



# A Dozen Things You Should Know About Automated Job Scheduling

*Use these tips to get started or to take your schedule to a new level*

**T**he more I travel and talk to customers, the more I'm convinced there are significant opportunities for improving night processing. Whether you're just thinking about a automation project, or have already started, here's a countdown of a dozen items you should consider.

## ***12. Automate the process of monitoring the schedule.***

Some of our customers still check off jobs manually in a log as they finish. There is no reason to do this—you can automate the entire process. Robot/SCHEDULE can run virtually any process on schedule. With a little creativity, you can create jobs that monitor the status of your batch processes or use the Job Monitor feature in Robot/SCHEDULE 10. And, this is the best way to meet Service Level Agreements (SLAs). If you're trying to stay on top of SLAs manually, you're using a brute-force approach. With automation, you manage only the exceptions to the norm—a much more elegant solution.

## ***11. Automate interactive processes.***

Do you have applications that require interactive input? Have you been told they can't be rewritten to run like batch jobs? Robot/REPLAY can automate them. Don't let interactive processes become a stumbling block for your automation efforts. Robot/REPLAY is the solution.

## ***10. Treat automating your job schedule as a project.***

Apply project management skills to break the project into manageable pieces. For instance, you might break out end-of-week or end-of-day as pieces of the project for a single business application. Phasing automation into incremental steps is the most successful approach. What should be that first step? Look at the pieces you've identified and find one that either has the biggest payback or is the easiest to implement.

## ***9. Assign an application name to each business application area.***

Robot/SCHEDULE's Initial Job Setup window has an Application field. As you set up jobs, label all your sales jobs as SALES, all your payroll jobs as PAYROLL, and so on. These labels are a great help when you want to generate reports about specific applications or secure them.

## ***8. Turn on auditing.***

When you first start automating your job schedule, you can be sure that someone will hold a job or force a job to run too soon. Later on, you may be more interested in auditing because of Sarbanes-Oxley (SOX) or other regulatory requirements. Robot/SCHEDULE provides an audit trail that tells you who changed what. It's security lets you lock down who can and cannot change jobs.

## ***7. Use Reserved Command Variables (RCVs).***

RCVs are dynamic parameters—such as today's date or the date of the end of the month—that you can use with many applications. Robot/SCHEDULE ships with many common parameters already defined, and you can create others for your specific needs.



### **6. Don't have Robot/SCHEDULE submit jobs to job queues and then have a production control person release them.**

The point of automating the schedule is to reduce human interaction and human error. Robot/SCHEDULE won't submit a job until the prerequisite job completes. So, let it handle the dependencies.

### **5. Use comments and documentation on as many jobs as possible.**

If you know how to put comments in CL programs, you can do the same on the Robot/SCHEDULE Command Entry window. You also can add job text or long descriptions as you create new jobs.

### **4. Event-driven scheduling is better.**

Automated scheduling reduces the amount of time it takes to run a job schedule by 40 to 60 percent over manual scheduling. Robot/SCHEDULE knows instantly when a prerequisite job completes and immediately runs the next process. Add Robot/SCHEDULE Enterprise and you can create an event-driven schedule across your entire enterprise. For example, backups completing on an AIX server can be a prerequisite for a job on a Linux server. Or, a file transfer from a Windows server can be the event that triggers a process to run on your IBM i server.

### **3. You bought an automated scheduler—use it.**

Sometimes customers complain that Robot/SCHEDULE's reporting or forecasting doesn't work for them. When we talk further, we often find that the reason is they have entries in other schedulers. Or, they have CL programs containing batch processes that Robot/SCHEDULE does not know about. One scheduler is the answer.

### **2. Granular is good.**

Robot/SCHEDULE is a database tool that's right at your fingertips and can handle all the volume you want. Don't simply schedule one large CL program that runs 50 other programs. Take that apart and schedule each of the 50 programs. Why? If you need to rerun a job, you can go to the exact job and not have to rerun the other 49 jobs. By breaking out each job, you gain a better understanding and better documentation of your night processing. It may seem more complicated at first, but in the long run it's simpler.

### **1. Use naming conventions for your job names.**

Each job in Robot/SCHEDULE should follow a naming convention. For example, you might call the end-of-week sales job EOWSALE001.

### **Summary**

Automated job scheduling is all about automation, and I hope these tips help get you there. While you are on the journey, keep this idea in the back on your mind, "If I am doing something manually, there must be a better way." Remain alert for additional items that you can automate.

Also, let other departments know that you can run things for them automatically. Working for multiple groups increases the net worth of your operations department. Your Operations team becomes an asset for other departments. People learn that even when they go on vacation or are sick, their reports and queries run automatically.

Remember—it's never too late to automate.

- Contributed by Tom Huntington, Vice President of Technical Services



**help/systems**

*World's Leader in Power Systems  
Software Solutions*

952/933-0609  
info@helpsystems.com  
www.helpsystems.com