

# Automation 101

# Automation is what drives efficiency and productivity for IT professionals.

The goal of automation is not to eliminate or replace human labor.

Instead, it can increase productivity and quality beyond what is possible with your existing team. That means you can realize economies of scale and establish predictable quality levels. With automation, your team is able to manage more endpoints by eliminating routine and mundane tasks. This gives your technicians the time to focus on higher priority and more complex tasks.

As an IT professional, you need to provide efficient service while improving consistency and quality. Building automation into your IT department will make that possible. In this eBook, you'll learn tips and best practices to successfully incorporate automation into your IT department, including:

- Why automation is vital to successful, scalable service delivery
- The tools you'll need to master automation
- How to start building automation into your IT department

Let's get started with answering your first question—why does my IT department need automation?



# 1 Why Automate?

At the most basic level, automation allows you to support more users without having to continually hire new people. By automating certain tasks, you eliminate the need for human intervention. As a result, your employees are free to focus on higher priority issues. Automation also provides consistent results across all users, every time—from simple tasks like antivirus management and disk defrags to higher-level tasks like software deployment and patching.

Automation decreases response time and gives you peace of mind because you know issues are being resolved. Completing tasks manually takes time, but your employees expect quick results. With limited resources to handle diverse maintenance requests, there will always be tasks that simply don't get done. You risk important issues falling by the wayside and employee productivity plummeting. Automation keeps downtime to a minimum, and it is also better for your technicians. No one wants to sit and do the same mundane task all day, every day. If you take those boring tasks and automate them, everybody wins.

**By mastering automation, you can deliver consistent, repeatable service in a controlled and organized fashion every time. Employee satisfaction and peace of mind comes with knowing you are effectively maintaining your company's IT systems.**





# 2 Must-Have Automation Tools

Behind every great IT department is a solid set of tools. You may have specific products that you like, and that's fine as long as you've got the necessary categories covered. The tools we'll cover are must-have tools you'll need in order to automate your IT department.

## Client Management Tools

Client management tools are used by IT departments to better manage employees' IT needs and provide more efficient support.

Agent-based client management tools are typically more stable and reliable because they require less network traffic. Remote agents can connect without VPNs, firewall issues or router configurations when users are active. Once deployed to the target servers, the agents are used to perform tasks automatically, allowing pre-emptive desktop and network management without interruption to the user. Your client management tool is where the majority of your automation will occur, so look for one that offers an easy-to-use and powerful scripting engine.

## IT Service Management (ITSM)

An ITSM platform provides the structure and functionality you need to run your IT department. With the right ITSM platform, you can organize your company around one system, enabling everyone to connect and communicate through one unified and fully integrated operational platform. The right ITSM simplifies:

- Ticket management
- Business processes and workflows
- Help desk and service management
- Project management
- Billing and reporting
- And more

For even more automation and efficiency with your client management tool, be sure to look for a global client management tool that integrates with your ITSM platform and provides users with two-way synchronization of companies and tickets.



# 3 Getting Started

The first step is the most important. You have to dedicate a resource to automation creation. This doesn't mean you need to hire a new full-time expert. It means assigning responsibility and accountability to a single person. If you're a small IT department, you might choose a single technician to dedicate four or five hours per week to automation. If you're larger, you might be able to have a dedicated resource whose sole responsibility is managing and automating your client management tool. Either way, you must have one person who becomes your automation specialist. Even if that resource can only focus four or five hours a week on automation, that's time well spent.

Automation is a force multiplier that flows down to your other technicians and makes them more efficient. Now, when one of your technicians is tasked with updating Flash® for users, all they need to do is run a script created by your automation technician. If you take automation one step further, the update just happens. Your techs don't have to do a thing because your client management tool detects that Flash® is outdated and automatically triggers the update script.





# 4 Importance of Training

To get the full ROI on your automation, you need to treat it like an employee. When you hire someone, you make an investment in that person. You spend time and resources training and nurturing new employees so they can reach their full potential. The same should be true for your investment in automation.

Your dedicated automation resource should become an expert in your client management tool and understand how it can incorporate automation—from scripting and policy-based tasks to creating monitors that drive corrective actions. Your automation specialist should also understand the interconnectivity between your client management and IT service management solutions so they can properly configure your ticket escalation and build workflows that will automate even more of your IT tasks.

The next step is to document all of your processes, which will provide you with a clear step-by-step path that sets you up for successful scripting.

Staff dedicated to automation should learn scripting languages like PowerShell and anything else that will facilitate the growth and expansion of automation. Education can then progress to more advanced topics like policy-based automation and monitoring with auto-remediation. A simple script can save countless technician hours, but policy-based automation multiplies that because it enables you to manage a group of similar computers as a single unit. This is immediately scalable versus managing each computer individually or running a script one-by-one.





# 5 Identify Automation Opportunities

The next step to jumpstart automation is to identify automation opportunities. To be a candidate, the solution to the problem must meet two criteria: 1) it must be resolved consistently through documented steps, and 2) the solution should be performed without using the user interface. How are the right issues identified? Start by making a list of repetitive issues and problems. Your technicians will be able to pinpoint most of these. Include the mundane tasks that your staff hates, like disk defrags and reviewing backup logs.

Once everyone on staff is considering how automation can help, you can rely on weekly check-ins to pinpoint the biggest pain points your technicians are dealing with. Those pain points should be first in line when it comes to focusing your automation efforts.

After your list is compiled, decide which tasks can be automated and which can't. Explore the marketplace to see if a script has already been written; if it hasn't, have your automation specialist take on the task. The goal is to have a help desk that is only fielding calls when something out of the ordinary is happening. You don't want your technicians updating copies of Flash® and Acrobat® when you can automate a majority of your management tasks. From antivirus and backup monitoring and remediation to software installation and patch management, automation leaves technicians free to do project work, conversions and more.

**If your technicians have to shadow a machine to fix a routine problem, it's time to rethink your processes.**



# 6

# Test Before You Deploy

This seems like a very simple task, but it is frequently overlooked. Before deploying any solution to your IT system, it is important that tools are tested on multiple computers to verify functionality on various operating systems. The last thing you want is a script that causes unforeseen problems and results in employee downtime.

## What Makes a Great Script?

Automation is not just writing a script and running it against a client. It's having a true end-to-end approach that is scalable and repeatable. It doesn't matter if it's going to run on two machines or 2,000. It must do the exact same thing in every single occurrence. If it's an installation script, it should run on any version of Windows, whether it's 32-bit or 64-bit. The script must be intelligent enough to put everything in the proper place.



# Summary

As you script solutions to your problems, you will allow for 6 to 10 times the productivity. As you add automation, you continue to exponentially multiply that productivity over and above the benefits you gained initially. This allows your staff to work on other issues. After all, you hired them because they are excellent technicians, not because they know how to restart a service.

## About LabTech Software

LabTech Software is the brainchild of an IT professional who struggled with the usual challenges and inefficiencies of a reactive IT maintenance and support model. LabTech—its flagship solution—was born out of the urgent need to eliminate technician inefficiencies and the desire to provide preventive and proactive service for an organization. Developed with cutting-edge, agent technology, LabTech is the only global client management platform created by system administrators for system administrators to automate your IT services and eliminate inefficiencies. For more information, please visit [labtechsoftware.com](http://labtechsoftware.com) or call 877.522.8323.