

RESEARCH REPORT

2019 I/O Performance Survey Results

Conducted via email during the 4th quarter of 2018 with 906 IT Professionals

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Foreword

This research was conducted to examine the real-world opinions of IT Professionals regarding I/O performance in their compute environments. 906 IT Professionals took our fourth annual industry-exclusive I/O Performance Survey, which makes this independent performance survey the largest of its kind. The surveyed audience excluded Condusiv's own I/O reduction software customers, who use the software to achieve the most performance possible from their server and storage assets.

The survey consists of 27 detailed questions designed to identify the impact of I/O growth in the modern IT environment. In addition to multiple choice questions, the survey included optional open responses, allowing a respondent to provide commentary on why they selected a particular answer. All the individual responses have been included to help readers dive deeply on any question.

Condusiv, the world leader in I/O reduction software, has conducted this intensive study since 2015. What is becoming clear as we look at year-over-year data is that yes, investments in newer storage technologies have provided additional capacity and performance improvements, but new hardware has not been the hoped-for panacea to I/O performance degradation troubles.

The survey was fielded in July 2018 and concluded in November 2018. IT Professionals were invited via email to participate in the survey and provide their opinions on I/O performance. Answers were collected through a well-known, online research platform.

The research highlights the latest trends in applications that are driving performance demands and how IT Professionals are responding. The results show that organizations are struggling to get the full lifecycle from their backend storage as the growth of I/O continues to outpace expectations. The research also shows that IT Pros continue to struggle with user complaints related to sluggish performance from their I/O intensive applications, especially citing MS-SQL applications.

It is recommended that the reader review this research and watch a 2-min overview of Condusiv I/O reduction software as well as read our published case studies from organizations that have at least doubled the performance of MS-SQL / Oracle workloads, EHR applications, and many other applications: visit www.condusiv.com/try.

Regards,

Dawn Richcreek

Dawn Richcreek
VP, Marketing
Condusiv Technologies



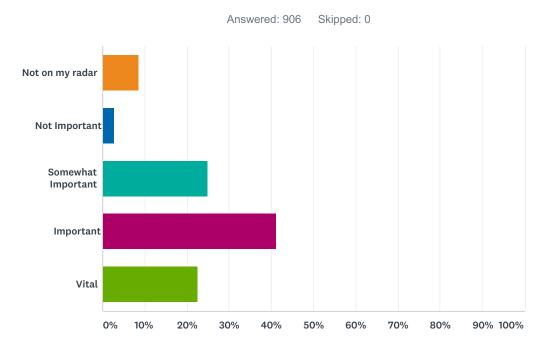
Summary of Key Findings

- **1.** I/O Performance is important to IT Pros: The vast majority of IT Pros consider I/O Performance an important part of their job responsibilities. Over a third of these note that growth of I/O from applications is outpacing the useful lifecycle they expect from their underlying storage.
- 2. Application performance is suffering: Half of the IT Pros responsible for I/O performance cite they currently have applications that are tough to support from a systems performance standpoint. The toughest applications stated were: SQL, SAP, Custom/Proprietary apps, Oracle, ERP, Exchange, Database, Data Warehouse, Dynamics, SharePoint, and EMR/EHR. See page 19 for a word cloud graphic.
- **3. SQL is the top troublesome application:** The survey confirms that SQL databases are the top business critical application platform and is also the environment that generates the most storage I/O traffic. Nearly a third of the IT Pros responsible for I/O performance state that they are currently experiencing staff/customer complaints due to sluggish applications running on SQL.
- **4. Buying hardware has not solved the performance problems:** Nearly three-fourths of IT Pros have added new hardware to improve I/O performance. They have purchased new servers with more cores, new all-flash arrays, new hybrid arrays, server-side SSDs, etc. and yet they still have problems. In fact, a third have performance issues that are preventing them from scaling up their virtualized infrastructures.
- **5. Still planning to buy hardware:** About three-fourths of IT Pros are still planning to continue to invest in hardware to improve I/O performance.
- **6. Lack of awareness:** Over half of respondents were unaware of the fact that Windows write inefficiencies generate increasingly smaller writes and reads that dampen performance and that this is a software problem that is not solved by adding new hardware.
- 7. Improve performance via a software solution to avoid expensive hardware purchase:
 The vast majority of respondents felt it would be urgent/important to improve the performance of their applications via an inexpensive I/O reduction software solution and avoid an expensive forklift upgrade to their compute, network or storage layers.

The above summary represents just some of the key findings from our survey. We encourage you to read the full 27-question report below. You will get insights into the top 5 business critical applications, hypervisor of choice, operating system of choice, future purchase plans, amount of storage under management and much more.



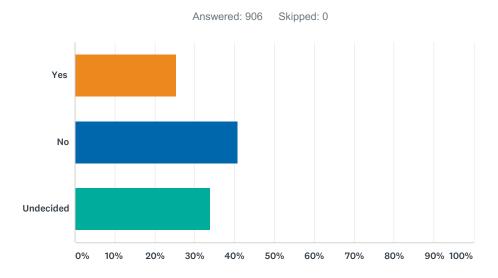
Q1 When considering your IT role and responsibilities, what importance do you attach to I/O performance?



| ANSWER CHOICES | RESPONSES | |
|--------------------|-----------|-----|
| Not on my radar | 8.61% | 78 |
| Not Important | 2.76% | 25 |
| Somewhat Important | 24.94% | 226 |
| Important | 41.17% | 373 |
| Vital | 22.52% | 204 |
| TOTAL | | 906 |



Q2 Have you found the growth of I/O stretching your ability to costeffectively keep up due to adding more and more server or storage hardware?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 25.28% | 229 |
| No | 40.84% | 370 |
| Undecided | 33.89% | 307 |
| TOTAL | | 906 |

| # | IF YES, PLEASE COMMENT | DATE |
|----|--|--------------------|
| 1 | speed increases have lont tail benefits | 10/25/2018 9:51 AM |
| 2 | We manufacture switches, so the network equipment is "free" but the server budget is tight, despite spending over 1 million dollars on a single AWS performance test. | 10/25/2018 8:36 AM |
| 3 | We aren't able to correctly understand the trends because we don't do requirements gathering correctly | 10/25/2018 8:20 AM |
| 4 | I work on IBM mainframes, servers are irrelevant to me | 10/25/2018 8:09 AM |
| 5 | Larger amounts of client data as well as daily backups and client analytics run have become more demanding in the past year. We are currently at around 40TB and constantly expanding. | 10/25/2018 8:03 AM |
| 6 | It definitely leads us to add more hardware on the server to reduce the performance lag | 10/25/2018 7:43 AM |
| 7 | Given the growth of data sets, need for real-time analytics, I/O requirements have been scaling in parallel | 10/25/2018 7:20 AM |
| 8 | R&D and Devops runs our storage devices so hat and always require more | 10/25/2018 6:47 AM |
| 9 | pure storage and isolon slow doen w/ load | 10/25/2018 6:46 AM |
| 10 | It is consuming more Datacenter rack space as well. | 10/25/2018 6:28 AM |
| 11 | it cost\$\$\$\$ | 10/25/2018 6:27 AM |
| 12 | it costs money to add hardware to our environment | 10/25/2018 5:34 AM |
| 13 | I/O is the limiting factor for most applications to be delivered effectively. | 10/25/2018 4:43 AM |
| | | |



| 14 | We use a mix of technologies | 10/25/2018 4:42 AM |
|----|---|---------------------|
| 15 | IO bandwidth gets shared | 10/25/2018 4:19 AM |
| 16 | performance intensive workloads in SAP | 10/24/2018 5:42 PM |
| 17 | Yes, especially the SQL databse for our BI reporting | 10/24/2018 5:21 PM |
| 18 | Both are being added | 10/24/2018 4:40 PM |
| 19 | Newer applications and business requirements mandate higher I/O performance than previously. While the cost of storage is going down generally, we are also needing to buy way more than in the past just to keep up. | 10/24/2018 4:17 PM |
| 20 | Moving to cloud | 10/24/2018 2:06 PM |
| 21 | Its hard sometimes due to cost to keep performance where the users want it to be | 10/24/2018 1:52 PM |
| 22 | Specifically in the AWS space, not as much on-prem | 10/24/2018 1:35 PM |
| 23 | We use Revit which demands alot | 10/24/2018 1:17 PM |
| 24 | Constant forklift upgrades due to increasing demand | 10/24/2018 12:47 PM |
| 25 | | 10/24/2018 12:46 PM |
| 26 | we have seen IO issues in the past and put in new systems to deal with it. knowing more in time will be needed | 10/24/2018 12:24 PM |
| 27 | We are currently adding new storage for that reason | 10/24/2018 12:03 PM |
| 28 | Need more bandwidth on the SAN switches | 10/24/2018 11:56 AM |
| 29 | we are continually adding more storage to various applications in our data center | 10/24/2018 11:38 AM |
| 30 | We support an ever growing Big Data infratructure related to ADAS development | 10/24/2018 11:14 AM |
| 31 | Particulary around backups | 10/24/2018 11:08 AM |
| 32 | We are in the media business and work with a high volume of image files globally | 10/24/2018 10:57 AM |
| 33 | Sometime running big batch jobs become very hard due to I/O limitations and need to think for alternative and optimzed solutions | 10/24/2018 10:41 AM |
| 34 | storage is totally unpredictable | 10/24/2018 10:38 AM |
| 35 | we have not optimized the storage to handle the i/o storms | 10/24/2018 10:33 AM |
| 36 | This will help us supporting more applications and more users. | 10/24/2018 10:28 AM |
| 37 | We are looking at both server I/O and network performance | 10/24/2018 10:14 AM |
| 38 | Currently we are facing issues with slow performance for the VMs created for developers, testers & product owners. Simple operation like switching on or off a VM which took less than a sec now takes more than 6 mins because the storage has ran out. As a result we are loosing valuable man hours. | 10/24/2018 10:10 AM |
| 39 | Using Turbonomic we've rightsized storage, memory, overall VM performance | 10/24/2018 10:00 AM |
| 40 | In some locations, with older hardware this has become an issue where we can't simply add newer disks | 10/24/2018 9:50 AM |
| 41 | Flash has helped a huge amount, but there are larger and larger data piles pushing the edge of what it is capable of. | 10/24/2018 9:37 AM |
| 42 | Performance issues | 10/24/2018 9:36 AM |
| 43 | cost of being efficient | 10/24/2018 9:35 AM |
| 44 | more i/o more expense | 10/24/2018 9:31 AM |
| 45 | More spinning disl and space was unutilized | 10/24/2018 9:30 AM |
| 46 | We've had to invest in flash storage arrays | 10/24/2018 9:23 AM |
| 47 | We have raw storage available but not enough computing power | 10/24/2018 9:08 AM |
| 48 | It is very cost effective. | 10/24/2018 9:02 AM |



| 49 | company growth exponential from small to corporate, escalating needs, and costs never planned for | 10/24/2018 9:00 AM |
|----|--|---------------------|
| 50 | The desire to converge compute, storage and network is always present but in a non greenfield environment you do what you can. | 10/24/2018 8:50 AM |
| 51 | We are working towards 100% virtual and the server requests are getting larger and larger for storage. | 10/24/2018 8:30 AM |
| 52 | We are adding more CPU and memory to maintain SLA when we should be addressing code defects | 10/24/2018 8:29 AM |
| 53 | User keep wanting more and more fast storage | 10/24/2018 8:27 AM |
| 54 | Increased requirements for performance-tier storage has proven to be one of my toughest challenges | 10/24/2018 8:23 AM |
| 55 | Better permanence and time | 10/24/2018 8:20 AM |
| 56 | yes - but cloud bias | 10/24/2018 8:19 AM |
| 57 | The demands of new applications and normal Windows OS; space has become an issue | 10/24/2018 8:18 AM |
| 58 | Flash Storage is expensive | 10/24/2018 8:06 AM |
| 59 | Storage I/O limitations are always in play. | 10/24/2018 8:05 AM |
| 60 | faster storage product evolution at lower price point is leading to higher sunk and switchover costs | 10/24/2018 7:55 AM |
| 61 | Data growth has grown significantly for us, taxing our equipment more and more | 10/24/2018 7:52 AM |
| 62 | I seem to store a lot of important data on my dvice, it give me te opportunity to store more | 10/24/2018 7:50 AM |
| 63 | Looking at all in one solution like nutanix | 10/24/2018 7:42 AM |
| 64 | there is no elastic on demand process for storage | 10/24/2018 7:41 AM |
| 65 | hard to keep up. | 10/24/2018 7:38 AM |
| 66 | We are narrowing down the need for I/O since so much hardware out there is getting ahead of where we are at | 10/24/2018 7:38 AM |
| 67 | We have over 1,000 VMs in our domain and reducing the amount of data going back and forth allows for other servers that require more I/O's to do so resulting in less impact, better performance and a ROI even quicker. | 10/17/2018 9:26 AM |
| 68 | Justifying present spend to cover future, un-planned workloads | 10/15/2018 9:50 AM |
| 69 | 20% growth every year and always visualizing more systems | 10/12/2018 12:24 PM |
| 70 | Data access and even network duplication has caused a lot of latency for the purposes of data safety | 10/10/2018 1:02 PM |
| 71 | Because of computing platforms changing with Virtual Servers, MFaaS and the challanges to keep up with the technology to keep the infrastructure performing a optimum performance. | 10/4/2018 11:55 AM |
| 72 | Global capacity management | 10/4/2018 8:53 AM |
| 73 | The balance between being cost effective, constant grown and needing to reconfigure bandwidth is a bit challenge. | 10/3/2018 1:00 PM |
| 74 | obvious right! | 10/3/2018 9:55 AM |
| 75 | Growth has been explosive across our service lines which means that it is difficult to predict and budget to accommodate the demand | 10/3/2018 9:36 AM |
| 76 | We have outdated hardware and have been shifting to the cloud to keep up with need, but mixed results on I/O performance | 10/3/2018 7:36 AM |
| 77 | Even with Llarge SSD NAS we get IO bottlenecks the prevent vendor applications from completing work fast. Requiring more processing server, thus increasing the load on the shared NAS Space. | 10/3/2018 7:29 AM |
| 78 | Fabric can improve but it expensive. | 10/3/2018 7:05 AM |
| 79 | Maintain hardware and support contracts on aging storage | 10/3/2018 6:48 AM |



| 80 | With a virtualized enviornment you need to provide all or nothing support for SSD when building a server with an array. It can be costly to support that kind of high priced server storage, but you still need the performance. | 10/3/2018 6:40 AM |
|-----|--|--------------------|
| 81 | IO performance has been an issue for us in our Oracle environment for quite some time. | 10/3/2018 6:32 AM |
| 82 | New business, more I/O. | 10/3/2018 6:24 AM |
| 83 | High I/O is required to meet regulatory deadlines around risk modeling and reporting with regards to estimated losses due to catastrophic events. | 10/3/2018 6:23 AM |
| 84 | Finding the Azure / Amazon pricing models difficult to navigate. | 10/3/2018 6:21 AM |
| 85 | Solid state is more expensive than I'd like. | 10/3/2018 6:18 AM |
| 86 | new vm being created and setup on new chassis | 10/3/2018 6:07 AM |
| 87 | Increased budgetary restrictions is an increasing issue | 10/3/2018 6:06 AM |
| 88 | storage needs expanding exponentially | 10/3/2018 5:58 AM |
| 89 | Acquisitions, organic growth and IoT all contributing to additional demand. | 10/3/2018 5:54 AM |
| 90 | The more servers we host, need more power. Which means more RAM, Storage capacity, and hardware. | 10/3/2018 5:54 AM |
| 91 | Seems like roll-out is never planned well enough. | 10/3/2018 5:35 AM |
| 92 | Costs and demand rises, budget doesn't as fast. | 10/3/2018 5:31 AM |
| 93 | DB performance is impacting I/O | 10/3/2018 5:09 AM |
| 94 | very important to keep speed of computers up | 10/3/2018 5:07 AM |
| 95 | In the cloud, paying for higher speed read / writes is very expensive | 10/3/2018 5:04 AM |
| 96 | virtual environment and need to load balance | 10/3/2018 4:58 AM |
| 97 | Its becoming clear that applications are making more calls for data without specifying that frequency, making I/O tuning an increasingly important task. | 10/3/2018 4:57 AM |
| 98 | converged acrchitecture makes it pricey yet easy. Popping in new nodes brings VMware licenssing and support costs | 10/3/2018 4:57 AM |
| 99 | it is costly | 10/3/2018 4:54 AM |
| 100 | Our storage team does a great job of providing fast reliable storage. | 10/3/2018 4:54 AM |
| 101 | as data increases so does the need for storage | 10/3/2018 4:54 AM |
| 102 | Everything just keeps growning and demading more space. | 10/3/2018 4:54 AM |
| 103 | Requires additional Network & Storage Hardware | 10/3/2018 4:52 AM |
| 104 | Increasing raw data growth stretches the budget trying to keep up with where to store the raw data | 10/3/2018 4:50 AM |
| 105 | Everyone always needs more space, getting that can be a challenge (\$) | 10/3/2018 4:47 AM |
| 106 | SQL databases cost money. | 9/26/2018 9:38 AM |
| 107 | Upcoming trends in storage technology has enabled us reduce the cost of hardware. | 9/25/2018 8:21 PM |
| 108 | The growth of I/O stretching is useful | 9/25/2018 4:38 PM |
| 109 | for the most part adding addition servers is not an option | 9/25/2018 12:30 PM |
| 110 | Currently migrating to AWS | 9/25/2018 11:58 AM |
| 111 | The need for more real-time streaming data analytics is created a tremendous burden on current infrastructure. | 9/25/2018 10:59 AM |
| 112 | Growing so fast, struggling finding room and available iops | 9/25/2018 10:27 AM |
| 113 | We planned ahead for this | 9/25/2018 9:53 AM |
| 114 | apps performance tough to plan for | 9/25/2018 9:42 AM |
| 115 | resources are streached and the fast pace is getting faster. we need to be better at maximizing our efforts | 9/25/2018 8:11 AM |



| 116 | The way the applications are being used have evolved and our performance needs to be monitored and adjusted progressively | 9/25/2018 8:06 AM |
|--------------------------|---|--|
| 117 | When there are more requests to our server the cost increases directly | 9/25/2018 8:01 AM |
| 118 | It just seems that we are always trying to keep up with an endless requirement of evergrowing need for more IO for complex databases and such. | 9/25/2018 7:50 AM |
| 119 | The performance of our VDI solutions are highly dependent on I/O of which our group has little control over. | 9/25/2018 7:46 AM |
| 120 | Data footprints will always grow and the demand will never diminish. It is increasingly important to have IO performance to keep up with the demands of BI and analytics as well. | 9/25/2018 6:43 AM |
| 121 | More diverse softwares needed, higher processing power required, document storage is double or triple what it once was. | 9/25/2018 6:26 AM |
| 122 | This is an ongoing trend with the more capacity workload we onboard | 9/25/2018 6:22 AM |
| 123 | Server storage must be increased to handle the time required to copy data to file at that location. Bandwidth affects this process as well. | 9/25/2018 6:09 AM |
| 124 | I/O performance is very much required to have stable IT environment (Application, database and Infra) | 9/25/2018 6:07 AM |
| 125 | as new technology ins introduced we need more platform to run it | 9/25/2018 6:04 AM |
| 126 | We have strategically begun moving to the cloud. | 9/25/2018 5:49 AM |
| 127 | We are no longer able to add shelfs to the Netapp we currently have and will be looking at new sans | 9/25/2018 5:47 AM |
| 128 | Big data clusters are so much dependent on I/O. | 9/25/2018 5:41 AM |
| 129 | I found the longer I've worked added storage the more effectively I've had. | 9/24/2018 4:15 AM |
| 130 | So far we have been able to keep up with demand by repurposing equipment and optimizing existing SAN architecture | 9/5/2018 5:49 AM |
| 131 | VMs have been increased substantially on each of our Host Servers | 9/5/2018 5:09 AM |
| 132 | On premise BI data storage solutions are progressively declining in favor due to the upkeep despite the I/O performance advantage over cloud of on-prem in-memory storage. | 9/5/2018 4:46 AM |
| 133 | We keep needing faster SANs due to IO latency due to load | 9/4/2018 7:08 AM |
| 134 | we are actually running out of physical space for additional servers | 8/29/2018 4:16 AM |
| 135 | Have to add more hardware and storage capacity | 8/28/2018 10:44 AM |
| 136 | More VMs increases the SAN i/o | 8/28/2018 9:00 AM |
| 137 | YES | 8/28/2018 6:26 AM |
| 138 | I can make all my correction, write all my thoughts all on the one media and never have to worry about losing anything | 8/28/2018 6:24 AM |
| 139 | More and more | 8/28/2018 6:18 AM |
| 140 | Larger data centers have been adversely affected by IO demands, needing a lot of load balancing to improve performance. | 8/22/2018 6:22 AM |
| 141 | Tier 1 storage is getting so expensive | 8/21/2018 10:35 AM |
| 142 | software compatibility is a large cost wih the growth of I/O | 8/21/2018 9:53 AM |
| | Always need more storage! | 8/21/2018 9:46 AM |
| 143 | | |
| | Unable to aquire funding for increased damand | 8/21/2018 8:58 AM |
| 144 | | |
| 144 145 | Unable to aquire funding for increased damand | 8/21/2018 8:58 AM |
| 143 144 145 146 | Unable to aquire funding for increased damand Have had to expand storage to both add capacity and increase I/O limits | 8/21/2018 8:58 AM 8/21/2018 8:55 AM |

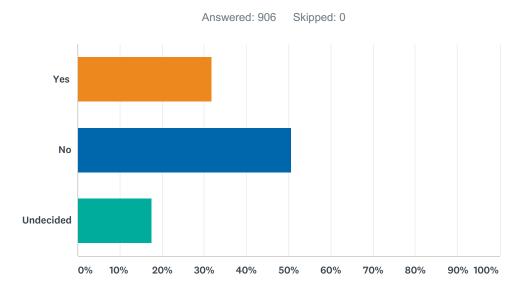




| 149 | We are heavily cloud based so it's usually not a big ask | 8/10/2018 8:56 AM |
|-----|---|--------------------|
| 150 | To process bigger data day by day, I/O increasing is hard to avoid, the key thing is how to manage it undercontrolable ways | 8/9/2018 6:06 PM |
| 151 | We have kept up with bandwidth needs as they increase by upgrading the network. | 8/9/2018 11:14 AM |
| 152 | Bandwidth is critical to keep data at minimum speed without losing reliability. | 8/9/2018 8:38 AM |
| 153 | Growth of I/O and the requirements to keep costs down is making the team determine if we go on prem or in the cloud for growth | 8/9/2018 8:27 AM |
| 154 | User satisfaction if rooted in the datacenters ability to provide fast responsive service. | 8/9/2018 7:05 AM |
| 155 | The growth of VMs has greatly impacted our VMware hosts I/O performance | 8/9/2018 5:07 AM |
| 156 | we had this problem by adding more server then now we have the opposite issue. | 8/9/2018 4:59 AM |
| 157 | This is especially tru on the virtualization side | 8/9/2018 4:51 AM |
| 158 | With our environment Satellite coverage plays a MAJOR role. | 8/9/2018 4:46 AM |
| 159 | one to one devices need to band and storage | 8/8/2018 2:38 PM |
| 160 | 40% storage growth per year plus added cloud services strain resources and require more storage, compute and capacity. | 8/8/2018 11:04 AM |
| 161 | Users always want a better performance | 8/8/2018 10:04 AM |
| 162 | I/O requirements increase with every new app and/or install and this is frustrating to say the least | 8/8/2018 8:24 AM |
| 163 | The cost of upgrading servers increases every 5 years at the rate that we are growing. | 8/8/2018 8:23 AM |
| 164 | Improved performance for virtual environemnts. | 8/8/2018 8:12 AM |
| 165 | storage space is begining to be a problem | 8/8/2018 6:10 AM |
| 166 | were always adding more storage | 8/8/2018 6:02 AM |
| 167 | Scalability of resources is generally outpaced by scale of demand | 8/8/2018 4:53 AM |
| 168 | expanding storage is often more expensive than the initial purchase | 8/8/2018 4:52 AM |
| 169 | If I understand "stretching" my ability, it's in issue. I had to settle for slower devices because of cost. | 8/8/2018 4:50 AM |
| 170 | We have a limited budget for servers and hardware, the more changes needed the more we spend | 7/26/2018 11:45 AM |
| 171 | FUsion IO cards get expensive | 7/26/2018 10:21 AM |
| 172 | Increased hardware capability (4K, GPU, etc) increases the amount of data collected (volume) and the need to get it into the hands of end users in a reasonable amount of time (velocity) | 7/26/2018 9:13 AM |
| 173 | VDI primarily | 7/26/2018 9:01 AM |
| 174 | With the increase in features in applications as time progresses, it is causing more development of I/O than was typically done. | 7/26/2018 8:26 AM |
| 175 | We have added a number of servers | 7/26/2018 6:38 AM |
| 176 | In converged infrastructure we see some limitations on IO depending on the device and shared infra. | 7/26/2018 6:19 AM |
| | | |



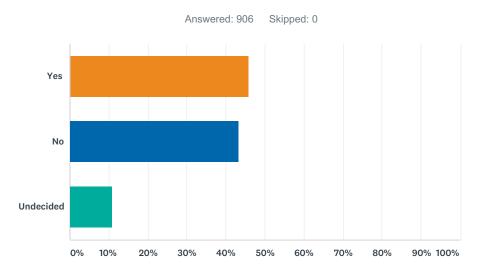
Q3 Has the growth of I/O from applications outpaced the useful lifecycle you expected from your underlying storage architecture?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 31.79% | 288 |
| No | 50.66% | 459 |
| Undecided | 17.55% | 159 |
| TOTAL | | 906 |



Q4 Do you have one or two applications that are your toughest to support from a systems performance standpoint?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 45.81% | 415 |
| No | 43.38% | 393 |
| Undecided | 10.82% | 98 |
| TOTAL | | 906 |

| # | IF YES, WHAT ARE THOSE APPLICATIONS? | DATE |
|----|--|--------------------|
| 1 | Inhouse testing of a big-data application we are developing for our customers. | 10/25/2018 8:38 AM |
| 2 | SAP | 10/25/2018 8:36 AM |
| 3 | Murex | 10/25/2018 8:20 AM |
| 4 | Healthcare analytics - billions of patient records processed by clients. | 10/25/2018 8:06 AM |
| 5 | CRM | 10/25/2018 7:44 AM |
| 6 | sql | 10/25/2018 7:43 AM |
| 7 | backups | 10/25/2018 7:33 AM |
| 8 | Cloud based, PaaS, SaaS | 10/25/2018 7:21 AM |
| 9 | Relativity, 3E | 10/25/2018 7:05 AM |
| 10 | imaging and onbase | 10/25/2018 6:48 AM |
| 11 | SharePoint, other server-based applications | 10/25/2018 6:38 AM |
| 12 | PDI, Allegro | 10/25/2018 6:18 AM |
| 13 | SharePoint | 10/25/2018 5:45 AM |
| 14 | erp system and email | 10/25/2018 5:35 AM |
| 15 | SharePoint | 10/25/2018 5:15 AM |
| 16 | ERP, Lab Management System | 10/25/2018 4:45 AM |
| 17 | SAP ECC 6 and SAP S4/HANA | 10/25/2018 4:44 AM |
| | | |



| 18 | EMR and HRP | 10/25/2018 4:42 AM |
|----|--|---------------------|
| 19 | Good, latest I/O update broke it. | 10/25/2018 4:13 AM |
| 20 | Personal Health Record Systems | 10/25/2018 4:08 AM |
| 21 | SQL and Data Analytics | 10/25/2018 4:03 AM |
| 22 | SQL Database | 10/24/2018 5:22 PM |
| 23 | Oracle, Commvault | 10/24/2018 4:51 PM |
| 24 | legacy mainframe applications | 10/24/2018 4:42 PM |
| 25 | Big Data (Hadoop), and a legacy COBOL application, among others. | 10/24/2018 4:21 PM |
| 26 | remedy | 10/24/2018 3:51 PM |
| 27 | HA SQL Application Clusters | 10/24/2018 2:54 PM |
| 28 | Predictive analytics | 10/24/2018 2:08 PM |
| 29 | Tam Retail - SQL database | 10/24/2018 1:51 PM |
| 30 | Actimize, ACH Plus | 10/24/2018 1:38 PM |
| 31 | Revit Newforma | 10/24/2018 1:18 PM |
| 32 | Oracle E-Business Suite | 10/24/2018 12:55 PM |
| 33 | SQL | 10/24/2018 12:53 PM |
| 34 | Exchange and ERP | 10/24/2018 12:49 PM |
| 35 | | 10/24/2018 12:47 PM |
| 36 | Encompass | 10/24/2018 12:37 PM |
| 37 | SQL Server and Tabular SQL | 10/24/2018 12:25 PM |
| 38 | Intergy EHR | 10/24/2018 12:22 PM |
| 39 | ERP and Engineering | 10/24/2018 12:12 PM |
| 40 | Data analytics | 10/24/2018 12:06 PM |
| 11 | ERP and CRM | 10/24/2018 12:03 PM |
| 42 | NetBackup, Exchange | 10/24/2018 12:02 PM |
| 43 | Data Warehouse, and Enterprise Merchandising System | 10/24/2018 11:57 AM |
| 14 | SAP | 10/24/2018 11:55 AM |
| 15 | SAP | 10/24/2018 11:53 AM |
| 16 | Home-grown database system | 10/24/2018 11:48 AM |
| 17 | ERP | 10/24/2018 11:40 AM |
| 18 | Epic and EDM | 10/24/2018 11:26 AM |
| 19 | sharepoint | 10/24/2018 11:19 AM |
| 50 | Internally developed automituve engoneering application | 10/24/2018 11:15 AM |
| 51 | Backup | 10/24/2018 11:09 AM |
| 52 | Public sites | 10/24/2018 11:03 AM |
| 53 | Our graphics managment applications | 10/24/2018 10:58 AM |
| 54 | SQL DB | 10/24/2018 10:55 AM |
| 55 | sql server | 10/24/2018 10:43 AM |
| 56 | Logstash, Database | 10/24/2018 10:42 AM |
| 57 | Infor Adage | 10/24/2018 10:41 AM |
| 58 | Allscripts Professional EHR | 10/24/2018 10:40 AM |



| 50 | AutoCAD/GIS/MicroStation | 10/24/2019 10:29 114 |
|----|---|----------------------|
| 59 | AutoCAD/GIS/MicroStation | 10/24/2018 10:38 AM |
| 60 | ERP Polly live ITSM | 10/24/2018 10:36 AM |
| 61 | Rally, Jira, ITSM | 10/24/2018 10:29 AM |
| 62 | Both internally-developed apps | 10/24/2018 10:29 AM |
| 63 | In house datawarehouse | 10/24/2018 10:26 AM |
| 64 | SAP, EDI | 10/24/2018 10:25 AM |
| 65 | ERP | 10/24/2018 10:16 AM |
| 66 | SharePoint, BI apps | 10/24/2018 10:14 AM |
| 67 | Working on a Virtual Machine using V-Center | 10/24/2018 10:11 AM |
| 68 | SAP - Oracle | 10/24/2018 10:06 AM |
| 69 | Dyanmics GP, SharePoint | 10/24/2018 10:04 AM |
| 70 | Gwabbit | 10/24/2018 10:02 AM |
| 71 | network monitoring, splunk | 10/24/2018 10:01 AM |
| 72 | Not tough just most heavily used, and on the way to the cloud/outsourcing (SAP) | 10/24/2018 10:01 AM |
| 73 | ERP | 10/24/2018 10:01 AM |
| 74 | Document management systems, quantitative Risk analysis | 10/24/2018 9:55 AM |
| 75 | data warehousing marts | 10/24/2018 9:55 AM |
| 76 | SAP, SCCM | 10/24/2018 9:51 AM |
| 77 | warehouse load | 10/24/2018 9:45 AM |
| 78 | Oracle | 10/24/2018 9:43 AM |
| 79 | In house booking system running on as 400 | 10/24/2018 9:40 AM |
| 80 | SAP and elastic logging | 10/24/2018 9:39 AM |
| 81 | Online checkin & profile | 10/24/2018 9:35 AM |
| 82 | VDI and DB | 10/24/2018 9:31 AM |
| 83 | VDI, and time and billing software at end of month | 10/24/2018 9:29 AM |
| 84 | Epicor's Eclipse ERP system, MS SQL | 10/24/2018 9:25 AM |
| 85 | TSM | 10/24/2018 9:24 AM |
| 86 | SQL and Replication | 10/24/2018 9:20 AM |
| 87 | Payplus, Assistck | 10/24/2018 9:15 AM |
| 88 | Order Entry | 10/24/2018 9:12 AM |
| 89 | Reporting and analytics | 10/24/2018 9:11 AM |
| 90 | Exchange and MS SQL | 10/24/2018 9:10 AM |
| 91 | Finance and HR | 10/24/2018 9:03 AM |
| 92 | Dynamics, Citrix | 10/24/2018 9:01 AM |
| 93 | CSPro, UPoint | 10/24/2018 8:39 AM |
| 94 | SAP, SAP Hana | 10/24/2018 8:32 AM |
| 95 | FileLocator Pro | 10/24/2018 8:29 AM |
| 96 | MS SQL Server | 10/24/2018 8:29 AM |
| 97 | Records, billing. | 10/24/2018 8:27 AM |
| 98 | Epicor Eclipse, Phocas | 10/24/2018 8:27 AM |
| 99 | Exchange and MSSQL | 10/24/2018 8:24 AM |



| 100 | SQL Server | 10/24/2018 8:24 AM |
|-----|---|---------------------|
| 101 | SQL Servers and Reporting Services | 10/24/2018 8:23 AM |
| 102 | database in Virtual enviroment | 10/24/2018 8:21 AM |
| 103 | Exchange 2010, Lawson | 10/24/2018 8:21 AM |
| 104 | Database | 10/24/2018 8:19 AM |
| 105 | CRM | 10/24/2018 8:19 AM |
| 106 | yrateirporP | 10/24/2018 8:12 AM |
| 107 | Bartender Labeling | 10/24/2018 8:10 AM |
| 108 | ArcGIS | 10/24/2018 8:09 AM |
| 109 | sap | 10/24/2018 8:08 AM |
| 110 | SAP/ MS Dynamics CRM | 10/24/2018 8:02 AM |
| 111 | Patriot GVPO and Nautilus | 10/24/2018 7:53 AM |
| 112 | Al via GPU, PACS | 10/24/2018 7:47 AM |
| 113 | SAP | 10/24/2018 7:43 AM |
| 114 | Cerner | 10/24/2018 7:43 AM |
| 115 | data intensive applications | 10/24/2018 7:43 AM |
| 116 | Opera hosting | 10/24/2018 7:43 AM |
| 117 | Oracle, Internal Logging Services | 10/24/2018 7:43 AM |
| 118 | b2b integrations | 10/24/2018 7:42 AM |
| 119 | Dynamics GP | 10/24/2018 7:40 AM |
| 120 | Automation | 10/24/2018 7:39 AM |
| 121 | Big data | 10/24/2018 7:38 AM |
| 122 | epic hyperspace | 10/24/2018 7:37 AM |
| 123 | SQL is one of our worst applications to support but Vlocity helps us minimize any impact | 10/17/2018 9:29 AM |
| 124 | Primary LOB application | 10/15/2018 9:51 AM |
| 125 | EMR | 10/15/2018 8:50 AM |
| 126 | Oracle | 10/12/2018 12:26 PM |
| 127 | Hyperion, Endeca, MS Dynamics, Oracle | 10/10/2018 9:36 AM |
| 128 | Anything from Thompson Reuters despite being on all-flash storage | 10/8/2018 11:52 AM |
| 129 | Nuance - Dragon, Allscripts EHR (which is hosted so there is minimal we can do to fix this) | 10/8/2018 7:18 AM |
| 130 | ORACLE | 10/5/2018 8:45 AM |
| 131 | Relativity | 10/4/2018 8:54 AM |
| 132 | Navigator Workforce and Lighthouse | 10/4/2018 6:29 AM |
| 133 | Office 365 (Cloud hosted by MS) | 10/3/2018 11:36 AM |
| 134 | AssistCK, ComplianceLink | 10/3/2018 10:38 AM |
| 135 | Custom applications | 10/3/2018 10:37 AM |
| 136 | VDI and Dashboards/Reporting | 10/3/2018 10:18 AM |
| 137 | enterprise apps | 10/3/2018 9:55 AM |
| 138 | Casper, APO | 10/3/2018 8:05 AM |
| 139 | Oracle EBS | 10/3/2018 8:05 AM |
| 140 | e-marketing and POS linkage to invenogry managmenet and finaincial systems | 10/3/2018 7:58 AM |



| 141 | EBMS; SQL | 10/3/2018 7:37 AM |
|-----|---|-------------------|
| 142 | Sefas Producer soon Quadient Inspire, I'm sure there are other in the enterprise out of my scope of work. | 10/3/2018 7:32 AM |
| 143 | mobile and IAM | 10/3/2018 7:12 AM |
| 144 | Web application | 10/3/2018 7:11 AM |
| 145 | Reporting servers, both MITS and SQL | 10/3/2018 6:42 AM |
| 146 | ms dynamics, SAP | 10/3/2018 6:39 AM |
| 147 | Citrix | 10/3/2018 6:37 AM |
| 148 | Oracle | 10/3/2018 6:33 AM |
| 149 | Third party modeling applications and proprietary applications that adjust the industry risk numbers. | 10/3/2018 6:26 AM |
| 150 | SAP ECC and SAP BI | 10/3/2018 6:26 AM |
| 151 | Oracle Ebusiness Suite / Oracle Dataware house | 10/3/2018 6:25 AM |
| 152 | SQL Servers | 10/3/2018 6:21 AM |
| 153 | EMR and SQL Cluster | 10/3/2018 6:19 AM |
| 154 | Delphix, QNXT | 10/3/2018 6:17 AM |
| 155 | Internally written and maintained software | 10/3/2018 6:17 AM |
| 156 | Sophos Antivirus, Forticlient VPN | 10/3/2018 6:14 AM |
| 157 | SQL with Nav | 10/3/2018 6:13 AM |
| 158 | McKesson, Epic | 10/3/2018 6:13 AM |
| 159 | eDiscovery and RDBMS | 10/3/2018 6:12 AM |
| 160 | CAD machines. Mixing mobility of architects with performance. | 10/3/2018 6:11 AM |
| 161 | Graphic processing application from Adobe | 10/3/2018 6:10 AM |
| 162 | Legacy SAP | 10/3/2018 6:10 AM |
| 163 | ERP | 10/3/2018 6:09 AM |
| 164 | Claims software, OCR systems | 10/3/2018 6:01 AM |
| 165 | Manufacturing execution system, real time collaboration | 10/3/2018 5:59 AM |
| 166 | SAP | 10/3/2018 5:58 AM |
| 167 | FM Audit - electronic device monitoring and data capture | 10/3/2018 5:55 AM |
| 168 | SAS | 10/3/2018 5:54 AM |
| 169 | Life-nbA | 10/3/2018 5:52 AM |
| 170 | sas | 10/3/2018 5:49 AM |
| 171 | Hitachi Command Suite | 10/3/2018 5:47 AM |
| 172 | Largely R&D's specific tools. | 10/3/2018 5:37 AM |
| 173 | adobe suite | 10/3/2018 5:33 AM |
| 174 | Data warehouse | 10/3/2018 5:32 AM |
| 175 | BitCentral, Wide Orbit | 10/3/2018 5:27 AM |
| 176 | Business Apps | 10/3/2018 5:24 AM |
| 177 | Point of sale program, Execontrol | 10/3/2018 5:17 AM |
| 178 | sql server. SAP Business objects | 10/3/2018 5:16 AM |
| 179 | SQL | 10/3/2018 5:10 AM |



| 180 | SQL DB. | 10/3/2018 5:10 AM |
|-----|--|--------------------|
| 181 | Epolicy Orchestrator | 10/3/2018 5:08 AM |
| 182 | EClass, Legacy systems | 10/3/2018 5:03 AM |
| 183 | Taxport and GTD | 10/3/2018 5:02 AM |
| 184 | home grown apps mostly built on java | 10/3/2018 5:01 AM |
| 185 | SAP, PkMS | 10/3/2018 5:01 AM |
| 186 | erp | 10/3/2018 4:59 AM |
| 187 | upgrading search results | 10/3/2018 4:59 AM |
| 188 | Home grown | 10/3/2018 4:58 AM |
| 189 | medical coding and billing programs | 10/3/2018 4:57 AM |
| 190 | No, our current technology (storage, CPU, network) is very fast. | 10/3/2018 4:56 AM |
| 191 | AS400 | 10/3/2018 4:56 AM |
| 192 | SQL | 10/3/2018 4:55 AM |
| 193 | Exchange and Document Managment | 10/3/2018 4:55 AM |
| 194 | SQL databases | 10/3/2018 4:54 AM |
| 195 | Operational Data Store | 10/3/2018 4:53 AM |
| 196 | SAP, Custom Data Analytics application | 10/3/2018 4:53 AM |
| 197 | Moxie | 10/3/2018 4:52 AM |
| 198 | Oracle ERP, Exchange | 10/3/2018 4:50 AM |
| 199 | MySQL and Exchange | 10/3/2018 4:50 AM |
| 200 | SAP Ananlysis | 10/3/2018 4:49 AM |
| 201 | Peoplesoft | 10/3/2018 4:49 AM |
| 202 | SQL server | 10/3/2018 4:48 AM |
| 203 | In house created apps for media management | 10/3/2018 4:46 AM |
| 204 | Meditech | 9/28/2018 11:19 AM |
| 205 | Virtual machines, NAS | 9/25/2018 8:24 PM |
| 206 | confidential | 9/25/2018 4:39 PM |
| 207 | SharePoint, Exchange | 9/25/2018 1:23 PM |
| 208 | Oracle Financial apps, VMware environment | 9/25/2018 12:48 PM |
| 209 | Object-oriented database (application and datawarehouse) | 9/25/2018 12:44 PM |
| 210 | SQL | 9/25/2018 11:58 AM |
| 211 | Spark, Vertica, MongoDB just to name a few. | 9/25/2018 11:01 AM |
| 212 | In-house SQL apps | 9/25/2018 10:47 AM |
| 213 | Classified | 9/25/2018 10:29 AM |
| 214 | Jlra/ Github Enterprise | 9/25/2018 9:42 AM |
| 215 | data warehouse | 9/25/2018 8:23 AM |
| 216 | Lawson, Web Center | 9/25/2018 8:16 AM |
| 217 | MS Exchange & Data Warehouse | 9/25/2018 8:12 AM |
| 218 | Custom, in-house developed | 9/25/2018 8:12 AM |
| 219 | Critical EMR/Healthcare | 9/25/2018 8:07 AM |
| 220 | Dynamics | 9/25/2018 8:02 AM |
| | | |



| 221 | Elite 3E | 9/25/2018 8:00 AM |
|-----|---|-------------------|
| 222 | Great Plains, Excel | 9/25/2018 7:58 AM |
| 223 | Hadoop | 9/25/2018 7:53 AM |
| 224 | SQL Server, Oracle | 9/25/2018 7:53 AM |
| 225 | Internally developed apps | 9/25/2018 7:52 AM |
| 226 | VDI | 9/25/2018 7:48 AM |
| 227 | SQL, VDI | 9/25/2018 7:47 AM |
| 228 | Busin. Intell. | 9/25/2018 7:46 AM |
| 229 | SQL, Exchange | 9/25/2018 7:46 AM |
| 230 | microsoft GP and sage | 9/25/2018 7:35 AM |
| 231 | Couchbase and Chat | 9/25/2018 7:31 AM |
| 232 | Proprietary | 9/25/2018 7:20 AM |
| 233 | Legacy apps built in house | 9/25/2018 7:05 AM |
| 234 | Custom built | 9/25/2018 7:02 AM |
| 235 | SAP and BPC | 9/25/2018 6:50 AM |
| 236 | Automated disclosure generation for loan applicants | 9/25/2018 6:47 AM |
| 237 | SQL Server | 9/25/2018 6:44 AM |
| 238 | Business Objects, Solar Eclipse | 9/25/2018 6:39 AM |
| 239 | Primavera, eLEM | 9/25/2018 6:27 AM |
| 240 | 3E, iManage | 9/25/2018 6:26 AM |
| 241 | TL2000 | 9/25/2018 6:21 AM |
| 242 | Maximo and Oracle | 9/25/2018 6:18 AM |
| 243 | SAP | 9/25/2018 6:12 AM |
| 244 | Data warehouse and CRM | 9/25/2018 6:08 AM |
| 245 | peoplesoft and clarity | 9/25/2018 6:06 AM |
| 246 | Custom in-house apps | 9/25/2018 6:04 AM |
| 247 | SQL, iManage (document management) | 9/25/2018 6:03 AM |
| 248 | Epic | 9/25/2018 6:02 AM |
| 249 | Clarity | 9/25/2018 5:55 AM |
| 250 | SAP | 9/25/2018 5:53 AM |
| 251 | Dell Boomi | 9/25/2018 5:51 AM |
| 252 | SAP, Unify | 9/25/2018 5:50 AM |
| 253 | Sql Server | 9/25/2018 5:48 AM |
| 254 | SAP/documentum | 9/25/2018 5:45 AM |
| 255 | SAP | 9/5/2018 3:17 PM |
| 256 | Epic | 9/5/2018 6:32 AM |
| 257 | SQL and Datex | 9/5/2018 6:27 AM |
| 258 | cassandra | 9/5/2018 6:20 AM |
| 259 | backup servers | 9/5/2018 6:18 AM |
| 260 | Oracle | 9/5/2018 5:45 AM |
| 261 | splunk | 9/5/2018 5:21 AM |



| 262 | Sap Spinfire | 9/5/2018 5:15 AM |
|-----|--|--------------------|
| 263 | SAP | 9/5/2018 4:53 AM |
| 264 | SAP BI on HANA backend | 9/5/2018 4:48 AM |
| 265 | Microsoft Dynamics NAVision | 9/5/2018 4:41 AM |
| 266 | Progress DB | 9/5/2018 4:39 AM |
| 267 | email | 9/5/2018 4:38 AM |
| 268 | SAP Cloud to on-premise interfaces, SAP Hana | 8/29/2018 6:54 AM |
| 269 | PCRM | 8/29/2018 4:17 AM |
| 270 | SQL servers | 8/28/2018 9:01 AM |
| 271 | Global Sales | 8/28/2018 6:46 AM |
| 272 | Informatica | 8/28/2018 6:44 AM |
| 273 | In-house applications | 8/28/2018 6:18 AM |
| 274 | Oracle RAC Database | 8/28/2018 6:02 AM |
| 275 | proprietary application | 8/28/2018 5:55 AM |
| 276 | Our EMR | 8/28/2018 5:41 AM |
| 277 | Fidelio, Silverware | 8/28/2018 4:59 AM |
| 278 | Exchange, SQL | 8/28/2018 4:53 AM |
| 279 | Oracle | 8/28/2018 4:45 AM |
| 280 | SAP HANA | 8/23/2018 11:10 AM |
| 281 | SQL, Exchange | 8/22/2018 9:49 AM |
| 282 | SAP and share point | 8/22/2018 6:25 AM |
| 283 | NextGen EMR | 8/21/2018 12:23 PM |
| 284 | DataWarehouse | 8/21/2018 12:17 PM |
| 285 | BizTalk, Sharepoint, 1 or 2 internal Apps | 8/21/2018 11:44 AM |
| 286 | Oracle | 8/21/2018 10:36 AM |
| 287 | Hyperion, Syteline | 8/21/2018 9:56 AM |
| 288 | DB2 | 8/21/2018 9:55 AM |
| 289 | SQL Server based | 8/21/2018 9:47 AM |
| 290 | SQL & Exchange | 8/21/2018 9:38 AM |
| 291 | Proprietary custom built | 8/21/2018 9:38 AM |
| 292 | AS400 and MS Office | 8/21/2018 9:18 AM |
| 293 | Unable to relay due to corporate security policies. | 8/21/2018 9:08 AM |
| 294 | Disked based and cloud based backup as well as sql | 8/21/2018 9:00 AM |
| 295 | Demantra | 8/21/2018 8:56 AM |
| 296 | Radiology PACS systems | 8/21/2018 8:02 AM |
| 297 | cdk, tech 2 win | 8/21/2018 7:29 AM |
| 298 | Our CRM is incredibly disk heavy | 8/21/2018 7:20 AM |
| 299 | Mitel Voip system, Various Virtual desktop apps | 8/21/2018 7:05 AM |
| 300 | VDI; PoS | 8/21/2018 6:54 AM |
| 301 | Proprietary software (prefer not to list the software) | 8/21/2018 6:43 AM |
| 302 | Oracle EBS | 8/10/2018 10:49 PM |
| | | |



| Apttus Oracle and Proficy Shared folder, database application and tape backup software Adobe Premiere Epicor ERP, SQL ESRI GIS BI & CRM netBeans and alternative IDE's. | 8/10/2018 12:31 PM 8/10/2018 8:57 AM 8/9/2018 6:09 PM 8/9/2018 1:59 PM 8/9/2018 1:06 PM 8/9/2018 12:02 PM 8/9/2018 10:48 AM 8/9/2018 10:20 AM 8/9/2018 10:13 AM 8/9/2018 10:03 AM |
|---|--|
| Shared folder, database application and tape backup software Adobe Premiere Epicor ERP, SQL ESRI GIS BI & CRM netBeans and alternative IDE's. | 8/9/2018 6:09 PM 8/9/2018 1:59 PM 8/9/2018 1:06 PM 8/9/2018 12:02 PM 8/9/2018 10:48 AM 8/9/2018 10:20 AM 8/9/2018 10:13 AM |
| Adobe Premiere Epicor ERP, SQL ESRI GIS BI & CRM netBeans and alternative IDE's. | 8/9/2018 1:59 PM 8/9/2018 1:06 PM 8/9/2018 12:02 PM 8/9/2018 10:48 AM 8/9/2018 10:20 AM 8/9/2018 10:13 AM |
| Epicor ERP, SQL ESRI GIS BI & CRM netBeans and alternative IDE's. | 8/9/2018 1:06 PM 8/9/2018 12:02 PM 8/9/2018 10:48 AM 8/9/2018 10:20 AM 8/9/2018 10:13 AM |
| ESRI GIS BI & CRM netBeans and alternative IDE's. | 8/9/2018 12:02 PM 8/9/2018 10:48 AM 8/9/2018 10:20 AM 8/9/2018 10:13 AM |
| BI & CRM netBeans and alternative IDE's. | 8/9/2018 10:48 AM 8/9/2018 10:20 AM 8/9/2018 10:13 AM |
| netBeans and alternative IDE's. | 8/9/2018 10:20 AM 8/9/2018 10:13 AM |
| | 8/9/2018 10:13 AM |
| | |
| iManage and Exchange | 8/9/2018 10:03 AM |
| SQL | |
| Oracle/Peoplesoft | 8/9/2018 9:30 AM |
| SQL Server | 8/9/2018 9:18 AM |
| Internal apps and financial apps | 8/9/2018 8:32 AM |
| Custom In house applications | 8/9/2018 8:23 AM |
| mobile web apps | 8/9/2018 8:23 AM |
| MSFT SQL server, Sharepoint | 8/9/2018 7:31 AM |
| Solarwinds Suite, custom applications, IBM CLM | 8/9/2018 7:07 AM |
| Oracle Hyperion, SQL | 8/9/2018 6:25 AM |
| sql oracle | 8/9/2018 6:10 AM |
| erp | 8/9/2018 5:45 AM |
| Electronic Medical Records | 8/9/2018 5:32 AM |
| landesk, legacy software | 8/9/2018 5:27 AM |
| Aprimo | 8/9/2018 5:25 AM |
| Business Intelligence Database cubing | 8/9/2018 5:20 AM |
| Oracle E-Business Suite and homegrown application using MSSQL databases as storage | 8/9/2018 5:20 AM |
| multiple medical imaging applications | 8/9/2018 5:11 AM |
| Home grown applications | 8/9/2018 5:09 AM |
| SQL based apps we use throughout the entire business. | 8/9/2018 5:00 AM |
| ERP & Datawarehouse | 8/9/2018 4:59 AM |
| databases | 8/9/2018 4:52 AM |
| BI related applications | 8/9/2018 4:52 AM |
| VDI, Imaging | 8/9/2018 2:05 AM |
| SQL database has been the constant performance target | 8/8/2018 3:12 PM |
| Exchange and our data warehousing. | 8/8/2018 11:07 AM |
| SharePoint, VDI and some Java based application (JVM) | 8/8/2018 10:05 AM |
| JD Edwards ERP | 8/8/2018 9:55 AM |
| IGT Advantage | 8/8/2018 9:06 AM |
| Abaqus, Pamcrash | 8/8/2018 9:05 AM |
| CRM and Great Plains | 8/8/2018 8:56 AM |
| Database | 8/8/2018 8:41 AM |
| Canvas, Discover | 8/8/2018 8:30 AM |



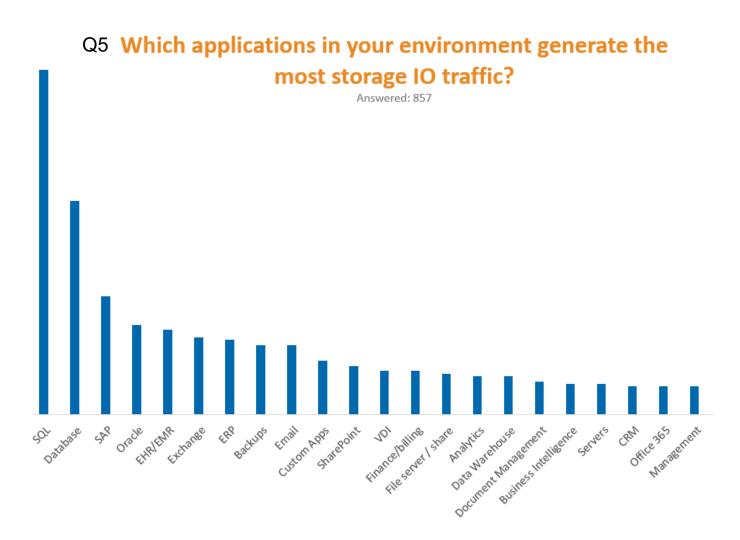
| 0.4.4 | Marthall DO had the are and others | 0/0/0040 0 05 444 |
|-------|---|--------------------|
| 344 | Mostly HPC but there are others | 8/8/2018 8:25 AM |
| 345 | Classified | 8/8/2018 8:23 AM |
| 346 | Cases | 8/8/2018 8:20 AM |
| 347 | PDI and FocalPoint | 8/8/2018 8:00 AM |
| 348 | SQL | 8/8/2018 7:15 AM |
| 349 | forecasting and ordering | 8/8/2018 6:20 AM |
| 350 | Azure servers supporting a BI configuration | 8/8/2018 6:18 AM |
| 351 | vendor vertical market trading system by Brady Trinity - Trinity Metals | 8/8/2018 6:11 AM |
| 352 | ERP | 8/8/2018 6:11 AM |
| 353 | Exchange | 8/8/2018 6:10 AM |
| 354 | SQL and our EHR | 8/8/2018 6:03 AM |
| 355 | Meditech 6.08 | 8/8/2018 6:03 AM |
| 356 | SQL | 8/8/2018 6:00 AM |
| 357 | Dynamics GP, OSSI | 8/8/2018 5:35 AM |
| 358 | Microsoft AX 2009 ERP | 8/8/2018 5:32 AM |
| 359 | SQL Server | 8/8/2018 5:31 AM |
| 360 | ERP, Specification Database | 8/8/2018 5:01 AM |
| 361 | SQL | 8/8/2018 5:00 AM |
| 362 | ERP Software | 8/8/2018 4:59 AM |
| 363 | Dynamics AX | 8/8/2018 4:59 AM |
| 364 | oracle database | 8/8/2018 4:56 AM |
| 365 | Banner | 8/8/2018 4:56 AM |
| 366 | Data warehouse applications | 8/8/2018 4:53 AM |
| 367 | Video editing, Archiving | 8/8/2018 4:51 AM |
| 368 | Web apps that are not developed well | 8/1/2018 2:38 PM |
| 369 | SAP and Hadoop | 7/27/2018 6:31 AM |
| 370 | video | 7/27/2018 2:49 AM |
| 371 | ERP | 7/26/2018 1:32 PM |
| 372 | EPIC | 7/26/2018 10:26 AM |
| 373 | call recordings. | 7/26/2018 10:21 AM |
| 374 | VDI | 7/26/2018 9:02 AM |
| 375 | Dealer Management System | 7/26/2018 7:56 AM |
| 376 | C based batch applications processing 80+ billion transactions a day | 7/26/2018 6:55 AM |
| 377 | SQL | 7/26/2018 6:51 AM |
| 378 | Radiology PACS system onsite | 7/26/2018 6:45 AM |
| 379 | sql, ACL, andTeammate | 7/26/2018 6:39 AM |
| 380 | supply chain management | 7/26/2018 6:37 AM |
| 381 | AHT LTC | 7/26/2018 6:35 AM |
| 382 | TMW, SAP | 7/26/2018 6:33 AM |
| 383 | Legacy systems where we benchmark data and send tons of files out at a single point in time | 7/26/2018 5:46 AM |
| 384 | EMR | 7/26/2018 5:23 AM |



This word cloud graphic weighs the number of times IT Pros mentioned an application that is toughest to support from a systems performance standpoint and displays the size relative to its frequency. In a glance, anyone can quickly ascertain the most popular applications driving performance requirements across the enterprise.







Answers were included in the above chart if there were at least 10 responses in the category. The responses below are simply listed as they could not be grouped into categories with at least 10 similar responses.

| Citrix | Engagement | interactive design sessions |
|-----------|--|------------------------------|
| Video | trading applications | Polling systems |
| Dynamics | benefite | Intranet |
| Reporting | Usersnot knowing what they need or don't | Power Chart |
| POS | Enterprise Merchandising System | CAE FEA |
| Adobe | virus scanning | prem exchange |
| VMware | EPIC CLarity | IoT event-based applications |



| Image | WhatsupGOLD | Production - Customer facing |
|----------------------|--|-----------------------------------|
| Data related | Big data | IPI |
| Virtualization | Network Monitoring Logging | QA systems in debug mode |
| Splunk | big data applications | IR |
| CAD | Novell GroupWise | Quantel and Drastic |
| Microsoft | BizTalk | ITV |
| PACS | Online Traffic | Quote requests |
| Web | Excel | java based |
| Order Entry | Alteryx | Raiser's Edge |
| VMs | AHT LTC | JDE 9.0 |
| Accounting | own software and Devops and R&D Departments | Real time monitoring |
| Hadoop | Execontrol | Jenkins |
| Manufacturing | Pegasus Transflo | recording |
| Solarwinds | Exodata | WMS |
| Claims | plm | any app that stores blob data |
| Cloud | FACETS XC | workflows |
| PeopleSoft | Clearcase build environments | Rev-Cycle |
| SAS | Bomgar | 000 unique barcodeds DAILY |
| Media | pricing & transactions | Any Geological apps |
| BlackBoard | Вох | Laserfiche |
| HPC | Qlik | Scada |
| iManage | FM Audit | Legacy |
| Creative | Radiology Systems | any microsoft application |
| Clinical | FortiClient VPN | LFM |
| Browser | Record ingest and storage before processing | Consumer site |
| 3E | Fundraising (Blackbaud) | Life-nbA |
| Relativity | Reservation system | Control M |
| GitHub | gallery and e-mails. | Listed above |
| ETL | Cognos | Shop Floor Systems |
| SCCM | Gene Sequencing | log monitoring |
| Trading | Sefas Producer. This is only my scope of influence | SIEM |
| Security | general activity audits. | Logging and auditing applications |
| Commvault | shipboard apps | Software AG |
| Engineering software | general office applications. | Logstash |
| Development | Skype | Couchbase and Chat |

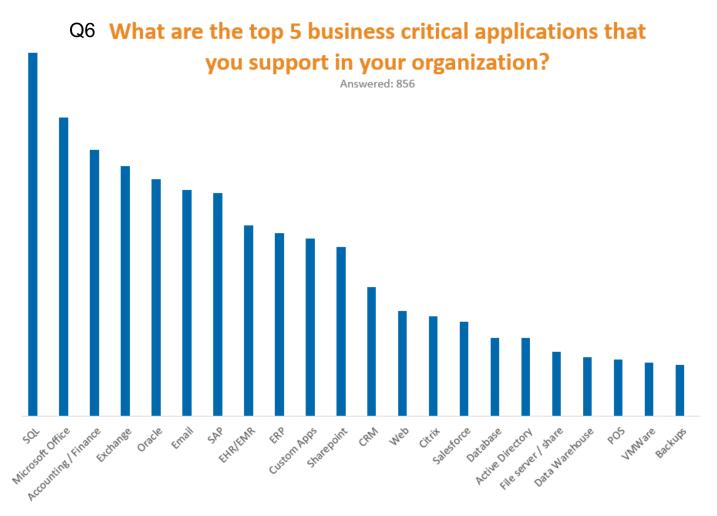


| Epicor | BPC | Machine patching |
|---|--|--|
| IOT | Spark | Speladex industrial |
| WFM | Al applications | Macola |
| GIS | ssl/tcp connections | Applications with heavy library calls for code or heavy dependence on data calls for typically dynamic data that is not resident within the application. |
| Word | Global Sales | main platform |
| Opera | Submission platforms | SSRS |
| Stalthbits | graphics managment applications | Mainframe |
| RDBMD | the one's that are not tested or assessed for load | student data |
| decision support | GTD and Taxport | Cards |
| we keep them balanced | TMW and TL2000 | Supply Planning apps |
| Dell Boomi | Guidewire | cassandra |
| policy admin | Transactional Sales | The ones that are games. |
| Delphix | all | Maximo |
| servicenow | updates | The statistical package R |
| depends on the enviorments | Hbase | mbile |
| UDP device communication | Appraisal Application | Timekeeping software |
| Design program tools | НСМ | cdk |
| Not applications but more on unstructured data stores | customer applications are invisible to us | Cube related |
| designed for distributed IO | HCS | Medidata |
| Parking application | Archiving | transaction |
| Avanti | HDFS read and write from various applications. | Messaging |
| PST | WebEx | TSM |
| device data | High transacation rate OLTP | Metric tracking systems |
| RTM | With the rise of In Memory cache grids | Unify |
| Devops | honeycomb | Changepoint |
| Solar Eclipse | NetSuite | UPoint |
| ACL | Business Objects | migration module |
| Ticketing | Nimble SAN | Varies |
| Banner | Huawei e-Sight | mirasys |
| vendor vertical market trading system by Brady Trinity - Trinity Metals | Not storage-heavy | VEEAM |
| ECM (Hyland OnBase) | 13 | Mobile Devices |



| netsmart | chicago environment | Vetrocket |
|---|----------------------------------|-------------------------------|
| E-commerce | IBM notes | Monitoring |
| oltp | Online Access | Customer Reservation Systems |
| EDI | IdM | Municipal Court application |
| O's | OpenText DM | DAS |
| EDM | Business Software CGS | my C fast data platform ones |
| Plant Automation | CICS | Vmwate |
| EDMS | All Applications used internally | NAS |
| PowerPointVisio | Originations (a platform | as400 |
| EDW | IMC | Navigator |
| Queries | outgoing | AS400 MAINFRAME |
| batch processes | In my realm | Navision |
| Client Versions. | AD and IE | Wind Tunnel Testing |
| elastic will be the highest IO in the end | Infor | NetApp |
| Commerce | PDI | Debit Card |
| Ellucian Banner | Infor Adage | Netflix |
| Shoretel | Classified | Jira |
| Bedside monitors | Informatica | Youtube |
| Applicant Tracking | PLC and network traffic | landesk |
| EMS Solutions | Ingestion applications | Large file generation/sending |
| testing applications | PMS | |





Answers were included in the above chart if there were at least 19 responses in the category. The responses below are simply listed as they could not be grouped into categories with at least 19 similar responses.

| Outlook | avid inews | Litera | |
|--------------|------------------------------------|----------------------------------|--|
| Reporting | avimark | Lithium | |
| Security | Bareos | live chat | |
| Peoplesoft | Bartender | Loan Officer pipeline management | |
| Data Related | batch jobs | lob apps | |
| Image | Behavioral Intervention Management | Login | |
| HR | Big Data | longview | |
| VDI | BigFix | lotus | |
| Analytics | Billing | LS-Dyna | |
| Service | BizTalk | LTC | |
| Skype | BLOB | Lumedex | |



| EDI | Bluebeam | lync | |
|------------------------|-----------------------|--|--|
| eCommerce | BlueBeam/Adobe | Macola | |
| Windows | bluecherry er | Magento | |
| Great Plains | ВО | Mapper | |
| Network | Boarding Control | MapRed Jobs | |
| Hadoop | BOLT | MaxRecall | |
| Hyperion | ВОМ | MBAM | |
| PACS | Bomgar | McAfee | |
| Mainframe | Boomi | Medidata | |
| Microsoft Applications | Box.com | Mediware CPR+ | |
| IIS | BPC | MEI | |
| Adobe | Brand Integrity | member-facing applications | |
| Supply Chain | brokerage management. | Meraki Cloud | |
| Servers | Browser | Microstation | |
| SAS | Budgeting tool | middleware | |
| Autocad | Build | Middleware Applications | |
| Telecom | Buyers Forecasting | mimecast | |
| Sales | Capture | MiPACS | |
| VMs | Care Fusion | mirasys | |
| Reservations | Carpe | MIS | |
| Warehouse | Carpe Diem | Mitel | |
| Workday | Casamba | MITS | |
| Intranet | ССМ | MMS | |
| CAD | CCP (CRM) | Modeling applications | |
| Customer Apps | Centricity | mongo | |
| Cisco | Chartmax | MongoDB | |
| Shipping | Chat tool | most commonly apps. | |
| Video | Checkout | mq | |
| Trading | Checkpoint | Multiple hosted for clients GIS websites | |
| Storage | cics | MyTime | |
| Printing | CIFS | Nagios | |
| Phones | CIRT | Nagios | |
| Mobile Apps | Civil 3D | NAV | |
| JDE | Click scheduler | NCR | |
| DNS | Client Access | NCS | |
| Communication | client portal | NDA covered | |



| AWS | cmdb | NDD. | |
|-----------------|---|----------------------------|--|
| Crystal Reports | CMMS | Netcom | |
| Collaboration | CMS | Netcracker | |
| Cognos | Coaching | Netformix | |
| Cloud | COBOL | netsmart | |
| Virtual | Cohito | New Business | |
| Splunk | collectors | News | |
| VOIP | Compass | NextGen EMR | |
| SCCM | Compliance | Nimble | |
| Radiology | concurrence | nintex forms and workflows | |
| Timekeeping | Confirmit | nitro | |
| Payments | connected assets | NUIX | |
| Messaging | Construction | NVR | |
| Lawson | consumer systems | NX12 | |
| Jira | Consumer website | O2E | |
| IBM | Contact Center | O2K | |
| Marketing | contact center engagement platform | OA | |
| Monitoring | content management software | OATI | |
| NetSuite | Content Mgmt | object | |
| IP | contributions gateway | OKTA | |
| Credit | Control | OLTP | |
| Engineering | Control M | OMI | |
| Azure | Control systems in a plant environment. | onboarding | |
| Access | cornerstone | one micro | |
| Call Center | Corrective Actions | OneNote | |
| AS400 | COTS and GOTS applications | Online Access | |
| Claims | covisint | Onshift | |
| Teams | C-PACS | Open Text | |
| Ticketing | CPW | OpenAir | |
| Performance | credit unions services | OpenEdge | |
| Spark | Crestron Fusion | OpenLDAP | |
| Veeam | CRF | OpenText | |
| Retail | Crowdrise | OpenText DM | |
| Production | Crunchtime | Opera | |
| Lotus Notes | CS Reporting | Optivision | |
| McKesson | CsPro | order processing | |
| Manufacturing | css | OSI-PI | |



| Inventory | customer facing Transactional systems - 2 | OSIPIE | |
|----------------------------|---|--------------------------------|--|
| MES | Cyberark | OSM | |
| ESX | Cybsecurity | OSSI | |
| Google | dameware | other business specific apps | |
| AX | dasd | other | |
| Antivirus | Datex | P2p | |
| Вох | DAX. | P8 | |
| 3E | Dayforce | Pagerduty | |
| Elite | Debit Card | PAM | |
| Audit | deliverers | Parallels RAS | |
| Blackboard | Dell Boomi | Parking | |
| QuickBooks | Dell open manager | Partner Clearance App | |
| VPN | Demand Planning | PathCore | |
| Voice | Demantra | Patient data | |
| Revenue Cycle Applications | Denali | pc miler | |
| Students | Dentrix | PE EMR | |
| WFM | deployment | Peace Texas | |
| PLM | Deposits | Pegasus Transflo Batch scan | |
| Relativity | Development | permitting | |
| Record Keeping | Diamond | Personify | |
| Work Order | Disclosure generation | PGD | |
| Shop floor | Dispatch s/w | PHR | |
| PMS | Distribution | pickup | |
| Scanning | dock yard | PKI | |
| WMS | doclink | Plant Automation | |
| Purchasing | DocStar | policy admin | |
| SolarWinds | Domain Controllers | Polling | |
| various | domino | POM | |
| Social | donations services | population health | |
| Navigator | DOS | Portal | |
| Fundraising | DR related and internal FIS applications. | Portfolio performance analysis | |
| Internet | Draftsight | Portia | |
| Microsoft | drive | PowerBI | |
| ETL | Drwings | Powerscribe 360 | |
| LMS | DUO | Prepaid System | |
| GE Centricity | DVO | Pricing | |



| Logistics | EAM | private portals | |
|--------------------------|--------------------------------------|--|--|
| Informatica | ebe | procurement | |
| IE | EBE | Product data movement to connected systems | |
| Guidewire | ECW | Product selection | |
| Ncontracts | EDW | Progress DB | |
| IVR | Elastic Search | Prometheus | |
| Java | Electronic Forms | Prophet | |
| Kronos | eLEM | Prophix | |
| CDK | Ellucian Banner | ProSurv | |
| Cardiology | EMC | Provenir | |
| Apache | EMC SoureOne | PRTG | |
| Conferencing | Employee website via SharePoint. | PSA | |
| EKG | Empower | PTMS | |
| Design | Encompass | Q2O | |
| Epicor | Encrypted logging | QC | |
| DHCP | end to end POS | QMatics | |
| Dealer Management System | Endeca | Quickview | |
| Unify | engagement | Quiet a few of them. | |
| Symantec | Engine | QuoteWerks | |
| Sharefile | enterprise one | R20 | |
| Python | entire global network infrastructure | Radius Auth | |
| TMW | entitlement gateway | Rally | |
| R&D | eod | Rate Systems | |
| Scheduling | EOHR | RE | |
| Raiser's Edge | Epolicy Orchestrator | Readsoft | |
| Success Factors | EPRESCRIBE | Recordings | |
| RDC | Equilogic | regulatory | |
| Tableau | era | regulatory weight control | |
| RDS | eroom | Remedy | |
| Transactions | E-scheduling | Rendezvous | |
| PDI | ESDL | RENXT | |
| Project | Essbase | Replenishment | |
| Remote Access | eStatements | Retain | |
| Search | ETAP | Reynolds and Reynolds | |
| Replication | Event Response applications | RF Smart | |
| Shoretel | Evidence Management | rhel | |
| Research | exalink | Risk Transfer Application | |



| SumTotal | Execontrol | Riskminder | |
|---------------------|------------------------------------|---|--|
| Revit | External Client facing app etc | Rollbase | |
| SYTELINE | F5 load balance | Rosch Immunology | |
| Rightfax | FA Dashboard | RP | |
| Primavera | FACETS | RTIconnect | |
| saas | FDA software | Ruby Rails Environment | |
| Trackwise | FEAR | S4HANA | |
| PkMS | Fee data | Sabrix | |
| Travel | fgh | Sagitta | |
| Planning | FICR | SAN/NAS | |
| Vertex | Fidelio | sandvine | |
| Satellite apps | Field Direct | Scoring | |
| Workflow | Field Sales Mobile | seismic processing | |
| Scada | Field Sales Routing and Navigation | Services for a variety of functionality | |
| youtube | Field Service | Shared folder | |
| Fraud | File Sharing | Siebel | |
| Novell | Fin | SIEM | |
| NetApp | FinalSite (website management) | Signature (Core) | |
| GIS | Firemon | Silverware | |
| MDM | Firewall | SIS | |
| Github | FIS | Sitefinity | |
| FTP | Fleet Maintenance Software | Siteminder | |
| HDFS | Flexara | Sitescope | |
| NICE | Flight Eventing | SKU Ownership | |
| HFM | Flight Operations | sl | |
| Maximo | FocalPoint | SLATE | |
| HPC | Forecast Planning | SMS | |
| Merchandising | Formassembly | SODI | |
| Identity Management | forms packager | Softeon wms | |
| Facilities | Fundtech (Wires) | Solar Eclipse | |
| Infor | FWs | solaris | |
| Fetal Monitoring | FX | solid works | |
| Federation | gcp | Solstice | |
| Netdocs | GCS | Solution Series | |
| Lending | Geo Apps | Source of Record | |
| Notes | GeoCue | Spear/Hanson Asset management | |
| Maintenance | GERS | Specification System | |
| Onbase | gfgf | Speech recognition | |



| Manhattan | Gigwalk | Spiceworks | |
|--------------------|--------------------------------|---|--|
| Operations | Giro Hastus | SpredSheet | |
| ERM | GIT | ssas cubes | |
| APM | Give | SSL | |
| Commvault | Global DataCenter connectivity | SSMS | |
| Couchbase | GlobalScape | sso | |
| ACH | gosystem/IE | SSRS | |
| B2B | Governance | Standard platforms | |
| Clarity | GPO | statistical analysis applications | |
| BaaN | grafana | stoneware | |
| EBS | GRC | Strategy | |
| Back Office | Group Policy | Stripe | |
| Concur | GTD | Sunquest | |
| Account Management | Halo Reporting | Surgemail | |
| Changepoint | handshake | SURGERY PLANNING | |
| Banner | hard dollar | sus | |
| Dialer | hardware | SXe | |
| Chat | Harmonic | System Center | |
| Business Objects | Harvest | T837 | |
| BOBJ | Hbase | Tagging | |
| EBMS | hcp anywhere | Taleo | |
| Ariba | Healthcare Source | TBA | |
| Cadence | Helpdesk Application | Tech support in general | |
| Datastage | Hive | Technical Operations | |
| eDiscovery | Hometrak | techsys | |
| Coding | Horizon | terminal | |
| Allegro | Hosting compute | the main platform is the only one | |
| decision support | housing management systems | The ones that have to do with business. | |
| Confidential | HPE SIM monitoring systems | Tibco | |
| Chrome | Hris | Timberline | |
| Confluence | HRMS | TJC | |
| Desktop | HRP | TL2000 | |
| Corepoint | HTTPD | Tomcat | |
| Allocation | HubSpot | too many to name | |
| Classified | IDE | Town Clerk | |
| SaaS based apps | idk | Tracker | |
| 3 m. Right fax | IdM | Training | |



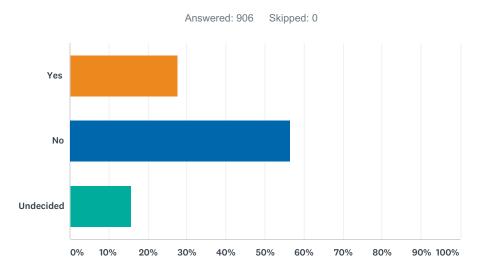
| 360 LEARNING | IDX | TRANSFLO | |
|------------------------------------|--------------------------------|--|--|
| 3D apps | IDX(medical billing & claims) | Treev | |
| 911 CAD | IFS | Trenstar | |
| a/d | Igt advantage | Truck Scales | |
| A/D Security | IMB/Unix | TruckMate | |
| Abaqus | IMC | TrueChem | |
| Abbyy | Impala Jobs. | TurningPoint | |
| accugrade | Importomatic | UPoint | |
| ACI | Impravita SSO | up-time | |
| ACL | IMS. | Users Apps | |
| ACSR | indexing systems | Valant Empyra | |
| Actimize | industry specific applications | vantage | |
| Adaptive | Informix | vCenter | |
| Aderant | infoship | VCS | |
| ADFS and other federation toolsets | instant communicator | venturi | |
| administrations systems | insurance portfolio management | Veracross (student information system) | |
| Advisor | IntApp | version control | |
| AES | Intapp Open | Vertical Wave | |
| aftersales | interfaces | Visio | |
| Agile PLM | Investment | vision link | |
| AgilePoint | IPI | Vista | |
| AHT | IPS/IDS | visual tool | |
| Al | IR | visualization | |
| ALOHA | IRMA | VIZ RT | |
| Alteryx | Ironport | vizexplorer | |
| Amdocs | iSeries | Voter Information System | |
| AMI | iSynergy | vtc | |
| Ancillary Support Apps | IT management/ticketing | WAF applications | |
| Animal Welfare | ITSM | Waterfield | |
| Ansys | ITV | Wausau Optima | |
| Antimalware | Jabber | We are a power company so anything related to the customer or power grid | |
| Anti-Money Laundering | Jail Management System | We are infrastructure | |
| API Gateways | Jenkins | We have moved almost everything to AWS | |
| apis | Jenzabar | We run 400+ apps | |
| Apollo | jobvite apis with filtering | we support the underlying architecture. | |



| App Platforms | Kafka | WebEx |
|-------------------------------|------------------------------------|-----------------------|
| арр v | kb's | WFX |
| арр1 | Keepass | Windchill |
| Application | Know Your Customer | WinSCP |
| Application for Public Safety | Lab | Wintel |
| applied | Lab Management | Wireless applications |
| Aprimo | Lab systems | WMM |
| Apttus | Labeling system | Wonderware |
| Apttus and Navision | labgem | Woodwing |
| ArcGIS | labis | Work Manager mobility |
| archiving | Laboratory Apps | WPS (License Manager) |
| Ascend | Lansweeper | Wrap Portal |
| Aspect suite of apps | large enterprise operating systems | XenMobile |
| Aspentech homegrown software | Larue | XM |
| Aspera Polling | Law Enforcement | yahoo |
| ASR | LAW PreDiscovery | zendesk |
| assets managment | Lead onboarding | ZENEFITS |
| Athena | leadgen | Zimbra |
| atlas | Learning Management | zos |
| Atlassian ALM | Legacy apps | Zuora |
| Autodesk | legal | Avaya |
| AV | LegalKey | LIMS |
| Avamar | LFM | |
| Avatar | Lighthouse | |



Q7 Regarding your I/O intensive applications running on MS SQL – Do you experience staff or customer complaints due to sluggish performance?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 27.70% | 251 |
| No | 56.51% | 512 |
| Undecided | 15.78% | 143 |
| TOTAL | | 906 |

| # | IF YES, WHAT ARE THE UNDERLYING APPLICATIONS? | DATE |
|----|---|--------------------|
| 1 | Queries are taking too long | 10/25/2018 8:20 AM |
| 2 | Provider Online, Facet and Index Builder | 10/25/2018 8:07 AM |
| 3 | Wide-variety, some home-grown, others are analytics packages such as Tableau, etc. | 10/25/2018 7:23 AM |
| 4 | Usually when blamed it is eventually shown to be the application. | 10/25/2018 6:55 AM |
| 5 | all | 10/25/2018 6:49 AM |
| 6 | MS CRM | 10/25/2018 6:39 AM |
| 7 | PDI, Allegro | 10/25/2018 6:19 AM |
| 8 | Poorly written queries | 10/25/2018 5:46 AM |
| 9 | SharePoint | 10/25/2018 5:16 AM |
| 10 | not sure | 10/25/2018 4:32 AM |
| 11 | ERP, CRM | 10/25/2018 3:52 AM |
| 12 | One suspected issue was the I/O performance, but this is not the sole factor that contributes | 10/24/2018 5:23 PM |
| 13 | Front-end Web UI's | 10/24/2018 2:54 PM |
| 14 | PDI Accounting / Laserfiche | 10/24/2018 1:53 PM |
| 15 | Tam Retail - SQL database | 10/24/2018 1:51 PM |
| 16 | Deltek Vision | 10/24/2018 1:18 PM |
| | | |



| 17 | ERP | 10/24/2018 12:54 PM |
|----|---|---------------------|
| 18 | Hyperion, BMC TrackIT | 10/24/2018 12:50 PM |
| 19 | | 10/24/2018 12:47 PM |
| 20 | our custom app | 10/24/2018 12:25 PM |
| 21 | Intergy EHR | 10/24/2018 12:23 PM |
| 22 | Forms management | 10/24/2018 12:06 PM |
| 23 | syteline | 10/24/2018 12:06 PM |
| 24 | ERP | 10/24/2018 12:03 PM |
| 25 | Internally developed applications | 10/24/2018 11:58 AM |
| 26 | Just Enough - Advertising System | 10/24/2018 11:57 AM |
| 27 | Many | 10/24/2018 11:55 AM |
| 28 | our database program, Hconnect | 10/24/2018 11:48 AM |
| 29 | ERP | 10/24/2018 11:40 AM |
| 30 | 1000+ Databases | 10/24/2018 11:27 AM |
| 31 | Not concerned with MS SQL | 10/24/2018 11:16 AM |
| 32 | Microsoft HPC | 10/24/2018 11:16 AM |
| 33 | eCommerce Platforms | 10/24/2018 11:11 AM |
| 34 | no ms sql here | 10/24/2018 11:02 AM |
| 35 | We dont run these applications on MS SQL | 10/24/2018 10:59 AM |
| 36 | Some of the search operations run on MySQL which become slow due to the query overhead and also thows OutOfMemory | 10/24/2018 10:44 AM |
| 37 | Accounting | 10/24/2018 10:42 AM |
| 38 | Infor Adage | 10/24/2018 10:41 AM |
| 39 | Allscripts Pro EHR | 10/24/2018 10:40 AM |
| 40 | custom developed | 10/24/2018 10:34 AM |
| 41 | Internally-developed apps | 10/24/2018 10:29 AM |
| 42 | ERP | 10/24/2018 10:17 AM |
| 43 | BI, General DB's | 10/24/2018 10:16 AM |
| 44 | Very litte SQL here | 10/24/2018 10:02 AM |
| 45 | Pegasus Transflo | 10/24/2018 10:00 AM |
| 46 | SCCM, Symantec | 10/24/2018 9:52 AM |
| 47 | ERP, Reporting | 10/24/2018 9:44 AM |
| 48 | Memory and index related issues | 10/24/2018 9:38 AM |
| 49 | have experience staff | 10/24/2018 9:32 AM |
| 50 | Latencies | 10/24/2018 9:32 AM |
| 51 | peak loads at end of month and end of year | 10/24/2018 9:31 AM |
| 52 | It's complicated :(| 10/24/2018 9:25 AM |
| 53 | DB server response | 10/24/2018 9:22 AM |
| 54 | custom apps, indexing issues | 10/24/2018 9:17 AM |
| 55 | n/A | 10/24/2018 9:14 AM |
| 56 | citrix | 10/24/2018 9:10 AM |



| 58 dynamics, doclink 10 59 Deltek vision and homegrown 11 60 Powerchart 10 61 Macola 11 62 Conference all delivery 11 63 Data load and ETL 11 64 backup software - storage constraints 11 65 Custom .NET Applications 10 66 Performance Reporting 11 67 CRM 10 68 Warehouse management 11 69 the main platform 11 70 Empower 11 71 SAP 11 72 Custom built applications 1 | 0/24/2018 9:09 AM 0/24/2018 9:03 AM 0/24/2018 9:01 AM 0/24/2018 8:59 AM 0/24/2018 8:43 AM 0/24/2018 8:30 AM 0/24/2018 8:27 AM 0/24/2018 8:26 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:11 AM 0/24/2018 7:45 AM 0/24/2018 7:45 AM |
|--|---|
| 59 Deltek vision and homegrown 1 60 Powerchart 1 61 Macola 1 62 Conference all delivery 1 63 Data load and ETL 1 64 backup software - storage constraints 1 65 Custom .NET Applications 1 66 Performance Reporting 1 67 CRM 1 68 Warehouse management 1 69 the main platform 1 70 Empower 1 71 SAP 1 72 Custom built applications 1 | 0/24/2018 9:01 AM 0/24/2018 8:59 AM 0/24/2018 8:43 AM 0/24/2018 8:30 AM 0/24/2018 8:27 AM 0/24/2018 8:26 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 10 | 0/24/2018 8:59 AM 0/24/2018 8:43 AM 0/24/2018 8:30 AM 0/24/2018 8:27 AM 0/24/2018 8:26 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM |
| 61 Macola 1 62 Conference all delivery 1 63 Data load and ETL 1 64 backup software - storage constraints 1 65 Custom .NET Applications 1 66 Performance Reporting 1 67 CRM 1 68 Warehouse management 1 69 the main platform 1 70 Empower 1 71 SAP 1 72 Custom built applications 1 | 0/24/2018 8:43 AM 0/24/2018 8:30 AM 0/24/2018 8:27 AM 0/24/2018 8:26 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 62 Conference all delivery 16 63 Data load and ETL 16 64 backup software - storage constraints 16 65 Custom .NET Applications 16 66 Performance Reporting 16 67 CRM 10 68 Warehouse management 16 69 the main platform 17 70 Empower 17 71 SAP 11 72 Custom built applications 16 | 0/24/2018 8:30 AM 0/24/2018 8:27 AM 0/24/2018 8:26 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 63 Data load and ETL 10 64 backup software - storage constraints 11 65 Custom .NET Applications 10 66 Performance Reporting 11 67 CRM 11 68 Warehouse management 11 69 the main platform 11 70 Empower 11 71 SAP 11 72 Custom built applications 1 | 0/24/2018 8:27 AM 0/24/2018 8:26 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 64 backup software - storage constraints 10 65 Custom .NET Applications 10 66 Performance Reporting 11 67 CRM 10 68 Warehouse management 11 69 the main platform 11 70 Empower 11 71 SAP 11 72 Custom built applications 11 | 0/24/2018 8:26 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 65 Custom .NET Applications 10 66 Performance Reporting 10 67 CRM 10 68 Warehouse management 11 69 the main platform 11 70 Empower 11 71 SAP 11 72 Custom built applications 10 | 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 66 Performance Reporting 10 67 CRM 10 68 Warehouse management 11 69 the main platform 11 70 Empower 11 71 SAP 11 72 Custom built applications 11 | 0/24/2018 8:24 AM 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 67 CRM 10 68 Warehouse management 11 69 the main platform 11 70 Empower 11 71 SAP 11 72 Custom built applications 1 | 0/24/2018 8:24 AM 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 68 Warehouse management 1 69 the main platform 1 70 Empower 1 71 SAP 1 72 Custom built applications 1 | 0/24/2018 8:20 AM 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 69 the main platform 11 70 Empower 11 71 SAP 11 72 Custom built applications 11 | 0/24/2018 8:18 AM 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 70 Empower 11 71 SAP 11 72 Custom built applications 11 | 0/24/2018 8:01 AM 0/24/2018 7:45 AM |
| 71 SAP 10 72 Custom built applications 10 | 0/24/2018 7:45 AM |
| 72 Custom built applications 1 | |
| | 0/24/2018 7:44 AM |
| 73 Opera always going down | |
| | 0/24/2018 7:43 AM |
| 74 server uptime 10 | 0/24/2018 7:40 AM |
| on occasion we do experience customer complaints about being sluggish. However this comes from application performance and configuration. Its not generally caused by waiting for data from a database. | 0/17/2018 9:31 AM |
| 76 locks 10 | 0/15/2018 9:52 AM |
| 77 Data Warehouse 10 | 0/12/2018 12:27 PM |
| 78 Dynamics 10 | 0/10/2018 9:38 AM |
| 79 Only from 3E | 0/8/2018 11:55 AM |
| 80 Varies by the multiple organizations being supported. | 0/4/2018 12:03 PM |
| 81 Navigator and Compass 10 | 0/4/2018 6:31 AM |
| 82 Peoplesoft 10 | 0/3/2018 1:02 PM |
| 83 AssistCK - users attempt to run queries that are far too large | 0/3/2018 10:39 AM |
| 84 Reporting and SCCM 10 | 0/3/2018 10:19 AM |
| 85 financial 1 | 0/3/2018 9:55 AM |
| 86 EBMS 11 | 0/3/2018 7:38 AM |
| 87 netsmart 10 | 0/3/2018 7:38 AM |
| 88 ERM 10 | 0/3/2018 7:12 AM |
| 89 Jobs running too long. | 0/3/2018 7:04 AM |
| 90 Warehouse management 10 | 0/3/2018 6:51 AM |
| 91 CRM and Reporting 10 | 0/3/2018 6:43 AM |
| 92 usually indexing 10 | 0/3/2018 6:34 AM |
| As mentioned before, regulatory requirement deadlines are stretched to the very last minute because of poor performance and that can impact the business and / or our ability to rerun some of the processes if an issue is found with the output. | 0/3/2018 6:30 AM |
| 94 Sometimes slow 1 | 0/3/2018 6:22 AM |



| 95 | QNXT, SQL | 10/3/2018 6:18 AM |
|-----|--|--------------------|
| 96 | Internally written and maintained software | 10/3/2018 6:17 AM |
| 97 | oracle | 10/3/2018 6:15 AM |
| 98 | NAV | 10/3/2018 6:14 AM |
| 99 | order entry, documentation | 10/3/2018 6:14 AM |
| 100 | Bandwidth and # of users | 10/3/2018 6:12 AM |
| 101 | SQL | 10/3/2018 6:03 AM |
| 102 | Mes | 10/3/2018 6:00 AM |
| 103 | MES, Escheduling, SHopvue | 10/3/2018 5:35 AM |
| 104 | ad fs, internal apps that use SQL | 10/3/2018 5:33 AM |
| 105 | Wide area response and high data demand. | 10/3/2018 5:33 AM |
| 106 | trade data, bloomberg | 10/3/2018 5:30 AM |
| 107 | In house developed applications. | 10/3/2018 5:27 AM |
| 108 | VB.net app. | 10/3/2018 5:25 AM |
| 109 | Large SQL Queries | 10/3/2018 5:17 AM |
| 110 | SQL | 10/3/2018 5:15 AM |
| 111 | Oracle Siebel | 10/3/2018 5:10 AM |
| 112 | Voice apps, MHE | 10/3/2018 5:03 AM |
| 113 | Taxify | 10/3/2018 5:02 AM |
| 114 | internal sites | 10/3/2018 4:59 AM |
| 115 | Home grown | 10/3/2018 4:58 AM |
| 116 | Great Plains | 10/3/2018 4:57 AM |
| 117 | MSSQL is very fast. | 10/3/2018 4:57 AM |
| 118 | N/A | 10/3/2018 4:56 AM |
| 119 | Slow Disk and VM | 10/3/2018 4:56 AM |
| 120 | Great Plains | 10/3/2018 4:56 AM |
| 121 | Data warehouse | 10/3/2018 4:55 AM |
| 122 | Halo and SQL | 10/3/2018 4:51 AM |
| 123 | MSSQL | 10/3/2018 4:50 AM |
| 124 | Dynamics NAV | 10/2/2018 1:52 PM |
| 125 | EMR applications | 9/26/2018 10:49 AM |
| 126 | SharePoint | 9/25/2018 1:24 PM |
| 127 | TeamConnect | 9/25/2018 12:45 PM |
| 128 | Great Plains | 9/25/2018 12:37 PM |
| 129 | Sccm | 9/25/2018 11:46 AM |
| 130 | Homegrown CRM | 9/25/2018 11:02 AM |
| 131 | ms SQL | 9/25/2018 10:48 AM |
| 132 | SQL reporting directly | 9/25/2018 10:38 AM |
| 133 | Jira, Confluence | 9/25/2018 9:43 AM |
| 134 | anything built over 3 years ago | 9/25/2018 9:00 AM |
| 104 | and a many a many a contract of a contract o | |



| 136 | Dynamics | 9/25/2018 8:03 AM |
|-----|--|--------------------|
| 137 | EDW and Internal app | 9/25/2018 7:57 AM |
| 138 | Custom | 9/25/2018 7:53 AM |
| 139 | | 9/25/2018 7:51 AM |
| 140 | Citrix XenDesktop/XenApp | 9/25/2018 7:48 AM |
| 141 | Sage | 9/25/2018 7:35 AM |
| 142 | Maximo, Credosoft | 9/25/2018 7:10 AM |
| 143 | Internal Apps | 9/25/2018 7:06 AM |
| 144 | Old legacy apps | 9/25/2018 7:02 AM |
| 145 | This typically happens when a development team releases poorly tuned SQL statements and executes them in a loop. Atypical but happens. | 9/25/2018 6:52 AM |
| 146 | call center app | 9/25/2018 6:47 AM |
| 147 | Custom platform code, Data Import and ingestion, Monitoring | 9/25/2018 6:45 AM |
| 148 | Solar Eclipse | 9/25/2018 6:40 AM |
| 149 | Custom Reporting | 9/25/2018 6:35 AM |
| 150 | Local DB; SQL Server 2008/2012 | 9/25/2018 6:28 AM |
| 151 | Citrix | 9/25/2018 6:26 AM |
| 152 | TMW | 9/25/2018 6:22 AM |
| 153 | clarity and ECW | 9/25/2018 6:07 AM |
| 154 | Epic | 9/25/2018 6:03 AM |
| 155 | Dasboard Reporting | 9/25/2018 5:45 AM |
| 156 | custom, backbone js alongside ms sql via rest | 9/25/2018 5:40 AM |
| 157 | office front ends | 9/5/2018 6:51 AM |
| 158 | Datex | 9/5/2018 6:27 AM |
| 159 | Multiple triggers, HW needing upgrades | 9/5/2018 5:11 AM |
| 160 | Epic Clarity | 9/5/2018 4:49 AM |
| 161 | Medical reporting database apps. | 8/28/2018 9:02 AM |
| 162 | Flight Operations | 8/28/2018 6:46 AM |
| 163 | Informatica | 8/28/2018 6:44 AM |
| 164 | proprietary application, unable to discuss. | 8/28/2018 5:58 AM |
| 165 | unknown | 8/28/2018 4:57 AM |
| 166 | Unsure; I do not manage | 8/28/2018 4:54 AM |
| 167 | Could be any. This doesn't happen often, but any application can be hit by a performance issue. | 8/28/2018 4:50 AM |
| 168 | Home-made | 8/28/2018 4:46 AM |
| 169 | SharePiont and hard dollar | 8/22/2018 6:27 AM |
| 170 | NextGen EMR | 8/21/2018 12:23 PM |
| 171 | DVO | 8/21/2018 11:47 AM |
| 172 | See other answers | 8/21/2018 11:44 AM |
| 173 | in house developed applications | 8/21/2018 10:43 AM |
| 174 | GP | 8/21/2018 9:00 AM |
| 175 | Various | 8/21/2018 8:57 AM |



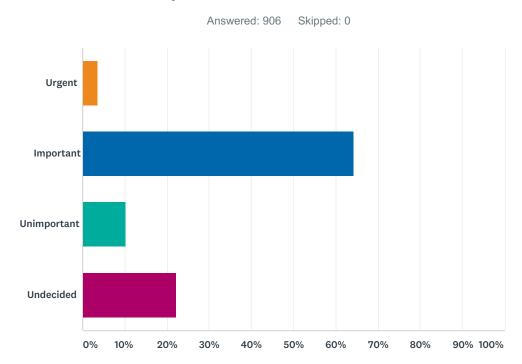
| 176 | Philips ISCV | 8/21/2018 8:03 AM |
|-----|--|--------------------|
| 177 | CMR | 8/21/2018 7:20 AM |
| 178 | Profit 21 (POS Software) | 8/21/2018 7:06 AM |
| 179 | Proprietary software | 8/21/2018 6:44 AM |
| 180 | Proficy and Oracle | 8/10/2018 8:58 AM |
| 181 | Clearing system | 8/9/2018 6:10 PM |
| 182 | SQL/Epicor | 8/9/2018 1:07 PM |
| 183 | data | 8/9/2018 10:49 AM |
| 184 | iManage | 8/9/2018 10:13 AM |
| 185 | Deltek Vision | 8/9/2018 10:04 AM |
| 186 | C# and CRM | 8/9/2018 8:42 AM |
| 187 | our custom built app (Dot Net Based) | 8/9/2018 7:32 AM |
| 188 | Solarwinds and IBM CLM | 8/9/2018 7:08 AM |
| 189 | Not often and when we do, the problems are usually Software glitches or too many transactions at the same time | 8/9/2018 6:31 AM |
| 190 | Aprimo | 8/9/2018 5:25 AM |
| 191 | Customer-facing web applications | 8/9/2018 5:00 AM |
| 192 | multiple | 8/9/2018 4:56 AM |
| 193 | BI related | 8/9/2018 4:52 AM |
| 194 | Access | 8/9/2018 3:11 AM |
| 195 | ERP and satellite apps | 8/8/2018 3:12 PM |
| 196 | SharePoint and some smaller custom apps | 8/8/2018 10:06 AM |
| 197 | Some are homegrown but SQL in general are an issue | 8/8/2018 8:26 AM |
| 198 | wait times | 8/8/2018 7:19 AM |
| 199 | Bad T-SQL statements. | 8/8/2018 6:21 AM |
| 200 | in house data warehouse -Trading system called Aquarius | 8/8/2018 6:12 AM |
| 201 | slow performance | 8/8/2018 6:04 AM |
| 202 | Citrix, SAP, Dynamics | 8/8/2018 6:00 AM |
| 203 | occasionally | 8/8/2018 5:36 AM |
| 204 | ERP | 8/8/2018 5:33 AM |
| 205 | Mediware CPR+ | 8/8/2018 5:28 AM |
| 206 | Slow performance with applications built on the SQL platform | 8/8/2018 5:03 AM |
| 207 | Dynamics AX | 8/8/2018 5:00 AM |
| 208 | Homegrown | 8/8/2018 4:56 AM |
| 209 | Optivision | 8/8/2018 4:56 AM |
| 210 | Accounting and data analytics | 8/8/2018 4:53 AM |
| 211 | Ninite | 7/27/2018 10:06 AM |
| 212 | Pricing application - RMS | 7/26/2018 11:47 AM |
| 213 | SAP | 7/26/2018 10:24 AM |
| 214 | Call analytics | 7/26/2018 10:22 AM |
| 215 | data analytics | 7/26/2018 9:03 AM |
| | | |



| 216 | Jail Management System, Employee Time Keeping | 7/26/2018 8:36 AM |
|-----|--|-------------------|
| 217 | Dealer Management System not even running on SQL | 7/26/2018 7:57 AM |
| 218 | Process control system inputs | 7/26/2018 7:02 AM |
| 219 | SAP B1 | 7/26/2018 6:51 AM |
| 220 | Fetal monitoring system | 7/26/2018 6:45 AM |
| 221 | TeamMate | 7/26/2018 6:40 AM |
| 222 | document management | 7/26/2018 6:38 AM |
| 223 | various | 7/26/2018 6:20 AM |
| | | |



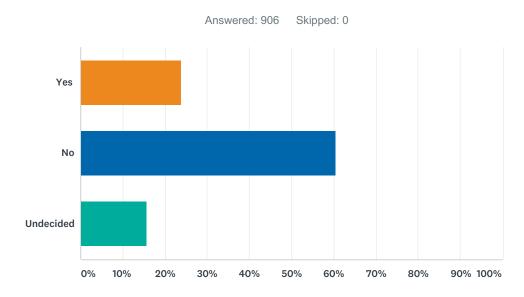
Q8 If you were able to reduce I/O from server to storage and get 50% faster application performance without adding new hardware, how would you rank that benefit?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Urgent | 3.53% | 32 |
| Important | 64.13% | 581 |
| Unimportant | 10.15% | 92 |
| Undecided | 22.19% | 201 |
| TOTAL | | 906 |



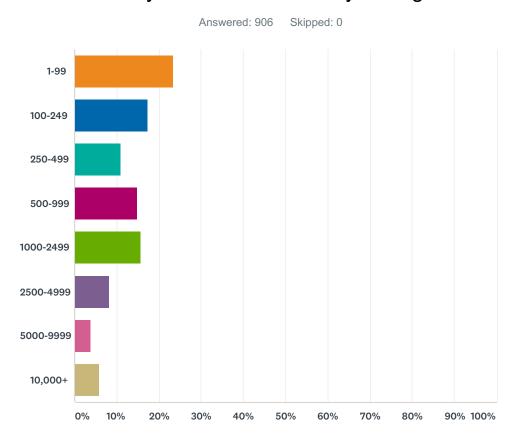
Q9 Do you have performance concerns about applications running in your virtual environment that are preventing you from scaling your virtualized infrastructure?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 23.84% | 216 |
| No | 60.49% | 548 |
| Undecided | 15.67% | 142 |
| TOTAL | | 906 |



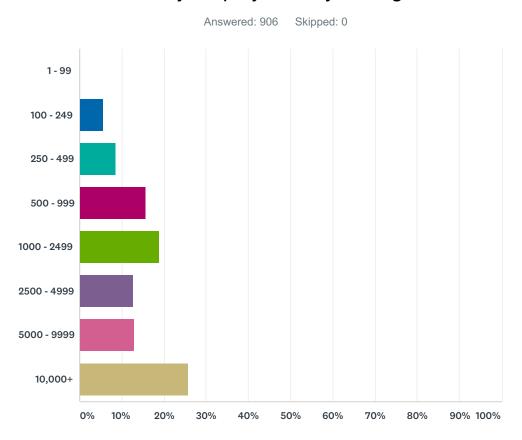
Q10 How many virtual machines in your organization?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| 1-99 | 23.51% | 213 |
| 100-249 | 17.44% | 158 |
| 250-499 | 10.93% | 99 |
| 500-999 | 14.79% | 134 |
| 1000-2499 | 15.67% | 142 |
| 2500-4999 | 8.06% | 73 |
| 5000-9999 | 3.75% | 34 |
| 10,000+ | 5.85% | 53 |
| TOTAL | | 906 |



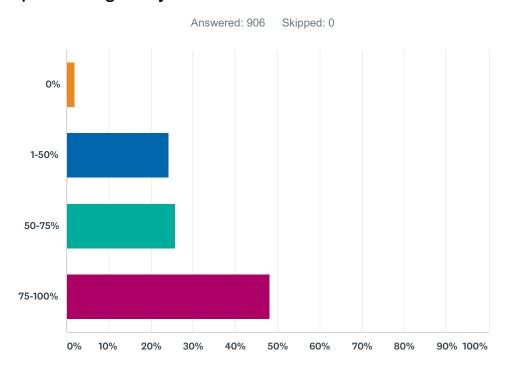
Q11 How many employees in your organization?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| 1 - 99 | 0.00% | 0 |
| 100 - 249 | 5.63% | 51 |
| 250 - 499 | 8.50% | 77 |
| 500 - 999 | 15.67% | 142 |
| 1000 - 2499 | 18.87% | 171 |
| 2500 - 4999 | 12.69% | 115 |
| 5000 - 9999 | 12.91% | 117 |
| 10,000+ | 25.72% | 233 |
| TOTAL | | 906 |



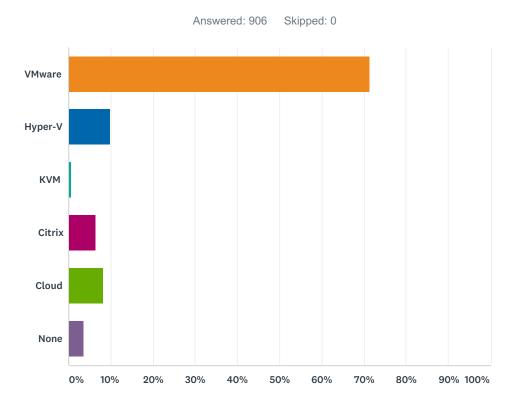
Q12 What percentage of your server environment has been virtualized?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| 0% | 1.99% | 18 |
| 1-50% | 24.28% | 220 |
| 50-75% | 25.72% | 233 |
| 75-100% | 48.01% | 435 |
| TOTAL | | 906 |



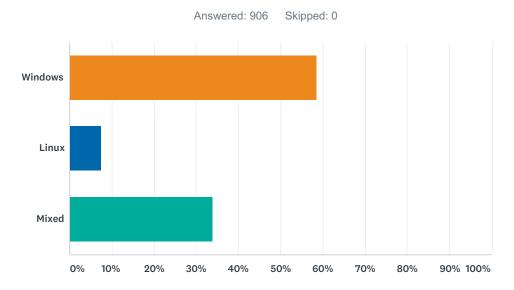
Q13 What is your hypervisor of choice?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| VMware | 71.41% | 647 |
| Hyper-V | 9.93% | 90 |
| KVM | 0.55% | 5 |
| Citrix | 6.40% | 58 |
| Cloud | 8.06% | 73 |
| None | 3.64% | 33 |
| TOTAL | | 906 |



Q14 What is the operating system of choice for your virtual servers?

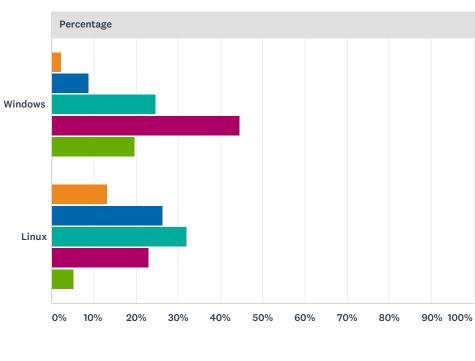


| ANSWER CHOICES | RESPONSES | |
|----------------|------------|---|
| Windows | 58.50% 530 |) |
| Linux | 7.51% | 3 |
| Mixed | 34.00% 308 | } |
| TOTAL | 906 | 3 |



Q15 You indicated your operating system of choice for your virtual servers is mixed; please indicate the percentage:



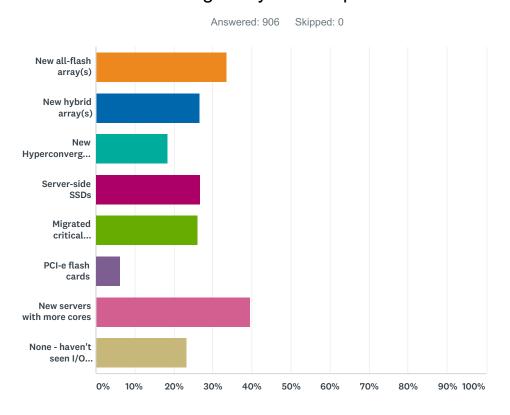


| Less than 10% | 10 - 24% | 25 - 49% | 50 - 74% | 75 - 99% |
|---------------|----------|----------|----------|----------|
| | _ | | | _ |

| Percentage | | | | | | |
|------------|---------------|--------------|--------------|---------------|--------------|-------|
| | LESS THAN 10% | 10 - 24% | 25 - 49% | 50 - 74% | 75 - 99% | TOTAL |
| Windows | 2.30% 7 | 8.85% 27 | 24.59% 75 | 44.59% 136 | 19.67% 60 | 305 |
| Linux | 13.20% 40 | 26.40% 80 | 32.01% 97 | 23.10% 70 | 5.28% 16 | 303 |



Q16 To improve I/O performance since virtualizing please select any of the following that you have purchased:



| ANSWER CHOICES | RESPONSES | |
|---|-----------|-----|
| New all-flash array(s) | 33.55% | 304 |
| New hybrid array(s) | 26.60% | 241 |
| New Hyperconverged storage system(s) | 18.32% | 166 |
| Server-side SSDs | 26.71% | 242 |
| Migrated critical workloads to Cloud | 26.16% | 237 |
| PCI-e flash cards | 6.29% | 57 |
| New servers with more cores | 39.62% | 359 |
| None - haven't seen I/O performance issues since virtualizing | 23.29% | 211 |
| Total Respondents: 906 | | |

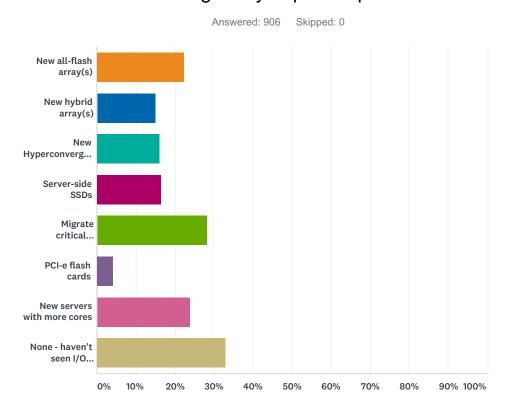
| # | OTHER (PLEASE SPECIFY) | DATE |
|---|---|--------------------|
| 1 | We are purchasing servers for building an internal cloud for container type virtualization. Containers, microservices and orchestration is strictly open source at this time. | 10/25/2018 8:42 AM |
| 2 | IBM mainframe running z/os operating system - don't have these problems | 10/25/2018 8:13 AM |
| 3 | Working on all Flash Array | 10/25/2018 6:49 AM |
| 4 | I/O is all cloud-based; we leveraged new VM types for better performance | 10/25/2018 5:47 AM |



| 5 | New Netfilers | 10/25/2018 4:46 AM |
|----|---|---------------------|
| 6 | We migrated all VM's from conventional to Hyper converged system solution | 10/25/2018 4:08 AM |
| 7 | we're using shelves of SSD as cache buffers for HDD aggregates | 10/25/2018 3:47 AM |
| 8 | Virtualizing the infrastructure belongs in a different group. | 10/24/2018 1:15 PM |
| 9 | No idea, not my area | 10/24/2018 12:54 PM |
| 10 | Flash based IO cards (inline flash cache) | 10/24/2018 12:26 PM |
| 11 | Really don't virtualize in the area I work | 10/24/2018 11:17 AM |
| 12 | Cloud is in consideration | 10/24/2018 9:57 AM |
| 13 | Tiered Storage Arrays for stale data Deep tier | 10/24/2018 7:44 AM |
| 14 | EMC VNX replaced all previous physical and virtual hardware last year. | 10/8/2018 11:57 AM |
| 15 | Moved applications to mainframe servers | 10/5/2018 8:48 AM |
| 16 | I am not in a position to say as I don't know. | 10/4/2018 12:08 PM |
| 17 | Unknown | 10/4/2018 6:34 AM |
| 18 | Undecided | 10/4/2018 5:01 AM |
| 19 | Not my area of expertise | 10/3/2018 4:56 AM |
| 20 | No upgrades have been done since | 10/2/2018 1:54 PM |
| 21 | Not sure not my area | 9/25/2018 9:21 AM |
| 22 | No Idea: not my dept | 9/25/2018 8:09 AM |
| 23 | | 9/25/2018 7:52 AM |
| 24 | In a managed hosting environment, so there are in place hybrid SANs and expansion is the only mitigation so far. Not effective at this point. | 9/25/2018 6:48 AM |
| 25 | Not sure. I don't manage the VM hardware of environments | 9/25/2018 6:05 AM |
| 26 | N/A Do not purchase not part of scope. | 9/25/2018 5:58 AM |
| 27 | I'm not that involved on the infrastructure side, so i'm not completely aware of wha tthey have purchased. | 8/28/2018 4:52 AM |
| 28 | Faster spinners | 8/21/2018 7:07 AM |
| 29 | we had Flash enabled HBAs for a while, moved to UCS so they are not valid now | 8/9/2018 7:34 AM |
| 30 | We are currently looking at moving fundraising to the cloud. | 8/9/2018 6:32 AM |
| 31 | Migrated non-critical workloads to the cloud | 8/9/2018 5:02 AM |
| 32 | I do not purchase, only recommend. | 8/9/2018 4:50 AM |
| 33 | Nutanix | 8/8/2018 9:57 AM |
| 34 | We do not share this info | 8/8/2018 9:09 AM |
| 35 | I'm not responsible for data center configurations | 7/26/2018 9:17 AM |
| 36 | upgrade our Dealer Management System | 7/26/2018 7:59 AM |
| | | |



Q17 To improve I/O performance over the next year, please select any of the following that you plan to purchase:



| ANSWER CHOICES | RESPONSES | |
|---|-----------|-----|
| New all-flash array(s) | 22.41% | 203 |
| New hybrid array(s) | 15.12% | 137 |
| New Hyperconverged storage system(s) | 16.00% | 145 |
| Server-side SSDs | 16.56% | 150 |
| Migrate critical workloads to Cloud | 28.26% | 256 |
| PCI-e flash cards | 4.19% | 38 |
| New servers with more cores | 23.84% | 216 |
| None - haven't seen I/O performance issues since virtualizing | 33.00% | 299 |
| Total Respondents: 906 | | |

| # | OTHER (PLEASE SPECIFY) | DATE |
|---|--|--------------------|
| 1 | complete network upgrade to 100g infrastructure in the lab. | 10/25/2018 8:43 AM |
| 2 | Equipment will be replaced as part of the HLC | 10/25/2018 6:57 AM |
| 3 | Our new fiscal year just started - no plans available yet | 10/25/2018 4:46 AM |
| 4 | Some systems will be within the DoD Environment (Clinical & Logistics) | 10/25/2018 4:17 AM |
| | | |



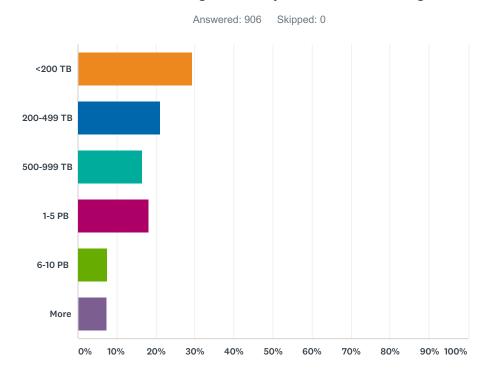
| 5 | Not responsible for purchase decisions | 10/24/2018 3:44 PM |
|----|--|---------------------|
| 6 | Note sure at this point. | 10/24/2018 1:03 PM |
| 7 | No idea, not my area | 10/24/2018 12:54 PM |
| 8 | Unsure | 10/24/2018 11:39 AM |
| 9 | Not virtualizing | 10/24/2018 11:18 AM |
| 10 | Undecided | 10/24/2018 10:42 AM |
| 11 | none lately Our SQL servers are still physical on heavy load apps like warehousing | 10/24/2018 10:38 AM |
| 12 | Undecided | 10/24/2018 9:41 AM |
| 13 | Not sure | 10/24/2018 9:18 AM |
| 14 | Virtualizing isn't really on our radar so nothing planned | 10/24/2018 8:53 AM |
| 15 | None | 10/24/2018 8:40 AM |
| 16 | undecided at this time | 10/24/2018 8:04 AM |
| 17 | If needed | 10/24/2018 7:45 AM |
| 18 | not in budget | 10/24/2018 7:40 AM |
| 19 | not sure what path they want to follow. | 10/17/2018 10:09 AM |
| 20 | cannot speak / write to future plans | 10/6/2018 7:38 AM |
| 21 | migrate worload to z/linux or pSeries servers | 10/5/2018 8:49 AM |
| 22 | I do not know. | 10/4/2018 12:09 PM |
| 23 | Unknown | 10/4/2018 6:34 AM |
| 24 | Undecided | 10/4/2018 5:01 AM |
| 25 | Storage system is pushing to reduce NAS usage and inclease use of EMC SAN Solution | 10/3/2018 7:36 AM |
| 26 | not yet decided | 10/3/2018 6:22 AM |
| 27 | Unknown - depends on business need, if it gets worse | 10/3/2018 6:16 AM |
| 28 | such plans are w/ AXA Infra Team | 10/3/2018 5:55 AM |
| 29 | none | 10/3/2018 5:16 AM |
| 30 | No additional purchases, developers working on the application | 10/3/2018 5:04 AM |
| 31 | I don't know what's in the plan to purchase. | 10/3/2018 4:58 AM |
| 32 | No considerations at the moment | 10/2/2018 1:55 PM |
| 33 | not sure | 9/25/2018 12:33 PM |
| 34 | Not sure not my area | 9/25/2018 9:21 AM |
| 35 | Again, if the vm team is going to purchase any, I've no idea. | 9/25/2018 8:10 AM |
| 36 | nothing at this time since we recently acquired more | 9/25/2018 8:06 AM |
| 37 | upgrades are not in the budget | 9/25/2018 7:33 AM |
| 38 | I am not directly involved in this planning. | 9/25/2018 7:00 AM |
| 39 | Don't know. I don't manage the VM hardware or environment | 9/25/2018 6:05 AM |
| 40 | N/A Not involved in purchase. | 9/25/2018 5:58 AM |
| 41 | code analysis | 8/28/2018 6:00 AM |
| 42 | unknown | 8/28/2018 4:57 AM |
| 43 | see other answer | 8/28/2018 4:52 AM |
| 44 | Moving to a 3rd party suppoerted data center | 8/21/2018 9:49 AM |
| 45 | * We have already purchased, but possibly need more in future. | 8/21/2018 7:08 AM |



| 46 | NASA is evaluating most of the above | 8/9/2018 7:19 AM |
|----|---|--------------------|
| 47 | Nutanix | 8/8/2018 9:58 AM |
| 48 | Not aware of future plans | 8/8/2018 9:10 AM |
| 49 | We do not share this info | 8/8/2018 9:10 AM |
| 50 | Havent made any plans | 8/8/2018 5:37 AM |
| 51 | Unknown - do not work in Service Operations | 7/26/2018 12:38 PM |
| 52 | I'm not responsible for optimizing datacenter performance | 7/26/2018 9:17 AM |
| 53 | Nothing is planned, mainly due to funding, but research is always being done. | 7/26/2018 8:38 AM |
| 54 | upgrade our Dealer Management System | 7/26/2018 7:59 AM |
| 55 | Utilizing serverless cloud components instead of servers in the cloud | 7/26/2018 5:49 AM |



Q18 How much storage does your team manage / use?

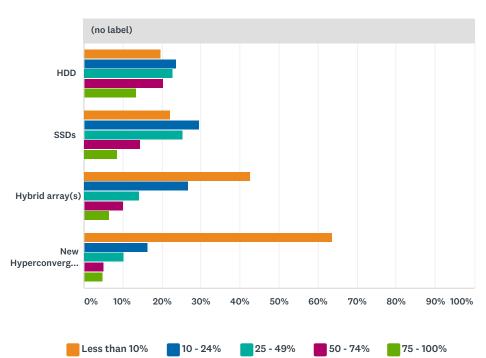


| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| <200 TB | 29.36% | 266 |
| 200-499 TB | 21.19% | 192 |
| 500-999 TB | 16.45% | 149 |
| 1-5 PB | 18.10% | 164 |
| 6-10 PB | 7.51% | 68 |
| More | 7.40% | 67 |
| TOTAL | | 906 |



Q19 What is the current makeup of your storage infrastructure?





| (no label) | | | | | | |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|-------|
| | LESS THAN 10% | 10 - 24% | 25 - 49% | 50 - 74% | 75 - 100% | TOTAL |
| HDD | 19.66% 164 | 23.62% 197 | 22.90% 191 | 20.38% 170 | 13.43% 112 | 834 |
| SSDs | 22.18% 183 | 29.45% 243 | 25.33% 209 | 14.42% 119 | 8.61% 71 | 825 |
| Hybrid array(s) | 42.70% 304 | 26.69% 190 | 14.19% 101 | 9.97% 71 | 6.46% 46 | 712 |
| New Hyperconverged storage system(s) | 63.52% 404 | 16.35% 104 | 10.22% 65 | 5.03% 32 | 4.87% 31 | 636 |

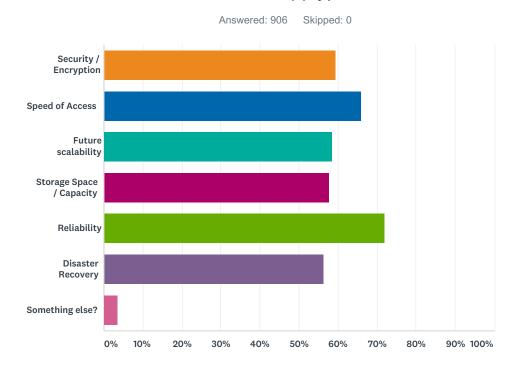
| # | OTHER (PLEASE SPECIFY) | DATE |
|---|---|---------------------|
| 1 | IBM mainframe storage - 3390 compatible | 10/25/2018 8:14 AM |
| 2 | Cloud | 10/25/2018 5:48 AM |
| 3 | Dont know | 10/25/2018 4:47 AM |
| 4 | cloud gateways | 10/24/2018 1:21 PM |
| 5 | I do not have that information | 10/24/2018 12:01 PM |
| 6 | Not really my area | 10/24/2018 11:19 AM |
| 7 | unknown | 10/24/2018 10:33 AM |
| 8 | Not Sure | 10/24/2018 10:17 AM |
| 9 | Everything new goes in the cloud | 10/24/2018 10:03 AM |



| 10 | S3 EBS glacier | 10/24/2018 9:32 AM |
|----|--|--------------------|
| 11 | No Hyperconvergence here. | 10/24/2018 9:27 AM |
| 12 | Not sure | 10/24/2018 9:17 AM |
| 13 | AWS EBS storage | 10/24/2018 8:33 AM |
| 14 | Cloud | 10/24/2018 7:47 AM |
| 15 | Unknown | 10/4/2018 6:35 AM |
| 16 | Undecided | 10/4/2018 5:01 AM |
| 17 | AWS cloud storage - about 99% | 10/3/2018 10:41 AM |
| 18 | Flash based Array | 10/3/2018 8:07 AM |
| 19 | don't know, i'm not in IT i just want the tablet | 10/3/2018 8:01 AM |
| 20 | Tape! | 10/3/2018 6:13 AM |
| 21 | unsure | 10/3/2018 5:56 AM |
| 22 | unknown | 10/3/2018 5:27 AM |
| 23 | all flash SANs | 10/3/2018 5:23 AM |
| 24 | i don't really know | 10/3/2018 5:10 AM |
| 25 | cloud | 10/3/2018 4:57 AM |
| 26 | Unknown | 10/3/2018 4:57 AM |
| 27 | It my area. I have no access to see storage. | 9/25/2018 9:22 AM |
| 28 | not disclosing this | 9/25/2018 8:53 AM |
| 29 | Not sure | 9/25/2018 8:24 AM |
| 30 | Again, my team solely works with saas. | 9/25/2018 8:10 AM |
| 31 | Unsure really | 9/25/2018 6:06 AM |
| 32 | other | 9/25/2018 6:06 AM |
| 33 | Not part of my scope responsibilities selected min as I do not know. | 9/25/2018 6:00 AM |
| 34 | No idea | 9/5/2018 7:41 AM |
| 35 | cloud | 9/5/2018 6:22 AM |
| 36 | cloud based | 8/28/2018 6:00 AM |
| 37 | unknown by me | 8/9/2018 5:48 AM |
| 38 | The new Hyperconverged systems will replace the current servers. | 8/9/2018 5:03 AM |
| 39 | Synced active storage (pure) | 8/8/2018 11:14 AM |
| 40 | We do not share this info | 8/8/2018 9:10 AM |
| 41 | Azure Storage | 8/8/2018 8:33 AM |
| 42 | Unknown | 7/26/2018 12:39 PM |
| | | |



Q20 What are your most important storage considerations (please select all that apply)?



| ANSWER CHOICES | RESPONSES | |
|--------------------------|-----------|-----|
| Security / Encryption | 59.49% | 539 |
| Speed of Access | 65.89% | 597 |
| Future scalability | 58.50% | 530 |
| Storage Space / Capacity | 57.84% | 524 |
| Reliability | 71.96% | 652 |
| Disaster Recovery | 56.29% | 510 |
| Something else? | 3.64% | 33 |
| Total Respondents: 906 | | |

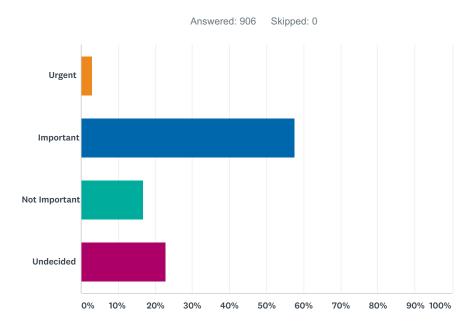
| 1 Cost 10/25/2018 7:01 AM 2 Cost 10/25/2018 6:50 AM 3 Image Storage (High Bandwidth 10/25/2018 4:19 AM 4 Cost:) 10/24/2018 5:46 PM 5 Cost 10/24/2018 2:12 PM 6 N/a 10/24/2018 1:32 PM 7 No idea, not my area 10/24/2018 12:55 PM | # | SOMETHING ELSE? | DATE |
|--|---|-------------------------------|---------------------|
| 3 Image Storage (High Bandwidth 10/25/2018 4:19 AM 4 Cost:) 10/24/2018 5:46 PM 5 Cost 10/24/2018 2:12 PM 6 N/a 10/24/2018 1:32 PM 7 No idea, not my area 10/24/2018 12:55 PM | 1 | Cost | 10/25/2018 7:01 AM |
| 4 Cost:) 10/24/2018 5:46 PM 5 Cost 10/24/2018 2:12 PM 6 N/a 10/24/2018 1:32 PM 7 No idea, not my area 10/24/2018 12:55 PM | 2 | Cost | 10/25/2018 6:50 AM |
| 5 Cost 10/24/2018 2:12 PM 6 N/a 10/24/2018 1:32 PM 7 No idea, not my area 10/24/2018 12:55 PM | 3 | Image Storage (High Bandwidth | 10/25/2018 4:19 AM |
| 6 N/a 10/24/2018 1:32 PM 7 No idea, not my area 10/24/2018 12:55 PM | 4 | Cost:) | 10/24/2018 5:46 PM |
| 7 No idea, not my area 10/24/2018 12:55 PM | 5 | Cost | 10/24/2018 2:12 PM |
| | 6 | N/a | 10/24/2018 1:32 PM |
| 0 D J J J J J J | 7 | No idea, not my area | 10/24/2018 12:55 PM |
| 8 Dougnnut storage 10/24/2018 12:29 PM | 8 | Doughnut storage | 10/24/2018 12:29 PM |



| 9 | Data classification, AAA | 10/24/2018 12:17 PM |
|----|---|---------------------|
| 10 | Future upgrades and security patches, high availability | 10/24/2018 10:50 AM |
| 11 | That it is cloud based where possible | 10/24/2018 10:03 AM |
| 12 | Global support | 10/24/2018 9:43 AM |
| 13 | Depup, compression, replication, S3 integration, data analytics | 10/24/2018 8:14 AM |
| 14 | Managed Centrally | 10/24/2018 7:48 AM |
| 15 | i have no concerns | 10/24/2018 7:43 AM |
| 16 | a scalability factor: balancing number/size of volumes with managing many volumes | 10/6/2018 7:40 AM |
| 17 | Undecided | 10/4/2018 5:01 AM |
| 18 | something else | 10/3/2018 10:23 AM |
| 19 | na | 10/3/2018 5:26 AM |
| 20 | N/a | 10/3/2018 5:18 AM |
| 21 | confidential | 9/25/2018 4:49 PM |
| 22 | on demand pricing | 9/25/2018 6:27 AM |
| 23 | Cost | 9/25/2018 6:13 AM |
| 24 | N/A | 9/25/2018 6:00 AM |
| 25 | This is a good ildie. | 9/19/2018 12:32 PM |
| 26 | that's it. | 8/29/2018 5:19 PM |
| 27 | cost | 8/22/2018 8:03 PM |
| 28 | N/A | 8/21/2018 12:45 PM |
| 29 | diffrent system | 8/9/2018 8:20 AM |
| 30 | Cost | 8/9/2018 5:24 AM |
| 31 | Cost | 8/8/2018 8:29 AM |
| 32 | N/A | 8/8/2018 8:25 AM |
| 33 | PIV-enabled | 7/26/2018 12:44 PM |



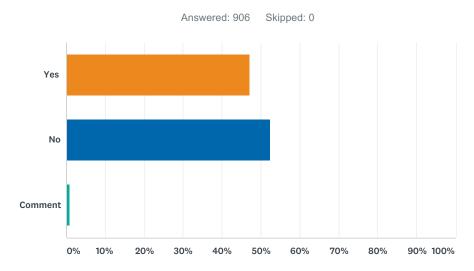
Q21 If you could improve the performance of one or two applications via inexpensive I/O reduction software and avoid an expensive forklift upgrade to your compute, network or storage layers, how would you rank that benefit?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Urgent | 2.87% | 26 |
| Important | 57.62% | 522 |
| Not Important | 16.67% | 151 |
| Undecided | 22.85% | 207 |
| TOTAL | | 906 |



Q22 Are you aware of Windows write inefficiencies that generate increasingly smaller writes and reads that dampen system performance?

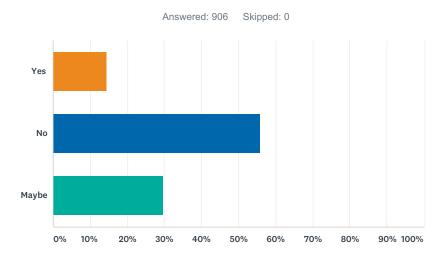


| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 47.02% | 426 |
| No | 52.21% | 473 |
| Comment | 0.77% | 7 |
| TOTAL | | 906 |

| # | COMMENT | DATE |
|---|---|--------------------|
| 1 | Zero dependancy on Microsoft products in the infrastructure where we have high I/O loads. | 10/25/2018 8:48 AM |
| 2 | Undecided | 10/4/2018 5:02 AM |
| 3 | Are we talking about fragmentation here? Or something else? | 10/3/2018 10:30 AM |
| 4 | I expect Windows to be a poor performer. | 10/3/2018 5:52 AM |
| 5 | Yes but SSDs are minimizing the effects | 10/2/2018 1:58 PM |
| 6 | you can tune block size to help minimize this | 8/9/2018 7:38 AM |
| 7 | I am now. | 8/8/2018 5:18 AM |



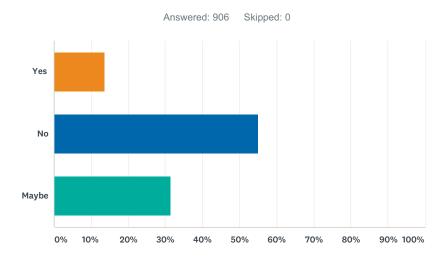
Q23 Would you like a free I/O Assessment Tool to identify which Windows systems in your environment are suffering from I/O issues and which systems are not?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 14.35% | 130 |
| No | 55.85% | 506 |
| Maybe | 29.80% | 270 |
| TOTAL | | 906 |



Q24 Would you like information or even free evaluation of a software-only approach that reduces the I/O requirement for every workload running on your VMs and guarantees to solve performance issues on Windows servers?



| ANSWER CHOICES | RESPONSES | |
|----------------|-----------|-----|
| Yes | 13.58% | 123 |
| No | 54.97% | 498 |
| Maybe | 31.46% | 285 |
| TOTAL | | 906 |



Q25 When considering your IT role and responsibilities, what problem(s) do you wish would go away to make your life easier (unrelated to your boss or staff)?

Answered: 737 Skipped: 169

| # | RESPONSES | DATE |
|----|---|---------------------|
| 1 | user management | 10/25/2018 1:13 PM |
| 2 | Funding approval | 10/25/2018 10:41 AM |
| 3 | latency | 10/25/2018 9:55 AM |
| 4 | Budget problems | 10/25/2018 9:25 AM |
| 5 | I'm not really IT, we don't have an IT presence at this office. I'm more on the Devops side. | 10/25/2018 8:50 AM |
| 6 | Catch up on lifecycle refresh | 10/25/2018 8:42 AM |
| 7 | Requirements gathering, currently we implement applications without proper requirements gathering. | 10/25/2018 8:24 AM |
| 8 | mpls provider downtime, o365 ethereal issues with mail, netapp sux | 10/25/2018 8:24 AM |
| 9 | commuting | 10/25/2018 8:16 AM |
| 10 | Unintended network failures, storage capacity limit issues and an easier migration to cloud. | 10/25/2018 8:12 AM |
| 11 | System performance and network latency | 10/25/2018 7:50 AM |
| 12 | malicious websites | 10/25/2018 7:43 AM |
| 13 | Simplified infrastructure and application landscape | 10/25/2018 7:27 AM |
| 14 | Intermittent and nearly untrackable performance issues. | 10/25/2018 7:09 AM |
| 15 | I don't have any truly critical pain points at this time. We are aware of solutions to the issues we do have. | 10/25/2018 7:02 AM |
| 16 | storage shortage | 10/25/2018 6:52 AM |
| 17 | File Permissions! | 10/25/2018 6:51 AM |
| 18 | issues with basic things - computers, connections, server patches, etc. | 10/25/2018 6:41 AM |
| 19 | Increase automation of daily activities. | 10/25/2018 6:38 AM |
| 20 | Constant upgrade | 10/25/2018 6:32 AM |
| 21 | low budgets | 10/25/2018 6:30 AM |
| 22 | Time it takes to deal with Security and Patching. | 10/25/2018 6:24 AM |
| 23 | Do more with less cost | 10/25/2018 6:17 AM |
| 24 | Network latency | 10/25/2018 6:12 AM |
| 25 | forklift upgrades | 10/25/2018 5:56 AM |
| 26 | Regular maintenance! i.e. system patching and updates | 10/25/2018 5:50 AM |
| 27 | Network/System downtime | 10/25/2018 5:19 AM |
| 28 | My concerns are mainly related to Enterprise Architecture. I would be happy to get more transparency in our storage situation globally. | 10/25/2018 4:49 AM |
| 29 | No real problem, per sayjust not enough hours in the day to move projects forward. | 10/25/2018 4:49 AM |
| 30 | All infrastructure related issues. We could then focus on improving the quality of services. | 10/25/2018 4:49 AM |
| 31 | any challenges we might have are related to outsourced IT support and MSP management | 10/25/2018 4:30 AM |



| 32 | Scaling systems | 10/25/2018 4:22 AM |
|----|--|---------------------|
| 33 | Relationships with external entities which increase workload. | 10/25/2018 4:21 AM |
| 34 | Robo calls. | 10/25/2018 4:18 AM |
| 35 | get rid of oracle, homegrown, and legacy applications. fix the culture. | 10/25/2018 3:52 AM |
| 36 | Windows bugs | 10/25/2018 1:47 AM |
| 37 | na | 10/24/2018 6:43 PM |
| 38 | Relevant business cases with quantifiable ROI and not just marketing fluff or sales talk. Thanks. | 10/24/2018 5:47 PM |
| 39 | Storage & Performance issue | 10/24/2018 5:26 PM |
| 40 | performance | 10/24/2018 5:20 PM |
| 41 | Interop issues | 10/24/2018 4:54 PM |
| 42 | migrate mainframe legacy systems to Virtual systems | 10/24/2018 4:46 PM |
| 43 | Capacity and performance management is made difficult by rapidly shifting business and customer needs, so being agile and able to pivot quickly to accommodate those changes is key. Most traditional data centers are not able to provide this ability. That makes it difficult to maintain some business critical data on-prem, with business infrastructure in the cloud. | 10/24/2018 4:33 PM |
| 44 | Standardization of power plugs in portable devices. Sounds silly, but my desk is filled with adapters, plugs, etc in case a user forgets theirs | 10/24/2018 3:48 PM |
| 45 | Right now? Linux package conflicts that prevent the installation of a critical tool. | 10/24/2018 3:46 PM |
| 46 | We have a fairly good handle on our challenges and how to resolve them. | 10/24/2018 2:56 PM |
| 47 | ROI | 10/24/2018 2:52 PM |
| 48 | Network outages. | 10/24/2018 2:41 PM |
| 49 | Clarity to Closer alignment to business and strategic objectives | 10/24/2018 2:13 PM |
| 50 | system Security | 10/24/2018 2:10 PM |
| 51 | Aren't they all though? A better way to handle AD authentication on wifi network would be nice. | 10/24/2018 2:00 PM |
| 52 | small staff easier to manage large infrastructure | 10/24/2018 1:56 PM |
| 53 | latency, stability | 10/24/2018 1:42 PM |
| 54 | Remove legacy systems | 10/24/2018 1:34 PM |
| 55 | Growth of data | 10/24/2018 1:23 PM |
| 56 | Bad data across the ESB. | 10/24/2018 1:17 PM |
| 57 | I wished we had a better way to alert on and respond to trends before they became issues. | 10/24/2018 1:14 PM |
| 58 | Total cloud computing | 10/24/2018 1:04 PM |
| 59 | Retention policies for Government Agencies. | 10/24/2018 1:03 PM |
| 60 | Aging hardware and issues associated with that. | 10/24/2018 1:00 PM |
| 61 | FAT clients, network instability | 10/24/2018 12:58 PM |
| 62 | E-mail. If E-mail were to go away, my job would be 100000% easier. Random surveys with prizes are cool though. | 10/24/2018 12:56 PM |
| 63 | downtime | 10/24/2018 12:54 PM |
| 64 | Un-informed end users. | 10/24/2018 12:53 PM |
| 65 | | 10/24/2018 12:50 PM |
| 66 | Third party hosted system latency and performance | 10/24/2018 12:44 PM |
| 67 | data sprawl due to SaaS and PaaS services. | 10/24/2018 12:37 PM |
| 68 | process and procedures | 10/24/2018 12:33 PM |



| 69 | unrelated / false alerts | 10/24/2018 12:32 PM |
|-----|---|---------------------|
| 70 | I love doughnuts. | 10/24/2018 12:30 PM |
| 71 | Migration roadblocks | 10/24/2018 12:18 PM |
| 72 | Improved performance, scalability, stability | 10/24/2018 12:17 PM |
| 73 | constantly adding new storage | 10/24/2018 12:10 PM |
| 74 | Poor documentation, poor communication | 10/24/2018 12:10 PM |
| 75 | DevOps | 10/24/2018 12:10 PM |
| 76 | Make the application owners more IT savvy so they stop asking for the impossible. But seriously: Improve the upgrade path from one OS version to the next; Improve the management tools and consoles to require fewer clicks to get from one thing to the next; Insure that every management console task has an associated PowerShell command so the steps being done in a console can be scripted; Fleshout tools all for example: SCCM uses a full SQL database on the backend but collections can only be created using WQL vs. full SQL query languages. | 10/24/2018 12:09 PM |
| 77 | everything in the cloud would solve our issues | 10/24/2018 12:09 PM |
| 78 | Speed, performance and security | 10/24/2018 12:08 PM |
| 79 | older applications | 10/24/2018 12:06 PM |
| 80 | I wish people would do their job so I dont have to! | 10/24/2018 12:06 PM |
| 81 | My application & Batch to run faster. | 10/24/2018 12:00 PM |
| 82 | Storage space and connectivity issues, upgrade hassles | 10/24/2018 11:58 AM |
| 83 | Outages affecting any of our carriers. We have circuits with AT&T, Windstream, Spectrum and local ISPs, and only AT&T provides the 4-Nines. | 10/24/2018 11:52 AM |
| 84 | System slowdowns | 10/24/2018 11:44 AM |
| 85 | for me personally; being able to identify phantom servers. | 10/24/2018 11:43 AM |
| 86 | Unexpected downtime | 10/24/2018 11:40 AM |
| 87 | On-site hardware | 10/24/2018 11:34 AM |
| 88 | Citrix | 10/24/2018 11:30 AM |
| 89 | Budget | 10/24/2018 11:29 AM |
| 90 | president of the united states! | 10/24/2018 11:26 AM |
| 91 | Migrations. | 10/24/2018 11:22 AM |
| 92 | Containerize or HPC environment | 10/24/2018 11:21 AM |
| 93 | Bureaucracy | 10/24/2018 11:21 AM |
| 94 | Outdated architecture, people and systems. | 10/24/2018 11:19 AM |
| 95 | out of touch support staff | 10/24/2018 11:18 AM |
| 96 | Backup windows | 10/24/2018 11:12 AM |
| 97 | Firewall access & SQL query/procedure speeds | 10/24/2018 11:10 AM |
| 98 | Users | 10/24/2018 11:05 AM |
| 99 | Infrastructure | 10/24/2018 11:02 AM |
| 100 | unified management standardized tools/software | 10/24/2018 11:02 AM |
| 101 | Audit. | 10/24/2018 11:00 AM |
| 102 | automation | 10/24/2018 10:58 AM |
| 103 | Internal understanding of the value of IT | 10/24/2018 10:57 AM |
| 104 | My machine's performance. Most of the windows run on HDD and it would be very helpful to receive SSD for those. Not commenting on UNIX terminal as it is now available as subsystem in Windows 10 although facing lots of problems while trying to SSH to a box using it. | 10/24/2018 10:54 AM |



| 105 | database data contentions | 10/24/2018 10:50 AM |
|-----|--|---------------------|
| 106 | Unfair questions, they are direct recipients of that award. Accessibility, performance, and the complaining of speed. | 10/24/2018 10:48 AM |
| 107 | worrying about infrastructure | 10/24/2018 10:48 AM |
| 108 | better business priorities | 10/24/2018 10:45 AM |
| 109 | Windows bugs | 10/24/2018 10:45 AM |
| 110 | Storage | 10/24/2018 10:44 AM |
| 111 | No Comment. | 10/24/2018 10:44 AM |
| 12 | Capital | 10/24/2018 10:43 AM |
| 113 | Slow performance | 10/24/2018 10:42 AM |
| 114 | Strategic Planning | 10/24/2018 10:42 AM |
| 115 | Unrelated to my job except I have to wait longer. There are other teams that work on that stuff. | 10/24/2018 10:41 AM |
| 116 | I need to make more time in the day to get everything accomplished. | 10/24/2018 10:37 AM |
| 117 | Help Desk support for slow connections | 10/24/2018 10:33 AM |
| 118 | app performance issues | 10/24/2018 10:32 AM |
| 119 | Password retention period | 10/24/2018 10:30 AM |
| 120 | Budget | 10/24/2018 10:30 AM |
| 121 | all infrastructure | 10/24/2018 10:29 AM |
| 122 | not being asked IT questions when I'm not the IT person | 10/24/2018 10:26 AM |
| 123 | nothing comes to mind | 10/24/2018 10:22 AM |
| 124 | Better Standards Approach | 10/24/2018 10:19 AM |
| 125 | Performance issues, complexity of hypervisor, automatic backups, automatic system recovery, identifying the bottlenecks in performance issues faced. | 10/24/2018 10:18 AM |
| 126 | Lack of available snacks. | 10/24/2018 10:12 AM |
| 127 | Virtualisation ,disaster recovery | 10/24/2018 10:11 AM |
| 128 | File servers all over the globe. | 10/24/2018 10:10 AM |
| 129 | unwanted emails | 10/24/2018 10:08 AM |
| 130 | Speed | 10/24/2018 10:08 AM |
| 131 | Legacy Systems and processes Paper | 10/24/2018 10:08 AM |
| 132 | Latency | 10/24/2018 10:06 AM |
| 133 | None | 10/24/2018 10:05 AM |
| 134 | lack of documentation about software platforms | 10/24/2018 10:04 AM |
| 135 | legacy systems | 10/24/2018 10:04 AM |
| 136 | Managing people | 10/24/2018 10:04 AM |
| 137 | will to accept the emerging technologies | 10/24/2018 9:59 AM |
| 138 | performance | 10/24/2018 9:59 AM |
| 139 | Faster data loads and retrievals | 10/24/2018 9:58 AM |
| 140 | end users | 10/24/2018 9:58 AM |
| 141 | Less fire fighting of server performance, back up failures and virtualization performance. | 10/24/2018 9:57 AM |
| 142 | The Ability to spend money that we need to instead of not spending money. | 10/24/2018 9:49 AM |
| 143 | Easy consolidated storage and recovery. | 10/24/2018 9:49 AM |



| 144 | having to worry about infrastructure | 10/24/2018 9:49 AM |
|-----|--|--------------------|
| 145 | Efficient and effective UI | 10/24/2018 9:48 AM |
| 146 | network conection | 10/24/2018 9:48 AM |
| 147 | nothing | 10/24/2018 9:47 AM |
| 148 | Patching issues. | 10/24/2018 9:46 AM |
| 149 | Physical HDD | 10/24/2018 9:45 AM |
| 150 | VM provisioning and managements that includes performance trouble shooting | 10/24/2018 9:45 AM |
| 151 | More cost effective storage (e.g., cost efficiency for a variety of performance requirements for both block and file use cases in a single consolidate array). | 10/24/2018 9:44 AM |
| 152 | Manual tasks | 10/24/2018 9:44 AM |
| 153 | Inefficiencies with connectivity with our users, 99.9% uptime. | 10/24/2018 9:43 AM |
| 154 | Took 2 of my choices away. Space issues | 10/24/2018 9:37 AM |
| 155 | As close tonReal-time streaming of monitoring data | 10/24/2018 9:36 AM |
| 156 | performance issues | 10/24/2018 9:36 AM |
| 157 | all of the issues. | 10/24/2018 9:35 AM |
| 158 | Budget | 10/24/2018 9:35 AM |
| 159 | System and data sprawl. Data is scattered into too many systems and processes. | 10/24/2018 9:31 AM |
| 160 | Email administration :(| 10/24/2018 9:30 AM |
| 161 | Lack of storage/VM | 10/24/2018 9:30 AM |
| 162 | easier purchasing model | 10/24/2018 9:28 AM |
| 163 | Internet bandwidth | 10/24/2018 9:25 AM |
| 164 | reliability of software | 10/24/2018 9:24 AM |
| 165 | delay on I/O ,wait on I/O, inconsistencies | 10/24/2018 9:23 AM |
| 166 | Cost for tools | 10/24/2018 9:21 AM |
| 167 | None | 10/24/2018 9:20 AM |
| 168 | Noisy neighbor in VM farms | 10/24/2018 9:18 AM |
| 169 | Less Incidents for the Service Desk due to applications performance. | 10/24/2018 9:18 AM |
| 170 | Performance and reliability issues | 10/24/2018 9:17 AM |
| 171 | High maintenance cists | 10/24/2018 9:16 AM |
| 172 | technical skills | 10/24/2018 9:15 AM |
| 173 | Bugs | 10/24/2018 9:15 AM |
| 174 | Integrations | 10/24/2018 9:14 AM |
| 175 | n/a | 10/24/2018 9:11 AM |
| 176 | Pain wity replication of data between sites. | 10/24/2018 9:07 AM |
| 177 | server speed and congestion issues | 10/24/2018 9:06 AM |
| 178 | Errors | 10/24/2018 9:01 AM |
| 179 | Patch Management of end points | 10/24/2018 8:46 AM |
| 180 | Less calls on server performance and application performance | 10/24/2018 8:43 AM |
| 181 | better performance with AWS Elastic Network Adapter that affects iSCSI disk I/O | 10/24/2018 8:38 AM |
| 182 | Firmware updates. | 10/24/2018 8:38 AM |
| 183 | Performance issues | 10/24/2018 8:38 AM |



| 184 | Move more infrastructure to the Cloud | 10/24/2018 8:37 AM |
|-----|---|--------------------|
| 185 | Quicker data access, better logging, traceability | 10/24/2018 8:35 AM |
| 186 | Occasional network instability, storage hickups. | 10/24/2018 8:33 AM |
| 187 | help desk support | 10/24/2018 8:31 AM |
| 188 | unsure | 10/24/2018 8:31 AM |
| 189 | Windows 10 updates, haha | 10/24/2018 8:30 AM |
| 190 | More direct control vs shared infra | 10/24/2018 8:29 AM |
| 191 | Patching | 10/24/2018 8:28 AM |
| 192 | Most issues have been resolved to date. | 10/24/2018 8:28 AM |
| 193 | Multiple servers and technologies. Would like to stick to one technology and OS. | 10/24/2018 8:28 AM |
| 194 | Nothing | 10/24/2018 8:27 AM |
| 195 | Storage scaling, performance bottlenecks | 10/24/2018 8:26 AM |
| 196 | Connectivity issues with our remote facilities. | 10/24/2018 8:26 AM |
| 197 | following corporate guidance | 10/24/2018 8:26 AM |
| 198 | storage capacity and performance | 10/24/2018 8:26 AM |
| 199 | We have performance issues at times with network speeds using windows DFS. The mac's use SMB protocol which can be challenging at times with DFS. | 10/24/2018 8:26 AM |
| 200 | Would like everyone else to take some responsibility for what they do rather than push everything over the fence to IT | 10/24/2018 8:24 AM |
| 201 | Issue awareness and slow IO | 10/24/2018 8:24 AM |
| 202 | No comment | 10/24/2018 8:23 AM |
| 203 | automation and integration to make scaling easier, security monitoring more informative, and workflows more efficient. | 10/24/2018 8:22 AM |
| 204 | licensing | 10/24/2018 8:21 AM |
| 205 | Data growth management and storage management and back up management | 10/24/2018 8:17 AM |
| 206 | The whole existence of backups. | 10/24/2018 8:16 AM |
| 207 | Hacking and government controls | 10/24/2018 8:12 AM |
| 208 | automation | 10/24/2018 8:11 AM |
| 209 | time to delivery, cost limitations | 10/24/2018 8:10 AM |
| 210 | use of the terms, "cloud", "devops" and anything promoting the idea of infrastructure running itself. nonsense. | 10/24/2018 8:10 AM |
| 211 | Performance | 10/24/2018 8:10 AM |
| 212 | Patching | 10/24/2018 8:08 AM |
| 213 | Faster performance and reliability | 10/24/2018 8:08 AM |
| 214 | Politics preventing the implementation of the proper solutions | 10/24/2018 8:07 AM |
| 215 | Constant security patching/updates that are necessary but break things - File shares, DFS, 3rd party application funcationality, email, etc. | 10/24/2018 8:04 AM |
| 216 | having the ability to be in control of services provided to 3 party vendor | 10/24/2018 8:03 AM |
| 217 | Excessive complexity to implement a faster approach, excessive management increases for my staff. | 10/24/2018 7:59 AM |
| 218 | Complaints | 10/24/2018 7:59 AM |
| 219 | Network Performance issues | 10/24/2018 7:55 AM |
| 220 | I/O Blender Effect | 10/24/2018 7:53 AM |



| 221 | less manual entries more Al capabilities | 10/24/2018 7:52 AM |
|-----|---|---------------------|
| 222 | storage transparency (invisible) | 10/24/2018 7:51 AM |
| 223 | More diagnostic tools for performance | 10/24/2018 7:51 AM |
| 224 | Inefficient monitoring | 10/24/2018 7:48 AM |
| 225 | N/A | 10/24/2018 7:48 AM |
| 226 | less things to manage | 10/24/2018 7:47 AM |
| 227 | High Out-Years on maintenance for hardware over three years, that can force upgrades on cost vs technical improvements | 10/24/2018 7:47 AM |
| 228 | Ransomware/Phishing | 10/24/2018 7:46 AM |
| 229 | Of course | 10/24/2018 7:46 AM |
| 230 | I don't support I/O | 10/24/2018 7:45 AM |
| 231 | Getting rid of SAP | 10/24/2018 7:44 AM |
| 232 | Predicatable data consumption | 10/24/2018 7:44 AM |
| 233 | Vendor updates that don't work | 10/24/2018 7:44 AM |
| 234 | DSC for my infrastructure | 10/24/2018 7:43 AM |
| 235 | More Virtualization | 10/24/2018 7:42 AM |
| 236 | None I can think of | 10/24/2018 7:42 AM |
| 237 | As of right now we are doing great, no complaints | 10/24/2018 7:41 AM |
| 238 | Policy and arbitrary security requirements | 10/24/2018 7:41 AM |
| 239 | bugs in software | 10/24/2018 7:40 AM |
| 240 | I would like all latency to go away and make my job to reduced to looking at logs on a daily basis automated then filtering only urgent issues and being paid for full time employee taking care of the environment being the super administrator. Only failed drives will get me down. | 10/17/2018 10:14 AM |
| 241 | streamlining project requests to increase transparency and collaboration | 10/15/2018 9:56 AM |
| 242 | Less calls to support queue | 10/12/2018 12:33 PM |
| 243 | Minimize Hardware and memory utilization failures | 10/10/2018 1:12 PM |
| 244 | Simplification of migration tools an dprocesses | 10/10/2018 9:42 AM |
| 245 | Thomson Reuters poor application design | 10/8/2018 12:00 PM |
| 246 | performance issues are a constant struggle - and since we are hybrid with on prem servers, virtual servers that we manage and virtual environments that we pay to have another company manage - we are constantly trying to investigate our way towards the source of a performance problem so we can address it. performance problems are also HIGHLY subjective, and I would welcome metrics that can be analyzed so we're not always relying on the end users' perception of performance issues. | 10/8/2018 7:39 AM |
| 247 | complexity | 10/8/2018 6:53 AM |
| 248 | tragedy-of-the-commons WRT disk space in large volumes | 10/6/2018 7:41 AM |
| 249 | constant audits and security layers | 10/5/2018 8:52 AM |
| 250 | The belief that all application errors or issues are actually Network problems. | 10/4/2018 12:16 PM |
| 251 | Capacity chaos and data lifecycle management. | 10/4/2018 8:59 AM |
| 252 | Users. | 10/4/2018 8:38 AM |
| 253 | Automate mundane tasks | 10/4/2018 7:47 AM |
| 254 | Upgrade compatibility issues between software versions | 10/4/2018 6:41 AM |
| 255 | ? | 10/4/2018 6:11 AM |
| 256 | Easier management of environment. | 10/4/2018 6:01 AM |



| 257 | Undecided | 10/4/2018 5:02 AM |
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| 258 | I wish disaster recovery was easier. | 10/4/2018 4:21 AM |
| 259 | having visibility into UBA and having AI to mitigate network and system issues. | 10/3/2018 4:32 PM |
| 260 | Secure and reliable with high availability | 10/3/2018 1:07 PM |
| 261 | Dont have these kinds of pain points. | 10/3/2018 12:23 PM |
| 262 | More focused monitoring and alerts | 10/3/2018 11:43 AM |
| 263 | performance issues | 10/3/2018 11:04 AM |
| 264 | Patching | 10/3/2018 10:57 AM |
| 265 | Slow boot time of my laptop | 10/3/2018 10:45 AM |
| 266 | Automation of SCCM remediation | 10/3/2018 10:32 AM |
| 267 | people | 10/3/2018 10:24 AM |
| 268 | outages | 10/3/2018 9:57 AM |
| 269 | currently we are looking to Nutanix which will increase the space the redunency. | 10/3/2018 9:44 AM |
| 270 | Better forecasting would help me the most. | 10/3/2018 9:44 AM |
| 271 | Culture | 10/3/2018 9:10 AM |
| 272 | tools to monitor system | 10/3/2018 9:07 AM |
| 273 | Better configuration management | 10/3/2018 8:54 AM |
| 274 | n/a | 10/3/2018 8:41 AM |
| 275 | Budget | 10/3/2018 8:10 AM |
| 276 | user error | 10/3/2018 8:02 AM |
| 277 | Slow producer performance which mostly seems application based. | 10/3/2018 7:41 AM |
| 278 | none | 10/3/2018 7:41 AM |
| 279 | system failures, vendor failure to meet SLA | 10/3/2018 7:40 AM |
| 280 | Latency! | 10/3/2018 7:31 AM |
| 281 | Network access with providers | 10/3/2018 7:26 AM |
| 282 | Capital funding shortage. Cumbersome purchase approval process | 10/3/2018 7:22 AM |
| 283 | Apps that identifiy issues and are reliable | 10/3/2018 7:20 AM |
| 284 | integration and scale | 10/3/2018 7:14 AM |
| 285 | Reliability Issues | 10/3/2018 7:10 AM |
| 286 | Data migration | 10/3/2018 7:08 AM |
| 287 | Support | 10/3/2018 6:56 AM |
| 288 | Streamline windows and java updates | 10/3/2018 6:56 AM |
| 289 | Hyperlinks in e-mails. | 10/3/2018 6:47 AM |
| 290 | Vendor reduction | 10/3/2018 6:44 AM |
| 291 | training to stay up to date | 10/3/2018 6:44 AM |
| 292 | No | 10/3/2018 6:42 AM |
| 293 | eliminating the redundant manual time consuming tasks - automation babay! | 10/3/2018 6:41 AM |
| 294 | The stress around worrying about if we can add more data to our modeling tool because the business would like to add more data but we currently aren't scalable and able to do that. | 10/3/2018 6:37 AM |
| 295 | Having to manage security | 10/3/2018 6:32 AM |
| 296 | Improved vendor support | 10/3/2018 6:30 AM |



| 297 | application performance, user experience consistency. | 10/3/2018 6:27 AM |
|-----|--|-------------------|
| 298 | Bandwidth, I/O time | 10/3/2018 6:24 AM |
| 299 | better project management | 10/3/2018 6:24 AM |
| 300 | Vendors cold calling, budgetary constraints | 10/3/2018 6:23 AM |
| 301 | lengthy processes an procedures that delay development | 10/3/2018 6:23 AM |
| 302 | rapid scaling | 10/3/2018 6:21 AM |
| 303 | Unexpected impact from changes | 10/3/2018 6:21 AM |
| 304 | Users trying to introduce new tech and/or ways to store data. | 10/3/2018 6:20 AM |
| 305 | uneducated user base. | 10/3/2018 6:20 AM |
| 306 | able to scale based on usage | 10/3/2018 6:19 AM |
| 307 | Patch management | 10/3/2018 6:18 AM |
| 308 | Planned obsolescence | 10/3/2018 6:16 AM |
| 309 | ? | 10/3/2018 6:16 AM |
| 310 | Lack of visualization of the entire organization | 10/3/2018 6:15 AM |
| 311 | adaptation of cloud | 10/3/2018 6:14 AM |
| 312 | memory & storage caps | 10/3/2018 6:13 AM |
| 313 | We like a challenge | 10/3/2018 6:10 AM |
| 314 | Not sure at this time | 10/3/2018 6:06 AM |
| 315 | Lack of storage and system crashes. | 10/3/2018 6:05 AM |
| 316 | Reduction in manual repetitive services. | 10/3/2018 6:04 AM |
| 317 | Heavy Endpoint security | 10/3/2018 6:03 AM |
| 318 | None | 10/3/2018 6:02 AM |
| 319 | Application Teams working to ensure accuracy of Systems Docs and ensuring adherence to Enterprise standards & design guidelines. | 10/3/2018 6:02 AM |
| 320 | Disparate technology stacks in the same environment. | 10/3/2018 6:00 AM |
| 321 | aging equipment | 10/3/2018 6:00 AM |
| 322 | false alarms | 10/3/2018 5:58 AM |
| 323 | Competing priorities. | 10/3/2018 5:53 AM |
| 324 | Correct configuration of vms and hosts prior to opening performance related tickets. | 10/3/2018 5:52 AM |
| 325 | upgrade and migration issues | 10/3/2018 5:52 AM |
| 326 | Easier Change Management processes | 10/3/2018 5:51 AM |
| 327 | Things are pretty good here and I'm not looking for change | 10/3/2018 5:50 AM |
| 328 | Taking actions without planning would be nice if disappeared. | 10/3/2018 5:43 AM |
| 329 | cheaper easier systems to implement | 10/3/2018 5:42 AM |
| 330 | An efficient set of hardware that need little to no support. | 10/3/2018 5:41 AM |
| 331 | email outtages | 10/3/2018 5:39 AM |
| 332 | Newer device performance and availability. | 10/3/2018 5:39 AM |
| 333 | Slow PC software. | 10/3/2018 5:37 AM |
| 334 | documentation and process trackers and flows | 10/3/2018 5:32 AM |
| 335 | Migration of our SharePoint Farm to Azure. | 10/3/2018 5:32 AM |
| 336 | Really none at this time. | 10/3/2018 5:31 AM |



| 337 | On going maintenance. | 10/3/2018 5:29 AM |
|-----|--|-------------------|
| 338 | Speed | 10/3/2018 5:28 AM |
| 339 | No issues at present. | 10/3/2018 5:26 AM |
| 340 | na | 10/3/2018 5:26 AM |
| 341 | Memory cost | 10/3/2018 5:25 AM |
| 342 | Less security issues, it's become so cumbersome to do my job I must have to enter a password 100 times a day for something. | 10/3/2018 5:22 AM |
| 343 | I am the whole IT department, so any tools to make my day easier would be great. | 10/3/2018 5:22 AM |
| 344 | legacy services | 10/3/2018 5:21 AM |
| 345 | High speed storage | 10/3/2018 5:19 AM |
| 346 | better ITIL processes | 10/3/2018 5:19 AM |
| 347 | outdated applications | 10/3/2018 5:18 AM |
| 348 | constant security patching | 10/3/2018 5:14 AM |
| 349 | more robust infrastructure | 10/3/2018 5:13 AM |
| 350 | Broken APIs | 10/3/2018 5:12 AM |
| 351 | the silos of responsibilities | 10/3/2018 5:12 AM |
| 352 | Better I/O Performance and Reliability | 10/3/2018 5:11 AM |
| 353 | Better automation | 10/3/2018 5:11 AM |
| 354 | business impacting performance issues especially with an unidentifiable root cause | 10/3/2018 5:11 AM |
| 355 | Old storage system | 10/3/2018 5:10 AM |
| 356 | Scalability issues that arise due to the ever changing landscape | 10/3/2018 5:10 AM |
| 357 | n/a | 10/3/2018 5:08 AM |
| 358 | Ability to obtain secure virtual servers quickly and easily | 10/3/2018 5:08 AM |
| 359 | Unrealistic expectations | 10/3/2018 5:06 AM |
| 360 | Current supported SAN's. Under warranty | 10/3/2018 5:04 AM |
| 361 | Poor documentation resulting in too much time troubleshooting problems or doing application forensics to identify root causes. | 10/3/2018 5:04 AM |
| 362 | User inputs limiting amount of good data | 10/3/2018 5:02 AM |
| 363 | Knowledge gaps in staff for cloud technologies (Azure) | 10/3/2018 5:01 AM |
| 364 | easier API integration across apps. | 10/3/2018 5:01 AM |
| 365 | pace of change | 10/3/2018 5:01 AM |
| 366 | The complexities underlying the sinmplification of systems and the OpEx costs that are out of control | 10/3/2018 5:01 AM |
| 367 | Slow network and disk | 10/3/2018 5:00 AM |
| 368 | automation | 10/3/2018 4:59 AM |
| 369 | More resources. | 10/3/2018 4:58 AM |
| 370 | SSL Certificate management | 10/3/2018 4:57 AM |
| 371 | Less Expensive Updated Technology | 10/3/2018 4:57 AM |
| 372 | Having a scalable storage solution that will easily plug into our environment. | 10/3/2018 4:56 AM |
| 373 | helpcenter | 10/3/2018 4:56 AM |
| 374 | IO Performance Issues Security Concerns | 10/3/2018 4:55 AM |
| 375 | After hour calls for problems with SRVP connections dropping and thus losing production counts | 10/3/2018 4:55 AM |



| 10/3/2018 4:54 AM | | | |
|--|-----|--|--------------------|
| Inconsistent performance of critical business applications. | 376 | no comment | 10/3/2018 4:55 AM |
| 379 None 10/3/2018 4.54 AM 380 people emailing me thinking I am in the IT operations side when if you actually took the time to read my Linked in and not just my title you could see it is a facilities job. 10/3/2018 4.52 AM 381 Disk Performance and Back Up Issues 10/3/2018 4.52 AM 382 Less in house development one off issues 10/3/2018 4.50 AM 383 Less IT problems overhead 10/2/2018 1.59 PM 384 Slowness! 10/1/2018 9.09 AM 385 Seamless updates 9/28/2018 5.35 AM 386 Constant push to change to the latest and greatest technologies. Some of it is great, but a lot is not vetted anough and can make things worse. 9/28/2018 5.24 AM 387 Have nothing to change. 9/28/2018 6.35 AM 388 Reporting 9/28/2018 10.51 AM 389 changing user requirements 9/28/2018 4.27 AM 390 Dependency on hardware 9/28/2018 4.50 PM 391 Give end user a view into their storage through some form of show back. 9/28/2018 12.51 PM 392 confidential 9/28/2018 12.52 PM 393 Storage performance 9/28/2018 12.52 PM | 377 | Security limitations | 10/3/2018 4:54 AM |
| People emailing me thinking I am in the IT operations side when if you actually took the time to read my Linked In and not just my little you could see it is a facilities job. Policy Performance and Back Up Issues 10/3/2018 4:52 AM | 378 | Inconsistent performance of critical business applications. | 10/3/2018 4:54 AM |
| read my Linked In and not just my title you could see it is a facilities job. Disk Performance and Back Up Issues 10/3/2018 4:52 AM Less IT problems overhead 10/2/2018 1:59 PM 384 Slowness! 10/1/2018 9:09 AM 385 Seamless updates Constant push to change to the latest and greatest technologies. Some of it is great, but a lot is not vetted enough and can make things worse. 387 Have nothing to change. 388 Reporting 389 changing user requirements 389 changing user requirements 390 Dependency on hardware 391 Give and user a view into their storage through some form of show back. 392 confidential 392 confidential 393 Storage performance 392 (Storage performance) 394 none at this time 395 Windows - log analytics of system logs to determine the real problem on a server. 396 Push Viser V 397 Users V 398 Jo delays 10/2018 10:51 PM 399 AWS 390 Dependency on verall memory issues and enhanced database (SOL) performance 3925/2018 12:53 PM 396 reduction in overall memory issues and enhanced database (SOL) performance 3925/2018 12:53 PM 397 Users V 398 Jo delays 10/2018 12:50 PM 399 AWS 390 Deta quality issue. 391/2018 12:50 PM 391 Give and user a reliability and scalability 400 daily operations issues 401 Data quality issue. 3925/2018 12:02 PM 4025/2018 12:02 PM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 404 Spam email 405/2018 10:03 AM 406 budget 407 work 408 sorry, it would be company politics 409 App performance issues and planning for bursts 410 Magic OS upgrade wand 411 Ldap and storage 4125/2018 19:23 AM 413 old cumbing infrastructure 4125/2018 19:23 AM 413 old cumbing infrastructure | 379 | None | 10/3/2018 4:54 AM |
| 382 Less in house development one off issues 10/3/2018 4:50 AM 383 Less IT problems overhead 10/2/2018 1:59 PM 384 Slowness! 10/1/2018 9:09 AM 385 Seamless updates 928/2018 5:35 AM 386 Constant push to change to the latest and greatest technologies. Some of it is great, but a lot is not vetted enough and can make things worse. 9/27/2018 5:24 AM 387 Have nothing to change. 9/27/2018 5:43 AM 388 Reporting 9/26/2018 10:51 AM 389 changing user requirements 9/26/2018 10:51 AM 390 Dependency on hardware 9/25/2018 10:51 AM 391 Give end user a view into their storage through some form of show back. 9/25/2018 12:52 PM 392 confidential 9/25/2018 12:52 PM 393 Storage performance 9/25/2018 12:52 PM 394 none at this time 9/25/2018 12:52 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SOL) performance 9/25/2018 12:55 PM 399 I/O delays </td <td>380</td> <td></td> <td>10/3/2018 4:53 AM</td> | 380 | | 10/3/2018 4:53 AM |
| Less IT problems overhead 10/2/2018 1:59 PM 384 Slowness! 10/1/2018 9:09 AM 385 Seamless updates Constant push to change to the latest and greatest technologies. Some of it is great, but a lot is not vetted enough and can make things worse. Page 17/2018 5:43 AM 387 Have nothing to change. Reporting Page 2018 10:51 AM 388 Reporting Changing user requirements Page 2018 10:51 AM 389 Changing user requirements Page 2018 10:51 AM 390 Dependency on hardware 391 Give end user a view into their storage through some form of show back. Page 2018 18:33 PM 392 Confidential 393 Storage performance 394 Nindows - log analytics of system logs to determine the real problem on a server. 395 Windows - log analytics of system logs to determine the real problem on a server. 396 reduction in overall memory issues and enhanced database (SQL) performance 397 Users :V 398 Vindows - log analytics of system logs to determine the real problem on a server. 398 Vindows - log analytics of system logs to determine the real problem on a server. 399 AWS 399 AWS 399 AWS 399 AWS 390 AWS 391 Data quality issue. 3925/2018 12:35 PM 400 daily operations issues 3925/2018 12:35 PM 401 Data quality issue. 3926/2018 12:02 PM 402 Stability with ease in reliability and scalability 403 100% performance (mostly high latency) related problems with serialized legacy applications. 3925/2018 11:04 AM 404 Spam email 405 identifying under-preforming / bottleneck hardware. 406 budget 3925/2018 10:25 AM 407 work 408 sorry, It would be company politics 409 App performance issues and planning for bursts 410 Magic OS upgrade wand 411 Ldap and storage 3925/2018 3:03 AM 412 Server Services that never need a restart 413 old crumbling infrastructure | 381 | Disk Performance and Back Up Issues | 10/3/2018 4:52 AM |
| 384 Slownesst 10/1/2018 9:09 AM 385 Seamless updates 9/28/2018 5:35 AM 386 Constant push to change to the latest and greatest technologies. Some of it is great, but a lot is not vetted enough and can make things worse. 9/28/2018 5:24 AM 387 Have nothing to change. 9/27/2018 5:43 AM 388 Reporting 9/26/2018 10:51 AM 389 changing user requirements 9/26/2018 4:27 AM 390 Dependency on hardware 9/25/2018 8:33 PM 391 Give end user a view into their storage through some form of show back. 9/25/2018 8:37 PM 392 confidential 9/25/2018 1:27 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:25 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 1:25 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 1:25 PM 397 Users : V 9/25/2018 1:25 PM 400 daily operations issues 9/25/2018 10:25 PM 401 Data quality issue. 9/25/2018 10:2 | 382 | Less in house development one off issues | 10/3/2018 4:50 AM |
| 385 Seamless updates 9/28/2018 5:35 AM 386 Constant push to change to the latest and greatest technologies. Some of it is great, but a lot is not vetted enough and can make things worse. 9/28/2018 5:24 AM 387 Have nothing to change. 9/27/2018 5:43 AM 388 Reporting 9/26/2018 10:51 AM 389 changing user requirements 9/26/2018 4:27 AM 390 Dependency on hardware 9/25/2018 8:33 PM 391 Give end user a view into their storage through some form of show back. 9/25/2018 7:14 PM 392 confidential 9/25/2018 1:25 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:25 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users : V 9/25/2018 12:50 PM 398 I/o delays 9/25/2018 12:50 PM 399 AWS 9/25/2018 12:20 PM 400 daily operations issues 9/25/2018 10:20 AM | 383 | Less IT problems overhead | 10/2/2018 1:59 PM |
| Constant push to change to the latest and greatest technologies. Some of it is great, but a lot is not vetted enough and can make things worse. Have nothing to change. 9/27/2018 5:43 AM 888 Reporting 9/26/2018 4:27 AM 389 changing user requirements 9/26/2018 4:27 AM 390 Dependency on hardware 9/25/2018 8:33 PM 391 Give end user a view into their storage through some form of show back. 9/25/2018 7:14 PM 392 confidential 9/25/2018 1:27 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:26 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 1:25 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:35 PM 397 Users :V 9/25/2018 12:35 PM 398 I/o delays AWS 9/25/2018 12:35 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 12:02 PM 402 Stability with ease in reliability and scalability 403 Lower-performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:05 AM 404 Spam email 9/25/2018 10:03 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:03 AM 406 budget 9/25/2018 10:03 AM 407 work 408 sorry, It would be company politics 409 App performance issues and planning for bursts 400 Magic OS upgrade wand 401 Ldap and storage 9/25/2018 9:03 AM 402 Server Services that never need a restart 403 old crumbling infrastructure | 384 | Slowness! | 10/1/2018 9:09 AM |
| 387 Have nothing to change. 9/27/2018 5:43 AM 388 Reporting 9/26/2018 10:51 AM 389 changing user requirements 9/26/2018 4:27 AM 389 changing user requirements 9/25/2018 4:27 AM 389 changing user requirements 9/25/2018 4:27 AM 389 Changing user requirements 9/25/2018 8:33 PM 391 Give end user a view into their storage through some form of show back. 9/25/2018 1:45 PM 392 confidential 9/25/2018 1:25 PM 393 Storage performance 9/25/2018 1:25 PM 394 none at this time 9/25/2018 1:25 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 1:255 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:55 PM 397 Users :V 9/25/2018 12:55 PM 398 I/o delays 9/25/2018 12:55 PM 399 AWS 9/25/2018 12:50 PM 400 daily operations issues 9/25/2018 12:50 PM 401 Data quality issue. 9/25/2018 12:50 | 385 | Seamless updates | 9/28/2018 5:35 AM |
| 388 Reporting 9/26/2018 10:51 AM 389 changing user requirements 9/26/2018 4:27 AM 390 Dependency on hardware 9/25/2018 8:33 PM 391 Give end user a view into their storage through some form of show back. 9/25/2018 7:14 PM 392 confidential 9/25/2018 1:25 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:26 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users :V 9/25/2018 12:55 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:50 AM 403 10% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 10:51 AM | 386 | | 9/28/2018 5:24 AM |
| 339 changing user requirements 9/26/2018 4:27 AM 390 Dependency on hardware 9/25/2018 8:33 PM 391 Give end user a view into their storage through some form of show back. 9/25/2018 7:14 PM 392 confidential 9/25/2018 1:20 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:26 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users : V 9/25/2018 12:53 PM 398 I/o delays 9/25/2018 12:35 PM 399 AVS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:50 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:03 AM | 387 | Have nothing to change. | 9/27/2018 5:43 AM |
| 390 Dependency on hardware 9/25/2018 8:33 PM 391 Give end user a view into their storage through some form of show back. 9/25/2018 7:14 PM 392 confidential 9/25/2018 4:50 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:26 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users: V 9/25/2018 12:55 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:50 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:32 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:33 A | 388 | Reporting | 9/26/2018 10:51 AM |
| 391 Give end user a view into their storage through some form of show back. 9/25/2018 7:14 PM 392 confidential 9/25/2018 4:50 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:26 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users: V 9/25/2018 12:55 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:50 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:32 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM <td>389</td> <td>changing user requirements</td> <td>9/26/2018 4:27 AM</td> | 389 | changing user requirements | 9/26/2018 4:27 AM |
| 392 confidential 9/25/2018 4:50 PM 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:26 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users :V 9/25/2018 12:51 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:14 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:33 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:33 AM 408 sorry, It would be com | 390 | Dependency on hardware | 9/25/2018 8:33 PM |
| 393 Storage performance 9/25/2018 1:27 PM 394 none at this time 9/25/2018 1:26 PM 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users : V 9/25/2018 12:55 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:35 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:14 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:34 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:33 AM 407 work 9/25/2018 10:35 AM 408 sorry, It would be company politics 9/25/2018 9:45 AM 409 <t< td=""><td>391</td><td>Give end user a view into their storage through some form of show back.</td><td>9/25/2018 7:14 PM</td></t<> | 391 | Give end user a view into their storage through some form of show back. | 9/25/2018 7:14 PM |
| none at this time 9/25/2018 1:26 PM Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:55 PM 397 Users :V 9/25/2018 12:51 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:14 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:25 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:23 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:25 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 392 | confidential | 9/25/2018 4:50 PM |
| 395 Windows - log analytics of system logs to determine the real problem on a server. 9/25/2018 12:55 PM 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users : V 9/25/2018 12:51 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:50 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:31 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:25 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:40 AM | 393 | Storage performance | 9/25/2018 1:27 PM |
| 396 reduction in overall memory issues and enhanced database (SQL) performance 9/25/2018 12:53 PM 397 Users:V 9/25/2018 12:51 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:14 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 9:45 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:23 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:03 AM 413 < | 394 | none at this time | 9/25/2018 1:26 PM |
| Users :V 9/25/2018 12:51 PM 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:14 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:08 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:23 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:03 AM | 395 | Windows - log analytics of system logs to determine the real problem on a server. | 9/25/2018 12:55 PM |
| 398 I/o delays 9/25/2018 12:35 PM 399 AWS 9/25/2018 12:02 PM 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:14 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:08 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:23 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:03 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 396 | reduction in overall memory issues and enhanced database (SQL) performance | 9/25/2018 12:53 PM |
| AWS AWS 400 daily operations issues 9/25/2018 12:02 PM 401 Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:14 AM 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 406 budget 407 work 408 sorry, It would be company politics 409 App performance issues and planning for bursts 410 Magic OS upgrade wand 411 Ldap and storage 412 Server Services that never need a restart 413 old crumbling infrastructure 9/25/2018 10:03 AM 414 Old crumbling infrastructure 9/25/2018 9:03 AM | 397 | Users :V | 9/25/2018 12:51 PM |
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| Data quality issue. 9/25/2018 11:50 AM 402 Stability with ease in reliability and scalability 9/25/2018 11:14 AM 403 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:43 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:08 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:40 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:03 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 399 | AWS | 9/25/2018 12:02 PM |
| Stability with ease in reliability and scalability 9/25/2018 11:14 AM 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:32 AM 406 budget 9/25/2018 10:32 AM 407 work 408 sorry, It would be company politics 9/25/2018 10:25 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:03 AM 413 old crumbling infrastructure | 400 | daily operations issues | 9/25/2018 12:02 PM |
| 100% performance (mostly high latency) related problems with serialized legacy applications. 9/25/2018 11:06 AM Spam email 9/25/2018 10:51 AM identifying under-preforming / bottleneck hardware. 9/25/2018 10:43 AM budget 9/25/2018 10:32 AM work 9/25/2018 10:25 AM sorry, It would be company politics 9/25/2018 10:08 AM App performance issues and planning for bursts 9/25/2018 9:45 AM Magic OS upgrade wand 9/25/2018 9:40 AM Hold Magic OS upgrade wand 9/25/2018 9:23 AM Server Services that never need a restart 9/25/2018 9:03 AM old crumbling infrastructure 9/25/2018 9:03 AM | 401 | Data quality issue. | 9/25/2018 11:50 AM |
| 404 Spam email 9/25/2018 10:51 AM 405 identifying under-preforming / bottleneck hardware. 9/25/2018 10:43 AM 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:08 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:40 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:03 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 402 | Stability with ease in reliability and scalability | 9/25/2018 11:14 AM |
| identifying under-preforming / bottleneck hardware. 9/25/2018 10:43 AM budget 9/25/2018 10:32 AM work 9/25/2018 10:25 AM sorry, It would be company politics 9/25/2018 10:08 AM App performance issues and planning for bursts 9/25/2018 9:45 AM And | 403 | 100% performance (mostly high latency) related problems with serialized legacy applications. | 9/25/2018 11:06 AM |
| 406 budget 9/25/2018 10:32 AM 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:08 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:40 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:03 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 404 | Spam email | 9/25/2018 10:51 AM |
| 407 work 9/25/2018 10:25 AM 408 sorry, It would be company politics 9/25/2018 10:08 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:40 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:12 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 405 | identifying under-preforming / bottleneck hardware. | 9/25/2018 10:43 AM |
| 408 sorry, It would be company politics 9/25/2018 10:08 AM 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:40 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:12 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 406 | budget | 9/25/2018 10:32 AM |
| 409 App performance issues and planning for bursts 9/25/2018 9:45 AM 410 Magic OS upgrade wand 9/25/2018 9:40 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:12 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 407 | work | 9/25/2018 10:25 AM |
| 410 Magic OS upgrade wand 9/25/2018 9:40 AM 411 Ldap and storage 9/25/2018 9:23 AM 412 Server Services that never need a restart 9/25/2018 9:12 AM 413 old crumbling infrastructure 9/25/2018 9:03 AM | 408 | sorry, It would be company politics | 9/25/2018 10:08 AM |
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| Server Services that never need a restart 9/25/2018 9:12 AM old crumbling infrastructure 9/25/2018 9:03 AM | 410 | Magic OS upgrade wand | 9/25/2018 9:40 AM |
| old crumbling infrastructure 9/25/2018 9:03 AM | 411 | Ldap and storage | 9/25/2018 9:23 AM |
| | 412 | Server Services that never need a restart | 9/25/2018 9:12 AM |
| I wish I wasn't bombarded by auto-generated marketing tools from business development people 9/25/2018 8:55 AM | 413 | old crumbling infrastructure | 9/25/2018 9:03 AM |
| | 414 | I wish I wasn't bombarded by auto-generated marketing tools from business development people | 9/25/2018 8:55 AM |



| 415 | N/A | 9/25/2018 8:50 AM |
|-----|---|-------------------|
| 416 | Network Reliability | 9/25/2018 8:40 AM |
| 417 | speed, large bandwith | 9/25/2018 8:32 AM |
| 418 | Security and threats. | 9/25/2018 8:30 AM |
| 419 | Operations Help desk | 9/25/2018 8:29 AM |
| 420 | storage management | 9/25/2018 8:26 AM |
| 421 | Legacy technology | 9/25/2018 8:23 AM |
| 422 | network issues and software upgrade problems | 9/25/2018 8:19 AM |
| 423 | Streamlining procurement. | 9/25/2018 8:19 AM |
| 424 | Spend less time in maintaining systems and handling outages. Spend more time in innovating technology and process to increase operational efficiencies. | 9/25/2018 8:17 AM |
| 425 | I wish that ServiceNow would load faster. | 9/25/2018 8:12 AM |
| 426 | Hardware management | 9/25/2018 8:11 AM |
| 427 | intelligent dashboard and alerting tools would simplify and shorten break/fix events | 9/25/2018 8:10 AM |
| 428 | Elasticity within limited budgets | 9/25/2018 8:06 AM |
| 429 | reliability is the most effective tool in IT. | 9/25/2018 8:05 AM |
| 430 | Governance Tools | 9/25/2018 7:56 AM |
| 431 | | 9/25/2018 7:54 AM |
| 432 | VDI latency | 9/25/2018 7:52 AM |
| 433 | Improved network and storage speeds | 9/25/2018 7:51 AM |
| 434 | inability of apps to manage and handle downtime for service/patching/maintenance | 9/25/2018 7:50 AM |
| 435 | User error, system crashes, bottle necks, performance | 9/25/2018 7:39 AM |
| 436 | Better programming of applications. | 9/25/2018 7:35 AM |
| 437 | That is not a simple answer. | 9/25/2018 7:29 AM |
| 438 | Not sure | 9/25/2018 7:23 AM |
| 439 | Better connections for network. Faster Speeds. | 9/25/2018 7:20 AM |
| 440 | I would have to go with shadow support. | 9/25/2018 7:17 AM |
| 441 | security "false positive" tests, network latency, constant patching especially on 3p libraries | 9/25/2018 7:12 AM |
| 442 | Eliminate legacy os | 9/25/2018 7:08 AM |
| 443 | network (in some office locations) and workstation performance due to under-powered hardware. | 9/25/2018 7:06 AM |
| 444 | Windows server updates that require a reboot. | 9/25/2018 7:02 AM |
| 445 | Network latency | 9/25/2018 6:59 AM |
| 446 | Performance issues | 9/25/2018 6:57 AM |
| 447 | Scalable architecture | 9/25/2018 6:53 AM |
| 448 | budget constraints | 9/25/2018 6:51 AM |
| 449 | SQL Server Virtualization and IO issues between VMWare and the SAN | 9/25/2018 6:51 AM |
| 450 | incompatabilities | 9/25/2018 6:47 AM |
| 451 | Overhead in related cost for equipment and infrastructure. Too many tools that do the same thing, consolidation would be nice | 9/25/2018 6:39 AM |
| 452 | n/a | 9/25/2018 6:35 AM |
| 453 | Legacy software with zero support, email as a storage solution, too many devices to manage. | 9/25/2018 6:32 AM |
| | | |



| 454 | Systems would perform better and the applications would be modernized. | 9/25/2018 6:25 AM |
|-----|--|--------------------|
| 455 | We are experiencing no problems at this time. | 9/25/2018 6:20 AM |
| 456 | Performance | 9/25/2018 6:19 AM |
| 457 | Supporting legacy AIX - much more difficult than Windows/LINUX | 9/25/2018 6:15 AM |
| 458 | Bottlenecks | 9/25/2018 6:14 AM |
| 459 | Over provision of resources. | 9/25/2018 6:14 AM |
| 460 | Sr.Database Engineer | 9/25/2018 6:11 AM |
| 461 | Accurate VMHost/VM utilization. | 9/25/2018 6:11 AM |
| 462 | Better Phishing detection. APT Threat detection. | 9/25/2018 6:09 AM |
| 463 | Determining when the server is slow vs. the network. | 9/25/2018 6:08 AM |
| 464 | Something stable and without latency and very dependable | 9/25/2018 6:01 AM |
| 465 | N/A | 9/25/2018 6:01 AM |
| 466 | Issues with scalability and performance monitoring | 9/25/2018 5:58 AM |
| 467 | DR Unmanaged systems Physical obsolete HW | 9/25/2018 5:57 AM |
| 468 | SAP | 9/25/2018 5:56 AM |
| 469 | Offloading the day to day issues helpdesk tickets | 9/25/2018 5:53 AM |
| 470 | Storage device crash | 9/25/2018 5:52 AM |
| 471 | load balancing. | 9/25/2018 5:49 AM |
| 472 | N/A | 9/25/2018 5:48 AM |
| 473 | none at this time other than communication | 9/25/2018 5:46 AM |
| 474 | security concerns, they're a huge cost in our industry. | 9/25/2018 5:43 AM |
| 475 | Just that the system would run smoothly. | 9/24/2018 4:20 AM |
| 476 | No. | 9/19/2018 12:34 PM |
| 477 | ability to recover from a disaster | 9/6/2018 6:55 AM |
| 478 | security concerns | 9/6/2018 4:51 AM |
| 479 | Purchase Orders | 9/5/2018 10:26 PM |
| 480 | Lifecycle upgrades, cloud SLA negotations | 9/5/2018 3:25 PM |
| 481 | Securing the environment, yet keeping things easier to manage | 9/5/2018 9:57 AM |
| 482 | The business not treating as a full partner | 9/5/2018 7:32 AM |
| 483 | latency | 9/5/2018 7:11 AM |
| 484 | better training for end users | 9/5/2018 6:57 AM |
| 485 | our WAN needs improvements. | 9/5/2018 6:54 AM |
| 486 | faster application speeds | 9/5/2018 6:36 AM |
| 487 | Datex | 9/5/2018 6:30 AM |
| 488 | azure stability | 9/5/2018 6:23 AM |
| 489 | Network slow down | 9/5/2018 6:16 AM |
| 490 | n/a | 9/5/2018 6:05 AM |
| 491 | storage capacity | 9/5/2018 5:50 AM |
| 492 | Number of vendors and products supported in the environment. | 9/5/2018 5:48 AM |
| 193 | storage bottleneck | 9/5/2018 5:44 AM |
| 494 | Managing apps consistently up | 9/5/2018 5:38 AM |



| 495 | Lack of funding | 9/5/2018 5:20 AM |
|-----|--|--------------------|
| 496 | Server "lockups" in which the VMs are not responsive, and yet the monitoring systems do not see this condition. Also, better, more robust scalable systems allowing more use of the Budgetary dollars | 9/5/2018 5:18 AM |
| 497 | The notion that storage is cheap is contrary to the reality of things, where we face data virtualization challenges when data stores are disparate, and data replication/transport issues when we wish not to keep the data in place. A sound data virtualization and transport/replication platform, preferably a COTS variety, is desirable. | 9/5/2018 4:57 AM |
| 498 | standardization | 9/5/2018 4:57 AM |
| 499 | LOB Application bugs and third party hardware compatibility issues with that app | 9/5/2018 4:45 AM |
| 500 | deployment traceability | 9/5/2018 4:43 AM |
| 501 | gfgfg | 9/5/2018 4:43 AM |
| 502 | CPU performance issues | 9/5/2018 4:43 AM |
| 503 | | 9/5/2018 4:42 AM |
| 504 | Keep skills current | 9/4/2018 8:12 AM |
| 505 | Backups and storage management | 9/4/2018 7:13 AM |
| 506 | Just easier accessibility to cloud based systems. | 8/29/2018 5:22 PM |
| 507 | More database conversion options and tools since we are a full network and we are constantly trying to integrate | 8/29/2018 8:16 AM |
| 508 | Disruption in service, resources and network | 8/29/2018 7:03 AM |
| 509 | speed and reliability | 8/29/2018 4:22 AM |
| 510 | Automation of repeatable tasks. | 8/29/2018 4:01 AM |
| 511 | Sharepoint admin | 8/28/2018 12:46 PM |
| 512 | Less alerts. | 8/28/2018 9:08 AM |
| 513 | Patch management and security remediation. | 8/28/2018 7:42 AM |
| 514 | Running out of space. | 8/28/2018 6:49 AM |
| 515 | With the upgrades, I would have to wait and see | 8/28/2018 6:32 AM |
| 516 | DR, Scalability and Failover | 8/28/2018 6:32 AM |
| 517 | videoconferencing | 8/28/2018 6:28 AM |
| 518 | I wish it was easier to get physical hardware purchases approved. | 8/28/2018 6:17 AM |
| 519 | speed in implementation | 8/28/2018 6:13 AM |
| 520 | Troubleshooting multiple systems and manufacturers. | 8/28/2018 6:09 AM |
| 521 | | 8/28/2018 6:02 AM |
| 522 | End-user error from lack of reading what's on the screen | 8/28/2018 5:43 AM |
| 523 | Poorly written and poorly documented software | 8/28/2018 5:25 AM |
| 524 | Decreased time to get compute power | 8/28/2018 5:22 AM |
| 525 | None | 8/28/2018 5:03 AM |
| 526 | hardware failure vendor replacement processing. | 8/28/2018 5:02 AM |
| 527 | cost | 8/28/2018 5:02 AM |
| 528 | N/a | 8/28/2018 5:00 AM |
| 529 | Red tape | 8/28/2018 4:58 AM |
| 530 | After hours support. | 8/28/2018 4:55 AM |



| 531 | Performance issues that we can't pin down as being hardware related. We get more issues with the software itself or it's configuration. | 8/28/2018 4:54 AM |
|-----|---|--------------------|
| 532 | Replace old Storage with new flash | 8/28/2018 4:49 AM |
| 533 | Lack of understanding by legacy IT staff or non-infrastructure knowledgeable teammates | 8/23/2018 12:39 PM |
| 534 | COst | 8/22/2018 8:04 PM |
| 535 | unsupported products | 8/22/2018 12:21 PM |
| 536 | Application Performance | 8/22/2018 12:16 PM |
| 537 | Improving security within the development workflow | 8/22/2018 9:54 AM |
| 538 | Run entry preparedness, IO performance, security issues, patching deployments. | 8/22/2018 6:36 AM |
| 539 | no | 8/22/2018 4:47 AM |
| 540 | Patch Management | 8/22/2018 3:49 AM |
| 541 | Increasing operating costs | 8/21/2018 12:46 PM |
| 542 | Money concerns | 8/21/2018 12:26 PM |
| 543 | security software | 8/21/2018 12:22 PM |
| 544 | record keeping | 8/21/2018 11:54 AM |
| 545 | Sharepoint | 8/21/2018 11:48 AM |
| 546 | Physical on-prem infrastructure. Moving to cloud will mitigate this. | 8/21/2018 11:44 AM |
| 547 | Resource issues | 8/21/2018 11:04 AM |
| 548 | Scalability of workloads either performance related or capacity | 8/21/2018 10:49 AM |
| 549 | reliability of systems | 8/21/2018 10:41 AM |
| 550 | Yes | 8/21/2018 10:08 AM |
| 551 | Updates reliablity | 8/21/2018 10:00 AM |
| 552 | Manual data key changes on source system for data analytics | 8/21/2018 9:58 AM |
| 553 | IO performance | 8/21/2018 9:51 AM |
| 554 | Knowing when data Patterens are going to change. | 8/21/2018 9:46 AM |
| 555 | Network capacity, business continuity | 8/21/2018 9:42 AM |
| 556 | easier budget access | 8/21/2018 9:25 AM |
| 557 | ease of use. | 8/21/2018 9:23 AM |
| 558 | proper training for users | 8/21/2018 9:14 AM |
| 559 | Coding issues that affect performance. | 8/21/2018 9:11 AM |
| 560 | any downtime | 8/21/2018 9:08 AM |
| 561 | Phishing attempts | 8/21/2018 9:05 AM |
| 562 | Management | 8/21/2018 9:03 AM |
| 563 | Application issues | 8/21/2018 9:02 AM |
| 564 | sluggish performance | 8/21/2018 8:59 AM |
| 565 | Storage Limitations (Data is constantly growing) | 8/21/2018 8:48 AM |
| 566 | Better project management | 8/21/2018 8:32 AM |
| 567 | Proactive vs Reactive assesments | 8/21/2018 8:20 AM |
| 568 | java, java, java. | 8/21/2018 7:33 AM |
| 569 | Enable more self service in the environment. | 8/21/2018 7:29 AM |
| 570 | Physical hardware failures | 8/21/2018 7:24 AM |



| 571 | None | 8/21/2018 7:16 AM |
|-----|---|--------------------|
| 572 | Updates/upgrades | 8/21/2018 7:11 AM |
| 573 | cross application permission schemes. (microsoft damn you and active directory) | 8/21/2018 6:42 AM |
| 574 | Communication between business and IT. Requirements definition and BU commitment. | 8/15/2018 9:45 AM |
| 575 | Yes | 8/14/2018 7:04 PM |
| 576 | Disaster recovery | 8/13/2018 12:28 PM |
| 577 | Errors | 8/13/2018 6:10 AM |
| 578 | Horrible property management systems | 8/13/2018 5:38 AM |
| 579 | No more dead nodes | 8/13/2018 5:15 AM |
| 580 | False alert reporting of system availablity | 8/10/2018 7:40 PM |
| 581 | wish I had control over which systems to purchase | 8/10/2018 2:53 PM |
| 582 | LOL. Solution stability | 8/10/2018 12:34 PM |
| 583 | Adoption and learning of the technologies so that people have a better understanding of what they use and how it works and how various changes can impact them and others | 8/10/2018 9:02 AM |
| 584 | Poor communication | 8/9/2018 6:55 PM |
| 585 | Tape backup management | 8/9/2018 6:16 PM |
| 586 | None | 8/9/2018 2:26 PM |
| 587 | costs | 8/9/2018 1:08 PM |
| 588 | Memory issues with applications on the server side | 8/9/2018 12:06 PM |
| 589 | I wish all hackers and Internet crooks would be burned alive and that there was a multi-million dollar international bounty on catching them. | 8/9/2018 11:23 AM |
| 590 | budget constraints | 8/9/2018 10:52 AM |
| 591 | less e-marketing | 8/9/2018 10:26 AM |
| 592 | Maintenance free | 8/9/2018 10:24 AM |
| 593 | Application performance issues | 8/9/2018 10:15 AM |
| 594 | Backups | 8/9/2018 10:07 AM |
| 595 | Cloud computing | 8/9/2018 9:58 AM |
| 596 | unpredictable cost of cloud storage scaling and lack of transparency to DR and InfoSec for that technology. | 8/9/2018 9:35 AM |
| 597 | Software errors. | 8/9/2018 9:26 AM |
| 598 | Servers crashing, not finding correct documentation | 8/9/2018 9:19 AM |
| 599 | WAN Bandwidth management, Network outages, Ability to manage network performance | 8/9/2018 8:54 AM |
| 600 | Increase reliability of disks and throughput speed. | 8/9/2018 8:47 AM |
| 601 | Higher funding allocation and resources. | 8/9/2018 8:46 AM |
| 602 | Reduction of power draw within my data centers | 8/9/2018 8:39 AM |
| 603 | Managing infrastructure | 8/9/2018 8:25 AM |
| 604 | improved funding | 8/9/2018 8:22 AM |
| 605 | Service Provider | 8/9/2018 8:21 AM |
| 606 | I/O | 8/9/2018 7:43 AM |
| 607 | ok, that is the best one yet (staff and boss). to me, better visibility into my on site systems so you do truly know what is going on. this would let me better plan my goals and budget. IT is the job of chancing bottlenecks, so if you fix one, you get the next and then the next. being to plan out your moves and the impacts is key | 8/9/2018 7:40 AM |



| 608 | Database instance sprawl and compatibility issues | 8/9/2018 7:22 AM |
|-----|--|------------------|
| 609 | Nothing | 8/9/2018 6:52 AM |
| 610 | Increasing complexity all the time. | 8/9/2018 6:41 AM |
| 611 | Subscriptions | 8/9/2018 6:37 AM |
| 612 | The frequency of patching and upgrading to remain security compliant. | 8/9/2018 6:35 AM |
| 613 | Replication delays/queues | 8/9/2018 6:32 AM |
| 614 | instant knowledge/training | 8/9/2018 6:16 AM |
| 615 | Managing to security regulations and compliance rules. | 8/9/2018 6:02 AM |
| 616 | Tasks that aren't really my responsibility. | 8/9/2018 6:01 AM |
| 617 | unplanned changes | 8/9/2018 5:56 AM |
| 618 | None We do what we do | 8/9/2018 5:51 AM |
| 619 | performance issues | 8/9/2018 5:50 AM |
| 620 | budgets | 8/9/2018 5:50 AM |
| 621 | Less unplanned downtimes | 8/9/2018 5:47 AM |
| 622 | process | 8/9/2018 5:47 AM |
| 623 | yes | 8/9/2018 5:43 AM |
| 624 | I need more scheduled down time. | 8/9/2018 5:42 AM |
| 625 | Change Management | 8/9/2018 5:34 AM |
| 626 | increase in reliability and speed | 8/9/2018 5:30 AM |
| 627 | Hardware failures | 8/9/2018 5:27 AM |
| 628 | users downloading junk that messes up their computers | 8/9/2018 5:20 AM |
| 629 | preventing my domain controllers and IDM servers from being hammered by LDAP/authentication requests | 8/9/2018 5:19 AM |
| 630 | We have a big problem with scale at the moment. Our converged solution didn't scale, neither does our backup solution. | 8/9/2018 5:05 AM |
| 631 | prediction | 8/9/2018 5:05 AM |
| 632 | na | 8/9/2018 5:04 AM |
| 633 | N/A | 8/9/2018 5:03 AM |
| 634 | manual processes | 8/9/2018 4:58 AM |
| 635 | No comment | 8/9/2018 4:57 AM |
| 636 | lightning | 8/9/2018 4:56 AM |
| 637 | Customers who don't pay their bills. Requests for OS reloads. | 8/9/2018 4:55 AM |
| 638 | Performance | 8/9/2018 4:55 AM |
| 639 | most of my responsibilities lie in programming, which are probably not what you are looking for. | 8/9/2018 4:52 AM |
| 640 | bureaucracy | 8/9/2018 4:50 AM |
| 641 | Nothing at this time | 8/9/2018 3:16 AM |
| 642 | Do more with less | 8/9/2018 2:12 AM |
| 042 | 20 111010 11111 1000 | |
| 643 | More robust cloud options | 8/8/2018 6:37 PM |
| | | |
| 643 | More robust cloud options | 8/8/2018 6:37 PM |



| • | pplying security controls may impact performanc and efficiency of systems. | 8/8/2018 2:00 PM |
|--------|--|-------------------|
| 648 In | | |
| | nternet bandwidth, cost escalation of ERP and database platforms and other contracts | 8/8/2018 12:21 PM |
| 649 C | ost of purchase | 8/8/2018 11:25 AM |
| 650 D | ata retrieval and capacity issues | 8/8/2018 11:20 AM |
| 651 P | atching, Updates | 8/8/2018 10:37 AM |
| 652 P | atches | 8/8/2018 10:09 AM |
| 653 P | rovisioning of new servers | 8/8/2018 10:01 AM |
| 654 m | narketing emails and phone calls from software vendors | 8/8/2018 9:30 AM |
| 655 N | lothing | 8/8/2018 9:25 AM |
| 656 G | Setting good detail alert when an error occurs. | 8/8/2018 9:15 AM |
| 657 P | roprietary adaptions of open standards. | 8/8/2018 9:14 AM |
| 658 Lo | ong term commitment and transparency from the hardware manufactures. | 8/8/2018 9:13 AM |
| 659 S | ystem sprawl i.e. a very large amount of disparate systems to support. | 8/8/2018 9:10 AM |
| 660 be | etter monitoring capabilities | 8/8/2018 8:37 AM |
| 661 se | ecurity and data privacy concerns of cloud computing | 8/8/2018 8:36 AM |
| 662 na | a | 8/8/2018 8:35 AM |
| 663 M | falware | 8/8/2018 8:32 AM |
| 664 N | leed for continuous refresh on seemingly an annual basis | 8/8/2018 8:30 AM |
| 665 G | eo-location and security requirements | 8/8/2018 8:28 AM |
| 666 N | //A | 8/8/2018 8:25 AM |
| 667 ba | ackups | 8/8/2018 8:03 AM |
| 668 M | love most of our processing to the cloud. | 8/8/2018 7:38 AM |
| 669 M | ly issues are entirely database structure related. | 8/8/2018 7:23 AM |
| | Vindows 10 update decisions by Microsoft (forced, take a long time, disruptive) Reluctance and ifficulty of company to change | 8/8/2018 7:08 AM |
| 671 ? | | 8/8/2018 6:59 AM |
| 672 N | letwork availability in remote geographic locations | 8/8/2018 6:43 AM |
| 673 pe | erformance issues | 8/8/2018 6:33 AM |
| | wish our provisioning of services was automated, the automated processes were documented, nd the by-product of all the automation was logged and retained. | 8/8/2018 6:26 AM |
| 675 S | harepoint online latency | 8/8/2018 6:24 AM |
| 676 sy | ystem lags | 8/8/2018 6:23 AM |
| 677 n/ | /a | 8/8/2018 6:23 AM |
| 678 R | un operations and reliability | 8/8/2018 6:22 AM |
| 679 st | tale storage | 8/8/2018 6:18 AM |
| 680 B | loatware | 8/8/2018 6:15 AM |
| 681 ea | ase of administration, security | 8/8/2018 6:12 AM |
| 682 S | torage management | 8/8/2018 6:07 AM |
| 683 P | oor development | 8/8/2018 6:03 AM |
| 684 se | ecurity clearances | 8/8/2018 6:01 AM |



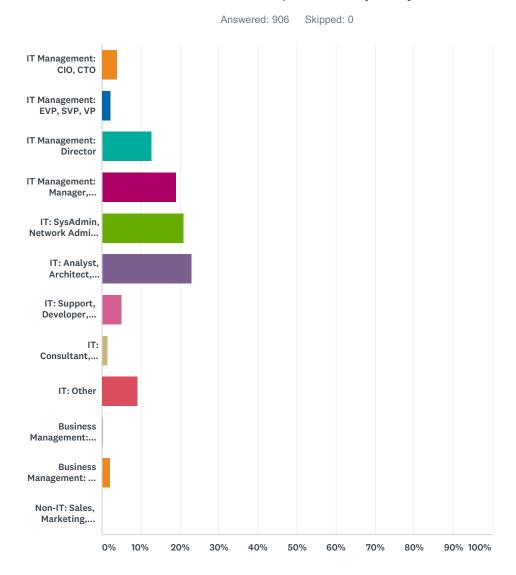
| 685 | I find this to be a rather ridiculous question. I don't wish for any problems to "go away". I work quite hard to ensure that problems are either avoided through strategic planning or problems are effectively resolved to the benefit of my clients and customers. | 8/8/2018 5:41 AM |
|-----|--|--------------------|
| 686 | speed and efficiency | 8/8/2018 5:40 AM |
| 687 | User errors, and problem creation from it. Systems typically perform their jobs | 8/8/2018 5:40 AM |
| 688 | Speed | 8/8/2018 5:35 AM |
| 689 | Failing Virtual host hardware. | 8/8/2018 5:32 AM |
| 690 | User backups. It's a pain having to set them up manually over several different offices. | 8/8/2018 5:20 AM |
| 691 | Sluggish Performance Drops in Network Connectivity Sub-par Disaster Recovery/ Business Continuity Plan | 8/8/2018 5:09 AM |
| 692 | If I can't choose boss or staff then "problem customers". Actually if I could get rid of multiple management interfaces especially flash or java based interfaces | 8/8/2018 5:08 AM |
| 693 | budget constraints | 8/8/2018 5:03 AM |
| 694 | Easier management of server, vm, and client performance. | 8/8/2018 5:03 AM |
| 695 | Budget constraints | 8/8/2018 5:02 AM |
| 696 | It would mainly be staff. | 8/8/2018 5:00 AM |
| 697 | simply user processes | 8/8/2018 4:59 AM |
| 698 | Firmware and security patches. | 8/8/2018 4:58 AM |
| 699 | Project priorities and resources | 8/8/2018 4:56 AM |
| 700 | I wish there was more support staff if we encounter a problem with our system. | 8/8/2018 4:55 AM |
| 701 | We have a solid infrastructure | 8/8/2018 4:55 AM |
| 702 | latency | 8/8/2018 4:55 AM |
| 703 | Not sure. | 8/8/2018 4:55 AM |
| 704 | Unsure | 8/8/2018 4:53 AM |
| 705 | I wish the misconception that the Cloud is an answer to everyone's issues | 8/8/2018 4:51 AM |
| 706 | Keeping up with security/compliance issues. | 8/1/2018 2:43 PM |
| 707 | No | 7/29/2018 7:43 PM |
| 708 | lack of money | 7/27/2018 10:09 AM |
| 709 | applications asking for more resources then they will use | 7/27/2018 6:34 AM |
| 710 | security issues | 7/27/2018 2:53 AM |
| 711 | Cost | 7/26/2018 1:35 PM |
| 712 | outdated infrastructures that cannot support 21-century technology | 7/26/2018 12:50 PM |
| 713 | none | 7/26/2018 11:52 AM |
| 714 | Speed to acquire SAN | 7/26/2018 11:41 AM |
| 715 | budget challenges - never enough money and a lack of understanding within the organization that solutions cost money. | 7/26/2018 11:29 AM |
| 716 | Data Center access too far. | 7/26/2018 10:35 AM |
| 717 | Application dependencies, MySQL performance | 7/26/2018 10:25 AM |
| 718 | Simple orchestration of multiple systems into a logical consumable system | 7/26/2018 9:56 AM |
| 719 | Inefficient data management architecture and infrastructure, federal government cloud usage security requirements/restrictions. | 7/26/2018 9:20 AM |
| 720 | nothing | 7/26/2018 9:18 AM |
| 721 | None | 7/26/2018 9:10 AM |



| 722 | Updates and upgrades | 7/26/2018 8:39 AM |
|-----|---|-------------------|
| 723 | Overhead of managing traditional multiple tiers of dissimilar infrastructure hardware. | 7/26/2018 8:34 AM |
| 724 | Not an IT support person, but a user that works with them to achieve the optimum environment we need. That being said, our joint focus is on stability, so any issues that arise from working in AWS (reliable connectivity, optimization, choosing the right environment for the job) is critical. Not that we wish it would go away, it's our job to deal with it, we just wish those functions to be as uncomplicated and practical as possible. | 7/26/2018 8:34 AM |
| 725 | upgrade our dealer Management System | 7/26/2018 8:02 AM |
| 726 | Backup issues | 7/26/2018 7:06 AM |
| 727 | Lack of a budget | 7/26/2018 6:54 AM |
| 728 | None | 7/26/2018 6:52 AM |
| 729 | Nothing I can think of off the top of my head | 7/26/2018 6:49 AM |
| 730 | backups and better management | 7/26/2018 6:47 AM |
| 731 | Printers | 7/26/2018 6:42 AM |
| 732 | N/A | 7/26/2018 6:35 AM |
| 733 | Busy work. Manual work. Support staff inefficiencies. | 7/26/2018 6:28 AM |
| 734 | System failing over incorrectly when their are internet issues. | 7/26/2018 6:02 AM |
| 735 | Logging - I would rather write code and have it self log so I don't have to spend so much time maintaining. CI/CD for the database. I need an easy and cheap solution while still maintaining state across large databases. | 7/26/2018 5:55 AM |
| 736 | Server and OS migrations. | 7/26/2018 5:29 AM |
| 737 | Checking backups | 7/26/2018 5:23 AM |



Q26 Please select which best represents your job function / title:



| ANSWER CHOICES | RESPONSES | RESPONSES | |
|--|-----------|-----------|--|
| IT Management: CIO, CTO | 3.97% | 36 | |
| IT Management: EVP, SVP, VP | 2.32% | 21 | |
| IT Management: Director | 12.80% | 116 | |
| IT Management: Manager, Supervisor | 19.09% | 173 | |
| IT: SysAdmin, Network Admin, DBA | 20.86% | 189 | |
| IT: Analyst, Architect, Engineer | 23.07% | 209 | |
| IT: Support, Developer, Programmer | 4.97% | 45 | |
| IT: Consultant, VAR, Solution Provider | 1.55% | 14 | |



| IT: Other | 9.16% | 83 |
|---|-------|-----|
| Business Management: CEO, COO, Chairman, President | 0.11% | 1 |
| Business Management: VP, Director, Manager | 2.10% | 19 |
| Non-IT: Sales, Marketing, Business Dev, Educator, HR, Finance | 0.00% | 0 |
| TOTAL | | 906 |

9 V-LOCITY CUSTOMERS RESULTS REVEALED

Results from 9 customers who deployed V-locity® I/O reduction software to solve their I/O blender effect problems.



Christus Health – A \$2,000,000 P.O. for new storage hardware was cancelled after V-locity solved sluggish electronic medical records performance.

145% Suncoke Energy –

145% reduction in I/O for greater throughput on Oracle workloads.



Hancock Regional Hospital – Patient records load 3X faster – no additional hardware required.

XXXXXXXXXX XXXXXXXXXX **15** XXXXXXXXX Hours

ASL Marketing – SQL batch imports dropped from 27 hours to 12 hours – a 15-hour reduction.

Myron Corporation –

Processing times for larger art files on the file server dropped from 5 minutes to 1 minute.



X vs 10 Minutes

Stockport College – Payroll reports that used to take 1½ hours to run, now take 10 minutes.

money spent by V-locity customers on new hardware to get 50-300% better application performance.

Creative Office
Pavilion – Response
times for SQL, CRM
and email are 90% faster



Bell Mobility – V-locity reduces I/O to SAN by 61% for 3X faster SQL report queries.



Altenioh, Brinck & Co. U.S. – V-locity saved a full day of productivity by moving orders through the ERP system.

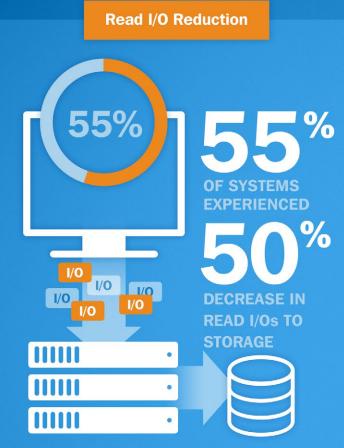


For more on V-locity and to read the full customer stories visit: www.condusiv.com/v-locity

Condusiv. Technologies

3450 VMS EVALUATE V-LOCITY

Unfiltered results from **3450 VMs** from over 100 customers who evaluated **V-locity I/O reduction software** and shared their before/after results with Condusiv.



Throughput Increase 43% EXPERIENCED 29% EXPERIENCED 100% INCREASE IN DATA PROCESSED 14% EXPERIENCED 15% EXPERIENCED 16% EXPERIENCED

Latency Reduction

AVG LATENCY REDUCTION

3GB AVAILABLE DRAM





For more on V-locity and customer stories visit: www.condusiv.com/v-locity

