



The State of SYSTEM Administration

2020

How Sys Admins face the challenges and requirements of the job.

Tricerat's State of System Administration survey is an in-depth study of system and network administrators, engineers, and architects.



INTRO

Arguably the lifeblood of IT departments, system administrators have one of the most important jobs in our workforce. Whatever the job title – **system administrator, network engineer, or architect** – the responsibility of making our IT systems run smoothly falls on them.

For over 20 years, Tricerat has existed to support those doing the critical work of system administration. Our 2020 System Administration survey highlights just how important these employees are to an organization's successes. This report dives deep into survey results to tackle **how system admins can succeed in their careers**, and **how employers can understand and support these employees**.



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WHO RESPONDED TO THIS SURVEY?

We sent out the call, and **over 135 people responded** to our request for data. **17 countries** from around the globe are represented (most respondents lived in the United States, Canada, and India). Ages ranged from 18-65+, with most around **25-54 years** old.

Job title

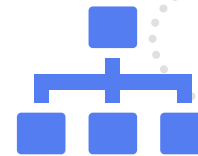
System/Network Administrator	40%
System/Network Engineer	18%
System/Network Architect	11%
System/Network Manager	14%
Director or above	17%

130+ respondents



17 countries

Most 25-54 years old



62% are team leads, and
60% have direct reports

57% support both internal and
external systems and/or users



23% support internal systems exclusively while 20% support external systems exclusively.





⏻ IF IT WAS EASY EVERYONE WOULD DO IT

In today's world, organizations will only go as far as their technology allows them. Who is responsible for managing that technology? **System administrators.** If everything is running smoothly, without any issue, you may not even realize it's thanks to a sys admin. That is because great system administrators work to catch problems before they arise, and stop them when they do.

To help, we've used our survey data to create **snapshots into the daily lives** of these vital employees.



A-Day-In-The-Life
Snapshots

System administrators continue to find themselves pressed for the time and tools they need to do their daily tasks.

After a down year in worldwide IT budget spending, it is projected that spending will reach over **\$3.9 trillion** in 2021*. Though this is an increase from 2020, system administrators are expected to take on even more responsibilities as remote work becomes the norm.

Knowing system administrators will have more duties than ever before in 2021, what does a typical day in their life look like? We've broken it into two sections:

TECHNICAL

- What systems and applications are you using daily?
- How do you organize your workload?
- What is the most time-consuming aspect of your job?

INTERPERSONAL

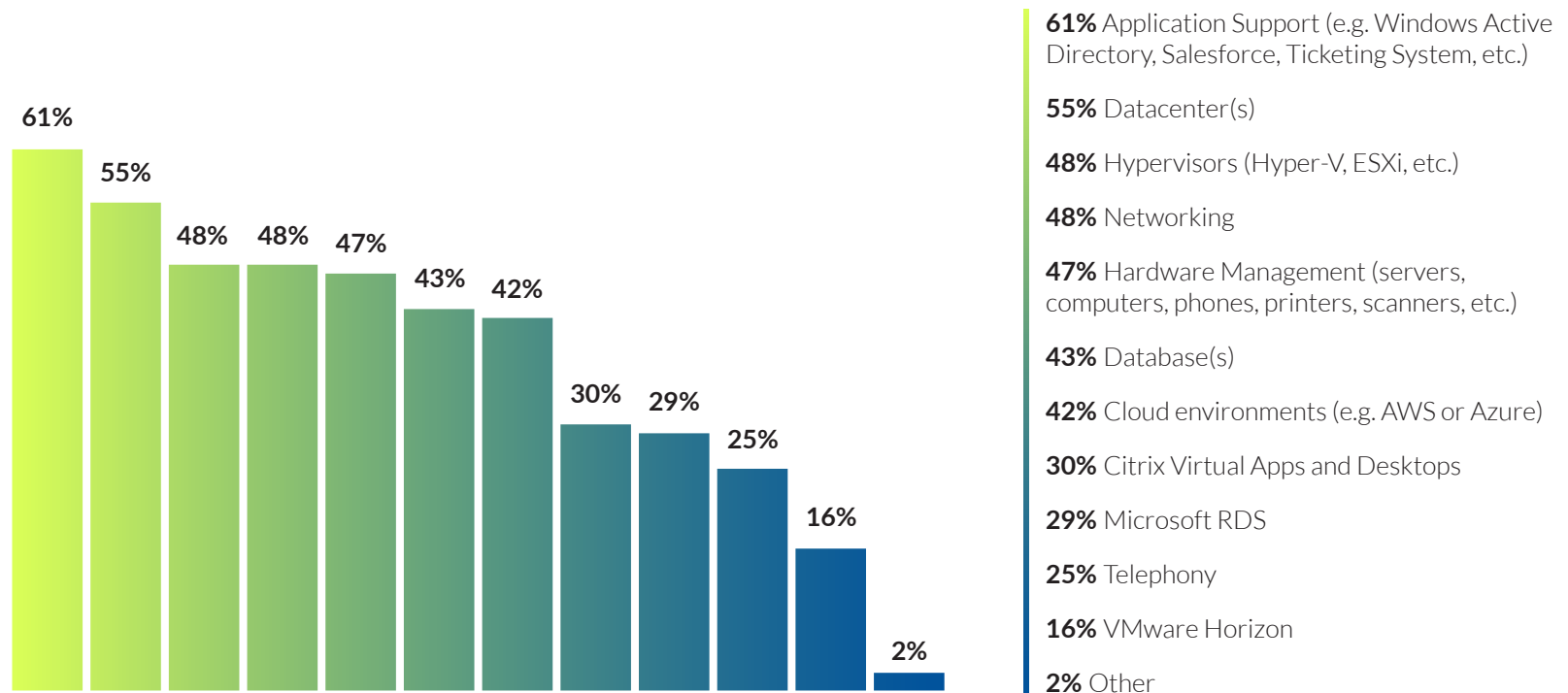
- How often do you have to deal with end users?
- Do meetings take up a lot of your day?
- Do you have to worry about things like SLAs, escalation, and documentation?

* (<https://www.techrepublic.com/article/businesses-will-spend-more-than-330bn-on-remote-working-tech-this-year/>)

Snapshots: Daily Life
Technical

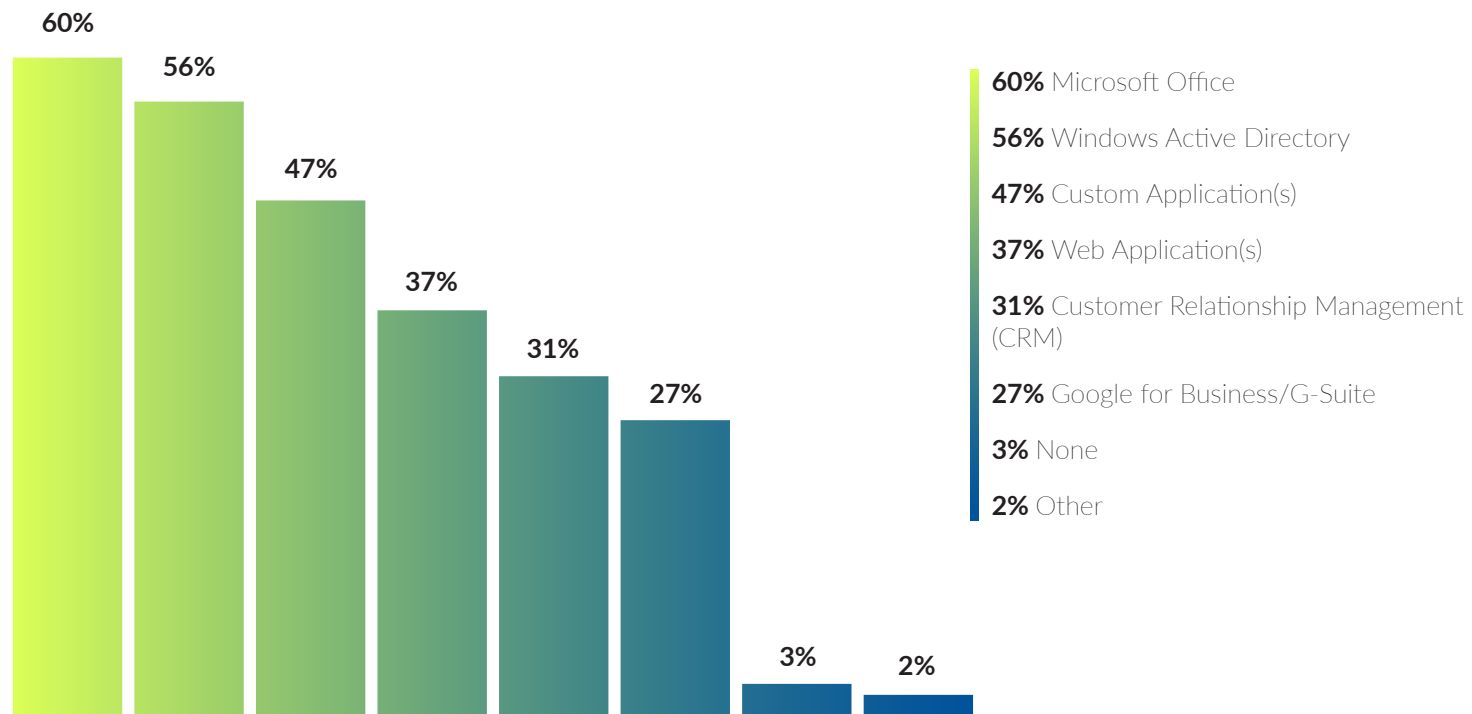
What system(s) and/or environment(s) do you support/manage? (multi-select)

Almost half (47%) of system administrators have to deal with hardware management - that's in addition to system and network responsibilities.



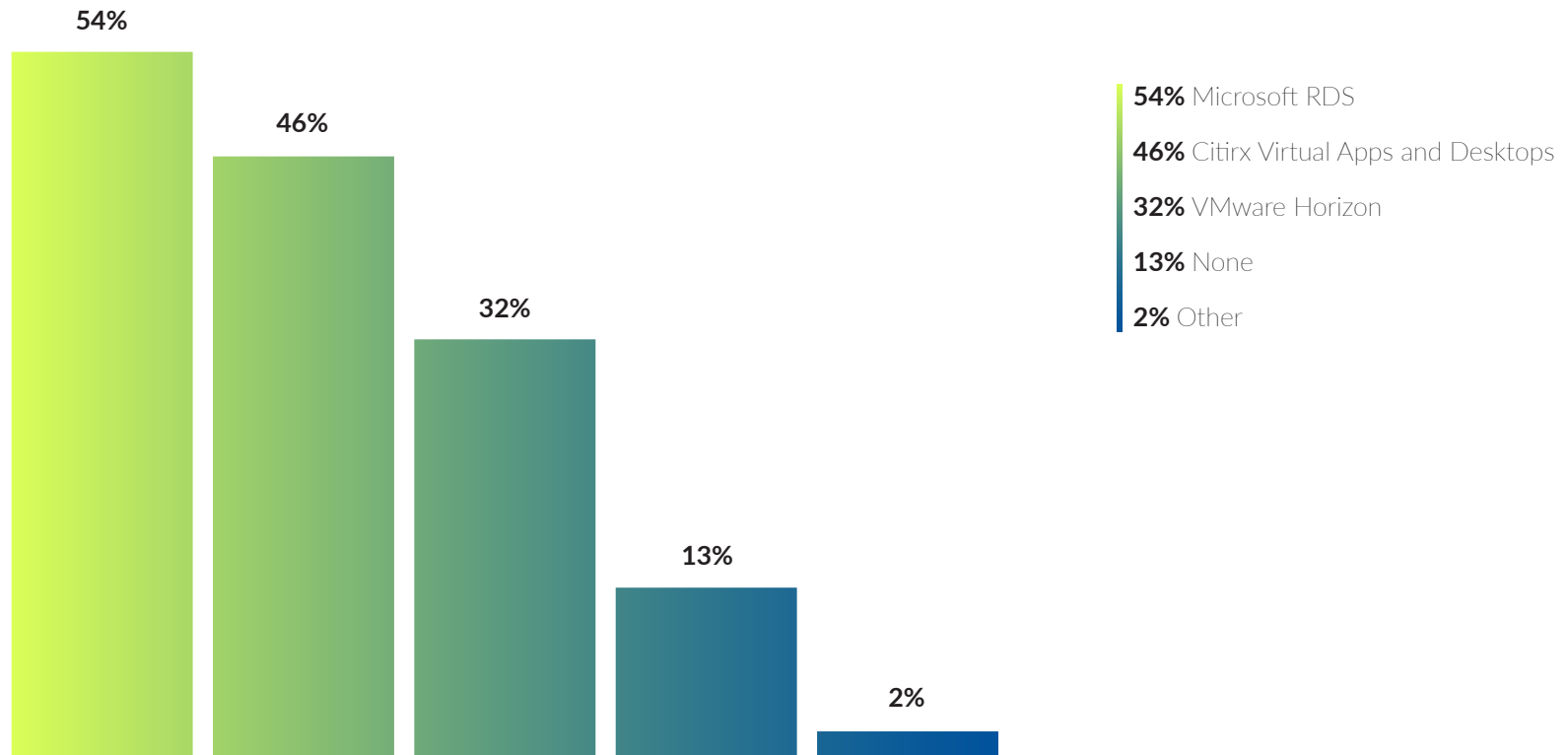
What applications do you manage/support in your current position? (multi-select)

Microsoft Office and Windows Active Directory are the most common applications sys admins are supporting: Over half of survey respondents (60% and 56% respectively) manage and/or support these apps.



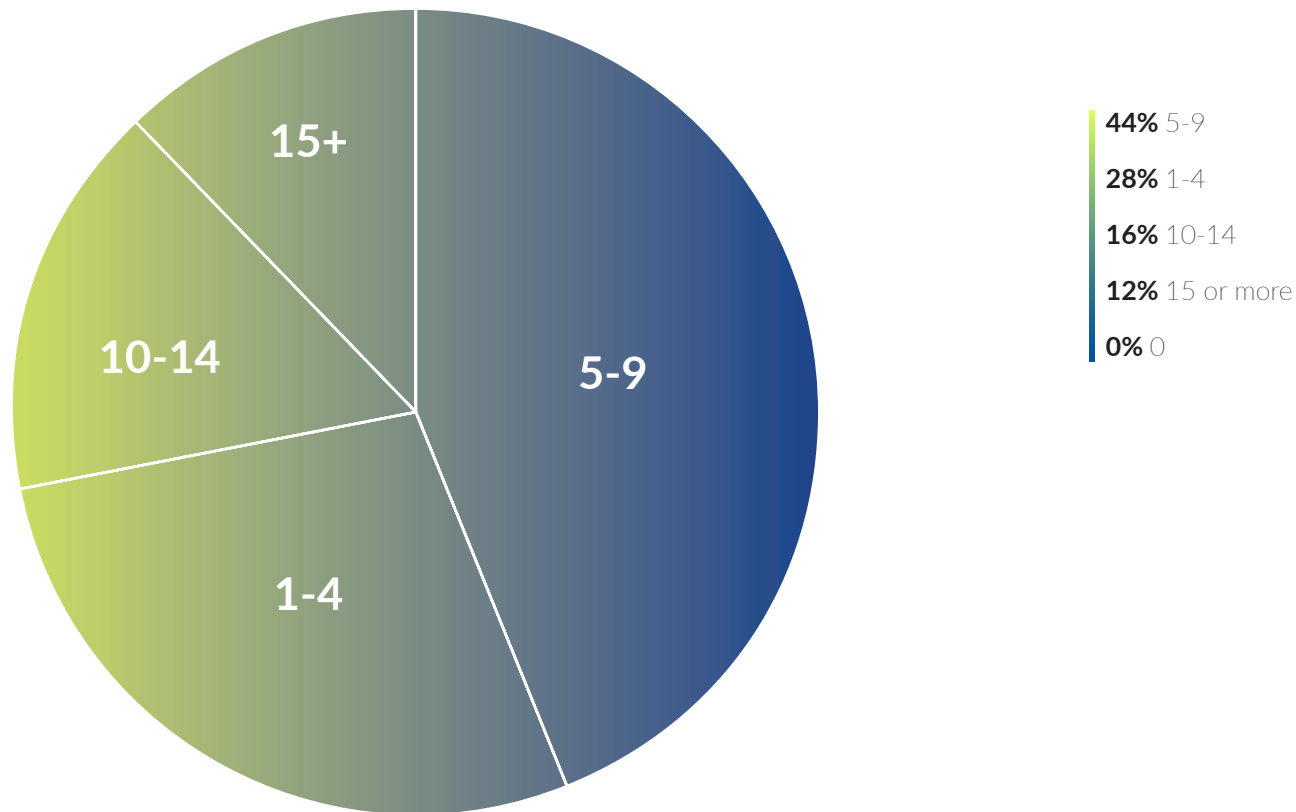
Do you or your company use any end user computing (EUC) virtualization? (multi-select)

80% of system administrators have users using some type of virtual desktops and/or apps.



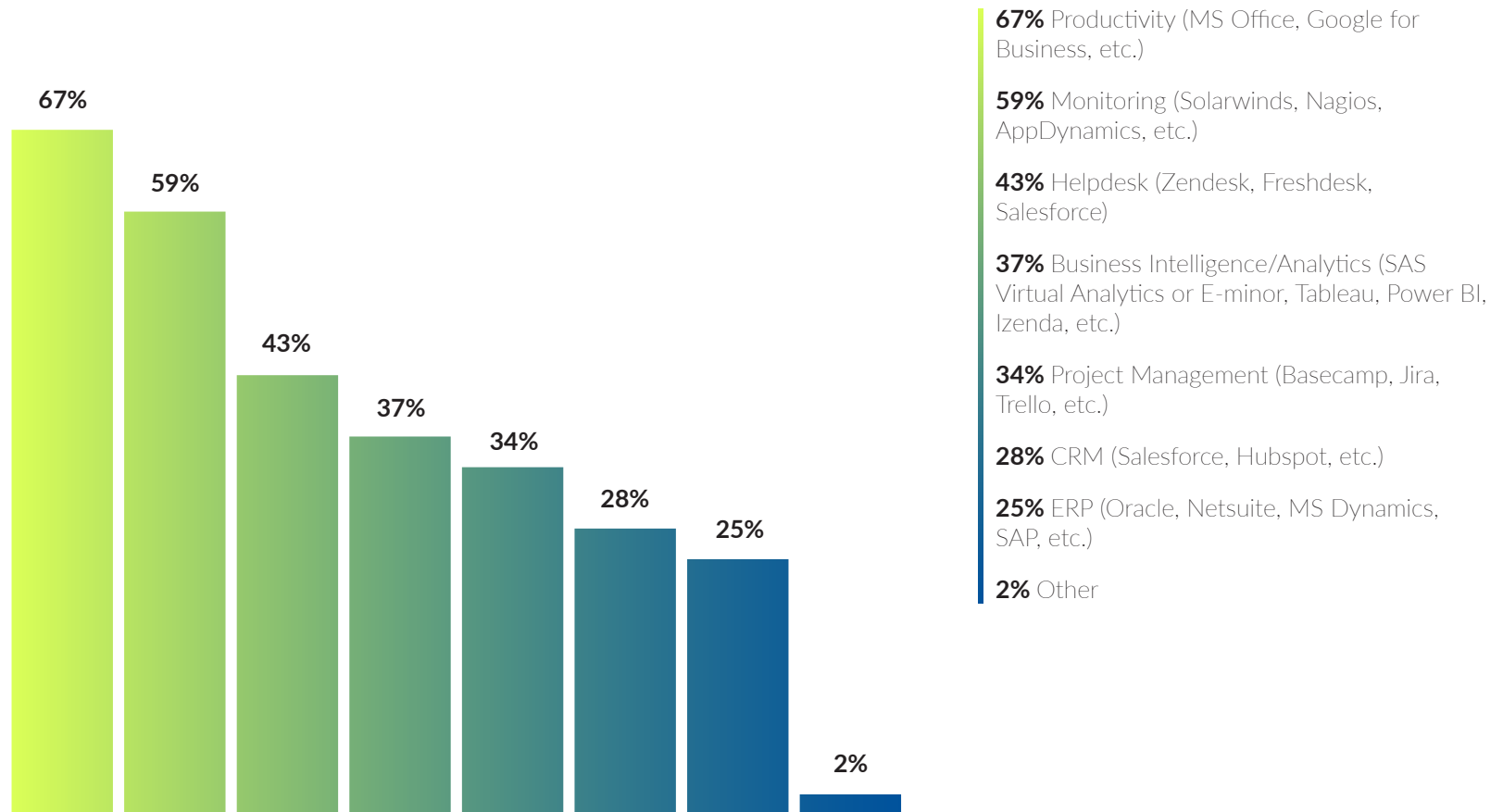
How many applications do you use to do your job on a daily basis?

A good sys admin is comfortable switching between a variety of apps to help get the job done. Almost half use 5-9 different applications (think email, chat, soft voice client, etc.) on a daily basis.

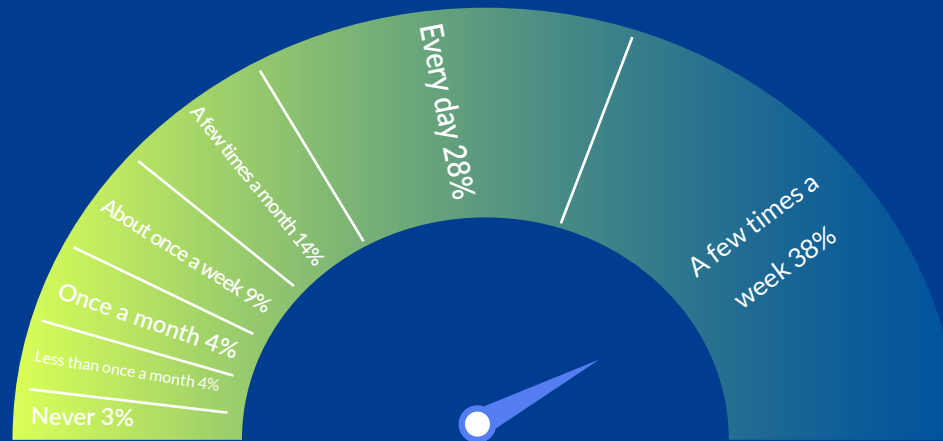


What applications do you use on a daily basis? (multi-select)

Of course, most sys admins spend their days using productivity, system monitoring, and help desk applications.



How often do you use automation or scripting in your current role?




Do you deal with printers or print servers?




61% Yes

Do you deal with scanning and scanners?



49% Yes

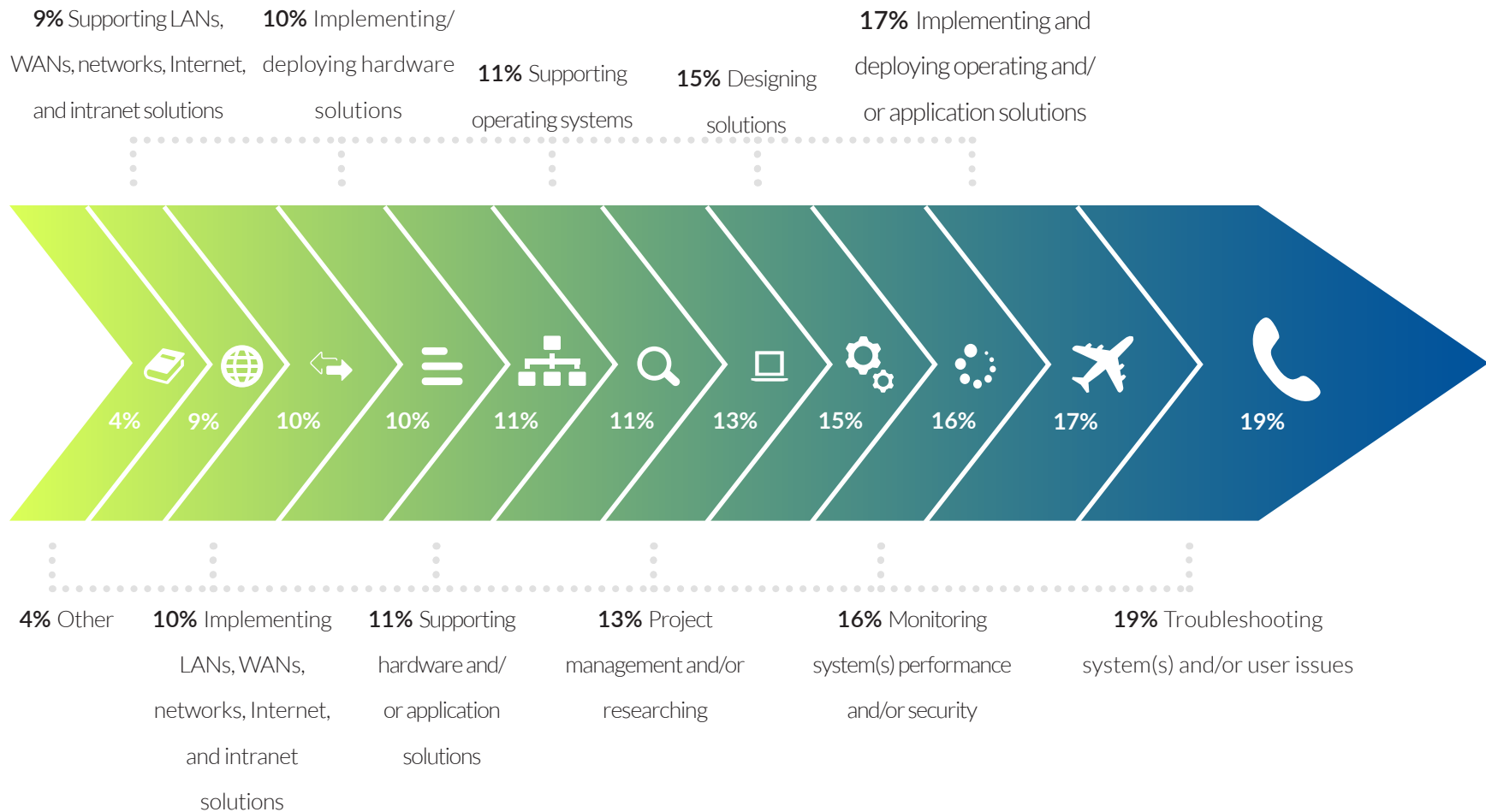
Do you deal with user profiles?



69% Yes

WHAT DOES A TYPICAL WORK WEEK LOOK LIKE FOR A SYS ADMIN?

To sum it up, **all over the place**. 19% of the work week, the biggest chunk of time, is spent troubleshooting.



Snapshots: Daily Life
Interpersonal




OFFICE LIFE

Interpersonal tasks involve **communication, teamwork, leadership, and conflict management** in an office setting.

Although they may not be written into the job description, these **tasks and daily interruptions** can have huge impacts on when sys admins are able to complete tasks.

But just how much time do they actually take away from administration deliverables?





Meetings

In a typical work day, how many **meetings per day** do you attend?

1-2 meetings 60%

90% of sys admins spend at least an hour a day in meetings. This can add up to 12% or more of each day taken away from other tasks.

3-5 meetings 25%

0 meetings 9%

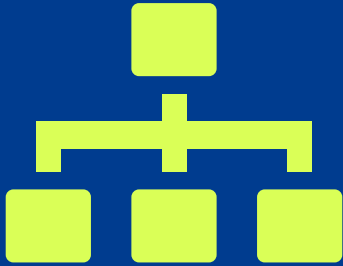
5+ meetings 6%

How often do you have to deal directly with end users?



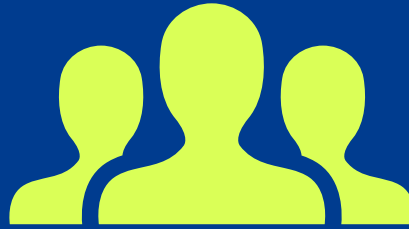
Do you have direct reports?

61% Yes



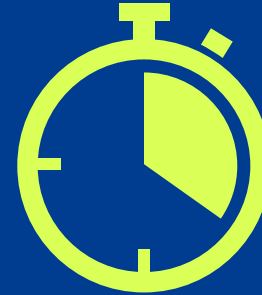
Are you a team lead?

62% Yes



Do you have any SLAs*?

59% Yes



*Service level agreements

Do you have a consistent maintenance window?

64% Yes



Who do you support?

57% Both internal and external systems and/or users

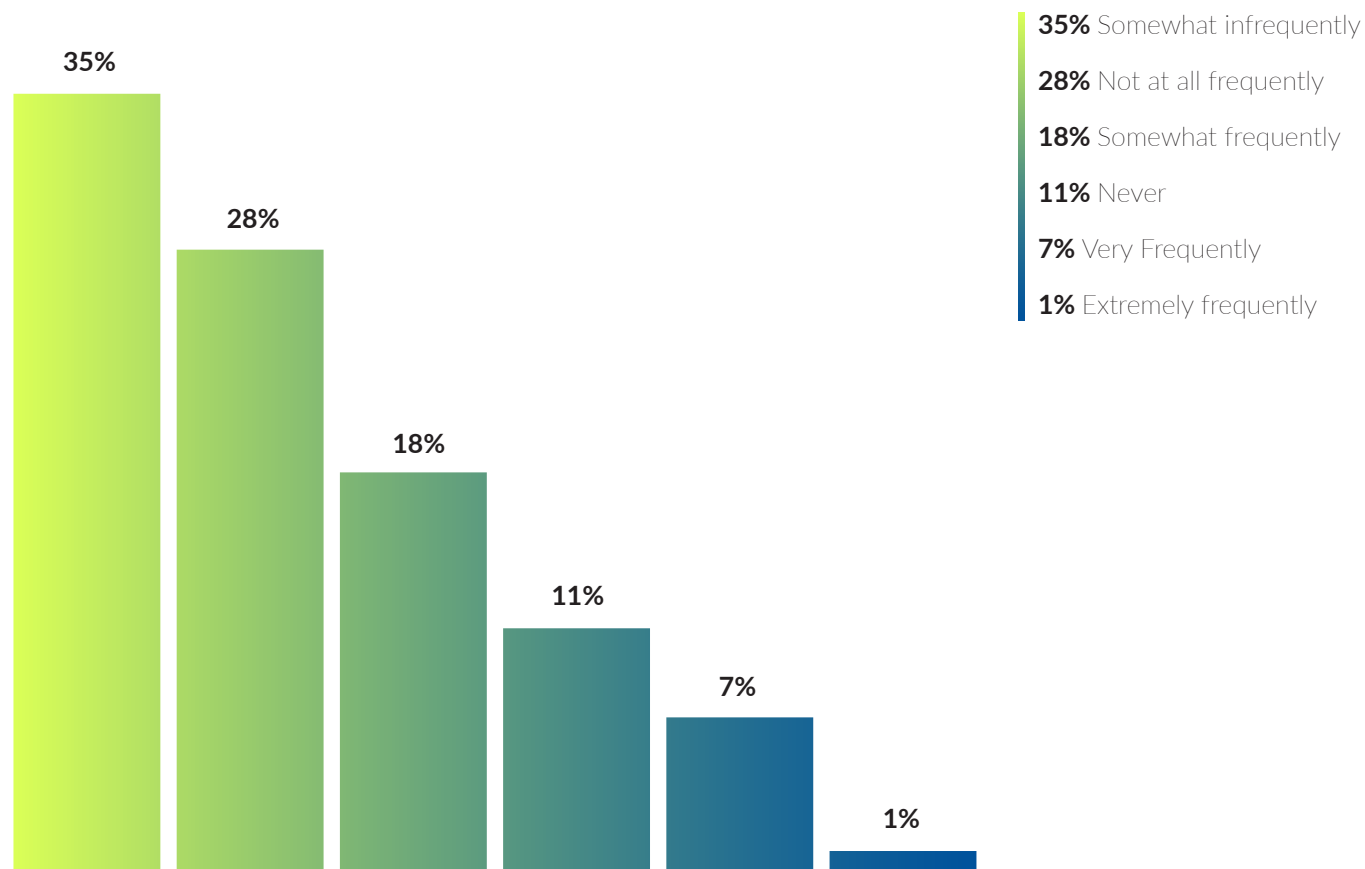
24% Internal systems and/or users only

19% External systems and/or users only



How frequently do you escalate issues to a higher level of support, either internally or externally?

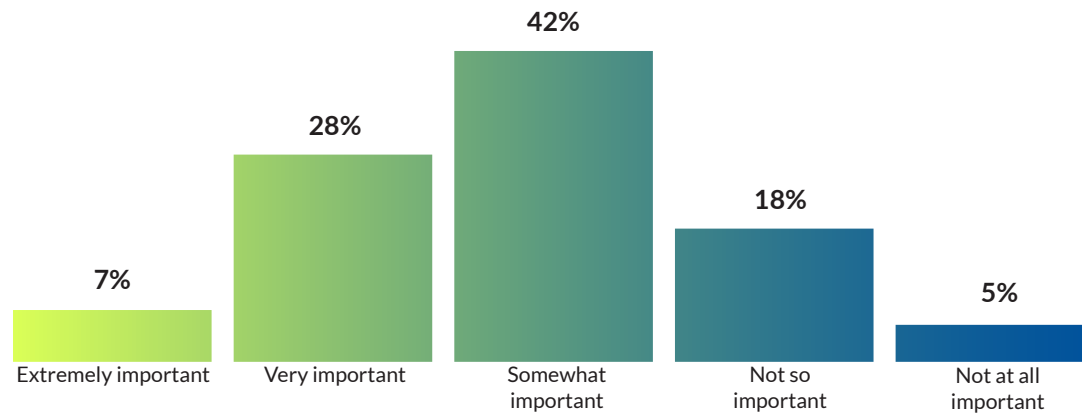
Sys admins are sometimes the only line of defense when it comes to troubleshooting issues. Most of our survey respondents don't often escalate issues to a higher level.



INTERPERSONAL TASKS

In addition to designing and running networks and managing IT systems, our data shows that most system administrators also have to deal with a lot of interpersonal office work as well. Between meetings with colleagues or direct reports, handling end user issues, supporting both internal and external systems, and meeting SLAs, time at work can be a total blur.

Only **7%** of survey respondents believe that their job is “extremely important” to their organization’s success.



6 Insights into Sys Admin **Success Factors**

ADMIN INSIGHTS

By understanding a day-to-day life of a system administrator, we see the common denominators of successful individuals.

We found 6 insights into what generally makes a successful sys admin.



INSIGHTS

- Being flexible
- Helping users
- Enjoying variety
- Always learning
- Being a problem solver
- Being a team player

INSIGHT 1

BEING FLEXIBLE

Being willing to work a **flexible schedule** is a great personality trait for sys admins as they have to balance many responsibilities.

The traditional 9-to-5 job doesn't sound appealing to 10% of survey respondents who said flexibility was the best part about being in system administration.

“

Managing all of a company's resources day-to-day requires a flexible schedule.

”

The ability to **work flexible working hours** is considered a benefit to those who want to succeed in this line of work.

INSIGHT 2

HELPING USERS

You may assume a typical IT person doesn't enjoy being around others, but successful system administrators **truly enjoy and embrace helping their users.**

10% of surveyed respondents point to **making their users happy** as the reason they come into work each day.

“

The best part of being an admin is helping the end-users accomplish their jobs and get through the day.

”

Though working with end-users can be frustrating, most admins enjoy being a **resource users can depend on.**

INSIGHT 3

ENJOYING VARIETY

System administrators have many responsibilities that change daily. **Embracing the unpredictability** of these responsibilities plays a key role in being a successful sys admin.

6% of respondents write that having something new every day on the job is the best part of being a sys admin.

“

It is certainly a new adventure each day when a problem surfaces to be solved.

”

Enjoying variety and **learning something new every day** are marks of a successful system administrator.

INSIGHT 4

ALWAYS LEARNING

11% of respondents said that **learning each day was the absolute best part** of being a sys admin.

With the pace at which technology evolves, most system administrators find it necessary to learn and grow to succeed in their role.

“

*Be open minded and willing to learn,
adapt to new technologies.*

”

Playing with the latest tech may sound fun, but remember that you have to be a **lifelong learner** to stay at the top of system administration.

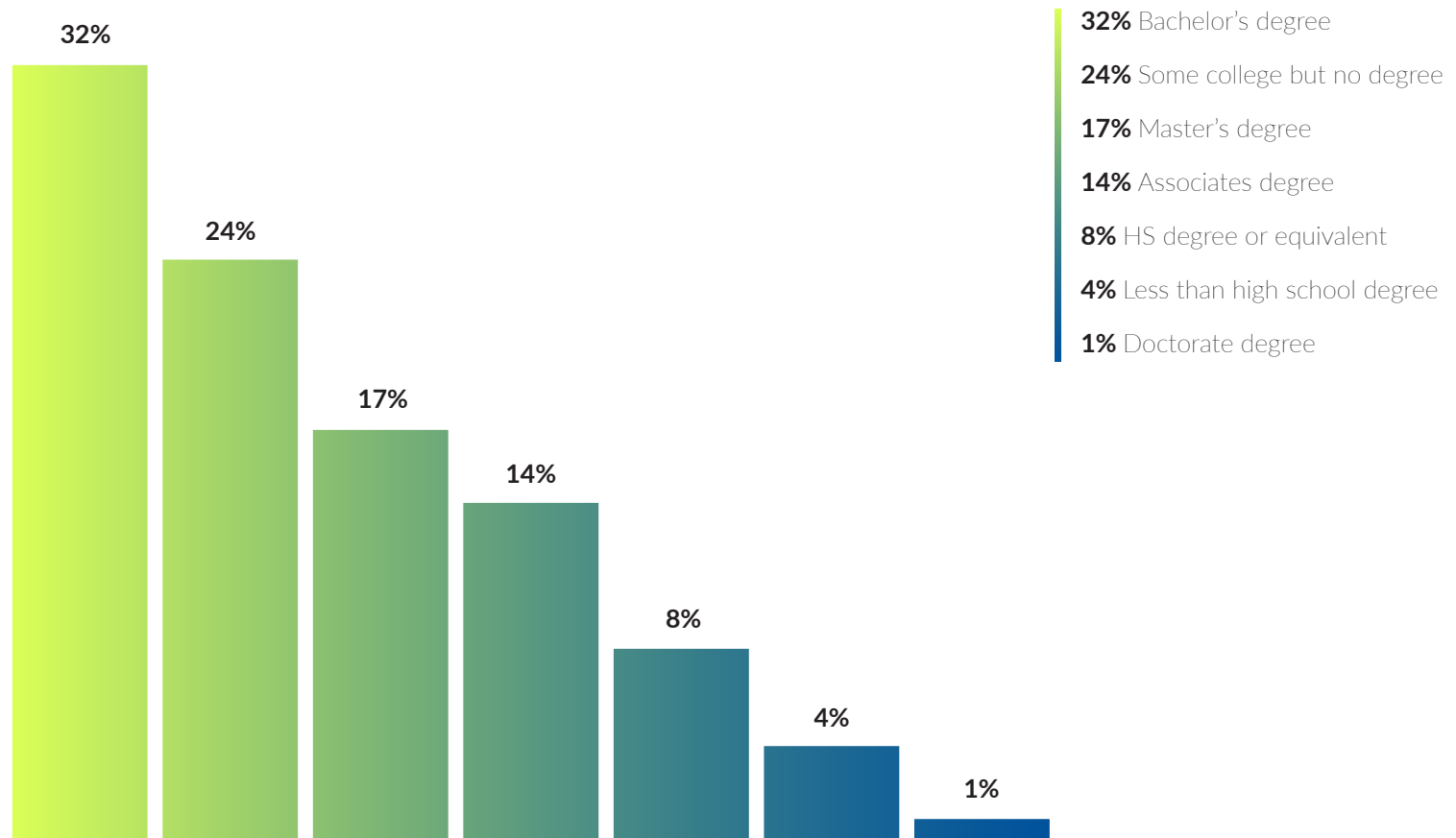
Formal Education?

Most companies require more formal education to consider candidates for a system administrator position. These requirements vary widely. Some businesses require a master's degree whereas others require an associate's, bachelor's, professional certifications, and/or industry experience – or any combination thereof.

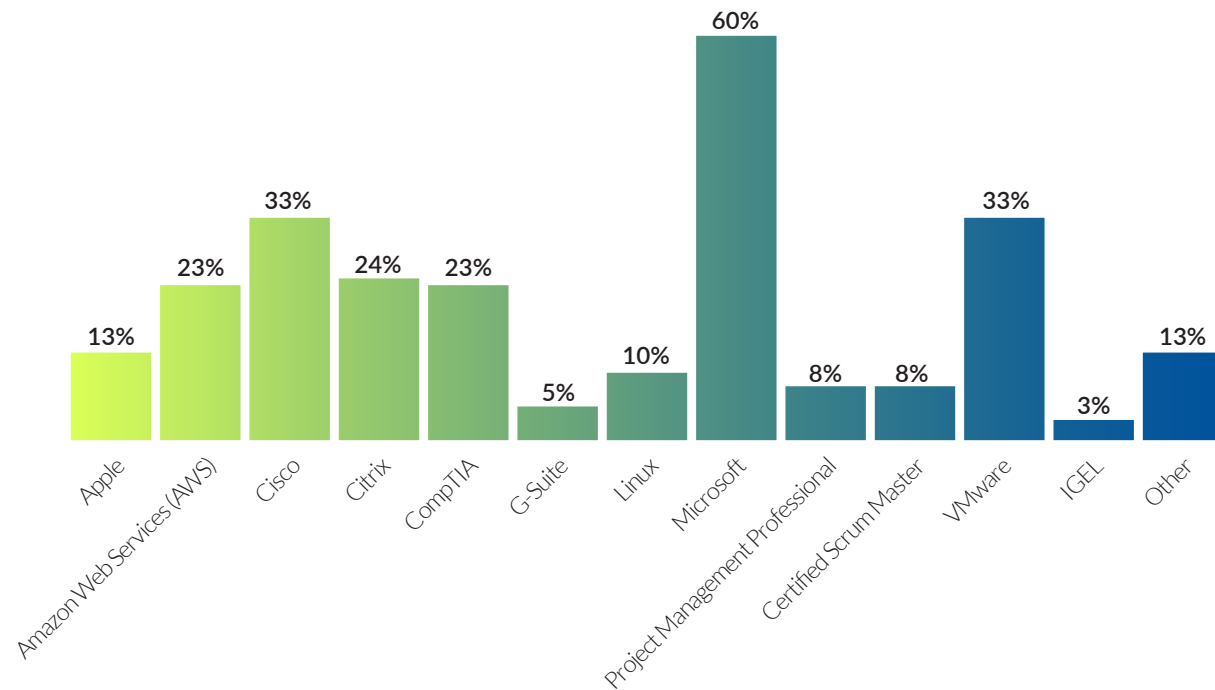
So, what do most system administrators actually have on their resumes? We found that **32% of respondents had a bachelor's degree** as their highest level of education and **73% had job related certificates** (and 15% didn't have any but planned to get some!).



What is your highest level of education?



What job-related certifications do you have? (multi-select)



*Other includes: Sun Java, CDCP, ITIL, among many others.

INSIGHT 5

BEING A PROBLEM SOLVER

Successful sys admins exercise the “**challenge accepted**” **mentality** when it comes to problems in the workplace.

10% of survey respondents reported that the best part of being in a system admin role is **solving problems**. Any time technology fails or has an issue most staff turn to the sys admin for the best fix.

“

Solving problems and enabling others are the best parts of being a system administrator.

”

Emergencies and other problems must be dealt with swiftly by system administrators to ensure normal business operations. The best sys admins enjoy **testing their brainpower** against broken systems and machines.

INSIGHT 6

BEING A TEAM PLAYER

Being a contributing member of a successful team is important for most system administrators.

27% of survey respondents stated that being able to make **important contributions to their team** and/or company was one of the best parts about being a system administrator.

“

Getting a sense of accomplishment after deploying and maintaining hardware for the whole team.

”

In order to succeed in this type of role, **it helps to have a team-first mentality.** Sys admins that support and push their team forward find fulfillment in their jobs.

4 Employer Strategies to **Ensure Sys Admin Successes**



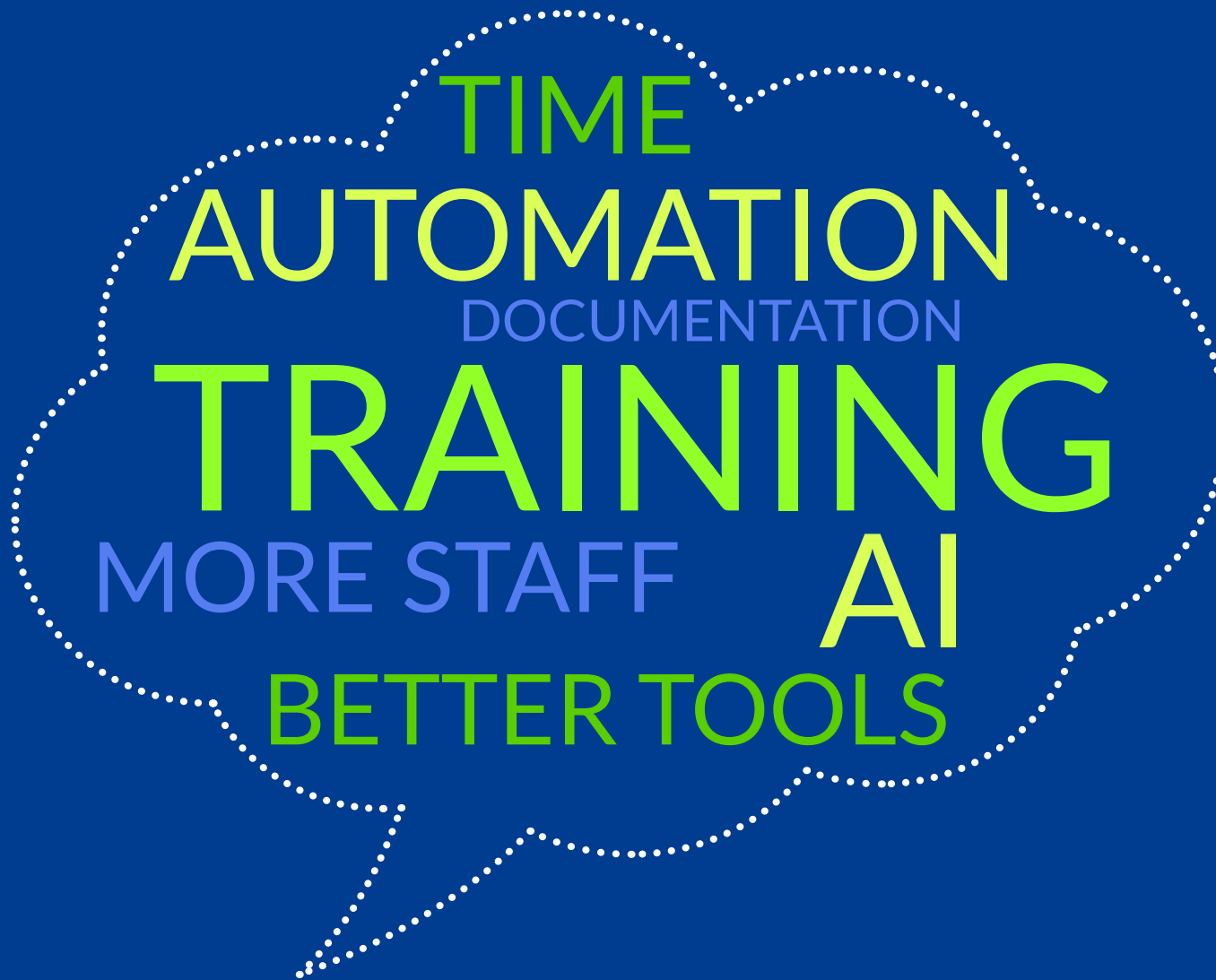
COMPANY SUPPORT

We've uncovered some of the main personality traits that make up a successful sys admin.

But these system admins don't work in bubbles. Their success is arguably correlated to the success of their organization as a whole.

So, what can companies do to ensure they're supporting this role effectively?





INSIGHT 1

TRAINING AND EDUCATION

15% of system administrators report that **more training and education** would make their job easier and more successful.

Sys admins are responsible for the keeping network systems online and operational. In order to do so effectively, they need to have **appropriate training on the latest developments in their environment.**



I need:

- “More time for more training”
- “Training to upgrade my skills”
- “Learning each day”

INSIGHT 2

AUTOMATION

14% of system administrators surveyed said that automation would be the most helpful thing to make their job easier.

Companies should invest in this type of technology to **reduce the burden on system administrators**, freeing up their time to work on more important things.



- "Automation of activites"
- "More automation"
- "Automation and AI"

INSIGHT 3

ENTERPRISE RESOURCES OR TOOL

10% reported that having access to **enterprise resources** or **better enterprise solutions**, is the number one thing to make their job easier.

It's important for companies to realize that while they may have the correct staff in the correct positions, these employees **need to be equipped with the correct system tools and management support** in order to work efficiently and achieve success.



- "Improved system operation"
- "A dependable CRM"
- "Script generation tools"

NICE-TO-HAVES

Additional things were also reported as ways to make life easier for sys admins. Companies can take all these factors into account when determining how best to support this critical system role in their organization.

Monitoring

8% of respondents reported that having better monitoring tools or skills would make their job easier.



More Staff/Time

9% of respondents said that having more staff or time would be the best way to improve their day to day operations.



Documentation

3% of respondents said what they really need is documentation to help make their daily lives on the job easier.



So,
What's Next?



THE CHALLENGE CONTINUES

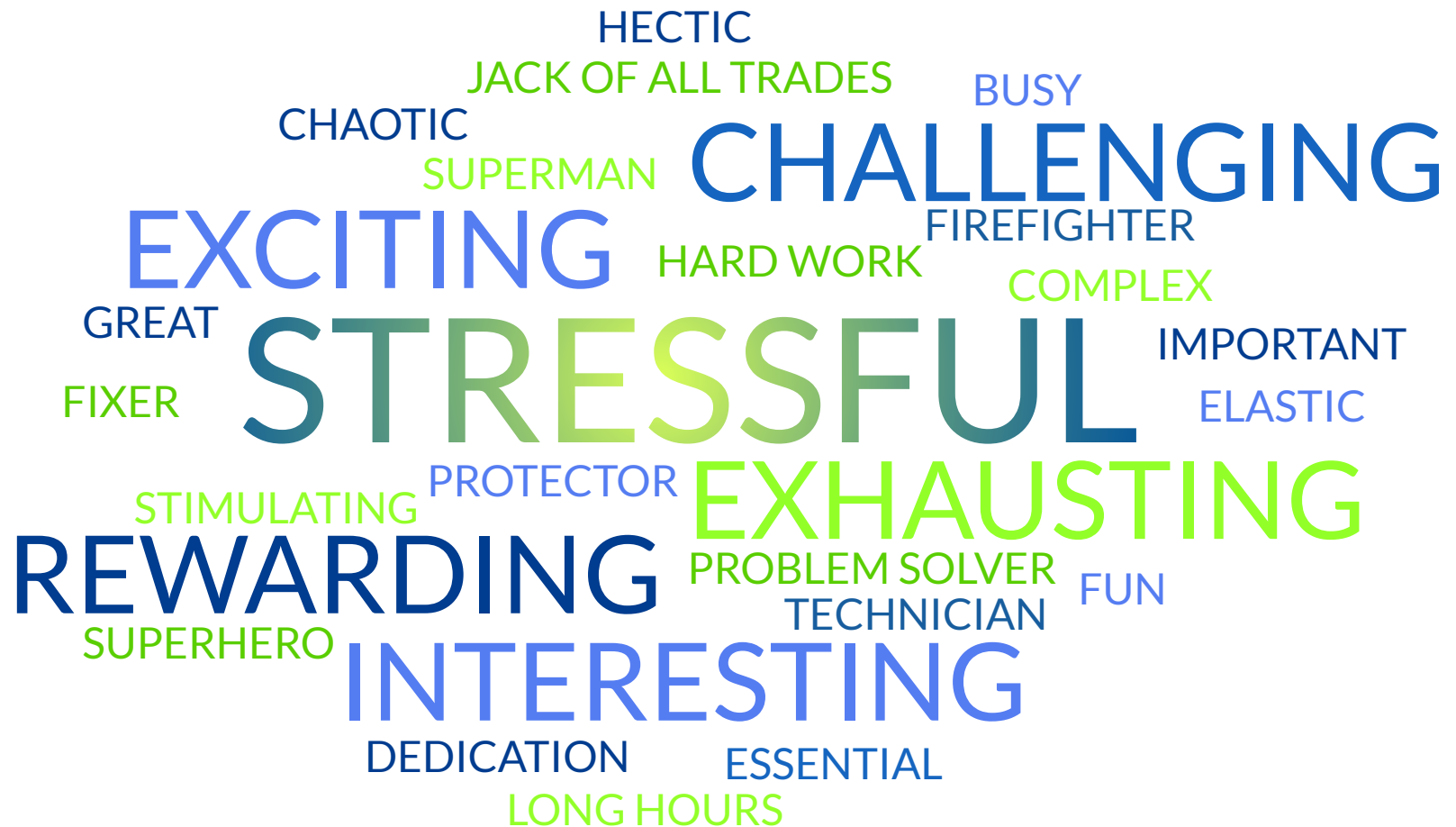
When asked to describe system administration in one word, people overwhelmingly responded with the word **“stressful”**. System Admins know that a lot rests on their shoulders. The stress of making sure all of a businesses’ systems are ready to go can be overwhelming, but these superheroes do it every day.

Successful system administrators can look at the challenge and see the work for what it is: the ability to work with technology systems, expand your own personal knowledge, be a crucial part of a team, and to help others.

To all the jack-of-all-trades, firefighters, problem-solvers, and fixers, we tip our hat to you. **The world of IT systems would not run without you!**



Describe being a system administrator in one word:



Learn more

To learn more about this study, and about how Tricerat is striving to make the lives of system administrators easier, visit www.tricerat.com or send us a message at simplify@tricerat.com.



Thank you!

