

IBM i SCHEDULING SURVIVAL GUIDE

AVOIDING THE WORST-CASE SCENARIOS

A CLEAR PATH TO AUTOMATION





Founded in 1982, Help/Systems is the world's leader in software solutions for IBM® Power Systems™ running IBM i. Its Robot systems management solutions include tools for enterprise scheduling, network monitoring, message management, and reporting. It was the first American software company certified under the ISO® 9001 standard and is certified compliant with the updated 9001:2008 standard.



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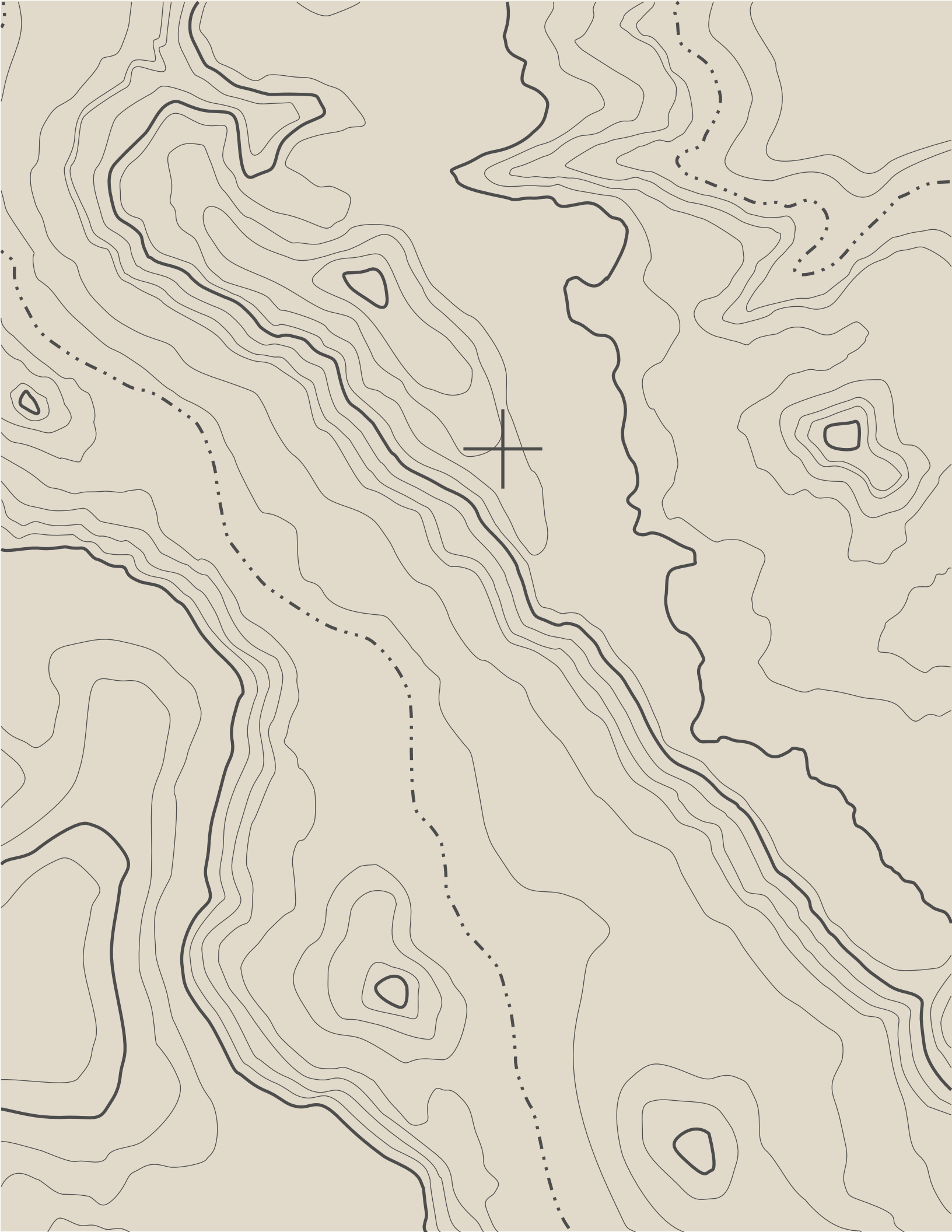
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THE JOURNEY TOWARD GREATER HEIGHTS



Imagine yourself at the base of a mountain, looking up. Jagged outcroppings obscure your view of the peak, though you know it must be up there...somewhere. You've heard stories about the pride and satisfaction that comes from reaching the summit, and you consider making the climb. And yet, from your perspective, all you see are obstacles and uncertainty.

While the IT department is no Everest, considering the climb toward enterprise scheduling automation can be intimidating. So, you psyche yourself out. Rather than focus on automation's potential, you fixate on potential perils. Instead of a peak, you see a cliff.

You have the desire to begin the journey toward a better operations environment—what you need is the right information from someone who has been there. You need a guide.

We created this resource to help make your decision easier, and to help make your rollout more manageable. Think of it as a survival guide. [We provide you with a strategy developed from over 30 years of helping customers not only survive the automation process, but flourish.](#) When you achieve scheduling automation, you will join these success stories and be well on your way toward ultra-efficient operations.

We believe in managing systems by exception. That is, if processes run smoothly, on time, and without errors, let them be. If problems arise, notify the responsible party. This guide addresses this approach and the desirable features to look for when evaluating an enterprise scheduling solution.

[After completing the steps in this guide, you will have a project outline in place and should be able to complete your trek toward software purchase and implementation with confidence. We share the best practices we've discovered through the years, so you won't have to go it alone.](#)

Don't worry—you'll make it to the top.

Imagine yourself at the mountain's peak. Your job scheduler is in place, and it is having an enormously positive effect on your day-to-day operations environment. Instead of spending time putting out fires caused by jobs running in the wrong order or at the wrong time, you now concentrate on offering your customers—outside clients and internal stakeholders alike—more services and more innovative ways to increase productivity.

That's your goal. Are you ready to take the first step?

WHAT IS AUTOMATED SCHEDULING?



ORDER ENTRY ERAS



1980s

Punch cards are fed manually into mainframe computers.



1990s

Orders are keyed into PCs, though multiple batches require multiple entries.



2000s

Y2K is uneventful. Internet sales explode, and processing methods are compressed.



TODAY

Orders are placed, picked, and shipped in minutes. Systems handle interactive and background processing concurrently, and instead of jobs running in batches, events trigger processes round the clock.

In the 1980s, computer operators using a mainframe ran many jobs and processes manually. Operators spent much of their time documenting process completion codes and statuses. Runbooks were the backbone of every operations area, providing details about when jobs should run and what to do when errors arose. Runbooks also acted as checklists, and as tasks finished, operators entered the date and time of the completion code, along with their initials. A great deal of time was spent updating and maintaining spreadsheets to reflect this information, and these documents became part of the company's change management system.

Comparing a modern order entry process with one from 30 years ago, we find that all of the same processes had to occur in the 1980s, but all of the triggers were manual. The process went like this: a call center employee received an order and filled out a form; the form was delivered to the data processing office, where another employee punched cards with the correct information. An operator manually fed cards into the mainframe computer, which produced the pick list during the batch run that evening. The lists were distributed and used to pull the correct orders. Team members punched additional cards for mailing labels and delivery instructions. After the cards were fed into the mainframe again the next evening, another batch ran and produced the needed instructions.

Each step in the process required another round of card punching and another batch run, with tedious manual processing involved in each step.

The evolution of batch scheduling means outside events now drive schedules, and those events can occur anytime. Batches run as soon as they are needed, based on schedule drivers and triggers, because downtime is not an option. During the software evaluation phase, remember that your scheduler must be able to monitor for important events and then initiate the next step in the process.

WHY YOU SHOULD MAKE THE JOURNEY

For many people, the reasons to initiate a scheduling automation project are obvious. However, they may not be apparent to those tasked with the chore of submitting jobs manually. After all, inertia is a powerful force. Unless a budget crisis or a mandatory compliance issue mandates change, the status quo remains.

But it doesn't have to be this way. You are not obligated to sit back and watch as your runbook grows increasingly complex and the errors that result devour company time and profit. You don't have to settle for a world of unplanned downtime and month-end traumas, a world where so much of your energy and training is spent reacting rather than looking forward. **Remember: No system is too complex or too custom for automation.**



Unless a budget crisis or a mandatory compliance issue mandates change, the status quo remains.

Neither do you have to deal with finger pointing and politics that inevitably sprout up around errors and inefficiency. Instead of spending your time in meetings, arguing over which team is at fault for last night's processing snafu, implement centralized scheduling consoles that allow you to drill down into log data. If you want to know who forgot to fasten the safety line to the mountain, you shouldn't have to guess.

If you recognize any of the following scenarios in your operations environment, it may be time to challenge the status quo and push for change:

CRISIS MODE

Your staff wastes valuable time fighting fires, perhaps because someone made a mistake or didn't catch a processing error in time. Operators, who check off jobs in a runbook, submit tasks out of order or with incorrect parameters. You dread Monday mornings and the unpleasant surprises that await you.

MISSED SERVICE-LEVEL AGREEMENTS

Jobs don't run at the optimal times to best meet your Service-Level Agreements (SLAs). You are not notified of failures and delays in your processes—instead, you have to go looking for them. You lack the ability to forecast the work that must take place over the next 24 hours, critical information that could affect your ability to keep system resources available.

AUDIT NIGHTMARES

You failed a portion of your Sarbanes-Oxley audit because you can't document batch activity or job changes. You don't track jobs that end abnormally, and you don't document rerun procedures to be used in case of failures.

WHAT IS AUTOMATED SCHEDULING?



⊖ MAJOR OBSTACLES:

Cost
People

⊕ CONVERSE BENEFITS:

Availability
Reliability

BEWARE OF FALLING ROCKS

If you decide it's time for a change and choose to undertake a scheduling automation project, be prepared for a few obstacles. First, remember that you are automating processes currently controlled by humans. The people affected may put up roadblocks, so you will need to know how to deal with these personnel issues as they arise. Other potential roadblocks center on money, time, and staffing:

- Insufficient budget for full-scale automation
- Lack of time
- Reliance on outdated tools
- Lack of staff buy-in
- Uncertainty and lack of confidence

The upshot is that for every falling rock, there is a plan of action to help you avoid it. For every big job, there is a process to help make it manageable. And for every uncertainty, there is an expert out there who can guide you and give you the confidence you need to succeed.

FIELDS OF GREEN

Generally, obstacles to automating computer operations fall into two categories: cost and people. Conversely, two common benefits derived from automation projects are availability and reliability. Both of these factors are convincing arguments to proceed with automation projects, and normally supersede the need to cost-justify them. However, as projects advance, additional cost factors come into play. The need may arise for additional investments in such things as automated tape librarians or virtual tape libraries, additional software, and training and consulting services. These should be compared with historical downtime and rerun costs, costs associated with missed SLAs, and the impact of lost customer goodwill as a result of late deliveries, for example.

Over the years, we've watched numerous companies implement automated systems and go on to realize substantial cost savings for their efforts, primarily because they meet SLAs and experience fewer errors that require data to be reprocessed. Ultimately, they provide better service to their end users.

While cost savings are compelling, they are not the primary reason to automate scheduling. Instead, focus on improving service to end users of your system. As you achieve this goal through the use of automation software, the costs associated with providing good service will improve as well.



GOING IT ALONE

Efforts to automate through in-house development or free solutions might succeed temporarily, but the scope of such success is usually narrow. (Because you *can* climb a mountain alone doesn't mean you *should*.) Homegrown systems typically fall short when it comes to the maintenance and enhancements required to continue the automation process. These efforts are often both expensive and a low priority for the development organization. As a result, most internally developed operation automation efforts stall after achieving limited results. Similarly, built-in solutions lack many of the features required to achieve full automation. For instance, dependency processing, notification options, and reporting features are usually absent. Many companies that choose this path eventually turn to off-the-shelf automation software.

ADAPT TO SURVIVE

Automation projects often bring personnel issues to the forefront. While people are more likely to accept change if you give them an active role in the project, many operators still view automation as a threat. Computer operators who feel their jobs are in jeopardy might find ways to throw wrenches into the testing, evaluation, or implementation of new automation software. Operations supervisors may consider reducing their staff, viewing them as threats to their own positions. The easiest way to fail at implementing an automated schedule is to not have a strategy for handling staff concerns and managing staff participation.

No company wants to part with good employees or damage morale. Besides, companies are changing so fast that attrition alone is not a viable solution.

The answer is to evolve and grow the role of the computer operator. Give operations personnel new responsibilities as operations analysts, networking technicians, and PC administrators. Education is the key to success in these new roles, so your staff must be willing to learn new skills. But you must provide the opportunity. As old positions fade away, new technology gives rise to new, and often greater, responsibility. Companies must recognize this in order to take advantage of the talent they already have in their midst.

Certain tasks, like mounting tapes and loading paper, require an off-hours operator. In the case of interactive processes, an operator must enter dates and parameters. Such processes need to be addressed during the automation project. Underlying issues like the reliability of the hardware involved have to be tackled in order for the project to succeed.

Some problems can be addressed with an automated scheduling tool. Others require a change in hardware, such as replacing a magnetic tape drive with a virtual tape drive to avoid media errors. Still other issues require a change in mindset. But, rest assured, these are obstacles you can overcome.



Just because you can climb a mountain alone doesn't mean you should!

USING OTHER MEANS:



FREE SOLUTIONS

- Provide only temporary success
- Have many limitations



IN-HOUSE SOLUTIONS

- Lack continuous enhancements
- Expensive
- Low-priority for development



BUILT-IN SOLUTIONS

- Lack of features to achieve full automation
- Unable to customize

POSTCARDS FROM THE MOUNTAIN TOP



AUTOMATION COST JUSTIFICATIONS:

- Cost per hour to conduct business
- Increased workload
- Hiring freeze
- Job satisfaction
- On-call staffing costs
- Error costs
- Missed SLAs

Halfway up the mountain, when your legs are rubber and your shoes concrete, a glimpse of your ultimate goal can be a great motivator. You need to remember both where you're going and why you're going there. Likewise, throughout the automation process—from deciding whether or not to proceed, to implementation—focus on the benefits you stand to achieve.

Hard benefits are cost savings to which specific dollar amounts can be assigned.

For example:

- The ability to reassign operators to more advanced duties; no new staff required
- Manage multiple schedules from one location; create and deploy jobs centrally
- Fewer time-wasting outages
- Fewer errors mean fewer jobs to re-run
- Automating processes to run during off-peak hours avoids necessity for memory upgrades

During the cost justification stage, quantify potential benefits by tracking unplanned downtime. What does it cost your business to be down for one hour? What does it cost, in terms of budget and job satisfaction, to have an individual on call continually in case problems arise? Do your best to track the costs associated with manual operations for three to six months. You may find the process uncomfortable, but be honest about the negative impacts on your business.

Even if your worries seem minor after you conduct this exercise, remember that small problems become major headaches when not addressed. Your goal with automation is to eliminate lag. If a process runs behind or too quickly, you need to know right away. Take a proactive approach to operations and work smarter, not harder.

In addition to the hard benefit of cost savings, you will discover soft benefits such as improved operations quality, since most operational snags are the result of human error. [Both soft and hard benefits can be derived from moving operators out of the data center and into end-user areas, where they can help resolve user problems and provide other valuable services.](#)

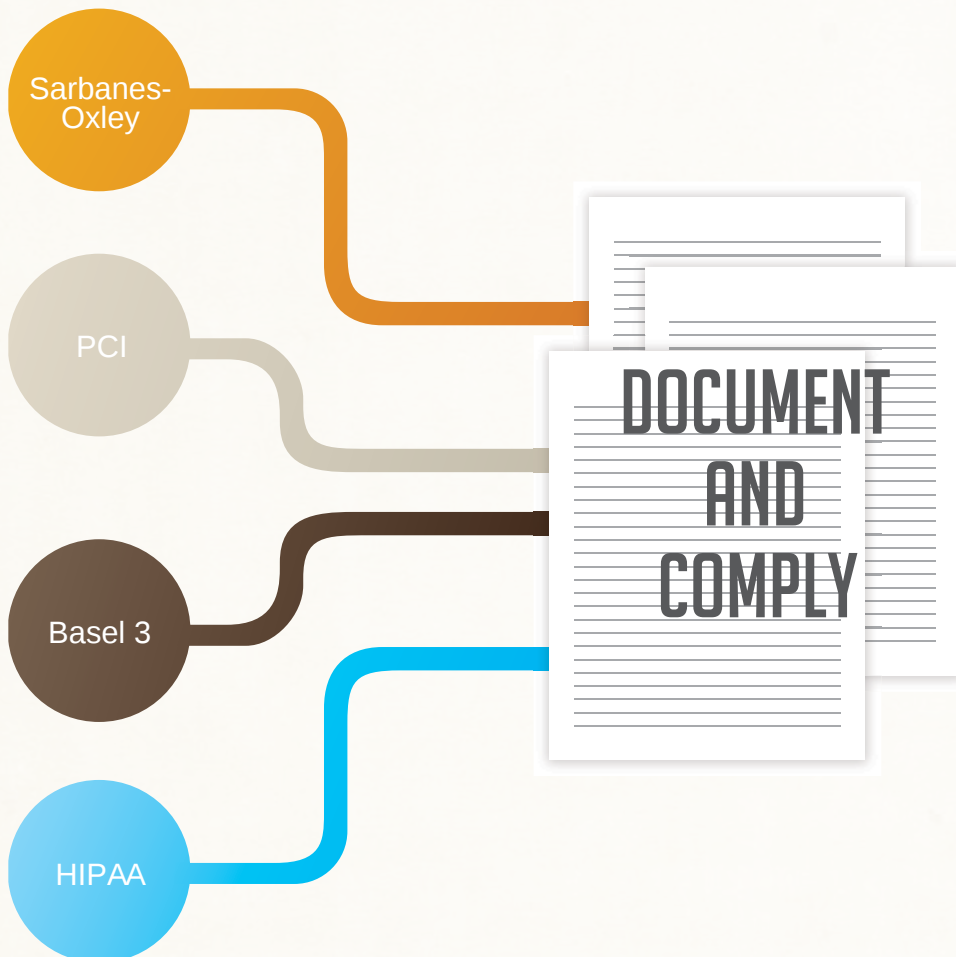
As operational problems become fewer and functions become better organized, schedule automation eliminates disorder. When a department runs smoothly, job satisfaction for operations personnel increases along with productivity, and turnover is reduced.

Here again are a few benefits of schedule automation:

- More productive, satisfied staff
- Better-utilized hardware
- Improved organization

DOCUMENT AND COMPLY

A major perk of automation is the improved ability to document. If you worry about Sarbanes-Oxley, PCI, Basel 3, or HIPAA compliance, or about the many requirements based on the COBIT framework, automation tools can help you breathe easier. Onboard tools included with scheduling automation suites provide the documentation auditors require, so IT audits are a snap.



Onboard tools included with scheduling automation suites provide the documentation auditors require, so IT audits are a snap.

BEFORE YOU SET OUT



KNOW YOUR GEAR

Survival gear has come a long way, and so have job schedulers. Some schedulers are now workload automation tools—they do more than just ensure that tasks run at specific times. Workload automation solutions monitor systems for errors or changes, interface with help desk and trouble ticket systems, and automate error recovery. This type of event-driven scheduler monitors systems for events like file additions, file changes, directory changes, process starts, and process completions, and acts upon them in a predetermined manner. To address the complexities of today's multi-platform operations environments, some schedulers can perform these tasks across different systems. In essence, these solutions have become the new computer operators.

The ability to monitor systems and react appropriately is important, since modern business models hinge on continuous availability. Downtime can damage everything from brand image to employee morale, so unexpected outages must be avoided at all costs. [Workload automation tools solve downtime issues by removing uncertainty. They largely eliminate human errors, and their precise coordination and optimization of resources \(e.g., server disk space or FTP availability\) means jobs can complete accurately and on time.](#) Comprehensive workload automation tools include retry capabilities and notification functionality, so that processes wait until resources are available before commencing. In the event of a delay, they can notify support staff, who can address the problem and avoid missing a SLA.

Workload automation tools interface with numerous business applications (financials, ERP, data warehouses, system maintenance tasks and backups) across platforms and allow staff to manage them from a central location. They allow the viewing of task dependencies and prerequisites easily, via a graphical interface. Security and auditing procedures must be followed so that system administrators can be freed up for more complicated tasks and the scheduling function can be performed by a production control area or help desk. Auditors require a division of duties so that no one area has too much access. Moving scheduling out of the system administration area or development area is generally a requirement of all internal audits. The operations area that provides the service to the rest of the business needs to be in control of the schedule. A comprehensive tool has built-in security so that appropriate access can be granted to each group while adhering to security policies.

Typical problems that need to be solved:

- Downtime caused by errors or job delays
- Complex schedules
- Missed SLAs
- Unfulfilled audit requirements
- Need to re-run jobs that run out of order or on the wrong day

Business requirements:

- SLAs
- Application interfaces
- Help desk support
- Staffing constraints
- Audit requirements
- Budget constraints

Functional requirements:

- Ease of use
- Complex schedules with dependencies
- Dependency types
- Security requirements
- Hardware requirements
- Communications requirements

Determine the costs of your current scheduling system, including:

- Personnel costs (wages and benefits)
- Software maintenance and support costs
- Downtime costs (IT department and individual business units)
- Overtime costs for off-hours coverage

Use these calculations to determine a budget for your new solution. If necessary, collect estimates from enterprise scheduling vendors to form an idea of the cost range involved. These costs are often based on your hardware type or operating system, the number of systems to be automated, or the number of jobs to be scheduled.



Some schedulers are now workload automation tools—they do more than just ensure that tasks run at specific times.

WORKLOAD AUTOMATION SOLUTIONS:

- Monitor multiple systems
- Interface with other applications
- Automate error recovery
- Monitor for changes
- Eliminate human errors
- Optimize resources
- Send notifications
- Allow easy viewing
- Secure systems and information
- Divide duties



BEFORE YOU SET OUT



PROJECT TEAM INCLUDES:

- Decision maker
- Operations staff
- Infrastructure representative
- Development staff

Designate project team and get buy-in from:

- Decision makers
- Operations
- Infrastructure
- Development

When you're scaling that rock face, who do you want holding your rope? You'll need to assemble your project team, preferably early in the process to ensure key stakeholders are supportive of the plan. Your team will likely include a decision maker, who controls the budget; operations staff, whose day-to-day jobs will be affected by the change; a representative from infrastructure, to assist with installation and implementation; and development staff, to make changes to application programs if necessary.

CONDUCT EXTERNAL RESEARCH

Once you've determined your business needs and the problems that need solving, it's time to research your options. Below is a list of resources that can be used for researching available automation solutions.

- Google
- Trade journals
- Software search portals like IBM
- LinkedIn
- User groups
- Trade shows
- Businesses like yours

1

Create Project Team

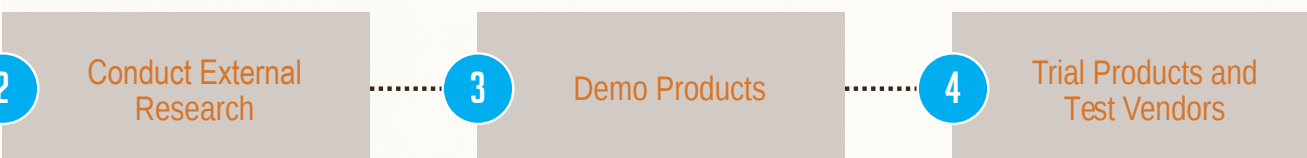
Most vendors provide multiple ways to access information about their products, including their website, white papers, customer case studies, and data sheets. Check the available information against your business requirements and pare your list down to a maximum of three candidate products.

Schedule a product demonstration with each vendor, using your business requirements to drive the demonstration. [Ask all pertinent questions and make sure you get satisfactory answers. You don't want to waste time trialing a product that doesn't meet your needs or your budget.](#)

TEST YOUR FOOTING

Next, it's time to schedule a trial period for each of the three products. When designing your project plan, set aside a week or two for each product in order to get a good idea of how it works, and how easy it is to install and maintain. Your proof of concept plan should include as many options as possible from your business requirements: security features, notification options, and the ability to handle complex schedules and dependencies. A comprehensive plan reduces the likelihood that you'll purchase a product that doesn't fully meet your needs.

Don't just test the product—test the vendor. During the trial period, make use of their support staff to determine how knowledgeable and responsive they are. Your purchase is the start of a long-term relationship with the company, so do your due diligence during the research and trial phases, and make your final decision based on how well each vendor performs. Make sure the vendor you choose is the Sherpa that can get you to the summit.



PLOTTING YOUR COURSE



In preparation for implementation, you are mapping out your areas of greatest need and pinpointing which of these projects have the best chance of success.

As you progress through pre-implementation planning for automated job scheduling software, pay attention to details. Determining more precise estimates of the costs involved, the in-house effort required, and the benefits expected usually needs to be done in order to secure funding for the project. In preparing for implementation, you are mapping out your areas of greatest need (the issues costing your company the most time, money, or opportunity) and pinpointing which of these projects have the best chance of success. To begin, consider a pilot project that will not overwhelm the participants, but instead give them a positive experience using the scheduling tool on a small scale.

TAKE SMALL STEPS

They say it is better to move forward by small steps than to take a great leap, only to fall backward. In other words, you need not hurry up the slope to automation. After you've identified which processes to automate and decided which projects to tackle first, break your goals down into manageable pieces. For example, "automate order entry" is too broad. Break it down into "process electronic orders," and perhaps further into "process electronic orders for product line A." Be sure to set milestones or progress points, and assign appropriate resources.

You'll also want to break functional areas down by shift, day of week, day of month, etc. Concentrate on your daily processes first, and then move on to weekly, monthly, and yearly tasks. If your goal is to automate off-shift work, make it a priority in your project plan. While adjusting to their scheduling tool, some companies find it convenient to start with processes that run during the daytime and then move to the off-shift tasks. Not taking on too much too quickly will help keep you from backsliding.

STAFF RESOURCES

If you plan to reach automation's pinnacle, you'll have to rely on the strengths of your team members. First, estimate how many workdays your staff will require completing each step. Identify the person responsible for completing the project, and give him or her the resources and authority to make it happen. You will need support from operations personnel, programmers, and end users. Verify end-user needs compared with the runbook.

The size and knowledge of your staff, the number of systems involved, and the scope of the project will dictate the number of people involved with implementation. Typically, your team will need between two and six members. Larger organizations may require more, but on occasion a single individual can do the job.

If in-house staff cannot fill critical roles, consider hiring an outside consultant. An expert in the field of automation tools, perhaps one supplied by your software vendor, can help you define the project's scope, ramp up progress rapidly, and guide the implementation to a successful conclusion.

Once you understand your resource requirements and have estimated your purchase costs, you can develop a project plan and estimate the overall cost and duration of the project.

SKILL REQUIREMENTS

Technical knowledge of:

- Planning tools and methodologies
- Runbook and tribal information about the job schedule
- Operating system components that handle workload
- Operating system commands and programs used to run jobs

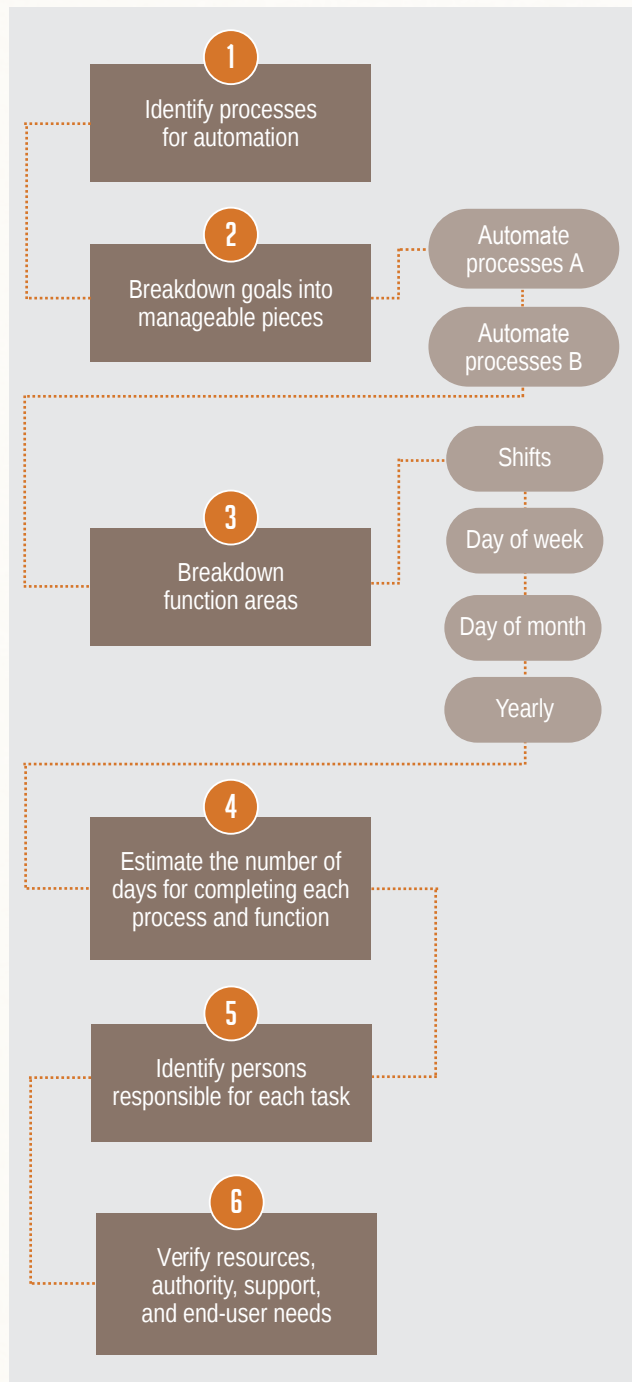
Soft skills:

- Works well on a team
- Willing to learn
- Open to change
- Persuasive
- Great communicator

Staffing needs for an operations automation project fall into two categories: implementation and maintenance.

The project manager should have a good understanding of computer operations, and be aware of both the project's general scope and specific goals. For programming tasks, individuals with appropriate skills can often be found and utilized on an as-needed basis. For applications, you may require programming assistance to modify jobs to allow them to be fully automated.

STEPS TO AUTOMATION



PLOTTING YOUR COURSE



In addition to these personnel, it is helpful to designate an operations analyst to oversee installation of the automation software and configure it. You might assign this role to a senior operator or system administrator.

The operations administrator responsible for monitoring and maintaining day-to-day operations should also be part of the implementation process. They will need to understand the automation software, and can contribute useful information concerning the daily functions and tasks to be performed.

TAKE INVENTORY

Before you begin your big climb, find out what equipment you're working with and whether it is in need of repair. As part of your planning, inventory the systems set for automation. Look at both the operating system and patch levels (service packs, PTFs, etc.) that could affect the compatibility of the automation tool. Also, consider your application software and any ancillary packages involved in the project. For example, you might configure a third party EDI to feed your ERP system with customer orders.

After you inventory, it is time to dig deeper into the details. First, collect task information for the pilot project from the runbook, and review the details with those people currently responsible for the processes. Aside from what is documented, be sure to gather any personal knowledge individuals might have about a process. Find out whether any issues need to be resolved before you can proceed. For example, a process may end abnormally once a week or once a month. This will impede automation, so engage your programming or third party technical support staff to fix the issue before proceeding. Don't wait until you're dangling from a ledge to find out that your harness is broken.

Once you've collected the process details, create a flowchart to determine true dependencies. Do this as a team—gather together those people most knowledgeable about the processes (operations, programming, business analysis). You may be surprised to find that processes which run sequentially today could run concurrently instead, depending upon available system resources (CPU and memory). The flowcharting process is almost magical in its simplicity and its ability to weed out superfluous processes.

PRE-IMPLEMENTATION CHECKLIST

- ☐ Assign project leader
- ☐ Identify participants
- ☐ Identify outside consulting and training provider
- ☐ Inventory affected software
- ☐ Determine operating system compatibility on both test and production servers
- ☐ Back up jobs and files on test system that may be affected by new system
- ☐ Install software on test system
- ☐ Schedule product walkthrough with vendor
- ☐ Review flowcharts and jobstream documentation from planning phase
- ☐ Schedule basic training sessions for pilot project participants
- ☐ Create jobs for pilot project in new scheduler on test system
- ☐ Consolidate and streamline schedule where possible (consider job dependencies)
- ☐ Run pilot jobs in test system, in parallel with production (if possible)
- ☐ Review results from pilot project (go, no-go decision)

BOOTS ON THE GROUND



Keep in mind that those people who were responsible for manual processing are valuable resources when confirming the accuracy of newly automated tasks.

You've done the legwork, from researching the challenge to setting goals. You've assembled a team, gathered the right equipment, and chosen an experienced guide. Your map is drawn—you're ready to climb to greater heights.

Like a flawless climb, your software implementation should go smoothly with the right preparation.

CHANGE MANAGEMENT

Hopefully, your pilot project has undergone the testing phase (you may have run it in parallel with the production process) and is ready to be placed into production. Depending upon your organization, change control processes may exist—you may have a change control committee who will need to approve the move to production.

Along with informing your change control committee, [you will need to brief the individuals who will be directly affected by the automation](#), or who will use the resulting information. The accounting clerk should verify the results of the newly automated process, and the person responsible for order processing or customer service needs to confirm the accuracy of their data. Keep in mind that those people who were responsible for manual processing are valuable resources when confirming the accuracy of newly automated tasks.

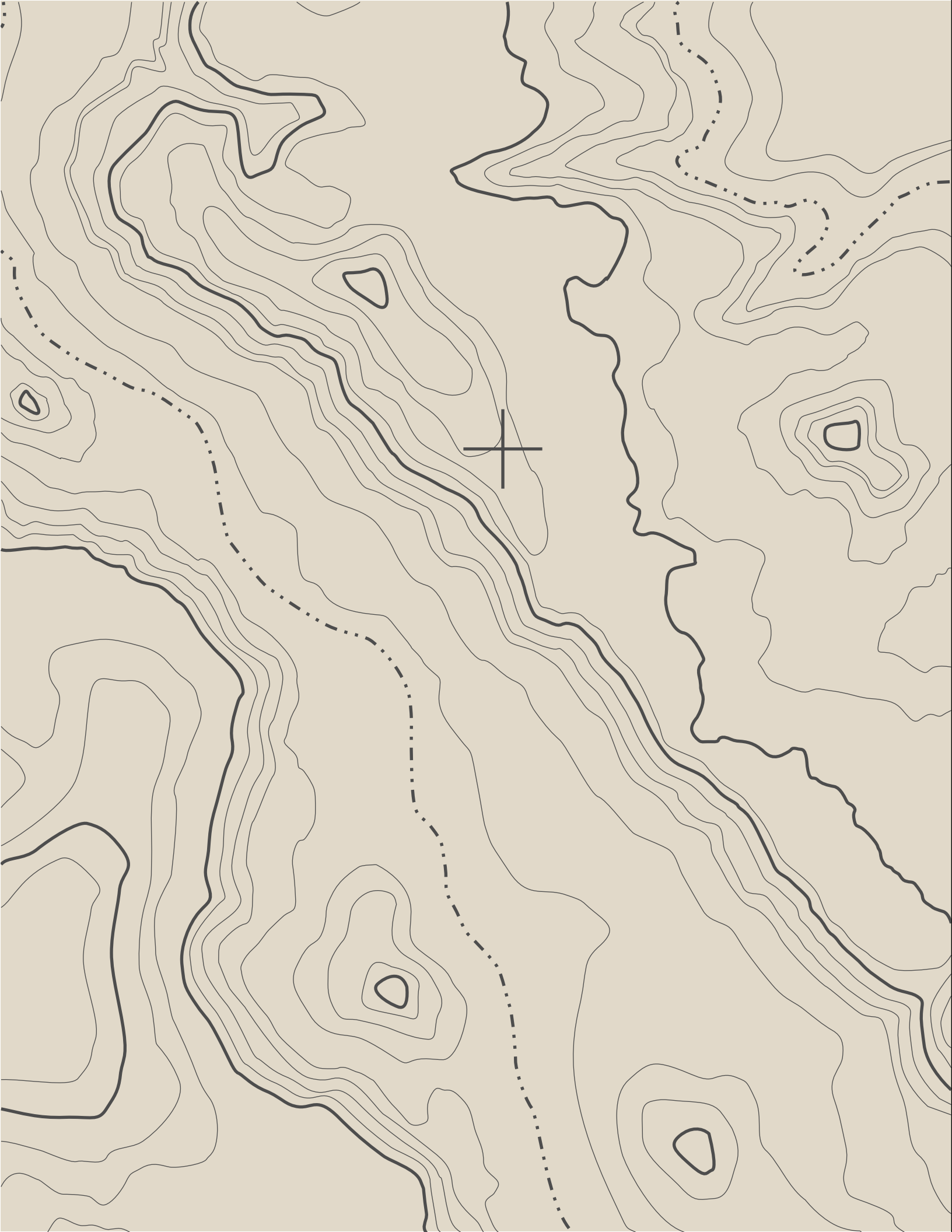
Since you arranged for additional personnel resources during the planning stage, you can now activate those individuals for analysis and troubleshooting. It then becomes an iterative process: focus on the next function to be automated, implement it in the test system, validate results, deploy it to production, and receive confirmation.

APPLICATION ROADBLOCKS

You will no doubt discover that some applications don't lend themselves well to automation. If you chose the right automation tool, it will be flexible enough to handle tasks like calculating parameters dynamically and automating what otherwise would require operator intervention. Occasionally, you will need to work with your core application provider to determine how to schedule a manual process to run automatically. It may require custom code, either generated in-house or by a vendor or consultant. In most cases, only a small number of programs fall into this category.

IMPLEMENTATION CHECKLIST

- ☐ Assign members of project team
- ☐ Schedule remaining training with vendor
- ☐ Get change management approval
- ☐ Install scheduling software on production system
- ☐ Review current schedules for possible changes or streamlining
- ☐ Review system setting defaults to support scheduling policies
- ☐ Determine who to notify of delays or job statuses
- ☐ Assign roles in scheduler for proper access and separation of duties
- ☐ Add users to roles
- ☐ Move pilot project into production
- ☐ Import jobs from old scheduler (place on hold)
- ☐ Schedule daily jobs (no dependencies except day and time)
- ☐ Schedule weekly jobs (no dependencies except day and time)
- ☐ Schedule monthly jobs (no dependencies except day and time)
- ☐ Schedule simple, sequential, dependent jobs
- ☐ Schedule more complicated job streams
- ☐ Set up audit and purge processes



06 ENJOY THE VIEW



Congratulations! You've made it safely to the summit of Mt. Automation. All of your planning and hard work has paid off, and you're already enjoying the benefits of efficient, error-free processing.

Now that you have successfully implemented your new scheduling solution, take some time to evaluate your project plan.

- Did you meet deadlines? If not, what were the barriers?
- Schedule advanced training for the staff. (In-depth training is more valuable after people have spent time with the product.)
- Review documentation for your new processes to make sure it is complete. Your new scheduling product should provide you with most of the documentation for schedules, etc., but you may need to ensure staff can access it and that it is archived and available for disaster recovery testing (and the real thing).
- Calculate your return on investment using actual implementation costs.
- Celebrate your project team's success.
- Conduct a 6-month ROI review.

As you wrap up your automation project, keep in mind that you can continue to build upon your success. Make a member of your team responsible for increasing automation and finding ways to improve productivity using your new tools. If your IT department hasn't achieved all of its automation goals, make plans and execute them until you get there. If you're already there, help other business units automate procedures using your new tools. Leverage your newfound strengths to help increase productivity across your entire company.

[Now it's your turn to be the guide.](#)

DON'T JUST SURVIVE, LEARN HOW TO THRIVE WITH ROBOT/SCHEDULE

Robot/SCHEDULE is easy-to-use, powerful, job scheduling software for Power Systems running IBM i (System i, iSeries, AS/400). Batch job creation and scheduling is at the heart of Robot/SCHEDULE. Whether you want to create a time-based schedule, an event-driven schedule, or a combination of the two, Robot/SCHEDULE offers the flexibility and reliability you need. By automating job scheduling and batch job management, Robot/SCHEDULE frees you and your operators, allowing time for innovation that adds value to your services.

Just think how much more productive you could be by stopping costly scheduling headaches like...

- Out-of-order jobs
- Missed jobs
- Insufficient help on the night shift
- Time-consuming manual entry
- Audit hassles
- Missed SLAs

WHY ERROR-FREE SCHEDULING IS THE NEW STANDARD

In today's uncertain economy, your company depends in performance goals, yet processing errors and growing compliance concerns drag down your efficiency.

Robot/SCHEDULE is specifically designed to allow you to automate complex scheduling tasks to ensure your jobs run on time and error-free. That means staff can contribute more towards high value projects.

IBM i JOB SCHEDULING QUIZ

The hours your team spends performing manual tasks are too long, and the errors are too many. You know the way to success—but have you wandered off the path? Take the [2-minute quiz](#) to find out.

FOR MORE INFORMATION

Call us at [1-800-328-1000](tel:1-800-328-1000) or email info@helpsystems.com to set up a personal consultation. We'll review your current setup and see how Robot products can help you achieve your automation goals.

