State of System Administration 2022

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An Ode to Sysadmins

It's no secret that the last few years have been anything but expected. The COVID-19 pandemic has upended every aspect of our lives — and we're all still adjusting to what this new normal looks like.

This is especially true for sysadmins. Overnight, you were asked to enable entire workforces to operate remotely. Two weeks turned into two months, which has now somehow turned into two years. As teachers, doctors, and civil servants struggled to adjust, they looked to their never-wavering sysadmins to lead them through the chaos. Without you, this time would have been unbearable. With your help, it was merely unpleasant.

So here's to you, sysadmins! In our books, you're one of the many unsung heroes that kept essential workers operating and non-essential workers safe at home.

If you, like us, are now wondering what 2022 has in store, you're in luck! We surveyed more than 400 sysadmins from around the world to find out. They represent every industry, from education and healthcare to financial services and agriculture. Most survey respondents had over 10 years of experience, so the data below represents experienced, tenured sysadmins with a pulse on the industry.

Let's find out what their responses reveal about system administration in 2022. Cheers,

Dan Cook
CEO

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About PDQ

Here at PDQ, we're passionate about sysadmins. (We're sysadmins ourselves, so it's a little self-serving.) We help sysadmins stay in-the-know and entertained with our live weekly webcasts, in-depth blog posts, and hilarious videos. (Did someone say sysadmin musical?)

Oh yeah. We also make software. Pretty great software, if we do say so ourselves. Our products help thousands of sysadmins streamline their patch management and software deployment processes. And the newest member of the family, SimpleMDM, means that we now support both Windows and Apple devices!

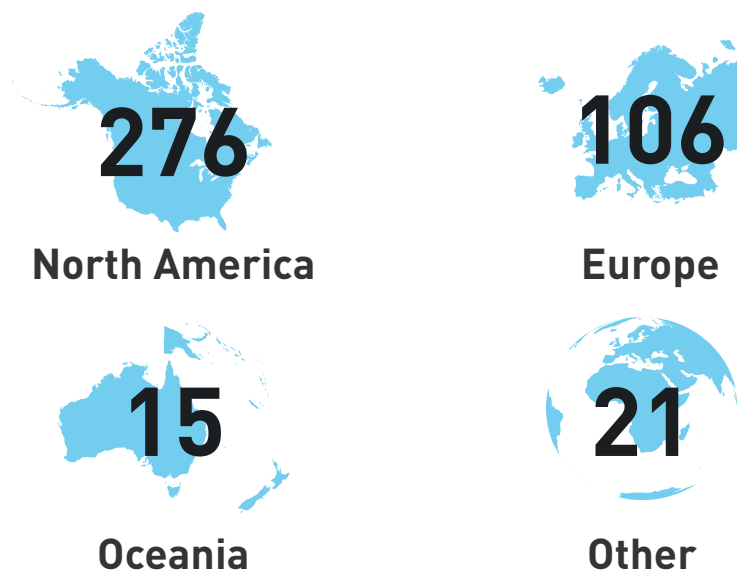## Want to check them out?

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01 Demographics

So who did we survey? 420 respondents from every region of the world piped in.

Primary Residence

North America - **276**
Central America - **2**
South America - **2**
Europe - **106**
The Caribbean - **2**
Africa - **5**
Middle East - **5**
Asia - **5**
Oceania - **15**

● Number of respondents

276
North America

106
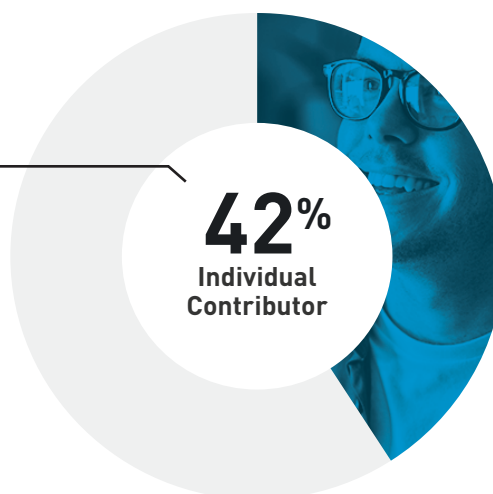Europe

15
Oceania

21
Other

> ⚠ **Numbers not adding up?**
> Some of our more lackadaisical respondents skipped a few questions, which is why the total number varies by question.

Role in the Company

Freelancer/Contractor - **9%**
Individual Contributor - **42%**
Manager - **38%**
Executive - **11%**

42%
Individual Contributor

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Total Employees

1. 1000+ Employees - **19%**
2. 501-999 Employees - **14%**
3. 101-500 Employees - **39%**
4. 11-100 Employees - **19%**
5. 1-10 Employees - **9%**

Industry

Type of Industry	Percentage
1. Education	19 %
2. Technology	15 %
3. Industrial	14 %
4. Public Service	12%
5. Healthcare	10%
6. Financial Services	7%
7. Other	23 %

Years of Experience

10+ years
75%

6-9 years
10%

3-5 years
11%

1-2 years
4%

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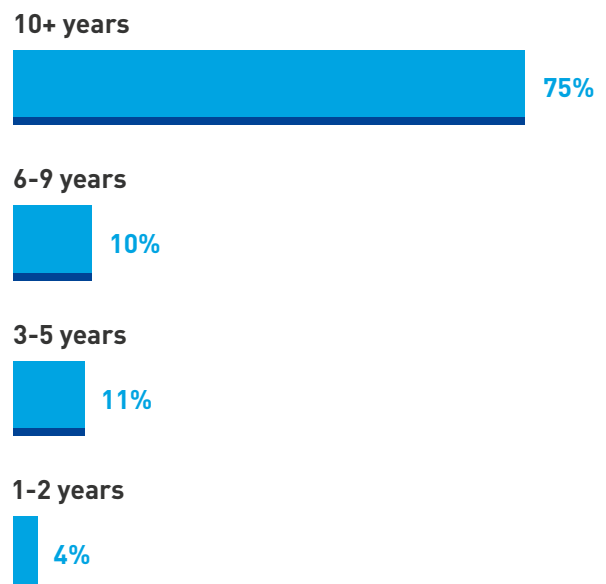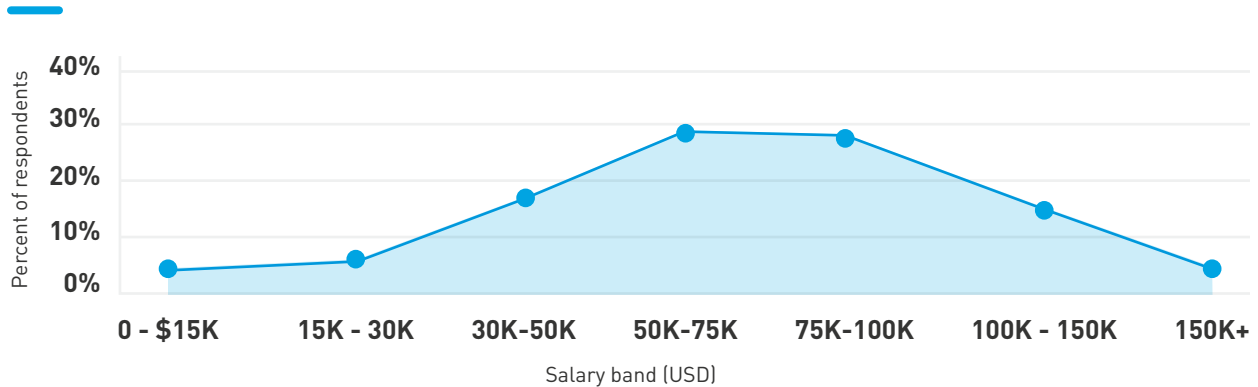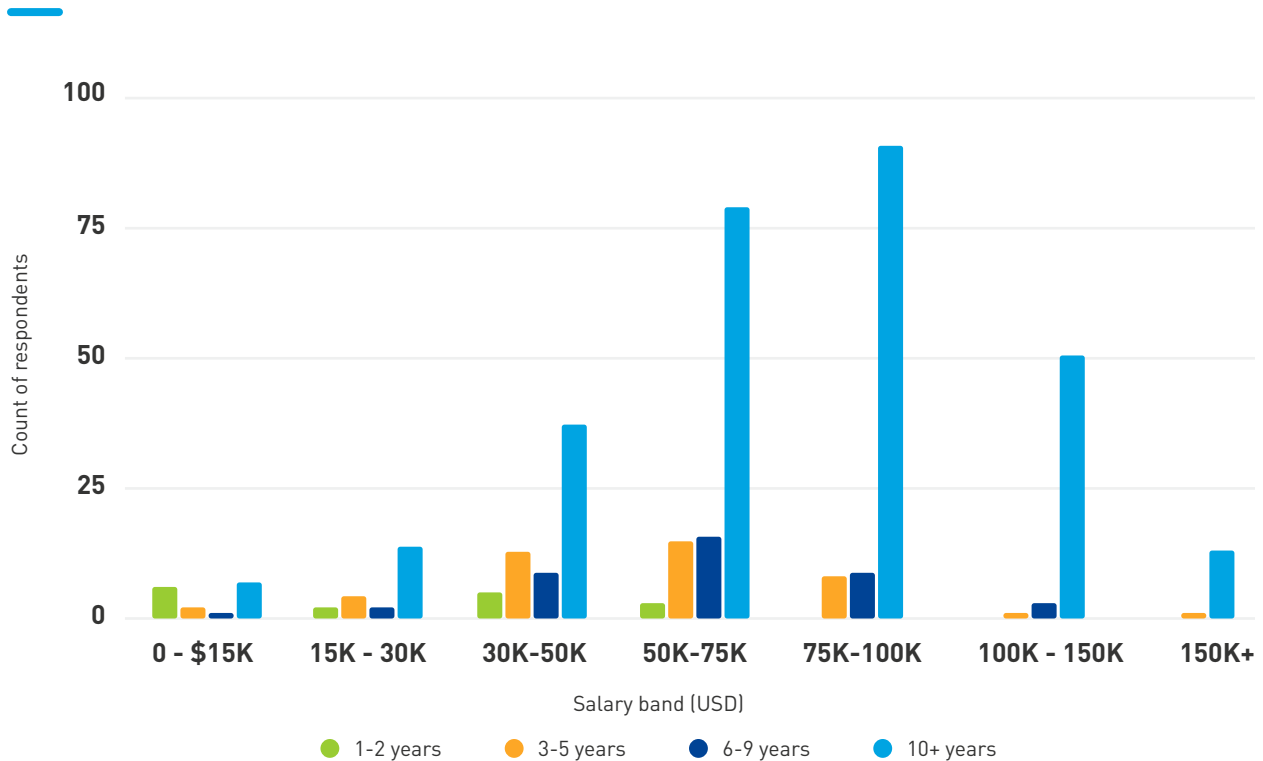
Salary 02

So how much money do all of these sysadmins make? Don't lie, we know this is the real reason you're here. What a Nosy Nellie. Most respondents make between $50,000 and $100,000, which is higher than the average American salary in 2020, which was reported at $53,383.

## What is your current salary band (USD)?

Of course, the longer you are a sysadmin, the more earning potential you have.

Salary band by years of experience

Our data showed a dramatic increase in salary once sysadmins hit the 10 year mark. Three quarters of sysadmins with 10 or more years of experience make over $75,000. With age comes wisdom — and inflation.

Earning potential by years of experience
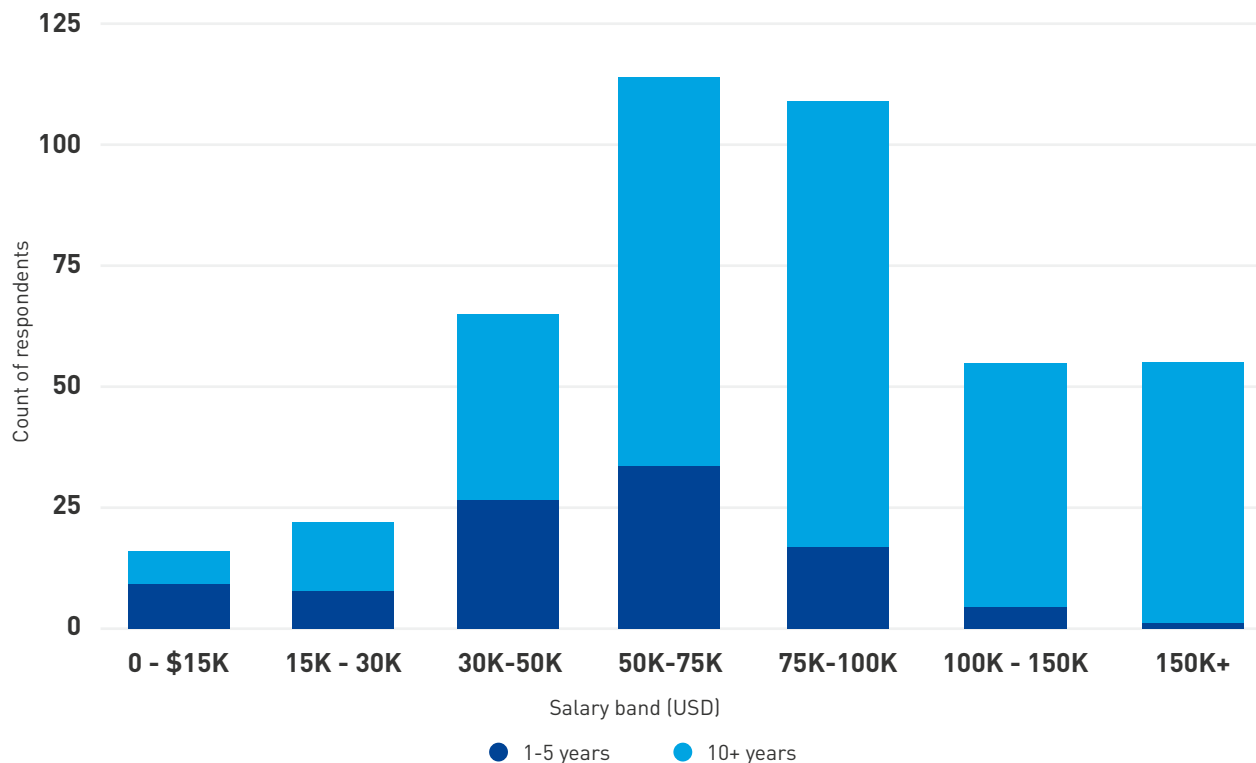
Another interesting trend we discovered was the wide variety of salaries based on the industry you work in.

- Salaries skewed lowest among those working in education, manufacturing, and technology.
- They were higher end in the financial services, professional services, and public service industries.

Takeaway:

Long gone are the days when salary was a taboo subject. Get comfortable talking about it and asking for what you deserve. The data above should give you a good place to start.

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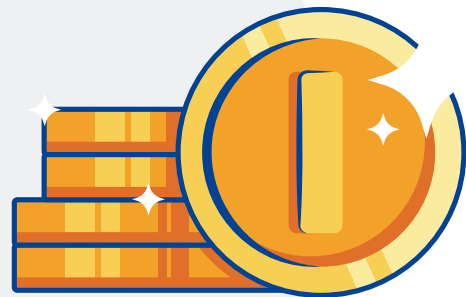
03 Work environment

What does the average day-to-day life of a sysadmin look like? Most will tell you that no two days look the same — there are always new vulnerabilities to mitigate, trainings to deliver, and devices to manage.

Time spent on activities
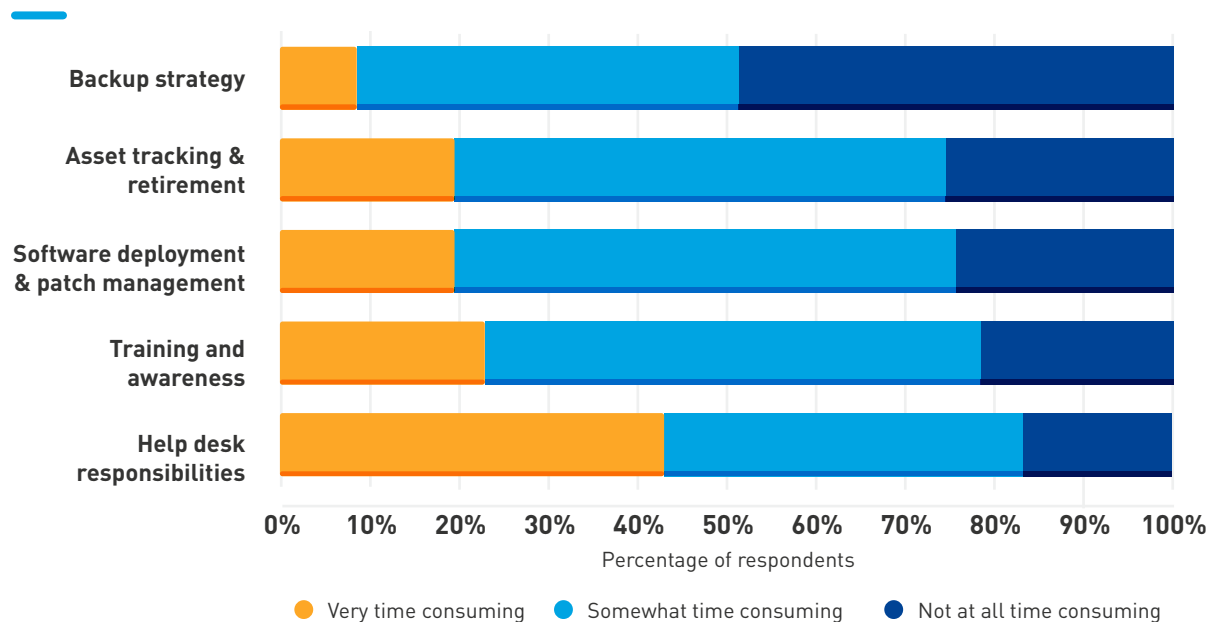
The good news is that most sysadmins aren't alone in trying to manage all of this. 70% of sysadmins have at least one other counterpart to share work (and probably drinks) with.

## Total sysadmins at your workplace
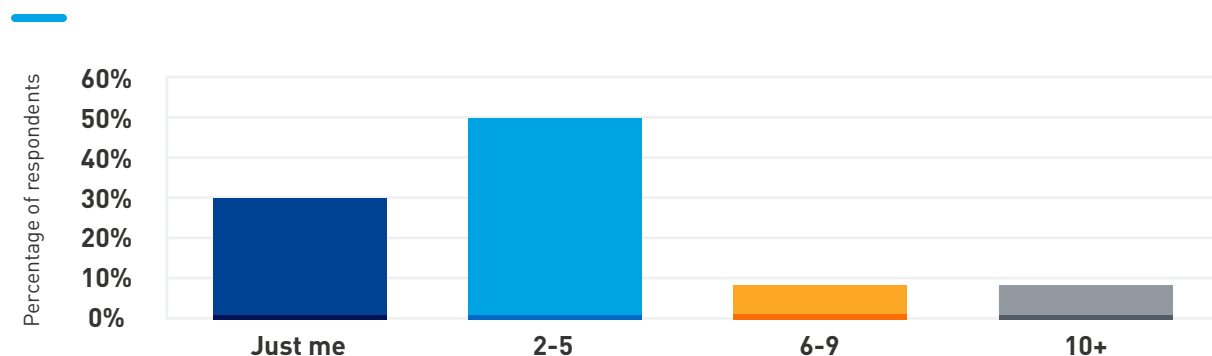
Of course, this varies by industry. 56% of respondents that worked in professional services reported being a one-person shop, while 77% of sysadmins working in the technology field had larger teams to support them.

The viability of small sysadmin teams diminishes as a company grows and the managed devices goes up exponentially. Over 80% of those surveyed manage more than 100 machines — and 65% of "lone wolf" sysadmins are tasked with 100 or more machines.

Number of devices managed (excluding servers)

1-25 machines - 3%
26-100 machines - 15%
101-500 machines - 43%
501-999 machines - 18%
1000+ machines - 21%

43%
manage 101-500 machines
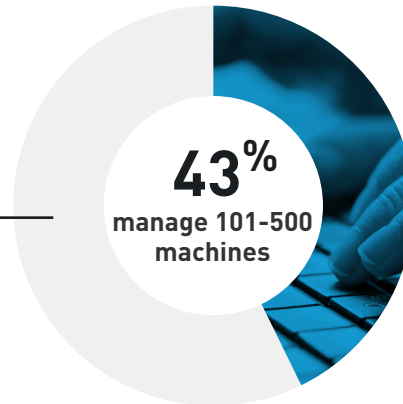
The variety in the types of devices companies use further complicates the day-to-day tasks of sysadmin teams. Unsurprisingly, all of the sysadmins we surveyed manage more than one operating system. Windows is still the most popular operating system by far — with Linux, Android, and Apple's iOS and macOS rounding out the top 5.

Which types of devices do you manage?

1. Windows - 97%
2. iOS - 63%
3. Linux - 48%
4. macOS - 46%
5. Android - 45%
6. Chromebooks - 20%
7. Other - 4%

Percentage of respondents

| Windows	iOS	Linux	macOS	Android	Chromebooks	Other
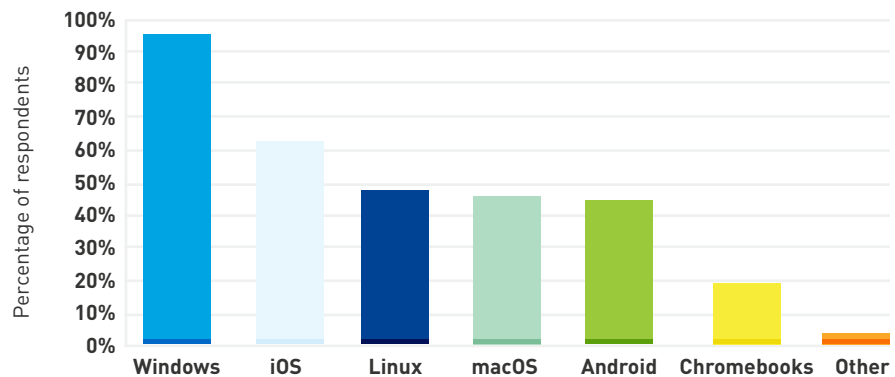
Takeaway:

If you're handling hundreds of computers alone, time to talk to your boss about hiring additional support. Not only will it help your mental health, but it will decrease the risks your organization faces.

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Remote work

The COVID-19 pandemic and the shift to hybrid work across many industries added another layer of complexity to sysadmin work over the last 2 years. Three quarters of sysadmins reported that at least 25% of their workforce was remote in 2021 — but they do expect that to shift to more in-office employees in 2022.

Percent of companies with at least a quarter of employees working remotely
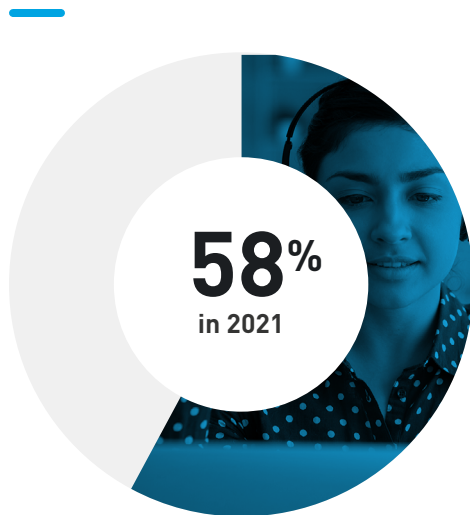
58%
in 2021

Percent of companies with at least a quarter of employees working remotely

48%
in 2022
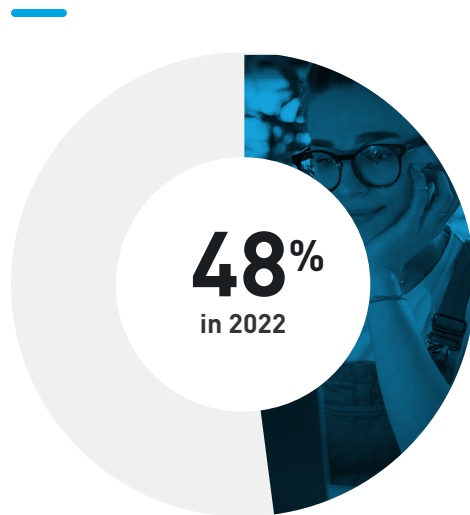
It is clear at this point that hybrid work is here to stay. So how will sysadmins respond? Some will certainly revel in their new-found ability to work from anywhere, capitalizing on less interruptions to be more productive. Others will struggle to troubleshoot from home, sitting on far too many Zoom calls to answer the same questions. And many will remain in office, physically supporting both people and machines, for the foreseeable future.

Takeaway:

Remote work is here to stay, and sysadmins will be asked to adjust. Work with your employer to draft official work-from-home policies that protect the organization and your time.

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05 Cybersecurity

Distributed teams pose a unique security threat for sysadmins to counterbalance. The Identity Theft Resource Center (ITRC) reported that 2021 was a record-breaking year for data breaches, leaving many to question what 2022 will have in store.

Has your company experienced a cybersecurity incident in the last 5 years?

No	Yes
66%	**34**%

Over a third of our respondents reported that they have experienced a cybersecurity incident in the last 5 years. Disturbingly, the industry with the most incidents has been healthcare (35%), and the least impacted has been financial services (11%).

Which industries were the most impacted?

Healthcare	**35**%

Financial Services	**11**%
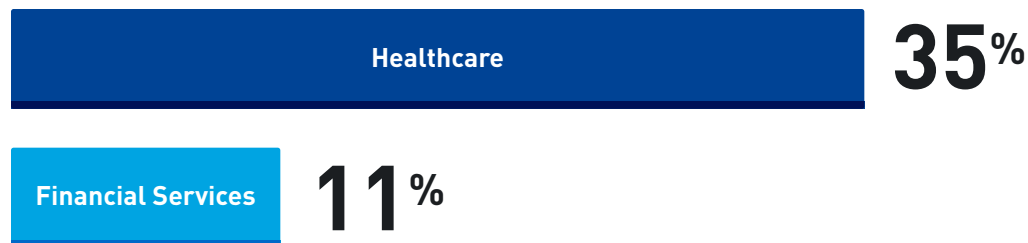
The interesting part is that those who have experienced an incident do not necessarily feel more prepared than those who have not. According to a 2021 report by Webroot, nearly 50% of business PCs that were infected once were re-infected in the same year. This highlights the need for constant vigilance and quick adaptations as new vulnerabilities arise.

With all of this complexity, it's no wonder that over 60% of sysadmins reported a high level of stress. Lack of clear goals (33%), inability to measure progress (54%), and inadequate tooling (39%) were noted as

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top stressors. Pair that with only 57% feeling like they had the support they needed from their executive teams, and it makes sense why we see so many **rants** on r/sysadmin.

But even with all of these challenges, sysadmins love being sysadmins. Even with the professional world buzzing about the "Great Resignation," sysadmins have remained more stable. While 55% of Americans plan to look for a new job in the next 12 months, over 70% of sysadmins expect to be in their same role a year from now. And closer to 90% want to remain sysadmins. Stockholm syndrome or passion? We'll let you decide.

Takeaway:

Staying on top of ever-growing cybersecurity threats now has to be considered a core job responsibility of sysadmins. It can't be something that happens only reactively. Proactive measures need to be taken and re-evaluated regularly to protect organizations.

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06 The sysadmin toolbox

So what tools do sysadmins use to securely scale and monitor hundreds of devices across operating systems and locations? Spoiler alert: there are a lot. With so many jobs to be done, let's take a look at the current state of the sysadmin toolbox.

> ⚠ We'll be honest and say that most of the respondents are PDQ customers. What can we say? We love them, and they love us. But we know that this skews some of the data below in our favor. We'll try to not let it go to our heads.

1. Asset management

Accounting for and maintaining company assets is a tedious, thankless job — and the variety of software used for this is huge. PDQ Inventory, Lansweeper, and ManageEngine top the list, although some people still use Excel to do this, which just makes us sad.

PDQ Inventory **Lansweeper** **ManageEngine**

2. End-user assistance

This category had by far the greatest variety of responses — ranging from TeamViewer and Dameware to AnyDesk and Splashtop as write-in answers.

TeamViewer solarwinds dameware ◆ **AnyDesk** ✕ splashtop

3. Install and configure operating systems

Nearly 40% of sysadmins aren't using software to manage and configure operating systems. But those that do favor MDT, SmartDeploy, and Clonezilla.

■ smartdeploy Clonezilla

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4. Mobile device management

While only 63% of those surveyed reported using an MDM software, Microsoft Intune, Jamf, and SimpleMDM were the clear winners.

5. Software deployment and updates

Keeping machines up to date and healthy is easy with the help of PDQ Deploy (hey, that's us!), SCCM, and Microsoft Endpoint Manager.

6. Script and program

The clear winner for scripting and programming is Notepad++, but Microsoft ISE, VS Code, and Visual Studio also made appearances.

7. Ticketing

This category also had a wide array of answers, but Spiceworks, Jira Service Desk, Freshdesk, and Freshservice beat others as top solutions.

8. Information

We strongly believe that staying up to date with the happenings of the sysadmin community is one of the most important yet underutilized tools. A true testament to the

sysadmin community is our strong presence on forums like Reddit and Spiceworks, where other admins are always willing to help out with questions or favorite solutions.

Of course, news outlets like TechCrunch and CNET remain important sources for understanding vulnerabilities at a deeper level. May we also suggest the PDQ blog?

reddit   spiceworks   TechCrunch   c|net

Takeaway:

The sysadmin toolbox is large and ever-growing. (Maybe a little unwieldy, too.) With so many options out there, communities like r/sysadmin are important forums for understanding solutions and pricing without having to go through a complete demo and discovery process with every vendor.
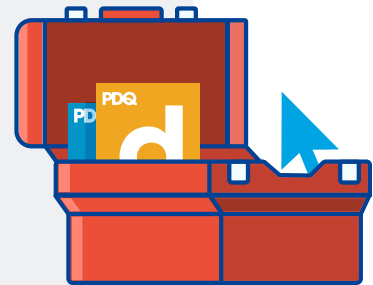
07 Summary & takeaways

So what next? Let's recap the top takeaways for moving forward in 2022:

- Long gone are the days when salary was a taboo subject. Get comfortable talking about it and asking for what you deserve. The data above should give you a good place to start.

- If you're handling hundreds of computers alone, time to talk to your boss about hiring additional support. Not only will it help your mental health, but it will decrease the risks your organization faces.

- Remote work is here to stay, and sysadmins will be asked to adjust. Work with your employer to draft official work-from-home policies that protect the organization and your time.

- Staying on top of ever-growing cybersecurity threats now has to be considered a core job responsibility of sysadmins. It can't be something that happens only reactively. Proactive measures need to be taken and re-evaluated regularly to protect organizations.

- The sysadmin toolbox is large and ever-growing. (Maybe a little unwieldy, too.) With so many options out there, communities like r/sysadmin are important forums for understanding solutions and pricing without having to go through a complete demo and discovery process with every vendor.

We hope you found this information useful — and thank you to those who participated! We can't wait to share the results with you again next year. In the meantime, check out the free 14-day trial of PDQ if you haven't already. It's the easiest way to keep your machines healthy and up to date, automatically.

Stay ahead of sysadmin trends

Share this report with your colleagues and friends — and subscribe to our blog to stay on top of what's happening in the sysadmin world.

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