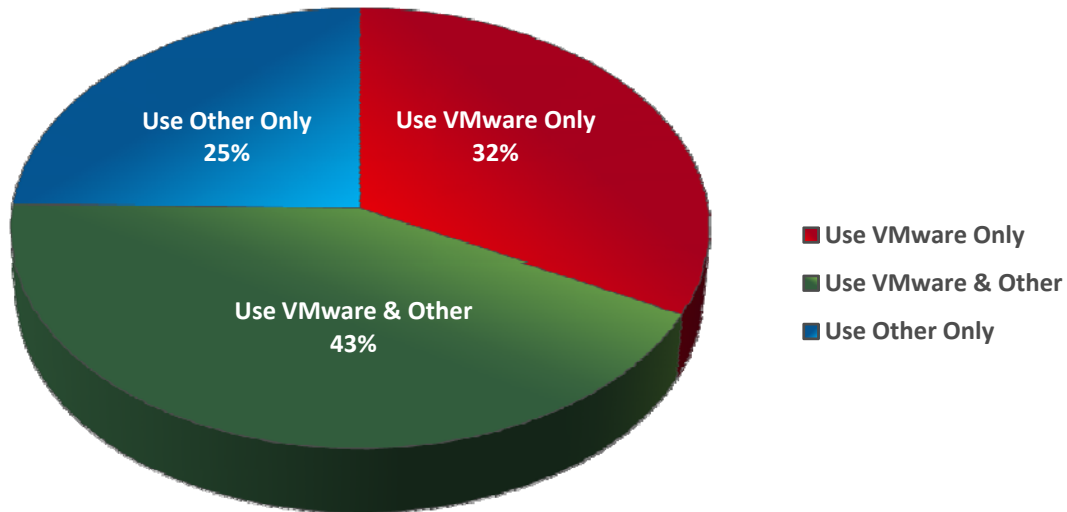
Multi-Vendor Hypervisor Distribution



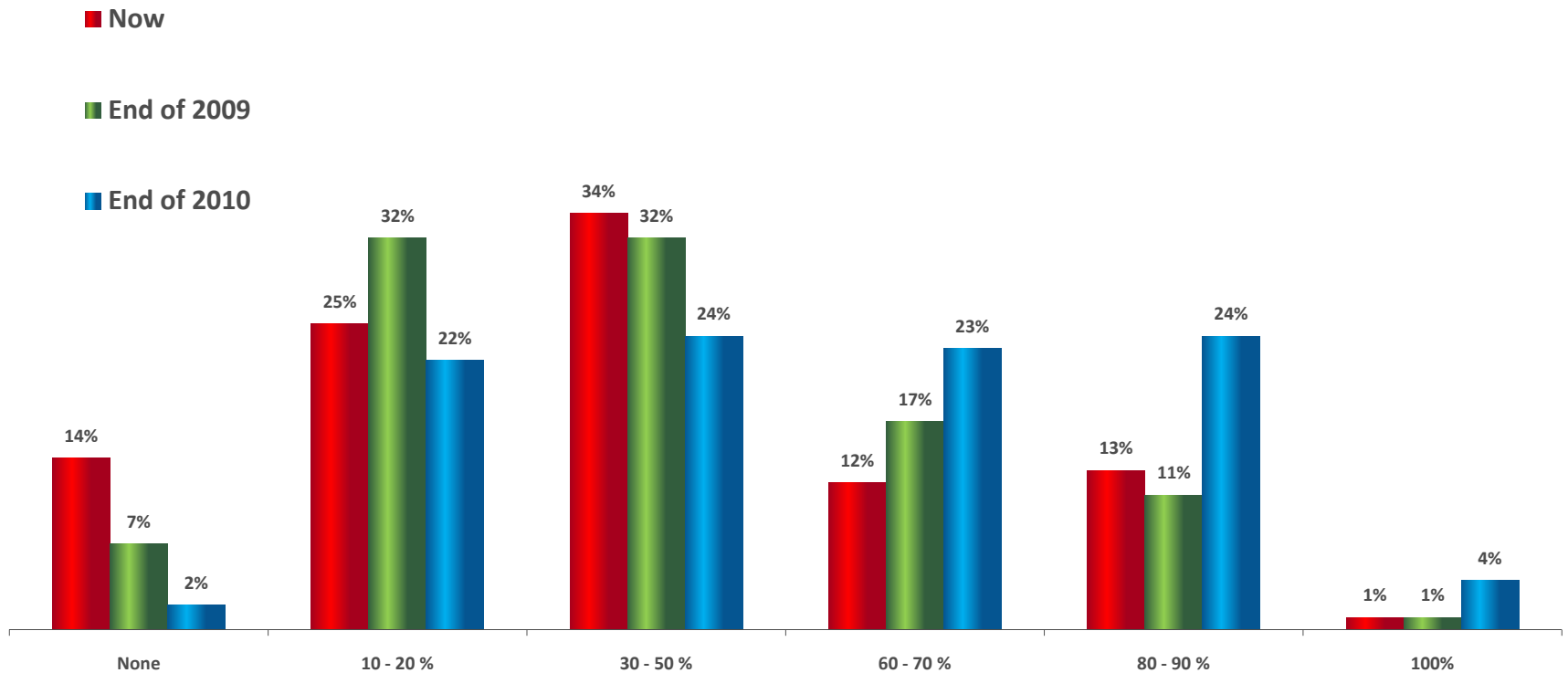
Base: Respondents to question

VMware ESX or ESXi are the most widely used hosts and use of ESX is approximately 2:1 vs. ESXi. Microsoft is used by 1 in 4 of the organizations.

# Which Virtualization Technologies are Being Used



# Future: Planned Use of Virtual Machines



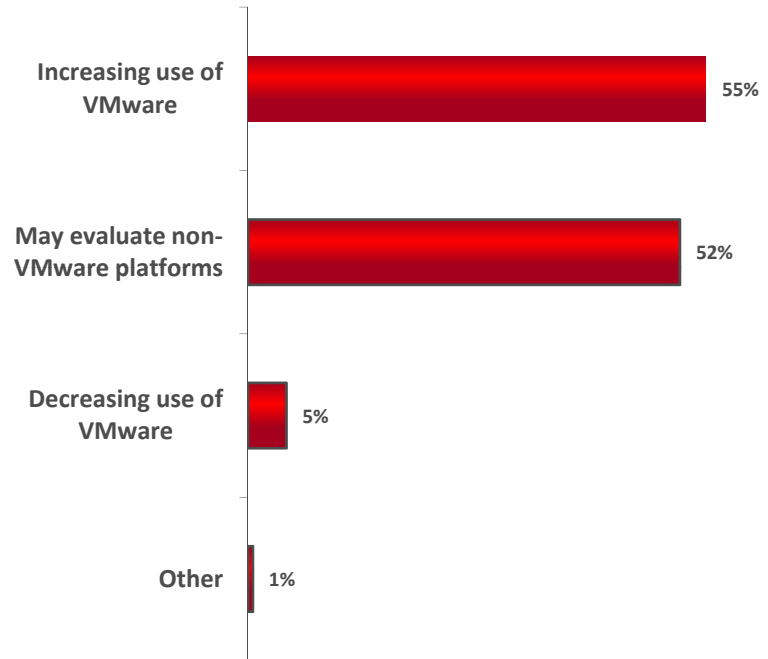
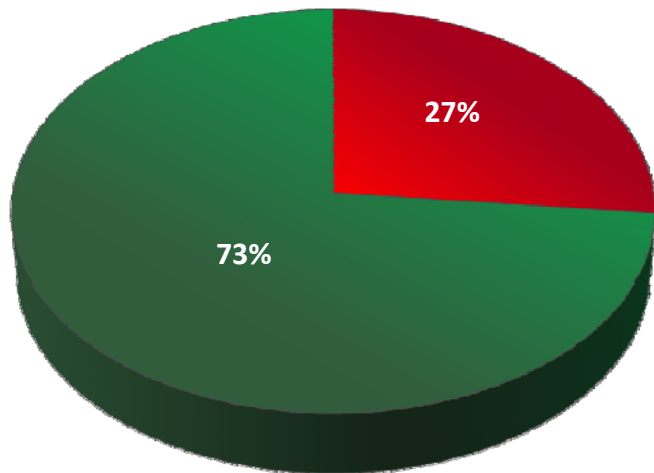
Base: Respondents to question

Nearly 26% of the respondents today have virtualized at least half of their systems. In less than 18 months, that number will double, so that by the end of 2010, 51% expect to have the majority of their systems virtualized.

# VMware Customers: Current and Planned Usage

■ Use VMware for non-critical systems

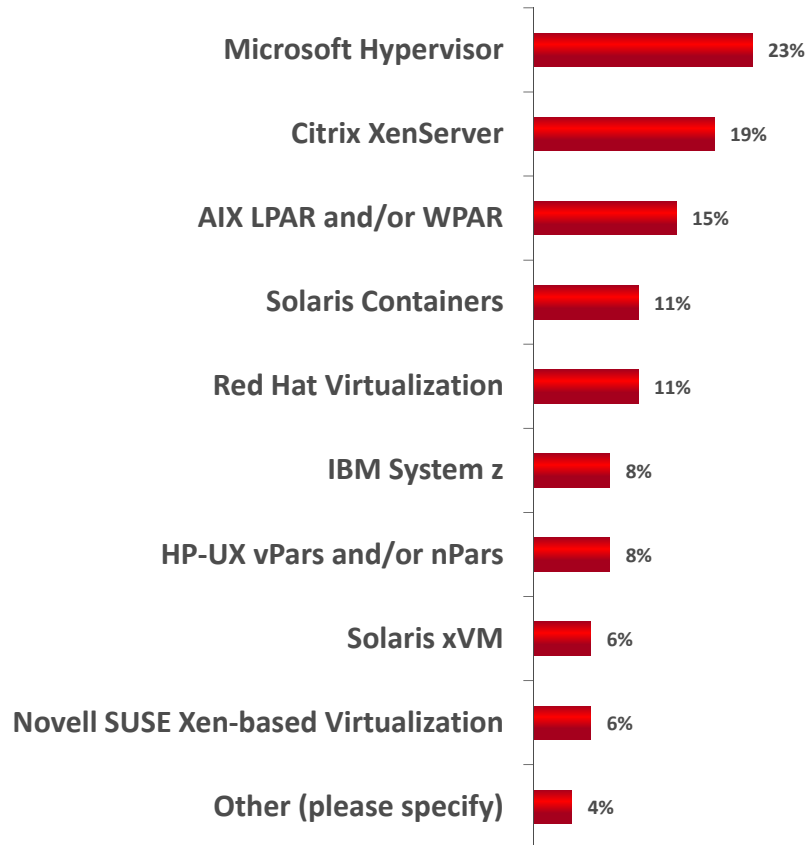
■ Use for both critical/non-critical systems



Base: Use ESX or ESXi

One in four organizations use VMware primarily on non-critical systems. About half of organizations are planning to increase VMware usage; an equal proportion are considering alternatives.

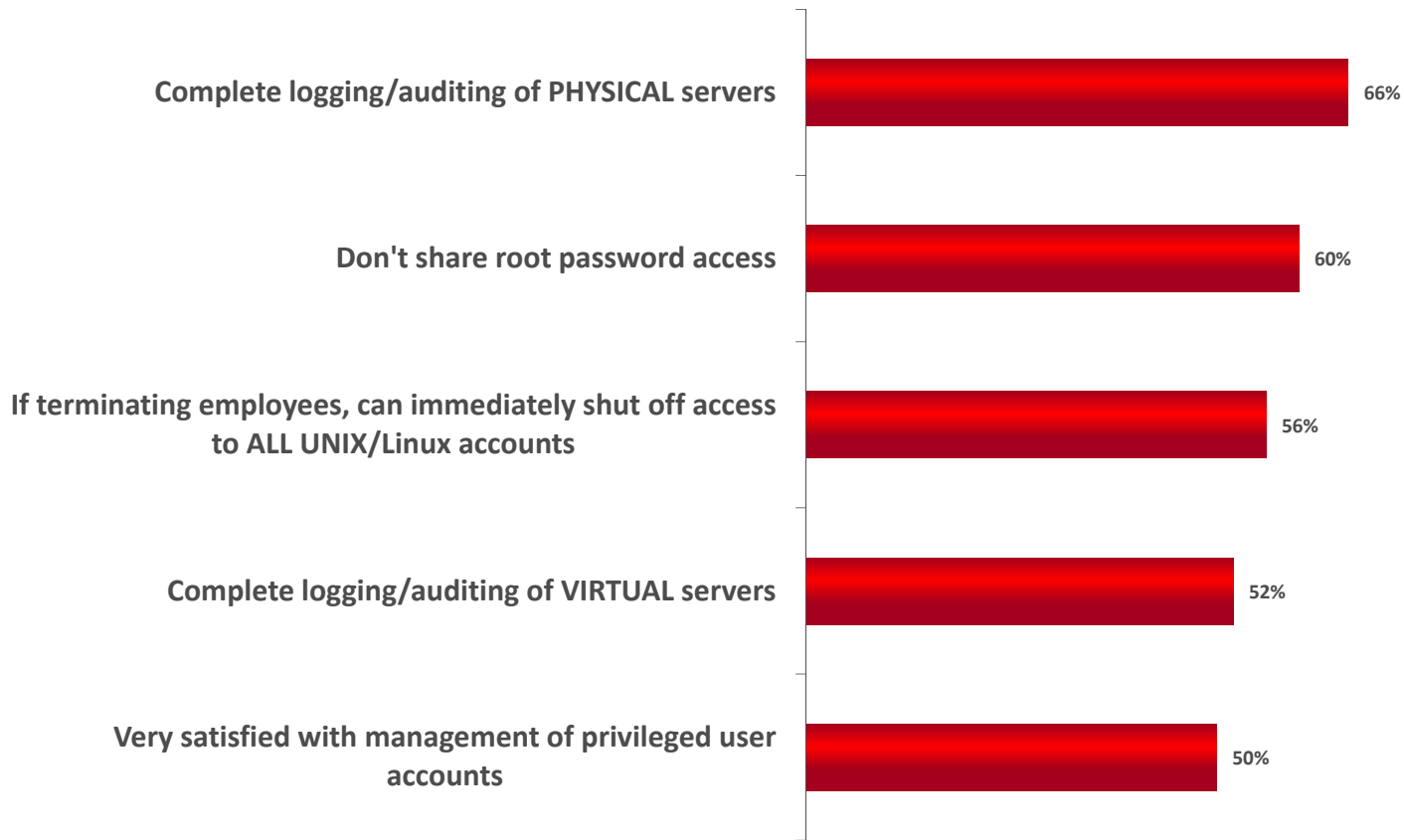
# VMware Customers Use Other Hosts/Hypervisors



Base: Use ESX or ESXi

At organizations that use either VMware - ESX or ESXi - other hosts/hypervisors are also used: on average, 1 additional virtualization host is deployed.

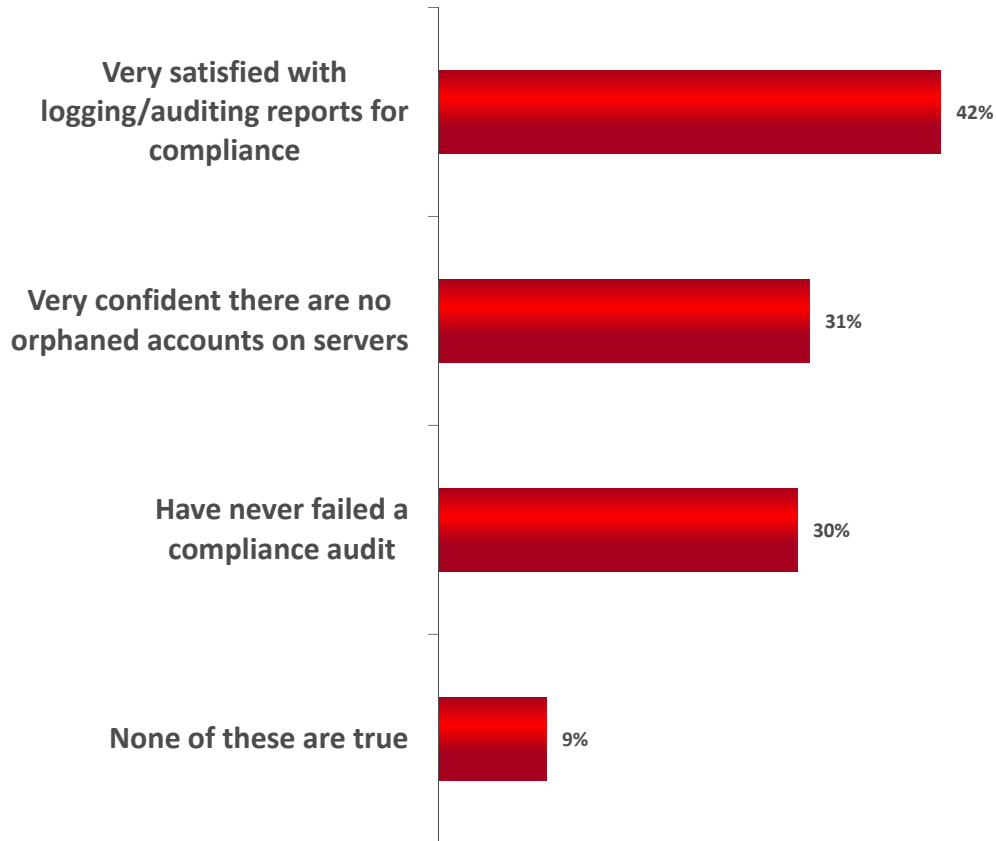
# Current State of Server Management



*Base: Respondents to question*

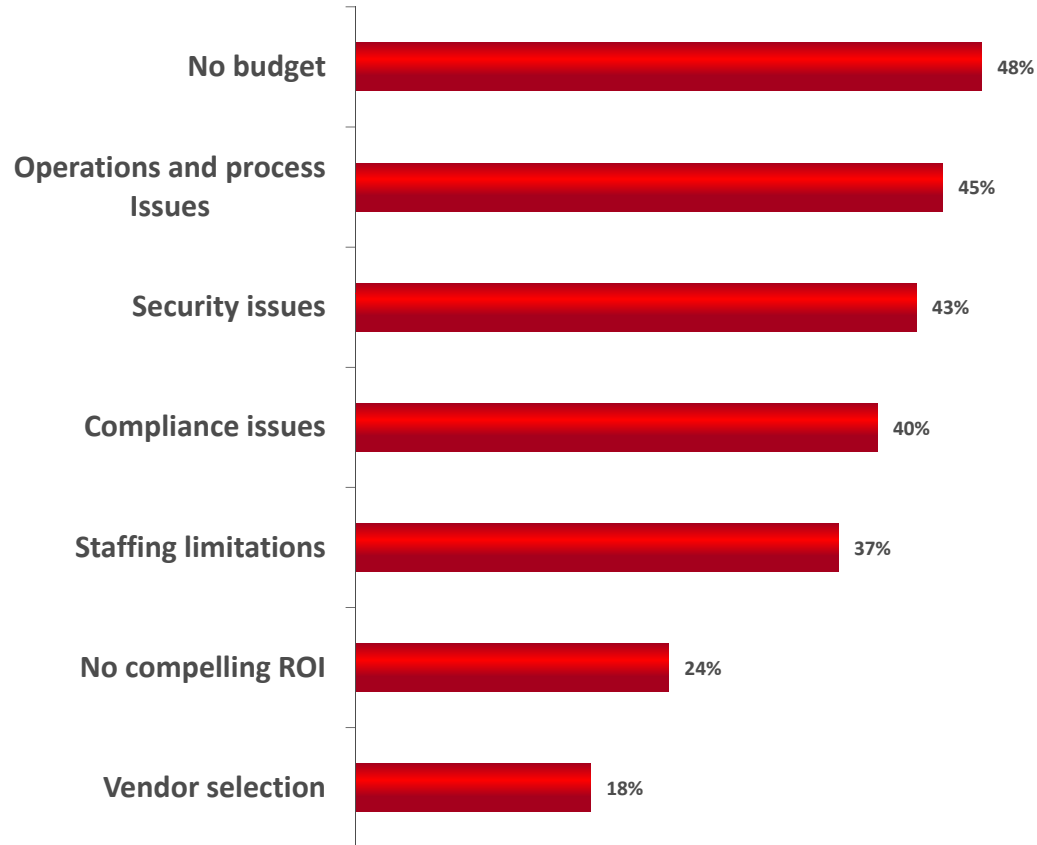
▶ For the following statements, which of these apply or are TRUE for your organization.  
(Please check all that apply.)

# Current State of Server Management (Cont.)



*Base: Respondents to question*

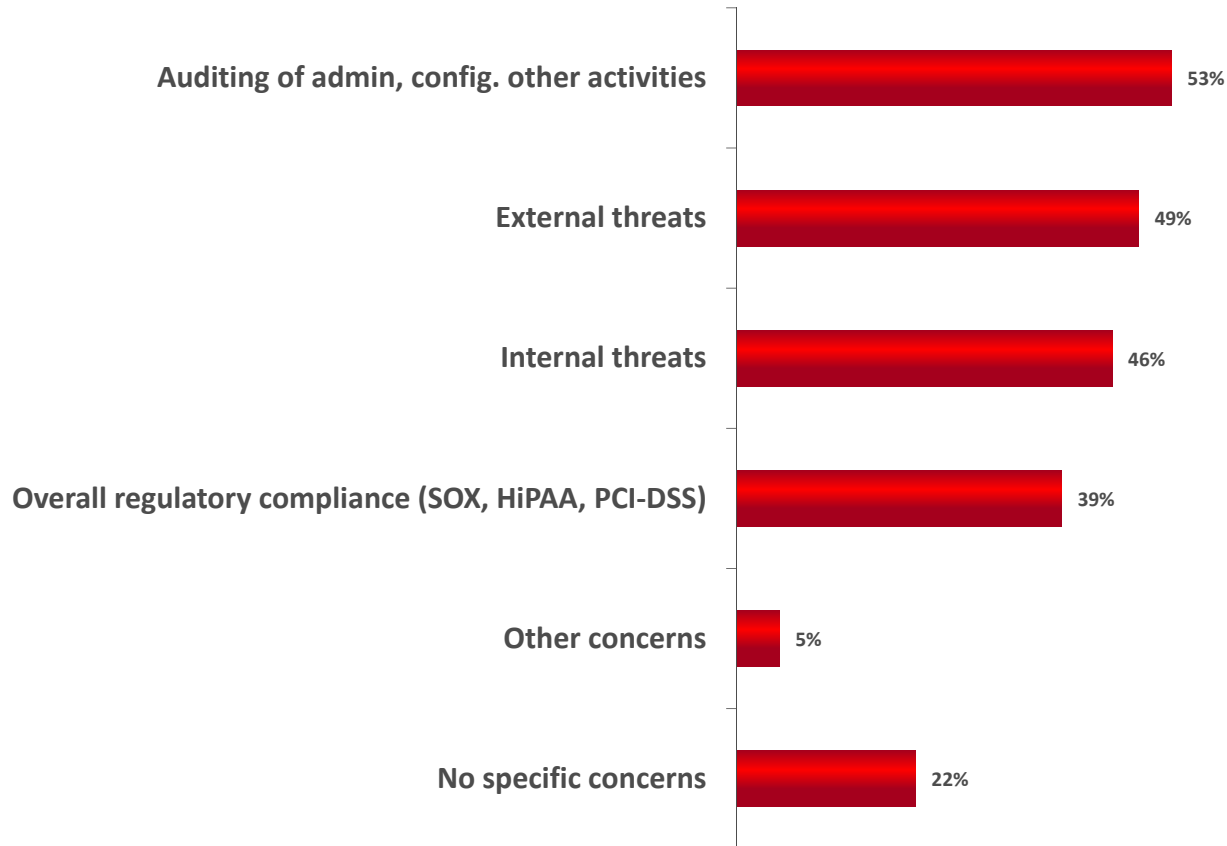
# Impediments To Virtualization Deployments



*Base: Respondents to question*

Organizational and administrative issues are the main barriers to adoption of virtualization - with budgets being the most common.

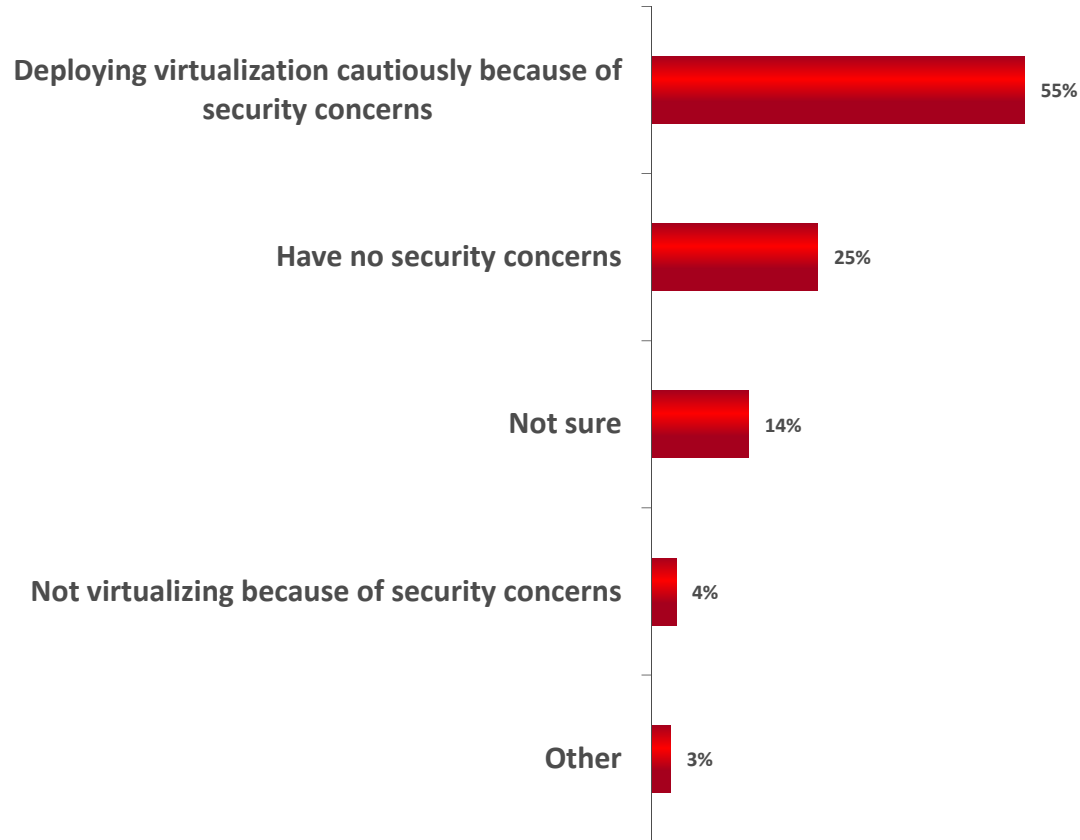
# IT Concerns in Deploying Virtualization Solutions



Base: Respondents to question

After configuration concerns, security threats and compliance were the major apprehensions of the respondents.

# Impact of Security Concerns on Deployments



*Base: Respondents to question*

Security concerns are leading some organizations to move cautiously with virtualization - but in general, security issues are not preventing adoption.

# Survey Methodology

---

- This survey was conducted in August 2009. Over 30,000 unique email addresses were sent a request to participate in an online survey opening on August 12. A reminder email was sent one week later, on August 17.
- The target contacts were obtained through rental of 3rd party list sources from TechTarget (primarily through their web properties related to virtualization) and other industry publications. All tolled, 531 respondents answered one or more survey questions. Centrify did not send the survey to their existing customer base.
- NewDiligence, an independent market research vendor, assisted in survey development and sent the email invitations. At no time was Centrify identified as the sponsor of the research. Survey respondents could also elect to receive a summary of the findings.
- The margin of error for the survey is plus or minus 4.4% at the 95% confidence interval.