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2014 State of Readiness for Windows Server 2003 End of Support Survey Results

Windows Server 2003 will reach End of Support on July 14, 2015. This has prompted IT professionals to evaluate their options which range from accepting the risks of running an unsupported OS to upgrading all of their servers to moving to the Cloud. This is the second annual study AppZero conducted to hear from the marketplace how IT pros are tackling the issues surrounding the EOS.

Executive Summary

Microsoft has announced that Windows Server 2003 will hit End of Support (EOS) on July 14, 2015. This news has prompted IT pros, sys-admins, developers and architects to evaluate their options which range from accepting the risks of running on an unsupported operating system to upgrading all of their servers to moving to the Cloud, with lots of other choices in between.

Over the course of 2014, AppZero undertook the second annual "State of Readiness for Windows Server 2003 End of Support" Survey in an effort to assess how serious this event is to enterprise IT, determine what preparations are underway and what progress has been made in the year since the first survey findings were published. Side by side comparisons will show what has changed, and just as important, what hasn't. There are some surprising results.

AppZero surveyed close to 500 Fortune 1000 IT professionals at a series of webinars and industry events including Cloud Expo, Microsoft WPC, VMWorld and Amazon re: Invent to assess their readiness for the impending end of support of Windows Server 2003.

Some key take-always from the survey are:

- Almost half (47%) are not aware of the EOS date or have no plans (yet) for remediation

- Only 21% of respondents have a remediation plan in place

- Security compliance and vulnerability management remains the largest concern (>50%)

- Fully one quarter (25%) of respondents still have more than 500+ WS2003 machines

With only 6 months until support ends, the majority of respondents have significant numbers of machines still running WS2003. Security compliance and vulnerability management remains the major concern. And almost half of the organizations still are not aware of or prepared to deal with the impending challenge.

Introduction

End of Support for Windows Server 2003 arrives in July 2015. This means that there will be no more patches or security updates, putting applications and business at risk. New threats won't be addressed and WS2003 systems will become a security risk and compliance nightmare. Especially for those in heavily regulated industries -- pharmaceuticals, banking/finance and insurance, as well as any company that processes credit card transactions -- this will cause a heavy compliance burden and could put you at risk of accruing penalties and fines.

Industry experts' estimates vary widely, ranging between 10[1] and 20[2] million WS2003 machines still running (the most commonly cited estimate at the time of publication is 13 million machines). For the majority of Windows Server 2003 instances, the applications have been running just fine. For years in fact, they have been running fine and moving them seems to be one of those jobs that no one wants to do. So, the first question often asked is "can I do nothing" and just continue to run my business on Windows Sever 2003?

There are many reasons why the answer to that question is an emphatic "No." Even though the operating system was released 12 years ago (in April 2003), there are still quite a number of patches that are regularly released. In 2013, Microsoft released 37 critical patches; 26 patches in 2014. Without those patches, WS2003 servers will become vulnerable and will be out of compliance. And consider this: different versions of Windows are built on top of a shared kernel that evolves very slowly. With the end of support of Windows XP, and soon Windows 2003, there is reason to believe that the number of critical vulnerabilities will increase.

When patches for Windows 7, Windows 8, WS 2008 or WS 2012 are released, hackers can see where the fixes are made. These patches provide a roadmap to where exploits likely exist in the Windows XP and Windows Server 2003 editions, and hackers know that those older systems are not getting those critical patches because support for them has ended. This is why many believe that there will be a significant increase in the risks of continuing to run on Windows 2003 after the summer of 2015.

According to a report by industry analyst IDC[3], "Customers that go beyond the termination of extended support place themselves at potential security risks and potentially in a regulatory noncompliance situation. Even if regulatory compliance is not a concern, the security improvements that Windows Server 2012 R2 offers are worth adopting if just to help defend against industrial espionage."

The choice you make in remediating this threat can affect your datacenter strategy for the foreseeable future, so it's worth reviewing all of the possible upgrade options. Traditional methods of modernizing applications --

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[1] http://www.crn.com/news/data-center/300073402/hp-microsoft-roll-out-partner-program-to-capture-windows-server-2003-end-of-life-upgrade-opportunity.htm

[2] http://www.fiercecio.com/story/more-20-million-still-using-windows-server-2003-end-support-draws-near/2014-12-10

[3]
http://www.derivetech.com/sites/default/files/Windows_Server_2003_Why_You_Should_Get_Current_IDC_Whitepaper.pdf

reinstalling, upgrading the machine or rebuilding -- are orders of magnitude more complex, expensive and time consuming than the newer approach of migrating applications onto a new OS. **P2V and V2V tools for migrating machines add no value when it comes to modernizing the OS infrastructure.** It may also be worth considering moving some of your applications to the Cloud as part of your upgrade process.

The following results from the 2014 AppZero State of Readiness for Windows Server 2003 End of Support Survey provide insight into the pain points shared among the respondents and reveal clarity into the upgrade path the majority intends to follow. At the conclusion of the findings, we will share recommendations that you can follow to protect yourself from the risk of running an unsupported operating system.

Methodology

AppZero pioneered the Virtual Application Appliance (VAA), in which an application is encapsulated into a container with all of its dependencies - - but without any operating system (OS) component. The result is applications that are portable. Given our expertise in the field and singular ability to "Up-Level" Windows Server applications to a new version of an Operating System, we conducted this study for the second time throughout 2014 to hear first-hand views from the marketplace on how IT pros are tackling the issues surrounding EOS of WS2003 and to see what has changed from the 2013 survey results.

The survey was structured as a multiple-choice questionnaire aimed at investigating the challenges and level of readiness among responding companies considering the WS2003 EOS issues. Questions were focused on understanding the current situation and highlighting the biggest area of concern for the respondents.

Close to 500 IT pros responded to the survey and related polls conducted by AppZero throughout 2014. More than 225 Fortune 1,000 companies participated in the survey. And an additional 240 participated in a subset of the survey (poll questions) conducted during several AppZero webinars this year. Their results have been tabulated and compiled into this report

Report Highlights

- 65% of respondents will not finish their migrations in time for EOS.

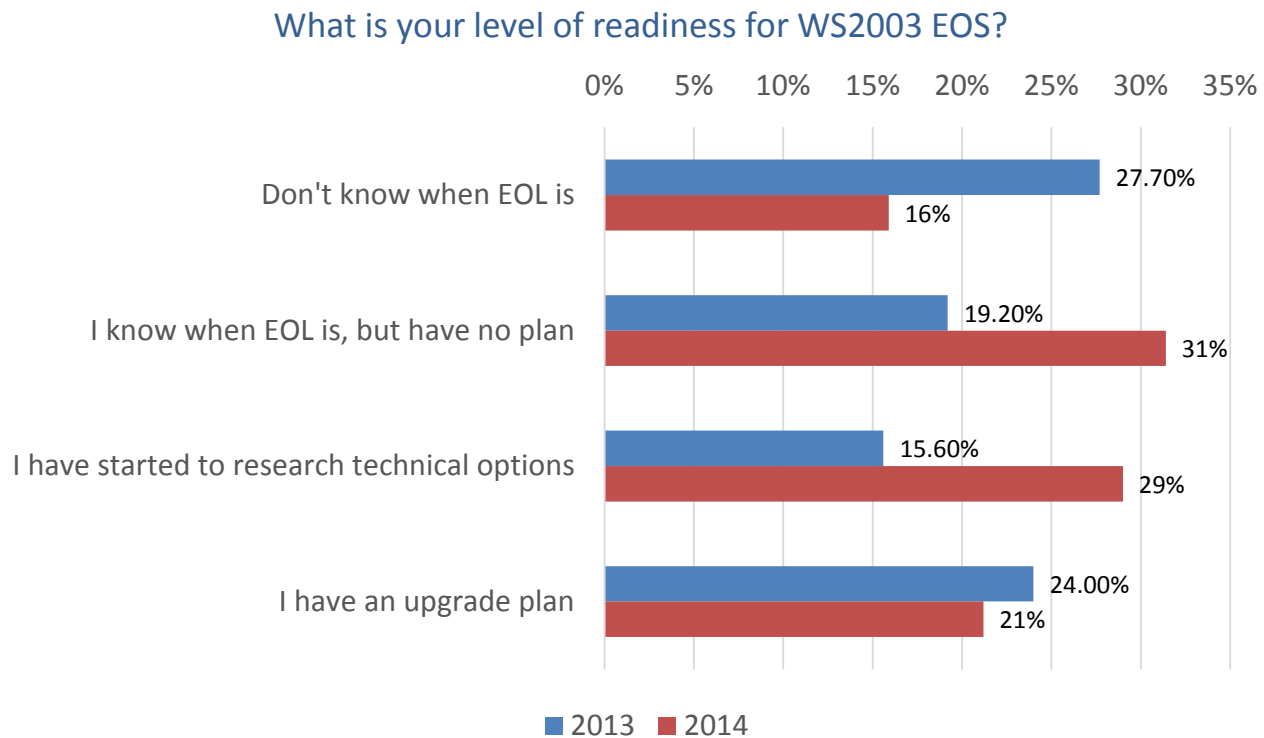### When will you be finished migrating all of your WS 2003 applications?

- ■ End of 2014
- ■ In time for EOS on 7/14/15
- ■ End of 2015
- ■ 2016
- ■ Don't Know
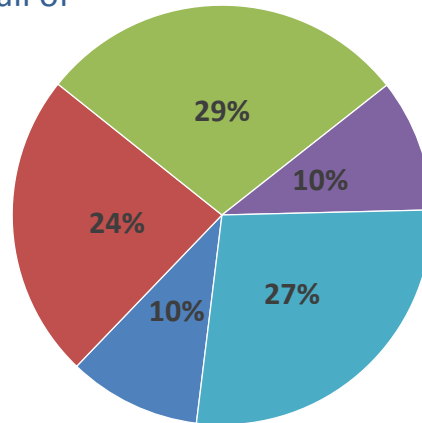
- 19% of respondents know when EOS is, but have no plan for dealing with the event.

- Only one quarter (24%) of respondents have an upgrade plan in place for remediating the risk of WS2003 EOS.

- The applications causing the most concern are Financial applications and then ERP applications. Additionally, in 2014, 16% of respondents cited homegrown applications as their biggest concern.

- One third (36%) will be moving their applications to the cloud as part of their upgrade process. An additional 40% are "unsure" which is likely to translate into more than half of respondents ultimately choosing to move to the cloud.

What is your level of readiness for WS2003 EOS?

The survey results showed a big change in responses when asking about the level of readiness for Windows Server 2003 EOS. In 2013, 28% didn't even know when the EOS date was, down to only 16% in 2014. Given that the EOS date is in July, this number still seems a bit high.

What is your level of readiness for WS2003 EOS?

Category	2013	2014
Don't know when EOL is	27.70%	16%
I know when EOL is, but have no plan	19.20%	31%
I have started to research technical options	15.60%	29%
I have an upgrade plan	24.00%	21%

■ 2013 ■ 2014

Now that the end of support for WS2003 is six months away, the number of respondents researching their upgrade options has doubled from 15% to 29%. More than half will move to the cloud (see page 11) although, *which* cloud comes out the winner remains to be seen. One factor in deciding the "cloud of choice" will be how easy it is for enterprises to onboard their production applications to that cloud.

In September 2014, AppZero conducted a webinar with Microsoft titled "Planning your Migrations off WS2003"[4] during which 240 participants were asked about their level of readiness[5]. Given the title, it is fair to extrapolate that this audience is aware of the EOS date. Despite that level of awareness, while 53% have started to research technical options, only 25% have an upgrade plan, barely better than the broader IT audience in the full survey.

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[4] https://www.appzero.com/video/webinar/planning-migrations

[5] http://blog.appzero.com/ws2003-market-checkpoint

Which risks of running an unsupported OS are of primary concern to your organization?

Of all the possible risks facing the enterprise when Windows Server 2003 hits End of Support (EOS), "security compliance and vulnerability management" was by far of most concern to respondents, with 55% citing it as the most worrisome risk – essentially the same as last year.

It was somewhat surprising, given regulations such as Sarbanes Oxley, Dodd-Frank, PCI and HIPAA which require companies to run on supported platforms that "regulatory compliance requirements" came in at a distant 9%. More respondents (31%) were concerned with "increased support costs and downtime." For many companies downtime means out of pocket money and reduced customer satisfaction. These two metrics are likely ones that IT organizations have service level agreements around and are measured against.

Which risks of running an unsupported OS are of primary concern to your organization?
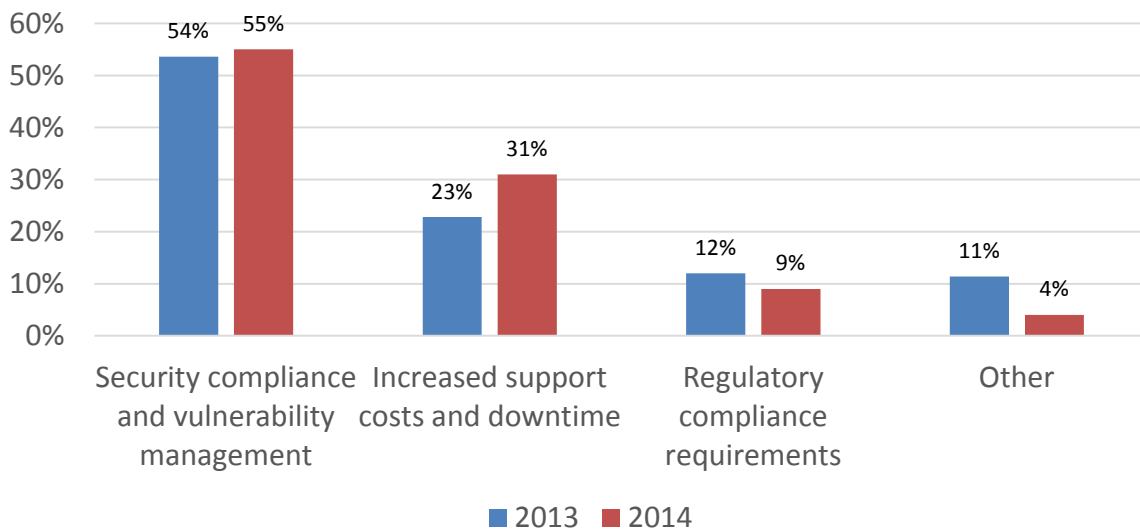
The only way to get support after the EOS deadline will be to first, have an active premium support contract in place with Microsoft and second, arrange a Custom Support Agreement (CSA) which imposes additional, significant expense. A Gartner report published in June[6] outlines processes for managing risk beyond the support deadline, and estimates that organizations that plan to continue to run [Windows Server] 2003 past the deadline should budget $1,500 per year per server. Fees for Microsoft's CSA compound, doubling or tripling annually and are available for three years only to organizations with a migration plan in place.

An organization with 2,000 machines having to pay $1,500/server would have to pay $3M for a first year CSA and could see more than $20M in fees ($6M year 2, $12M year 3) for the three-year period after EOS.

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[6] https://www.gartner.com/doc/2772017/make-migration-windows-server- (registration /fee required)

Does your corporate compliance policy require you to run applications on a supported operating system?

This question was added to the survey in 2014 in response to the high number of inquiries to AppZero on the issue. Last year's survey had shown that the early movers tended to be in regulated industries -- pharmaceuticals, banking/finance and insurance, as well as any company that processes credit card transactions – and the data from the survey confirmed that more than half (58%) of respondents were required to upgrade to a supported operation system in order to remain compliant.
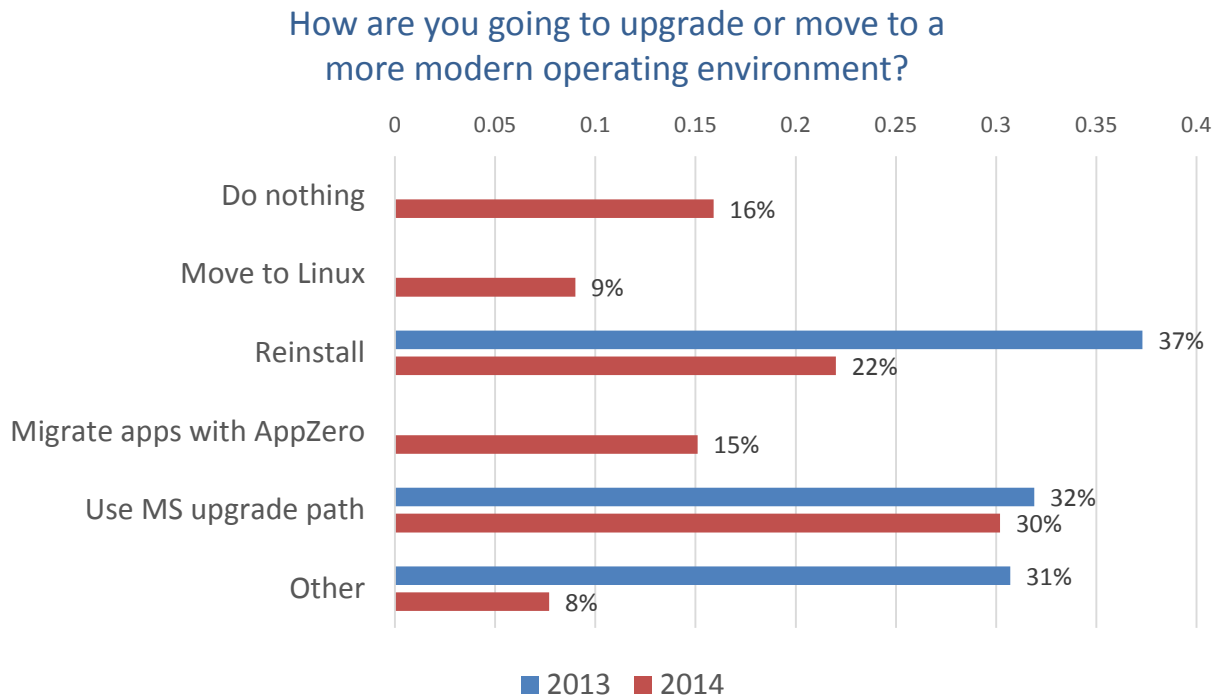
Does your corporate compliance policy require you to run applications on a supported operating system?

■ Yes ■ No ■ Not Sure ■ Other/ No Response
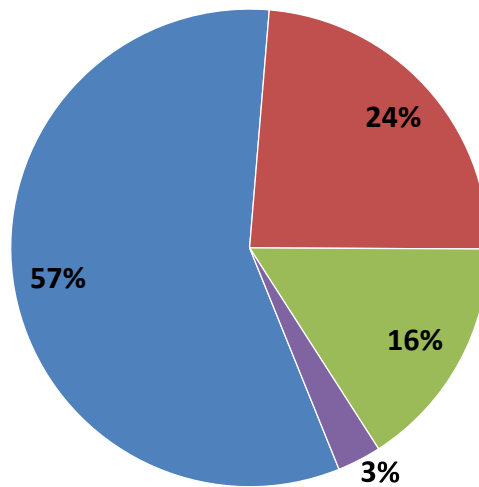
How are you going to upgrade or move to a more modern operating environment?

After spending the past year talking with IT pros about this issue, we added some additional options to the question on this year's survey (you can see the changes reflected in the graph)

How are you going to upgrade or move to a more modern operating environment?

|	2013	2014
Do nothing		16%
Move to Linux		9%
Reinstall	37%	22%
Migrate apps with AppZero		15%
Use MS upgrade path	32%	30%
Other	31%	8%

Reinstall and the Microsoft upgrade path are largely equivalent from the application point of view. The MS upgrade path recommends uninstalling critical applications, upgrading the machines' operating system and then reinstalling the applications. Many of these applications have been running for close to 10 years. Finding install media and application code that matches what is installed and running today will be a significant challenge for many organizations – perhaps this is one of the reasons why 15% of respondents are using AppZero to meet this challenge.

In cases where media is available, reinstalling, reconfiguring, dumping and reloading data are a set of tasks measured in *weeks* per application and often don't result in applications configured correctly. Manual remediation is very time consuming and expensive.

Respondents planning to use the upgrade path laid out by Microsoft was largely unchanged – 32% in 2013 and 30% this year.

## Do you have the internal resources to implement this project?

When asked in 2013 if they had internal resources to implement the EOS remediation project, 73% of respondents said they did as compared with only 17% who did not. The 2014 results differ moderately with 64% of respondents saying they had the proper resources (down 9%). It is likely that as companies become educated on the problem, the realization is that the staffing and time required to address the EOS challenge is beyond the available internal resources. Of those who did not have adequate resources in 2014, almost all planned to outsource the work to an IT services provider.

Do you have the internal resources to implement this project?
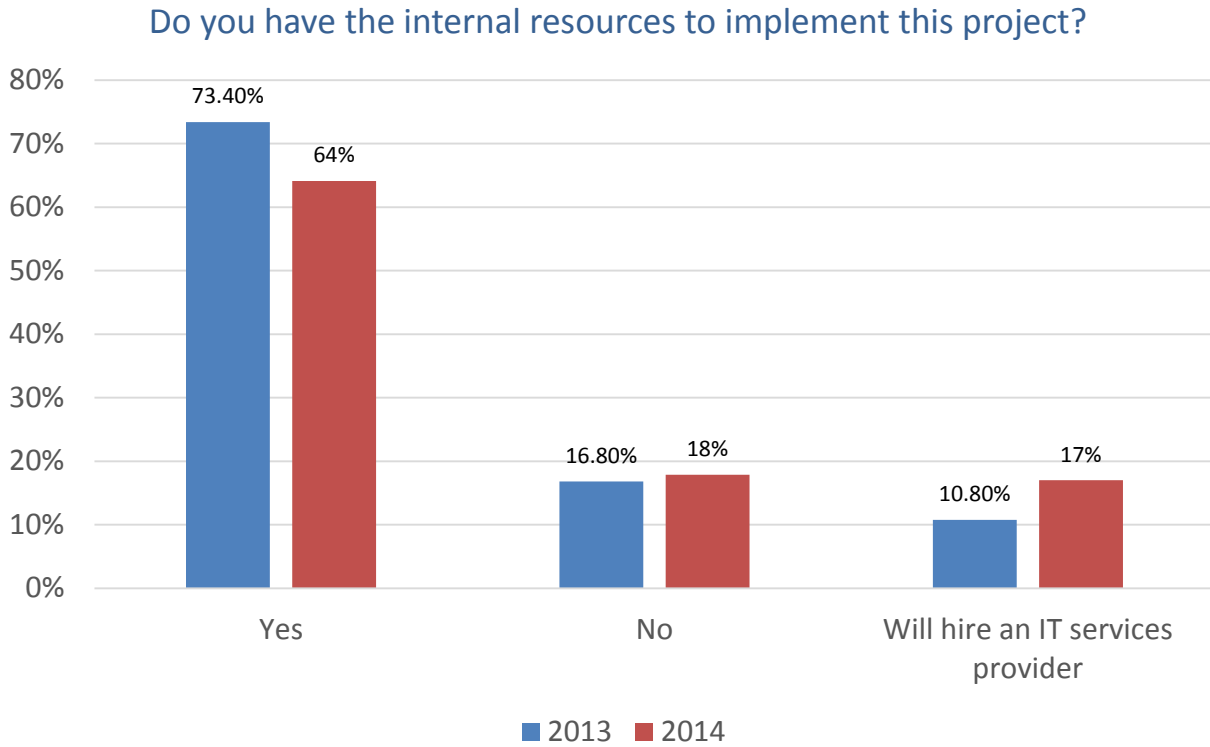
As part of your upgrade, will you be moving applications to the cloud?

When asked if they would move to the cloud as part of the upgrade process, 34% of respondents had not yet decided, down from 40% in 2013. Of the remaining respondents 31% said they would move all or some of their applications to the cloud and 34% said they would not, up from 22% last year.

One could interpret the "unsure" as many organizations still getting their hands around the EOS challenge. If the "unsure" respondents follow a course of action in the same percentages as the those who have decided, than more than half of all respondents will ultimately chose to move some applications to the cloud. According to Wikibon.org, 84% of CIOs cut application costs by moving to the cloud.

As part of your upgrade, will you be moving
applications to the cloud?
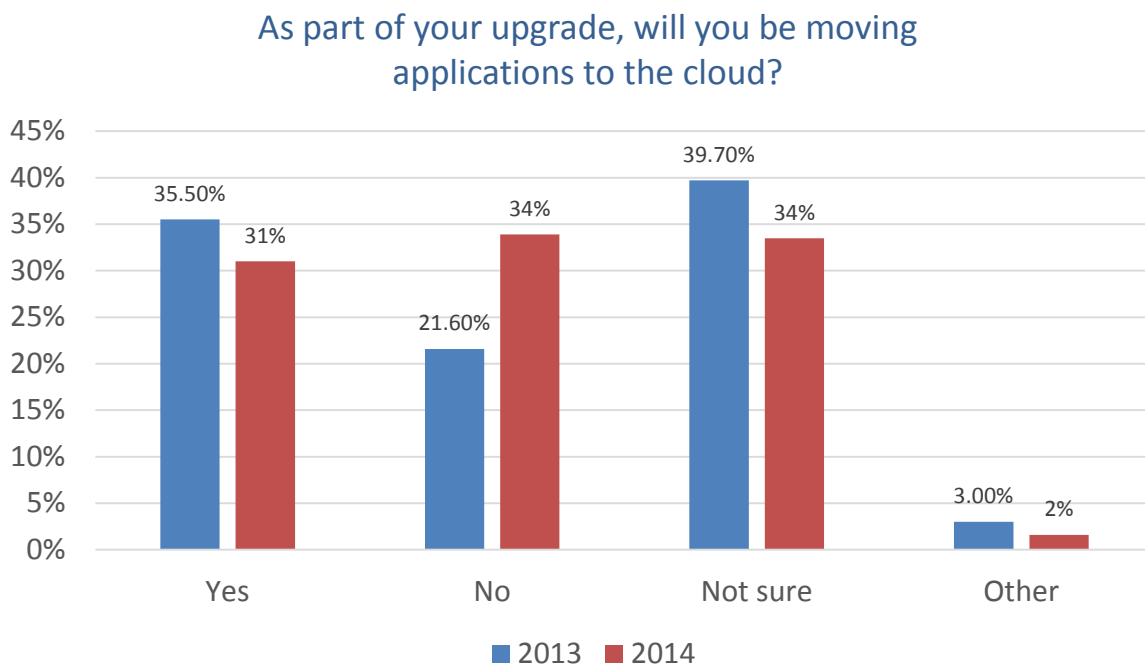
We asked this question of our webinar attendees as well. That audience reported that 43% would be moving to the cloud with 27% unsure. Only 23% said they would not be moving to the cloud.

What types of applications cause you the most concern?

When asked which applications they were most worried about, Financials topped the list at 33%, holding firm from 2013. It stands to reason that when you need to report to the Board of Directors or to your Shareholders you need to have confidence in your financial data. Not many companies would be willing to risk having a complete and correct picture of their revenue, assets and liabilities. The vast majority of the 17% responding "other," indicated that they are most concerned about homegrown applications.

What types of applications cause you the most concern?
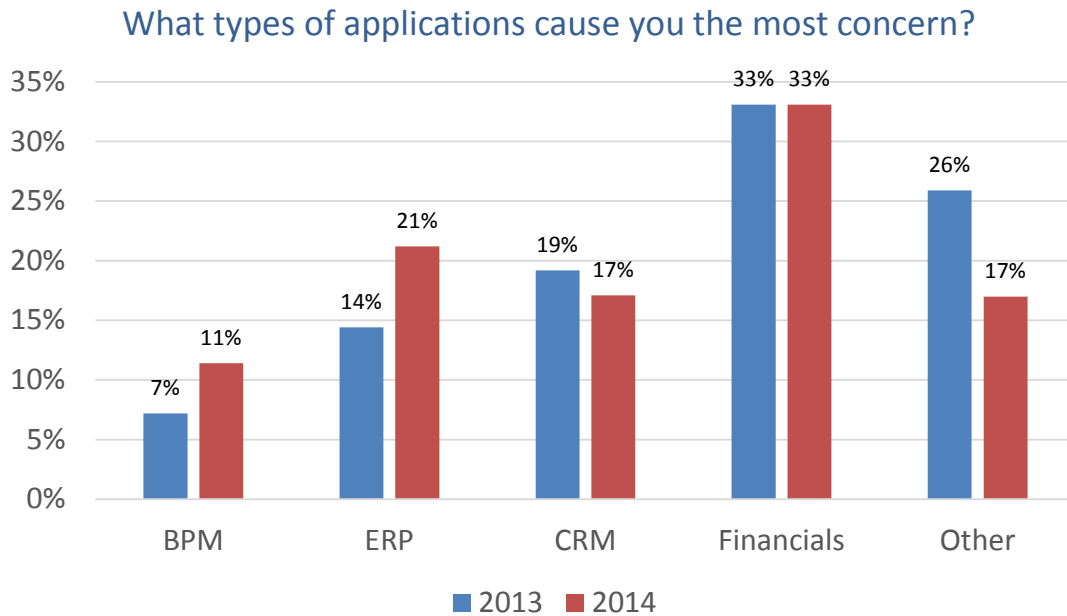
In 2014, ERP applications (21%) took over the second spot from last year's second place finisher CRM (20%)
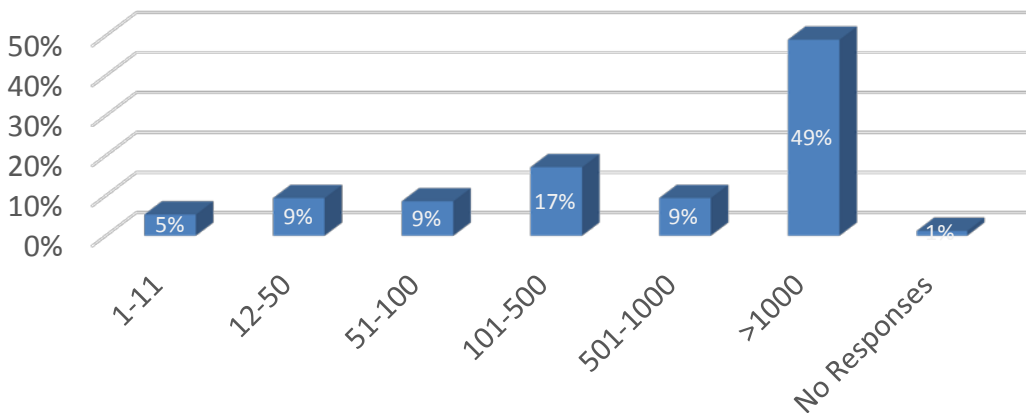
Survey Respondent Demographic Data

The following is a breakdown of types and sizes of companies surveyed and respondents by job function.   The majority of respondents (55%) come from "corporations" which is not surprising since the Fortune 1000 was the focus of this survey. Others are predominately divided between types of technical services companies that serve the Fortune 1000.

What type of business is your organization?

■ Corporation ■ Other/ No Response ■ Consultant ■ SI ■ SMB ■ CSP/MSP


14%
11%
56%
8%
7%
4%
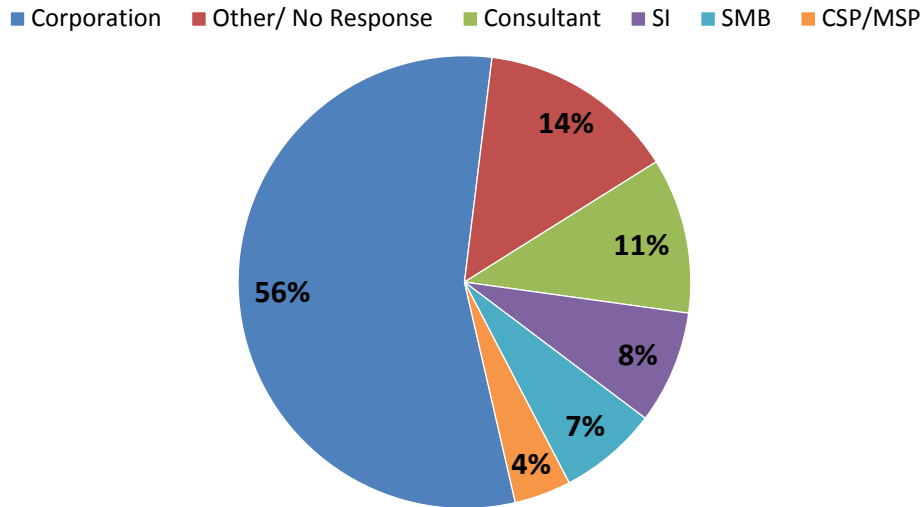
Again, as is fitting with our target demographics for the survey, the majority (49%) work for companies employing over 1,000 full time employees.

How many full-time employees currently work for your organization?

|	1-11	12-50	51-100	101-500	501-1000	>1000	No Responses
	5%	9%	9%	17%	9%	49%	1%

Survey Respondent Demographic Data (cont.)

Relatively speaking, all of our respondents work in IT, with most of them (42%) identifying with the broadest category of IT pro. The remaining respondents fit into the more specific options available, with only 4% reporting as "other."

What is your title/job function?
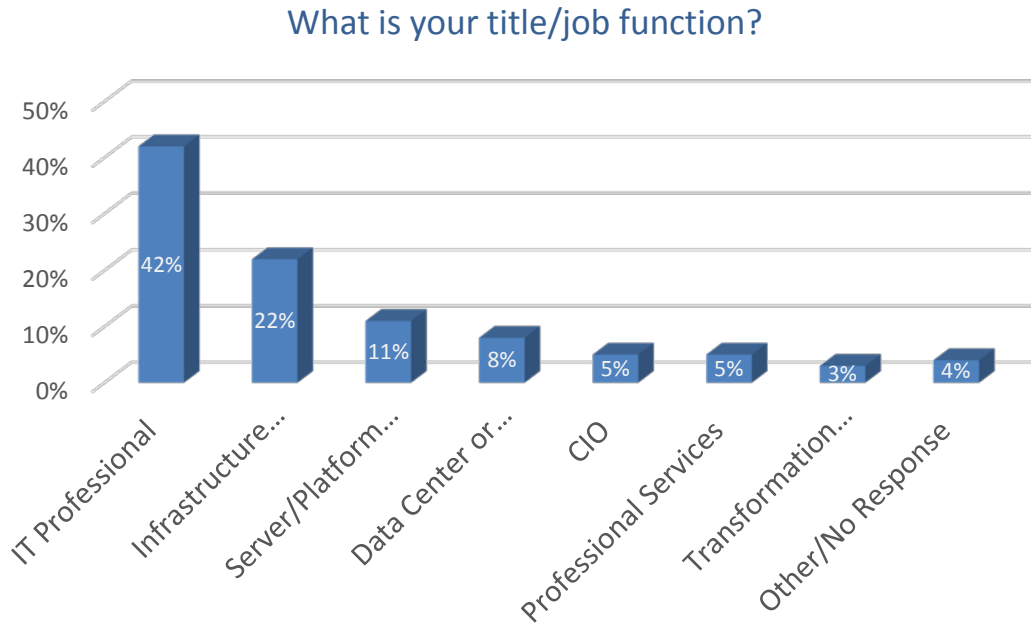
Sizing the Issue

To get an idea of how large this issue is, we asked respondents about the number of servers under their management and how many of those servers were still running Windows Server 2003. Last year, there was a lot of diversity around the number of servers with respondents at the low end (1-25) almost equal with respondents at the high end (5000+). This year our sample had fewer people with 5,000+ servers. It is worth noting that while we conducted the survey at many of the same events, we were not necessarily surveying the same people.
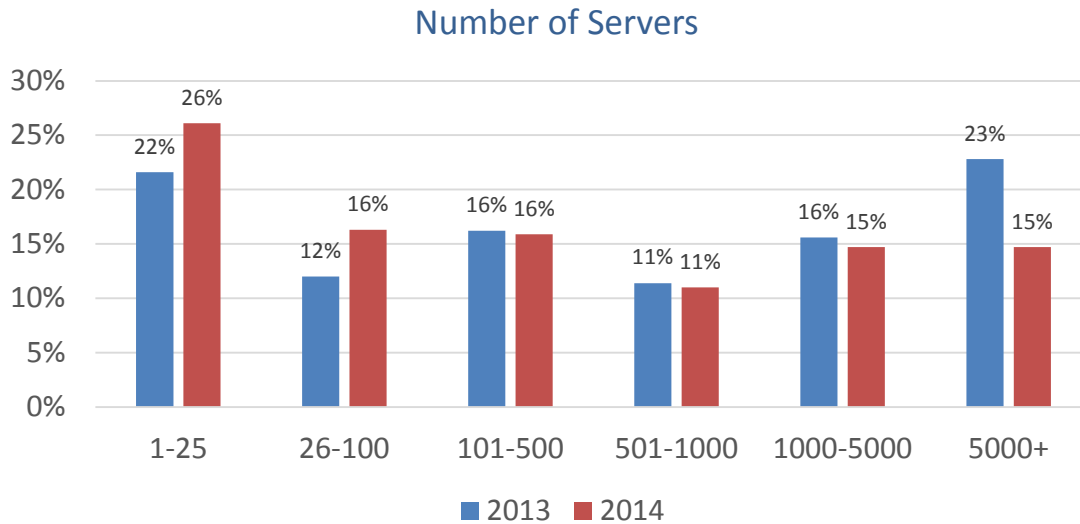
Number of Servers

The most noteworthy change in this category in 2014 is the drop in the number of respondents having 101-500 WS2003 Servers under management, down to 17% from 25% in 2013

How many servers are running Windows Server 2003?
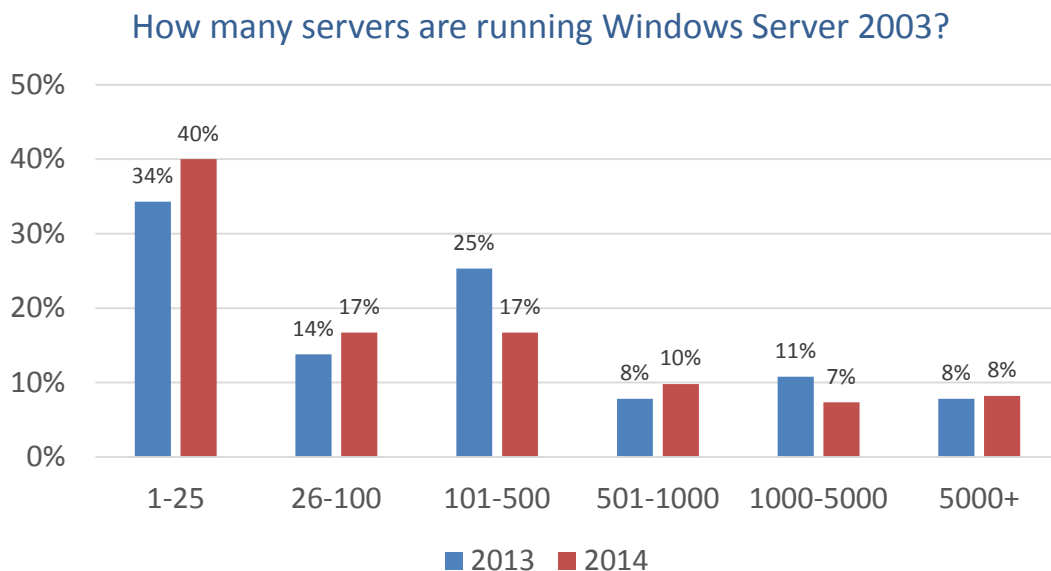
Conclusions and next steps

So what can you learn from this data? Do the results provide any insights into how you should or how you will manage your Windows Server 2003 upgrade process?

Here are some key questions for you to consider as Windows Server 2003 approaches end of support:

1. How many machines in your operations are running WindoWS2003?

2. Do you have a plan to remediate the risk of WS2003 EOS?

3. How are you going to upgrade or move to a more modern operating environment?

4. Does moving to the cloud solve this soon-to-be compliance problem?

It is clear that WS2003 EOS is giving IT administrators a lot to think about. Most will not run the risk of running an unsupported operating system, but the clock is ticking. Every day there is less time to deal with this critical situation. There are many companies that are building out products and services and are available to help. The best way to start is to have a plan. That plan should include the four phases of a migration strategy:

1. Discovery – Catalog your software and workloads

2. Assessment – Categorize your applications and workloads

3. Target – Identify your destination

4. Migration – Move your applications

And the time to start planning is now. As of this writing, there are less than 190 days until WS2003 hits EOS and many people estimate these projects to take 200 days. If you're not going to beat the clock, minimize your exposure by at least starting with the easy workloads and homegrown apps that don't need ISV support.

According to Gartner, "There may not be much debate over the advisability of migrating all servers to a newer, supported OS, but for many IT organizations the priority for this task relative to all potential activities is too low. At this point in time, Windows Server 2012 R2 is the destination to which these older servers will be migrated. A migration of a large pool of servers to a new OS is a long and resource-intensive effort, one that must be started soon if the project is to be completed before July 2015."[7]

Greg O'Connor, CEO of AppZero says, "Our view on the topic is that the number of production applications still running WS2003 is greater than 10 million. The enterprise underestimates the time and cost it will take to remediate their applications that are running on a soon-to-be unsupported WS2003. Remediation is not a question of "if" but when. The longer it takes, the more the organization will pay due to increased downtimes, failed compliance audits and to purchase a Customer Support Agreement from Microsoft. The on-going costs of

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[7] Gartner Report: Make Migration From Windows Server 2003 a Priority, Before Support Ends in July 2015, 18 June 2014

continuing to run your business on WS 2003 are extremely high and only getting higher as time goes on -- Don't delay start now."

Below are the options for remediating WS2003 EOS[8] and what they entail:

Do nothing – Choosing to "do nothing" still requires making a decision. Taking into account a security vulnerability being discovered or a system failure occurring, this decision would likely be called into question.

Rewrite the applications – Rewriting all of your applications is very expensive and time consuming. It also requires knowing the applications in enough detail to create good requirements.

Reinstall the application, reconfigure and migrate the data -- This approach can work but requires having all of the install media and code, and a clear understanding of what is currently running and installed. Migrating data and configurations is not easy for older systems.

Upgrade the OS –In this scenario, you install Windows and keep all of your files, settings and applications. This approach looks promising on the surface but isn't viable once you dig deeper. The challenge is the methodology to upgrade the machines, which says: "Uninstall critical applications, upgrade the OS and then reinstall the applications."

Migrate the application to a new OS – Use an automated application migration tool to "up-level" your applications. These tools let you quickly and easily move your applications and data from old machines running outdated versions of the OS to a new server anywhere - cloud or datacenter- running newer operating systems such as Windows Server 2008 (R2) or Windows 2012.

AppZero is the only tool that can Up-Level your applications, letting you quickly and easily move your applications from old, bare metal machines running WS2003 to any server running newer operating systems. AppZero moves the applications in much less time than it would take to install them and can even move old 32-bit apps to 64-bit OS such as WS2012. If you're moving to WS2012, you can get there in one step – no need to first upgrade to WS2008.

WS2003 is becoming a catalyst for migration with many companies mandated by compliance requirements to migrate applications to a supported operating system. This reality can either be approached as a security and compliance headache for business -- or an opportunity to eliminate old infrastructures for a more modern one such as the Cloud.   Make the migration effort a suitably high priority to gain approval and funding for the project such that it can be completed before support ends.

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[8] http://blog.appzero.com/blog/windows-server-2003-eol-mini-y2k-event-enterprise

It is possible to have a smooth, easy and cost effective transition to new infrastructures. Whether the destination for modernization is the cloud or new hardware, the opportunity to modernize the OS and supporting infrastructure benefits companies by:

- reducing the risk of migrating applications

- leaving behind antiquated systems

- remediating WS2003 EOS quickly and cost effectively

- enabling IT and business groups to work together to upgrade their server applications in a way that benefits all

With more than 10 million Windows Server 2003 instances still in production today, the formal end-of-support is a major event. Whichever option you chose to mitigate your risk, remember that WS2003 will reach EOS on July 14, 2015 and you must prepare for this event. Your appetite for risk and the regulations that your company must comply with will help determine which approach is best for you. If you'd like to learn how AppZero can help, contact us at info@appzero.com.

About AppZero

AppZero is the fastest, most flexible way to move server applications to and across any cloud or datacenter, without code change or lock-in. Encapsulating Windows applications in VM/OS-free packages, AppZero's patented software moves complex server applications with ease. AppZero allows you to modernize your infrastructure, moving from an old OS to a newer one with the click of a button - modernize and move to the cloud in one step.

For more information, visit www.appzero.com and follow us on twitter @AppZero_Inc.