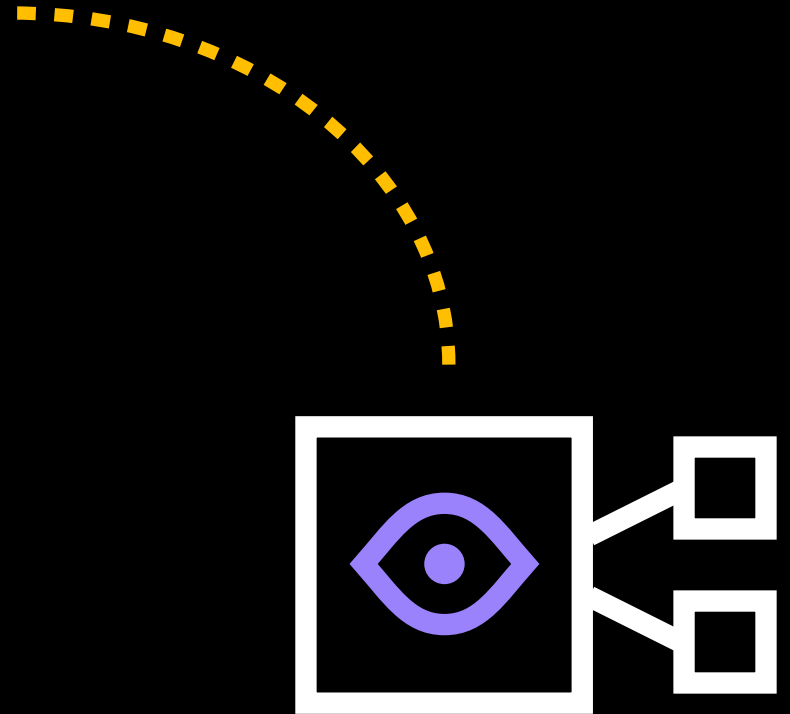




2023 Network IT management report

Evolving IT to manage
the new network



Contents

| | |
|-----------|---|
| 3 | Executive summary |
| 4 | Introduction |
| 7 | Part I — Network management needs |
| 11 | Part II — The vital role of automating network management |
| 15 | Part III — Extending reach with Wi-Fi and SaaS Management |
| 18 | Part IV — End users demand faster and easier IT network solutions |
| 21 | Conclusion |
| 22 | Methodology |





Executive summary

The network is evolving.

The future of work continues to be hybrid.

As the network expands beyond an office firewall and into what we at Auvik have termed **The Last Mile of the Office Network**, IT professionals, and particularly, decision makers, need to be aware of the role that network monitoring and management, as well as SaaS, Wi-Fi, and End User Experience, play in their organizations. Now is the time to consider automating network tasks and improving network visibility, so that the workforce of the future can continue to be managed successfully by internal in-house IT and MSPs.

Data highlights

4,500

IT professionals across North America surveyed

75%

are IT decision makers

86%

support a remote workforce at least some of the time

45%

don't know the full configuration of their network

73%

outsource some of their network-related tasks

50%

already work on SaaS and Wi-Fi management

45%

are measured on their service to End Users

61%

believe a lack of time and money are restricting their ability to better serve their colleagues and clients

Introduction

What is the current state of network management as a field, and what does its future look like?

To answer this question, colleagues at Auvik surveyed 4500 IT professionals across North America in 2022. The survey included both Managed Service Providers (MSPs) and internal, in-house IT teams.

Within the respondent group, a quarter of those surveyed are most likely to be decision makers. In [figure 0.1](#), 28% indicated they had 11 or more years of experience. As shown in [figure 0.2](#), 26% of the respondents noted that they are responsible for the final purchase decisions regarding IT at their organization, which is consistent with our hypothesis.

How many years of IT experience do you have?

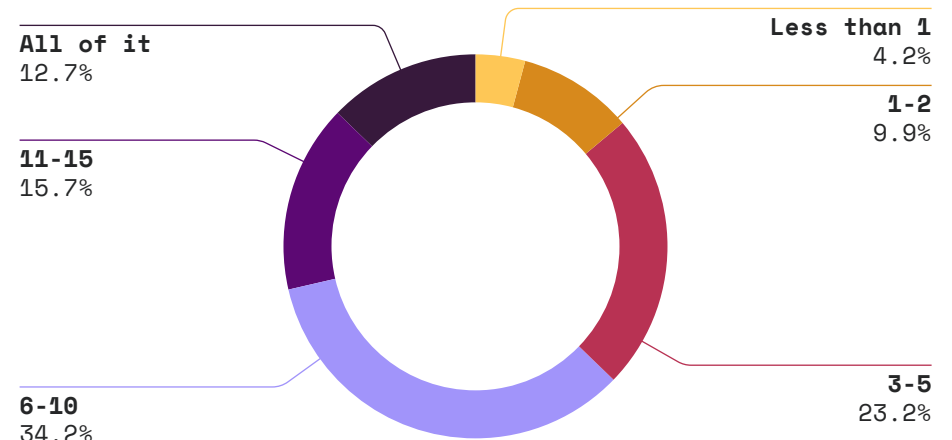


figure 0.1

How involved are you in IT decision making?

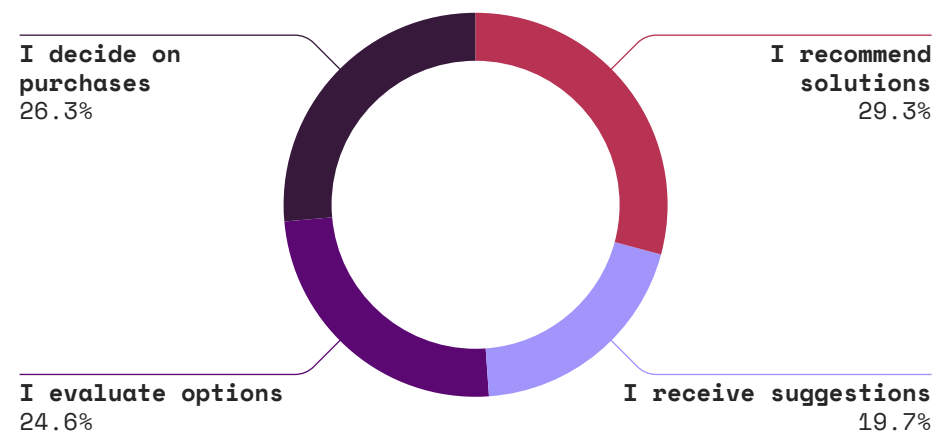
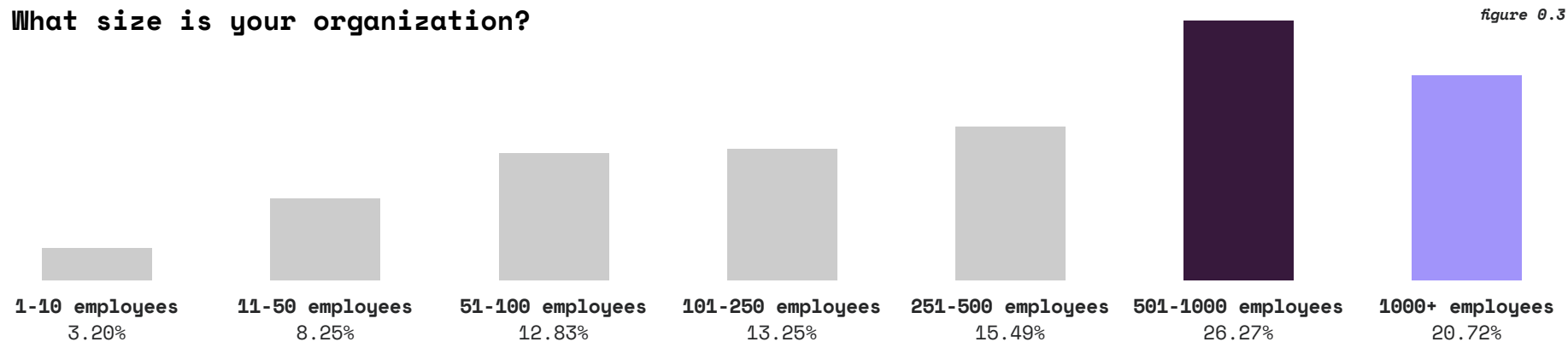


figure 0.2

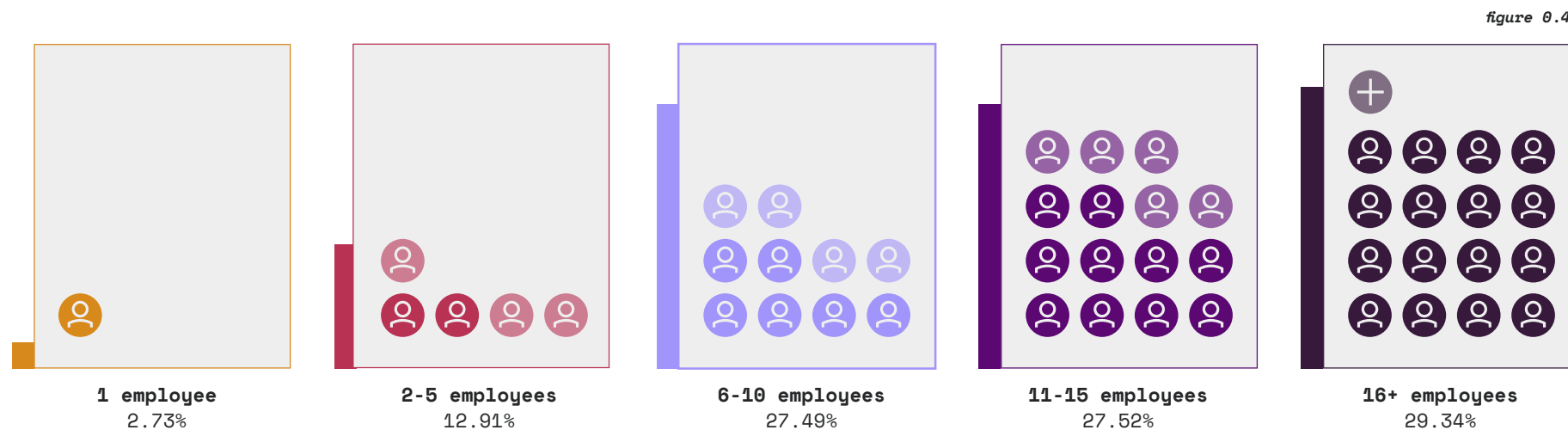
In **figure 0.3**, we see that the size of the organizations represented by those surveyed leaned larger, with 47% having over 500 employees. Over 75% of organizations represented had more than 100 employees.

84% of respondents work on an IT team of 6 or more employees, as shown in **figure 0.4**. This is consistent with organization size, as larger organizations are more likely to have a larger IT team.

What size is your organization?



How many IT employees work at your organization?



Perhaps the most anticipated data regarding the makeup of the survey is this:

Which percentage of the IT teams surveyed support fully remote teams compared to teams fully in office?

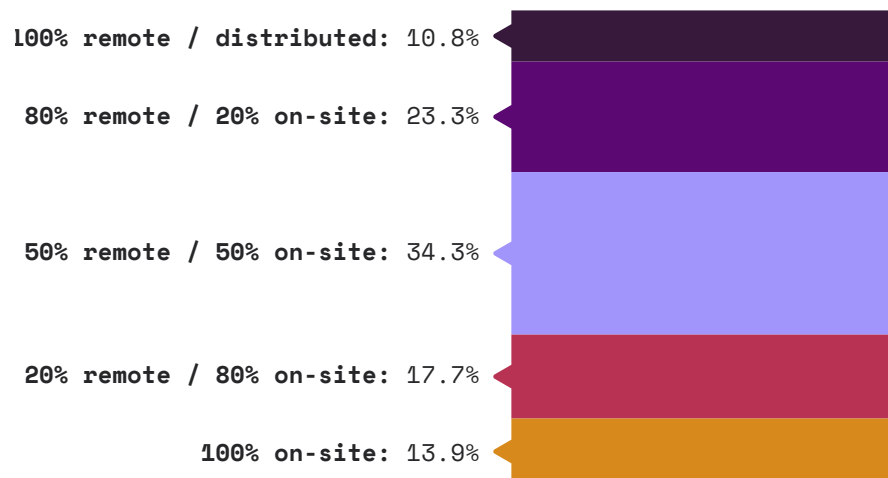
While the percentage of organizations that operate fully onsite is slightly higher, at 14% compared to the 11% who are fully remote, the amount of IT professionals who support remote workers during any amount of work hours is 86%—see [figure 0.5](#).

Remote work is here to stay. The field of network management is changing because many IT teams must now support hybrid working conditions. The advent of Software-as-a-Service (SaaS) solutions, mixed with employee preference for the ability to work from home, has led to many organizations adapting so productivity can take place anywhere. The concept that work is done entirely on an office network secured behind a firewall is an idea from pre-pandemic times.

But what aspects of IT network management will be most impacted by hybrid work? How will service providers and internal IT teams rise to meet the challenges resulting from supporting employees at home, at a coffee shop, and around the world? We've called this step in network management's evolution The Last Mile of the Office Network. Let's take a look at some of the key factors changing how IT teams operate and what IT leaders can do to help them reach that last mile.

I support a team that is...

figure 0.5



Auvik insights

- We surveyed 4500 IT professionals in North America.
- At least ¼ of them are decision makers.
- They represent larger companies of 100-1000+ employees.
- They have teams of 6+ employees.
- 86% of them work for an organization that supports remote employees at least some of the time.
- Reaching employees beyond the office firewall and supporting their needs means preparing to monitor and manage The Last Mile of the Office Network.



Network management needs continue to grow

How do IT teams keep their organizations running productively while employees continue to stretch working conditions to The Last Mile of the Office Network?

The answer may lie in network visibility and disciplined network management. When “the network” now includes a home network setup, a coffee shop’s Wi-Fi, or drop-in workspace in addition to the headquarters of the organization, it’s important for IT professionals to have full visibility and complete knowledge when it comes to their team’s connected devices.

Do IT teams currently know how their network(s) are configured? In the 2021 Network Field Report, we noted that 57% of IT teams did not fully know the configuration of their networks. The percentage of those who know (or claim to know!) their full network is improving, but in our 2022 survey 45% of IT pros still responded that they don’t fully know their network(s) configuration—see [figure 1.1](#).

Do you know how your network is configured?

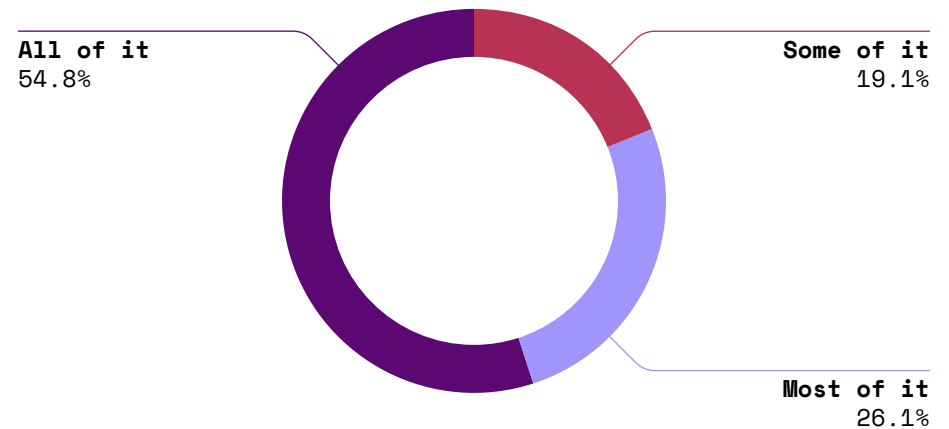


figure 1.1

Who makes configuration changes?

You: 43.5%



Other IT staff: 35.6%



Users / Non-IT: 20.9%



figure 1.2

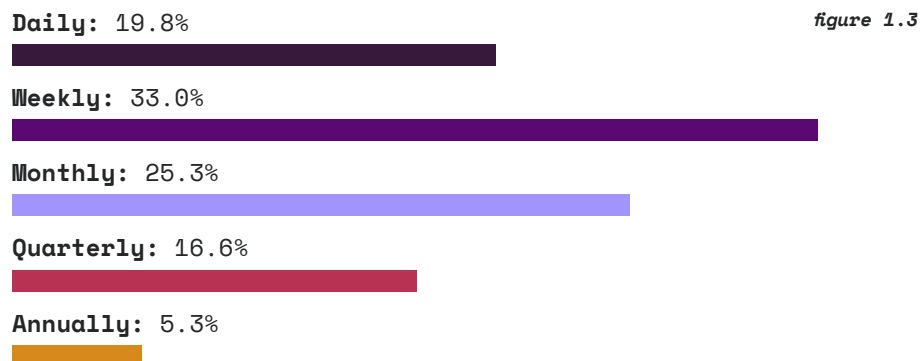
There is a difference between the confidence an IT professional has in their organization's network(s) and the knowledge of what is connected to the network. This gap can prove risky for the reliability, performance, and security of their networks.

Network visibility is lacking. As seen in [figure 1.2](#), IT pros either do not fully know who is making changes to the network configurations, or control of this aspect has moved out of their hands due to The Last Mile of the Office Network. This means security risks are greater than ever, in part due to a lack of visibility, and in part due to insider risk from employees working on their own IT.

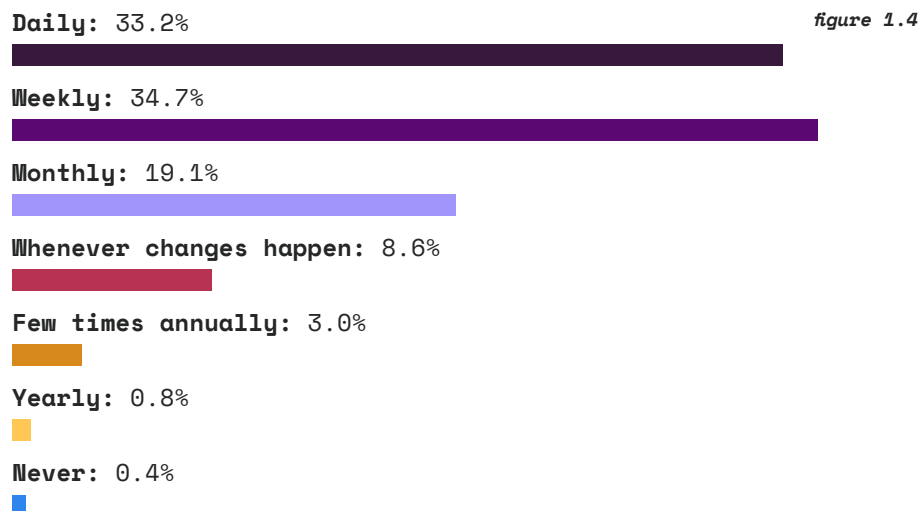
Whether malicious and intended, like revealing confidential information and sharing logins, or due to human error, like via a phishing or smishing attack, leaks can happen when SaaS and additional network territory is left unmonitored. Things can become even more dangerous when configuration changes are made on a daily or weekly basis, as shown in [figure 1.3](#). It is implied that if IT doesn't always know who is doing the configuration changes, or the changes are not being properly tracked, or both, we could have instances of daily or multiple-times-daily configuration changes going un-tracked.

In [figure 1.4](#) we can see that a healthy 68% of organizations are backing up configurations weekly or daily. Over a quarter of respondents said their organization only backs up configurations monthly or less often. We know that not having a configuration backed up can lead to issues troubleshooting later. But if it is the case that not every IT professional knows when a configuration is changed at their organization, because the IT team is unaware of configuration changes or because they are being made by users, how will the IT team know when to perform a backup?

How often are configuration changes made?



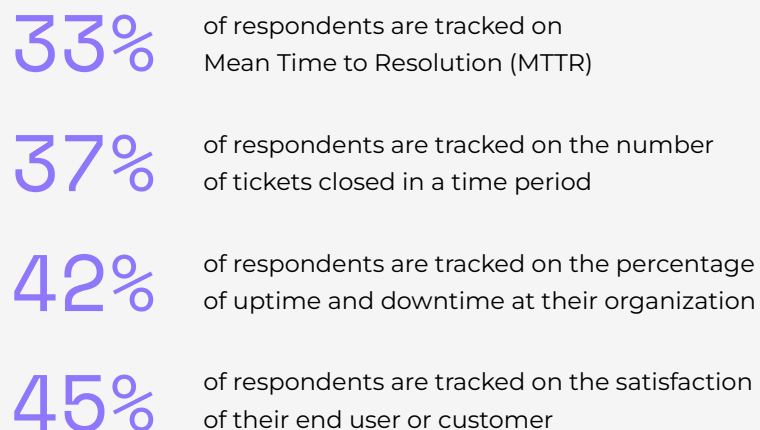
How often are configurations backed up?





Similarly, network documentation can either make troubleshooting much easier or much more difficult. We see in **figure 1.5** that documentation habits have improved since 2021, with 58% of teams updating their documentation weekly or daily, a 14% increase from the previous report. However, there are also some teams, totalling about 6% of those surveyed, who only update documentation annually. These teams could be working throughout the year on outdated documentation that does not have the information needed for troubleshooting.

While quick troubleshooting is not the only measure of an IT professionals' success, it does make up a significant amount of the network-related time in their day. Most commonly tracked metrics are based on troubleshooting or cost, as shown in **figure 1.6**. If we compare the percent of troubleshooting metrics:



How often is network documentation updated?

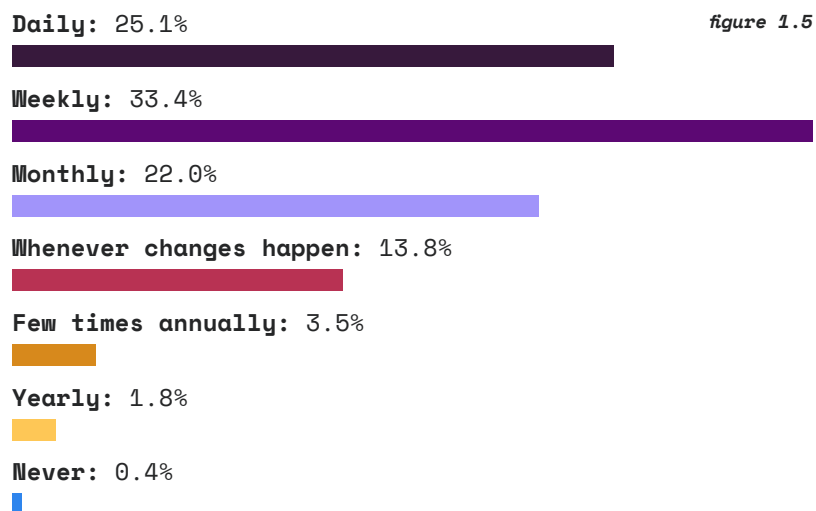


figure 1.5

Which metrics are you and your team tracked on?

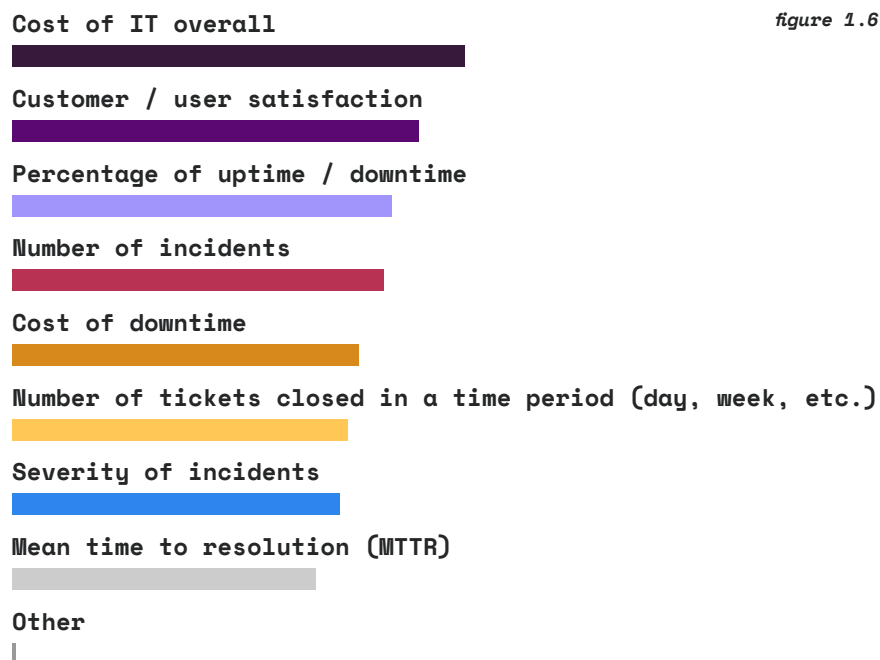


figure 1.6



These metrics are all double or triple the 15% of respondents who are evaluated on cost of their operations. This could be due to the impact downtime has on a business. [ITIC's 2021 Hourly Cost of Downtime](#) survey indicated that a single hour of server downtime totals \$300,000 or more for 91% percent of small to mid-sized enterprises. About 44% of organizations in that same survey estimated that an hour of downtime could cost them \$1 million. Knowing that many of those surveyed for this 2023 Field Report work for small enterprise level companies, we can see why this would be an important metric.

As hybrid working conditions continue and we stretch the reach of IT to The Last Mile of the Office Network, downtime, MTTR, and cost of IT operations continue to be key factors in an IT team's success. It is vital that network monitoring, management, and maintenance continue to adapt to the changing circumstances for each organization's workforce.

Auvik insights

- On The Last Mile of the Office Network, network visibility is key to keeping productivity consistent.
- Gaps in configuration management and documentation are contributing to risk for security and productivity.
- 45% of IT pros still don't fully know the configuration of the networks they're responsible for.



The vital role of automating network management

How confident are IT professionals when it comes to their network?

Do they believe it can support their organization's needs on a daily, weekly, yearly basis? And what contributes to their confidence, or lack thereof?

In [figure 2.1](#) we can see that 46% of respondents have "Very High" confidence that their network meets their organization's needs, and 44% have "High" confidence of the same. But what about the other 10%? Considering the practices outlined in section I of this report, these teams could be those functioning with outdated configurations, outdated documentation, and lack of network visibility. If it is true that there are gaps in IT professionals' network knowledge, is confidence in the network overall trending too high? To reiterate, 45% of those surveyed also reported that they do not fully know how their networks are configured.

Level of confidence in the network

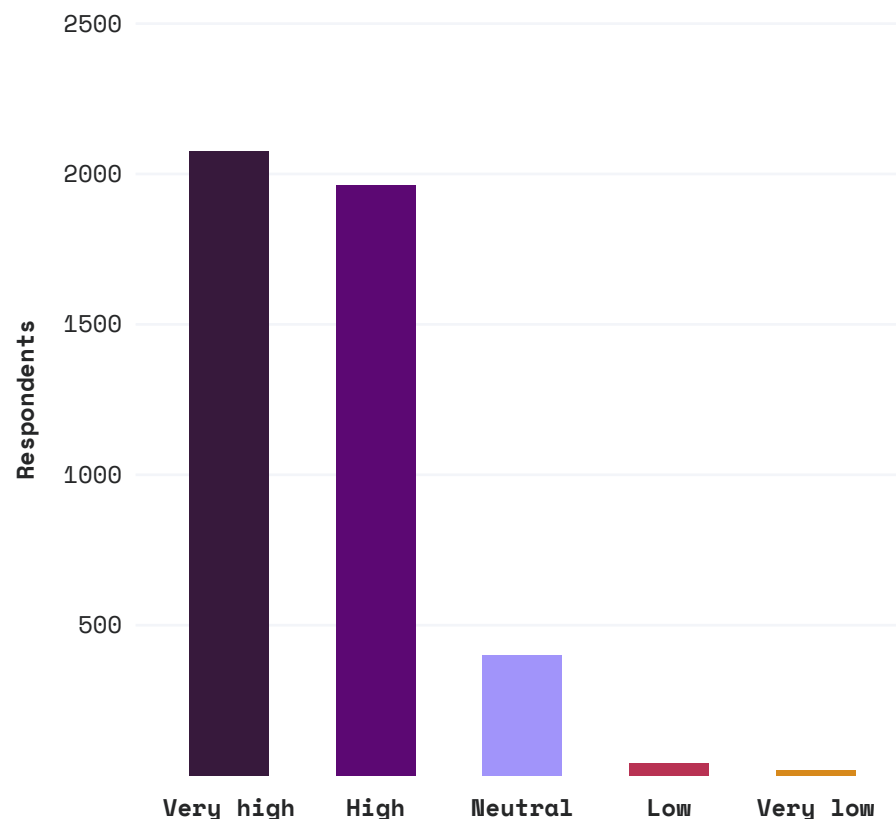


figure 2.1



The viewpoint of the average IT professional has not evolved as quickly as the distributed and hybrid work environment of The Last Mile of the Office Network. Usage of the network behind the firewall has changed, and end users are no longer all on the same network all the time—can IT teams continue to have high confidence if they are not seeing the entire picture, including the SaaS applications and home setups and free Wi-Fi that today's workforce are now operating with? It's possible that issues with home and extended networks are not being resolved due to reach issues. This is why network monitoring (and the ability of those monitoring the network to reach beyond the firewall) is vital.

IT professionals continue to work the same amount as they did in 2021 (a majority work about 30-50 hours per week—see [figure 2.2](#)). These numbers do not need to increase, but they are at risk of doing so if more IT professionals are troubleshooting connectivity issues for end users that they can't fully monitor. If an IT team is not monitoring the network, or they do not have full visibility of their connections, they will be reactive to network issues 100% of the time, instead of proactively preventing them.

As we can see in [figure 2.3](#), most of the IT professionals surveyed for this report are balancing about 50/50 in terms of proactive tasks and reactive troubleshooting. Ideally, only a fraction of any IT team's time should be dedicated to resolving issues that appear suddenly (also known as “putting out fires”). If troubleshooting time is reduced, there can be more time spent on proactive tasks like network planning and new technology research, which we will see to be high on many IT professionals' wishlists in part IV of this report.

How many hours per week do you work?

Less than 10 hours: 1.29%



10 to 20 hours: 5.38%



21 to 30 hours: 14.69%



31 to 40 hours: 43.11%



41 to 50 hours: 28.40%



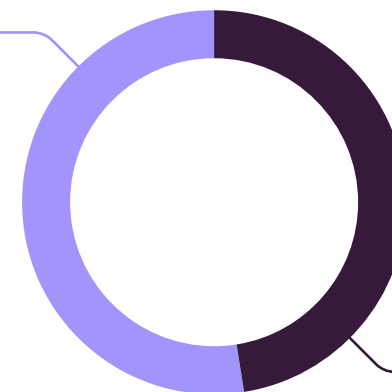
More than 50 hours: 7.13%



figure 2.2

How much of your weekly time is spent on...

Proactive tasks
52.5%



Reactive tasks
47.5%

figure 2.3

In [figure 2.4](#), we can compare network management tasks and see where IT teams are spending the most time today compared to in 2021.

Most of these tasks are performed “Frequently,” which is notable in a few categories where the numbers were previously “Very Frequently” in 2021.

In a typical week, how often do you work on:

figure 2.4

| | Very frequently | | | Frequently | | | Sometimes | | | Rarely | | | Never | | |
|---|-----------------|-----|------|------------|-----|------|-----------|-----|------|--------|-----|------|-------|-----|------|
| | 2021 | vs. | 2022 | 2021 | vs. | 2022 | 2021 | vs. | 2022 | 2021 | vs. | 2022 | 2021 | vs. | 2022 |
| Team management | 36% | ▼ | 33% | 28% | ▲ | 36% | 22% | ▲ | 24% | 7% | ▼ | 5% | 7% | ▼ | 2% |
| Network monitoring | 33% | ▼ | 30% | 33% | ▲ | 38% | 20% | ▲ | 23% | 8% | ▼ | 7% | 6% | ▼ | 2% |
| Network configuration backup | 30% | ▼ | 26% | 31% | ▲ | 35% | 23% | ▲ | 27% | 10% | ▼ | 9% | 7% | ▼ | 3% |
| Network troubleshooting | 29% | ▼ | 25% | 30% | ▲ | 35% | 27% | ▲ | 29% | 7% | ▲ | 9% | 7% | ▼ | 2% |
| Network configuration | 28% | ▼ | 27% | 35% | — | 35% | 22% | ▲ | 28% | 8% | — | 8% | 7% | ▼ | 2% |
| Network mapping | 28% | ▼ | 22% | 27% | ▲ | 34% | 29% | ▲ | 30% | 9% | ▲ | 10% | 7% | ▼ | 3% |
| Network documentation | 28% | ▼ | 25% | 30% | ▼ | 28% | 26% | — | 26% | 11% | ▼ | 8% | 6% | ▼ | 2% |
| Network planning | 27% | ▼ | 25% | 35% | — | 35% | 24% | ▲ | 28% | 7% | ▲ | 9% | 7% | ▼ | 2% |
| Network vendor management | 27% | ▼ | 22% | 32% | ▲ | 33% | 24% | ▲ | 29% | 10% | ▲ | 12% | 7% | ▼ | 4% |
| Reporting on past & current network performance | 25% | ▼ | 24% | 35% | ▼ | 34% | 26% | ▲ | 30% | 7% | ▲ | 9% | 6% | ▼ | 3% |
| Network maintenance | — | | 24% | — | | 35% | — | | 31% | — | | 8% | — | | 2% |
| Researching new technology | — | | 24% | — | | 33% | — | | 30% | — | | 11% | — | | 2% |

As we transition to tackle The Last Mile of the Office Network, there is much room for improvement. Good network monitoring tools can automate many tasks on this list, including configuration backup, network documentation, network mapping, and in some cases these tools also perform alerting and reporting to a degree that will significantly decrease human lift. Network automation is key in advancing IT to support hybrid work.

It is also noteworthy, because a quarter of those surveyed are decision makers and IT leaders, that 33% of respondents listed team management as an activity they perform “Very Frequently.” If a high frequency of an IT professional’s time is spent managing their team, what can be done to reduce this? It’s important that the tools IT teams are using can be operated by even entry level or L1 tech specialists so that more tasks can be delegated. If senior level IT employees are freed from basic network monitoring and management tasks, they will also have more time to work on projects that help the adjustment of their organization to hybrid work.

Where possible, it’s important to remember that time is money. IT professionals cannot be spending all of their hours on troubleshooting-related tasks, because that means hours of wages and salaries are being spent on stagnant, reactive work rather than productive work that helps boost and retain profit. The more IT teams can do to automate tasks that can be automated, delegate tasks that can be delegated, and keep information centralized so that it is quickly accessible by those who need it, the more effective they will be.

Effective network monitoring and management is step one in evolving IT to reach The Last Mile of the Office Network. Adapting and using existing technology where available is essential. The next steps lie in the developing technologies that will be necessary for continued monitoring of a hybrid work environment.



Auvik insights

- **Confidence in the network is high considering the risk presented by lack of network visibility and the evolving work landscape.**
- **IT pro work weeks are similar to in 2021, but around half that time is spent on reactive tasks and putting out fires.**
- **The level of time spent shows there is room for automation on individual network monitoring and management tasks such as mapping and documentation.**
- **Automating and centralizing network information can contribute to improved use of time.**

Extending reach with Wi-Fi and SaaS management

It is largely thanks to the advent of SaaS applications that hybrid work continues to be popular in a gradually progressing post-pandemic landscape.

It would be difficult to complete work and collaborate with colleagues without Microsoft 365, or the Google Suite, or Zoom and Slack.

Network management includes the management of SaaS applications as well as the cloud and the Wi-Fi that keeps workers connected to them. In [figure 3.1](#), note that half of the IT professionals surveyed work for an organization that already performs SaaS/Cloud monitoring and Wi-Fi management. While that may seem significant at first, it's at most half of the 86% of IT teams who support remote workers.

What network management activities does your company do?

Mapping: 5.77%

Documentation: 9.12%

Configuration: 10.14%

Configuration backup: 9.55%

Monitoring: 9.55%

Troubleshooting: 8.75%

Reporting: 7.44%

Planning: 8.12%

Wi-Fi management: 9.40%

SaaS/Cloud monitoring: 8.72%

UEM (Unified Endpoint Management): 5.11%

Network automation: 8.30%

Other: 0.04%

figure 3.1

What does this mean for in-house IT and for MSPs? Both need to improve their ability to monitor and troubleshoot for SaaS and Wi-Fi connections.

It's essential for in-house IT to understand and have visibility into how these connections work so that they can, at minimum, diagnose a problem. For MSPs who serve many organizations of different distributions, it's important because their clients will expect them to be able to adapt and see into the technology that keeps teams productive regardless of their location (or their proximity to the MSP). Ensuring that their technicians are capable of addressing SaaS and Wi-Fi is the only way that MSPs will be able to reach The Last Mile of the Office Network.

And as [figure 3.2](#) shows, 73% of IT teams are outsourcing network related tasks. In [figure 3.3](#) it becomes apparent that the most frequently outsourced tasks are related to SaaS/Cloud applications and Wi-Fi management. MSPs have been dealing with hybrid work for several years now, and should be considered experts where this domain is concerned. They have already been servicing clients remotely, but now those same clients are going remote themselves, which will make them twice removed from their MSPs vision. Again, everyone must adapt to the changing environment and technology, but MSPs should especially be aware of what's available to help them in terms of new technologies for SaaS monitoring and Wi-Fi management from a remote perspective.

Do you outsource network related tasks?



figure 3.2

Which network tasks do you outsource?

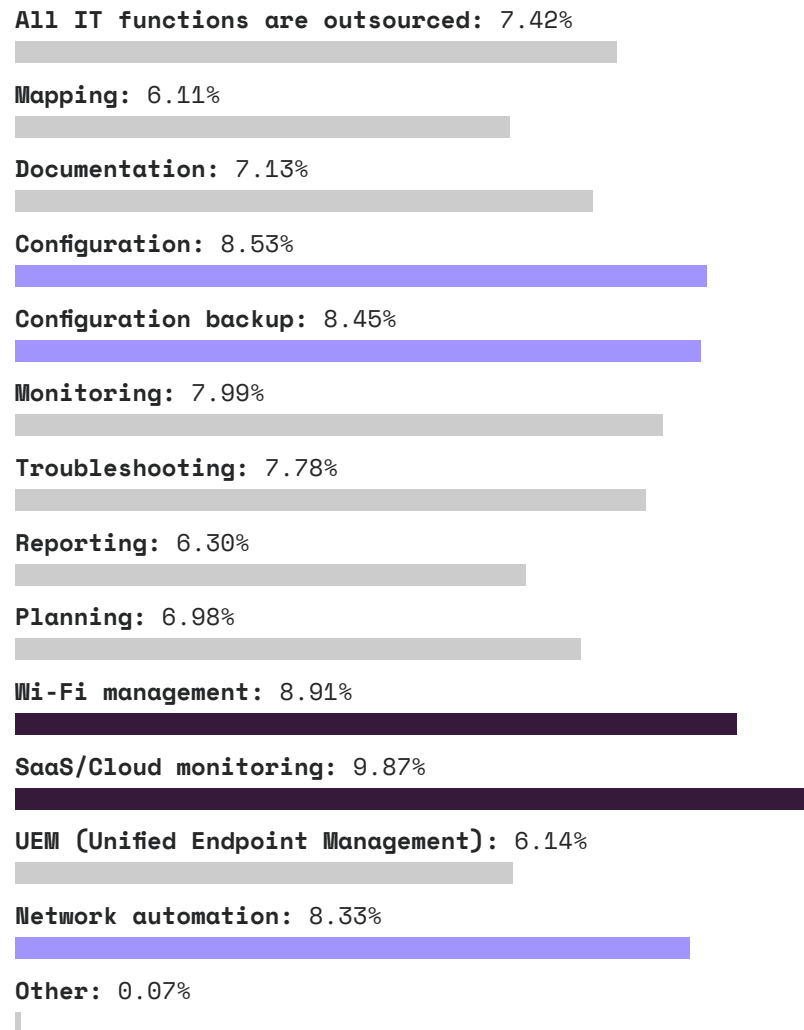


figure 3.3



Interestingly, on the continued topic of SaaS and Wi-Fi, it seems many organizations are planning to invest in these technologies in the next 12 months, as seen in [figure 3.4](#). It is likely that IT leaders are planning to invest in solutions that can help with network visibility for hybrid working conditions. It is great news that many IT professionals are aware of a gap in their monitoring capabilities. What else can we do, while technology advances in these fields and the focus of IT continues to be End User Experience?

Auvik insights

- Half of respondents are already taking on tasks like Wi-Fi and SaaS Management.
- Most organizations currently outsource at least some tasks related to the network, including Wi-Fi and SaaS management.
- IT leaders are planning to invest more in solutions for Wi-Fi and SaaS Management in the next 12 months.



Planned network and IT investments in the next 12 months

ITSM (IT Service Management): 14.31%

NPM (Network Performance Monitoring): 9.76%

Wi-Fi management: 14.80%

SaaS / Cloud monitoring: 14.97%

UEM (Unified Endpoint Management): 9.01%

Network hardware: 12.42%

Network automation: 11.95%

SD-WAN: 5.33%

IPv6: 4.39%

No planned investments: 2.94%

Other: 0.14%

figure 3.4

PART 4

End users demand faster and easier IT network solutions

The End User, or IT's biggest customer, is the driving force in much of an IT professional's work.

As we saw previously in figure 1.6, 45% of those surveyed for this report are measured by the satisfaction of their customers. Whether we discuss an in-house IT team who are serving their colleagues, or an MSP who serves their clients, the end user must always be capable of productivity. That means they also need to be online, with operable technology to do their work. More than ever, as we reach for The Last Mile of the Office Network, this means they also need to be reachable everywhere. It's no surprise that this means there are many more challenges facing IT teams today.

In [figure 4.1](#), we can see that Budget and Cost are the challenges on the mind of most of the IT professionals surveyed. Runners up include security, shortage of skilled professionals, and, as we previously discussed, network visibility.

What can be done to address these challenges?

It's easier said than done.

What are some of the challenges facing your team?

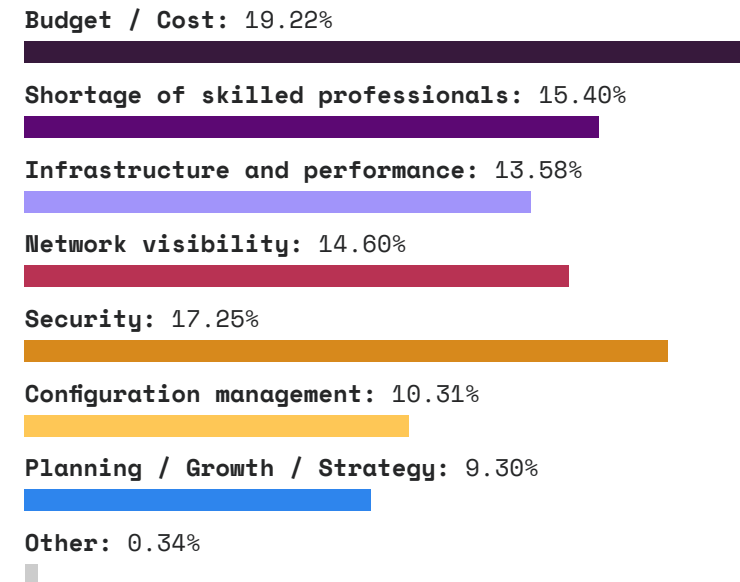


figure 4.1

IT teams need to become faster at solving problems, and they need their tools to do so to be accessible and easy for even entry level team members to use. It's not just because that will make their jobs easier—the End User demands it. Gone are the days where a loaner laptop from the service desk could bide time for a disgruntled employee, because that employee could now be on the go in a coffee shop miles from anyone on the IT team

Network activities on your wishlist

figure 4.2





We know from Parts II and III of this report that network automation can do a lot to help IT professionals spend less time on tedious tasks like documentation, and SaaS and Wi-Fi management are becoming vital technologies for the future. But do the respondents in this report agree?

They do.

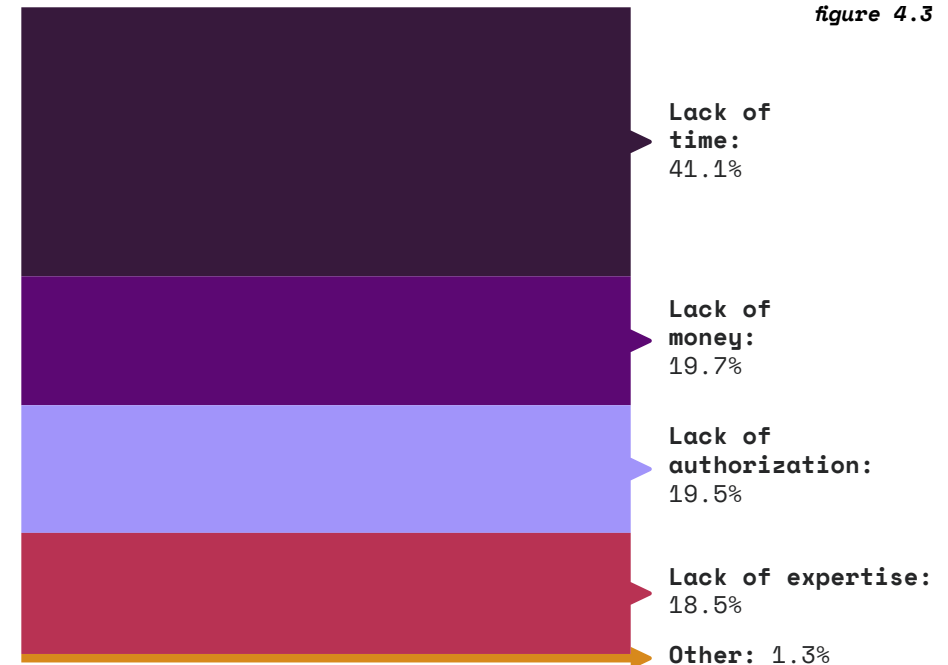
30% of respondents noted Network Programming and Automation as an item on their project wishlists. Additionally, significant responses include researching new technology, strategic business initiatives, and security. All of these topics tie back to one key theme: IT professionals see gaps in their technology stacks and their visibility. They know they have limited time and budget to address this (see [figure 4.3](#) where 61% in total list time or money as blockers), and they also have to deal with putting out fires, so a lot of it is left on the backburner.

It doesn't have to be.

Today's IT solutions are getting faster and easier to use than ever, and it can be a worthwhile investment to look into network management software. Reallocating senior personnel from monitoring and enabling entry level or L1 techs to resolve more tickets on their own will pay for itself. Investing in SaaS and Wi-Fi management is worth it when much of the workforce is in a hybrid state and will continue to be. Remember, time is money, and hours of work spent putting out fires is productive time that can't be won back. Solving for a lack of network visibility is also vital to continuing business operations in a world where IT needs to reach The Last Mile of the Office Network.

What's getting in the way of your network wishlist?

figure 4.3



Auvik insights

- A driving factor in IT is the End User or Customer.
- 45% of respondents say success at their organization is measured by End User Experience.
- IT professionals know they need to have faster and easier solutions to meet their End Users' needs.



Conclusion

**You can't secure what you can't see.
You can't put out fires you can't see.
You can't boost productivity or show
applications that are dragging it down
if they exist somewhere you can't see.**

Visibility is essential to owning The Last Mile of the Office Network.

We've discussed hybrid work's growing network management needs, and the vital role of network monitoring automation in hybrid working conditions. We've evaluated SaaS and Wi-Fi management as new fields to watch, and noted the significance of having faster and easier IT solutions to better serve the End User.

If there is one thing to take away from this report, it is that the network has evolved beyond the average IT professional's control, and it will only continue to do so as technology advances and so does the state of work. To keep up, we must adapt, automate, and advance with it.



Auvik insights

- Network visibility is essential to reach The Last Mile of the Office Network.
- Network management needs are continuing to grow.
- Network monitoring is vital to the future of work.
- Reaching further than the office network requires a solution for SaaS and Wi-Fi management.
- End Users will demand a faster and easier IT experience.



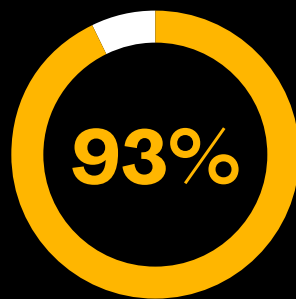
APPENDIX

Methodology

This report presents the results from an online survey that was conducted on behalf of Auvik Networks and was completed by IT managers, IT directors, IT specialists, network managers, and network administrators working in North America. The survey was fielded in Q2 of 2022. The objective of this survey was to better understand how IT administrators at companies of various sizes manage their networks, how knowledgeable and confident they are about their networks, which tasks occupy the majority of their time, and how often they outsource network-related tasks and functions. It includes respondents from Managed Service Providers (MSPs) and internal in-house IT teams.



**of respondents
use Auvik**



**of respondents are
happy with Auvik**

We included a question in this report's survey asking respondents about the network monitoring solutions they have seen and use. 20% of those surveyed currently use Auvik, and reported a 93% satisfaction rate with our software. If you're looking for a solution that's faster, easier, and future-thinking, it's a simple choice.

**Visit auvik.com
to start your free
14-day trial today.**

**The network is everywhere work happens.
Control it all, faster and easier, with Auvik.**

Auvik provides cloud-based IT monitoring and management at astonishing speed. It lets IT professionals visualize IT infrastructure, SaaS applications, and shadow IT in minutes, identify and resolve issues in seconds, and recover valuable time in their day.

Copyright © 2023 Auvik Networks Inc. All rights reserved. Auvik is a trademark of Auvik Networks Inc.

