



Automation Yields Efficiency and Resiliency Benefits

The 451 Take

Although many organizations have been seeking to modernize their IT infrastructures in recent years, few have managed to reach the pinnacle in terms of automation. In our recent Voice of the Enterprise: Storage, Budgets and Outlooks 2020 survey, barely 4% of respondents claimed their infrastructure management had fully autonomous remediation. Infrastructure management automation is not an easy goal for most organizations to attain, and it involves a process that, without assistance, can take several years.

That being said, automation is a necessary goal given that most organizations today are seeing their workloads increase at a rapid pace, while their budgets are not growing at anywhere near the same rate. For example, while we often see data growing at annual rates approaching 30%, in our recent survey, budgets were only expected to grow 10% this year – so clearly IT professionals will continue to face a reality where management expects increased productivity while providing fewer resources to handle the growing load.

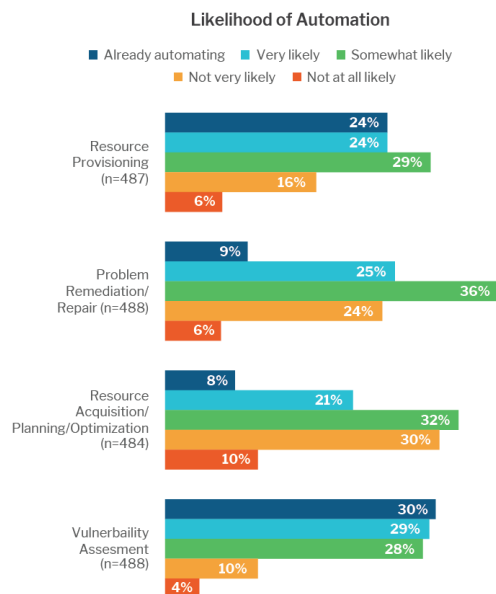
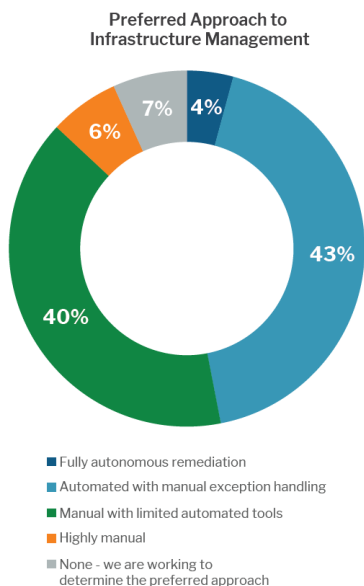
Another factor to consider is that organizations do not have to reach the ultimate state of fully autonomous remediation or other objectives such as automated provisioning in order to reap major benefits. Even partial automation, which occasionally relies on human intervention, can reduce the workload for IT professionals while also improving the efficiency and responsiveness of administrators. In the our survey, 43% of respondents claimed they were mostly automated with some manual exception handling, and 66% of these respondents reported having increased reliability and consistency, while 55% of them saw improved security, and 47% had the benefit of accelerated access to infrastructure resources.

Automation is Progressing at Different Rates

Source: 451 Research's Voice of The Enterprise: Storage, Budgets and Outlooks 2020

Q. What is your organization's preferred approach to IT infrastructure management? Base: All respondents (n=475)

Q. What is your organization's likelihood to automate each of the following processes? Base: All respondents



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Business Impact

HALF OF ORGANIZATIONS ARE AUTOMATING OR WILL SOON BE AUTOMATING RESOURCE PROVISIONING.

In the age of cloud-native environments and with the rise of DevOps, provisioning speed has become a critical issue. Developers and business stakeholders are under pressure to convert business data into insights and revenue as fast as possible, and they have little to no patience to wait for infrastructure resources. With predefined templates, IT organizations can make provisioning faster and repeatable with automation.

PROBLEM REMEDIATION AND REPAIR IS AN AREA OF FUTURE GROWTH FOR AUTOMATION. Only 9% of surveyed organizations are using automation to handle remediation and repair in their environments, which is understandable given that many administrators still want to be hands-on with repair operations, especially when dealing with mission-critical workloads. As automation becomes increasingly common and trusted, more organizations will allow automation to handle repairs, especially if this will reduce downtime, and also reduce the time spent troubleshooting and resolving issues.

VULNERABILITY ASSESSMENT IS ALREADY A KEY AREA WHERE ORGANIZATIONS ARE USING AUTOMATION. In our survey, 30% of respondents were using automation to improve their vulnerability assessment, with an additional 28% indicating they were very likely to use automation for this purpose. This benefit is typically linked to security teams, which use automation to identify and deal with false-positive incidents that occur all too often. By eliminating these false positives, security professionals are able to eliminate distractions and focus on key issues, which may develop into significant problems.

FEW ARE IMPLEMENTING AUTOMATED RESOURCE ACQUISITION NOW, BUT PLANNING AND OPTIMIZATION ARE KEY STEPPING-STONES. Given the complex nature of hardware and software acquisition, only 8% of surveyed organizations are using automation for this task. That being said, automation can provide proactive guidance to help organizations prepare for future capacity additions, and it can also help ensure that existing resources are utilized efficiently by key workloads.

Looking Ahead

Some IT professionals admit to having a fear of automation, due to the potential threat of automation eliminating their roles. With business expectations driving a need for instant access to infrastructure resources while ensuring minimal downtime, manual IT organizations will not be able to keep up with requirements in the near future. IT personnel should view automation not only as a way to improve the reliability and responsiveness of their environments, but also as a way to expand their career opportunities with an IT automation skill set.

The advent of artificial intelligence/machine learning-enhanced management tools will help organizations accelerate their automation efforts by providing proactive alerts and resource planning recommendations to boost the efficiency of IT personnel. By leveraging these tools, organizations can accelerate their automation efforts.

Meanwhile, the COVID-19 pandemic has highlighted the need for advanced remote management by forcing IT organizations to deal with infrastructure issues when it is not always possible to be physically present in datacenters. This trend will continue, and will serve as another key reason that automation should become a mainstream element in modern IT infrastructures.

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