Robot/SCHEDULE®

Enterprise Scheduler • Automatic Computer Operator
Batch Management System • Job Schedule Forecaster

Robot/SCHEDULE Is Ready To Take Over The Work For You

With more than 15,000 users worldwide, Robot/SCHEDULE is the most popular software package for the IBM® System i™ (System i5™ or iSeries™). It's easy to see why. Since its introduction in 1982, Robot/SCHEDULE has been enhanced with hundreds of features. These features were requested by our design staff—the thousands of users who have used and relied on Robot/SCHEDULE over the years. Today, Robot/SCHEDULE is a winning combination of power scheduling, and great design, documentation, and technical support—fueled by Help/Systems' focused dedication to System i operations automation.

More Than Just A Job Scheduler

Robot/SCHEDULE is the never-forget operator that eliminates user complaints about missed jobs or reports. Users like Robot/SCHEDULE because their reports and jobs are scheduled, run, and delivered on time. And, a system operated by Robot/SCHEDULE runs smoother, more reliably, with fewer operational crises and off-shift operators.

Works Nights And Weekends For You

Robot/SCHEDULE works overtime and weekends, instead of your programmers and operators. That means less interference with your staff's leisure time and family life. You tell Robot/SCHEDULE what to do. When one job finishes, it runs the next job in its schedule, and so on. If your System i really needs help, Robot/SCHEDULE uses Robot/ALERT, our system event notification software, to send a text, e-mail, or pager message. No more camping out in the computer room waiting for dedicated jobs to finish. Say goodbye to unnecessary overtime and hello to more nights, weekends, and holidays free.

Increases Programmer Productivity

Robot/SCHEDULE eliminates the hundreds of CL programs necessary to run your batch jobs. You just fill in the blanks to tell Robot/SCHEDULE how you want the batch job to run and Robot/SCHEDULE goes to work. If you are new to the System i and setting up jobs, Robot/SCHEDULE can save you and your staff months of CL programming. Don't waste your programmers' time—get Robot/SCHEDULE.

Four Reasons Robot/SCHEDULE Is Right For You

1 Display your job schedule and manage your system with ease. Click on a job to see its details. The Schedule Activity Monitor™ (SAM™) displays your entire schedule so you see the big picture at-a-glance. Using SAM, you see your entire job schedule from your desk on a single, tabbed display. It shows you the status of every batch job on your system. Another tool, the Job Schedule Blueprint, graphically displays job details—name, type, override codes and more—and relationships to other jobs.

2 Eliminate expensive errors; track and reduce downtime. Whether you measure them by time wasted, money spent, unhappy users, or Service Level Agreements (SLAs) missed, mistakes are costly. Robot/SCHEDULE helps you fight back with job monitors. If a job runs too long, completes too quickly, or starts late, Robot/SCHEDULE can end the job or send a message to a message queue. Using job monitors, you'll easily meet, or exceed, your SLAs.

3 Document your schedule information for Sarbanes-Oxley (SOX) auditors. Who changed the job schedule? When did processes actually start and end? Robot/SCHEDULE answers these questions and provides online records that document the security in your job schedule. When the SOX auditors come calling, Robot/SCHEDULE has the answers to their questions.

4 Monitor your entire enterprise with Robot/SCHEDULE. When you use Robot/SCHEDULE, you can run jobs reliably on your System i while handling Windows, UNIX, and Linux server processes. Use Robot/SCHEDULE with Robot/NETWORK, our network management software, to display all the systems in your enterprise online. If an important job fails anywhere in the enterprise, Robot/NETWORK indicates the problem and uses Robot/ALERT to send a text, pager, or e-mail message. Contact your Regional Sales Manager and ask for the Enterprise Scheduling brochure to learn more.

Now is the best time to take a closer look at Robot/SCHEDULE.

Why Robot/SCHEDULE Is The Perfect Automation Package For You

Whether you have one system or a thousand, Robot/SCHEDULE delivers the seven major elements essential for complete operations automation.

Job Scheduler And Forecaster

Robot/SCHEDULE offers 26 scheduling options. You can use any combination of time patterns to run all of your company's vital jobs. Just fill in the blanks to enter your schedule, or use a command to have your own programs update your job schedule. Turn your batch jobs over to Robot/SCHEDULE for a more efficient, productive, and reliable IT department.

Robot/SCHEDULE can forecast your schedule for any time period and display it in its easy-to-use graphic format. You see immediately if you have time for a new application, or if you need to shift your workload. And, after your schedule is complete, you can really impress your SOX auditors with your job setup and schedule documentation.

Automatic Computer Operator

Use Robot/SCHEDULE to place jobs into a group. After the group starts, Robot/SCHEDULE won't start the next job until the previous one completes. And, if a job in a group fails, Robot/SCHEDULE uses Robot/ALERT, our system event notification software, to send you a message. After you fix the problem, you can restart the group where it left off.

Robot/SCHEDULE can react to system or device events on the same system, on another system in your network, or in your PC network. Use Robot/SCHEDULE to react to a combination of events, or a program, to start a job. Or, if a job fails, Robot/SCHEDULE can start recovery procedures, automatically.

Batch Management System

Robot/SCHEDULE's Job Completion History gives you complete control over all your batch jobs—submitted, running, or finished. You can see at-a-glance if any jobs failed during the night.

Easy, fill-in-the-blanks setup of job execution and printer environments eliminates hundreds of CL programs associated with batch jobs. It is so complete, you can view it as a CL program generator. This is crucial if you are new to the System i, or to setting up new applications.

Server Scheduler

Robot/SCHEDULE works with Robot/CLIENT, the server operations event manager, to schedule tasks on multiple platforms, including Windows, UNIX, and Linux servers. It offers complete flexibility so you can make those tasks prerequisites to other tasks on the server, or elsewhere. The result—Robot/SCHEDULE is the most powerful, reliable, and efficient server scheduler available. See the Enterprise Scheduling brochure for more information.

Report Distributor

Robot/SCHEDULE eliminates the CL programming associated with print files and printing. Just fill in the blanks to override printer attributes at the print file or recipient level and Robot/SCHEDULE does the rest. Robot/SCHEDULE prints a banner page and distribution list, and puts the right number of report copies at the correct printers, whether they are on the same system or located halfway around the world.

Network Batch Manager

Robot/SCHEDULE works with Robot/NETWORK, our network management software, to control your Help/Systems products and job schedule across your System i network, including cross-system reactivity and centralized distribution of product instructions (packets). See the Enterprise Management brochure for more information.

Smart Scheduler

Robot/SCHEDULE is a smart scheduler. Its Learn function lets you set up complex jobs quickly and automatically. Just put Robot/SCHEDULE into Learn mode and submit jobs as you normally do from menus or command entry screens. Robot/SCHEDULE captures all the information needed to run each job, while creating job setups you can schedule.

The Power User

At first, you won't use most of Robot/SCHEDULE's 400 special features. But, as you become more comfortable with Robot/SCHEDULE, you'll soon become a power user. Here are just a few examples of what you can accomplish:

Day-Of-The-Week Scheduling

You can enter most jobs in less than a minute. Just enter a program or command, the times to run, and each day of the week the job should run. That's all there is to it—the defaults you entered at system setup time handle the rest.

Advanced Scheduling

If day-of-the-week scheduling is not what you need, Robot/SCHEDULE has 25 other scheduling options you can use. For example, if a job is scheduled to run on a non-workday, you can instruct Robot/SCHEDULE to skip the job, or to run it before or after the non-workday. With more than 90 calendar options, Robot/SCHEDULE can adapt to any work schedule or fiscal year.

Exception Scheduling

If the advanced scheduling options still don't meet your requirements, you can invent your own. Combine time requirements with events and conditions to create the perfect schedule for your needs. And, since Robot/SCHEDULE stores these options as scheduling objects, you can reuse them for many different jobs.

Commands Without Programming

You can enter up to 999 commands for Robot/SCHEDULE to execute without creating a CL program. No more writing CL programs to make batch jobs do what you want them to do. You also can enter Windows or UNIX tasks to execute on attached servers. You can even create system-wide reserved variables (such as the operator on duty or today's date) to update hundreds of commands or Windows tasks at once.

Easy And Flexible Job Control Options

In addition to its normal submit job options, Robot/SCHEDULE brings even more flexibility to your job scheduling. Enter instructions for what Robot/SCHEDULE should do if the job needs operator attention (including sending a message using Robot/ALERT). And, if you have Robot/AUTOTUNE, our automatic performance monitoring and tuning software, you can even control the processing speed of the job.

Report Distribution And Output Control

You can document printer attributes, as well as who gets reports and when. Robot/SCHEDULE handles the rest. It puts the right number of copies, with the right print attributes, on the right printers, on the right days. You can even use its date calculator to run closings on a certain day of the month, but date the reports with the last day of the previous month. Robot/SCHEDULE interfaces with Robot/REPORTS, our report distribution, archiving, and viewing software, for more advanced report management, including electronic bursting, sorting, and bundling—and PDF and Excel output.

Reactive And Group Jobs

Robot/SCHEDULE can run a job in reaction to events on your System i, or on any other system in your network. Just enter the prerequisite conditions to create dependency processing.

You can build customized procedures using different programs and commands. For example, group your jobs for weekly, monthly, and annual closings to ensure that programs run in the correct sequence so you never have to worry about processing errors.

Job Schedule Modification Tracking

Robot/SCHEDULE lets you create an audit log of modifications to your job schedule. Anytime users make a change, addition, or deletion to the job schedule, it's included in the log. The log tracks the name of the user who made the change, and the time and date of the change. For troubleshooting and record retention, you can display, print, or export the log to a library. When the SOX auditors arrive, you're ready!

Listen To What Our Robot/SCHEDULE Users Say...

Our customers have awarded us over 10,000 times with Robot/SCHEDULE purchases.

"Automation has been invaluable to us. Robot/SCHEDULE really saves us time and gives us peace of mind knowing we don't have to remember to send a report or start a job. Robot/SCHEDULE does it all. Thank you."

Ana Maldonado
IT Manager
SYSCO of Central California

"Robot/SCHEDULE is a great product that makes my life easier…It's just like having a super-dependable operator on staff. Best employee we could have."

Christine Dick
System Administrator
Dacotah Banks

"Without Robot/SCHEDULE, I don't know if we would have ever passed the [Sarbanes-Oxley] audits. Robot/SCHEDULE has the jobs scheduled, maintains a log, and automatically archives all important information."

Jackie Rowland Briscoe
Business Analyst
Xomox Corporation

"We staff our iSeries machine during the day, and at about 4:00 p.m. our batch processing starts. With Robot/SCHEDULE, it's all automated—we only intervene if Robot/ALERT notifies us that there's a problem. We use Robot/SAVE to do two backups a night and it's all integrated into Robot/SCHEDULE. I'd say we have a couple of thousand jobs in Robot/SCHEDULE and it's really nice the way it works—basically, it's lights out."

David Hinrichs
iSeries System Administrator
Cascade Corporation

"I love Robot/SCHEDULE. We have been using it for years and it is so helpful. We run a lot of jobs through Robot/SCHEDULE and the ease of setting up jobs is great. It saves me a lot of time, reduces stress, and gets the job done. I just love your products!!!!"

Lois Anne Warnock
System Administrator
Mill's Pride

"Robot/SCHEDULE teamed with Robot/REPLAY has allowed me to fully automate daily, weekly, and period closing tasks. We no longer have to VPN in at odd hours to do mundane and repetitive tasks—I love Robot/SCHEDULE!

Ed Kandel
Senior Programmer/Analyst
TEXTRON Fluid & Power

"Robot/SCHEDULE can run jobs for me off hours and keeps me from working the long hours.

Robot/SCHEDULE keeps us from forgetting to run important jobs on the right day of the month.

Robot/SCHEDULE helps us keep up with housekeeping with our outqueues and subsystems, and saves us TIME."

Sharon Morris
AS/400 Specialist
GeoVera Insurance Company

"I love Robot/SCHEDULE because it is easy to set up, easy to change, and easy to review the status of jobs. In other words, it's easy!"

Carolyn Bain
Programmer/Analyst
WM Wright Company

"My favorite Help/Systems product is Robot/SCHEDULE because it makes my life easy and lets me sleep well at night instead of having to look at a green screen. Robot/SCHEDULE is now doing the job of 11 operators—it's saved us a lot of money."

Saurav Kumar
Genworth Financial

"Our schedule is a mile long, but with Robot/SCHEDULE, we've structured it and made it easy to manage. We have roughly 180 groups set up, with thousands of jobs under those groups. Thousands. I'm confident we're covered [for Sarbanes-Oxley] because of our IT controls. I don't need stacks of job schedule documentation because my job schedule is fully automated. I can provide a list telling the auditors everything they want to know."

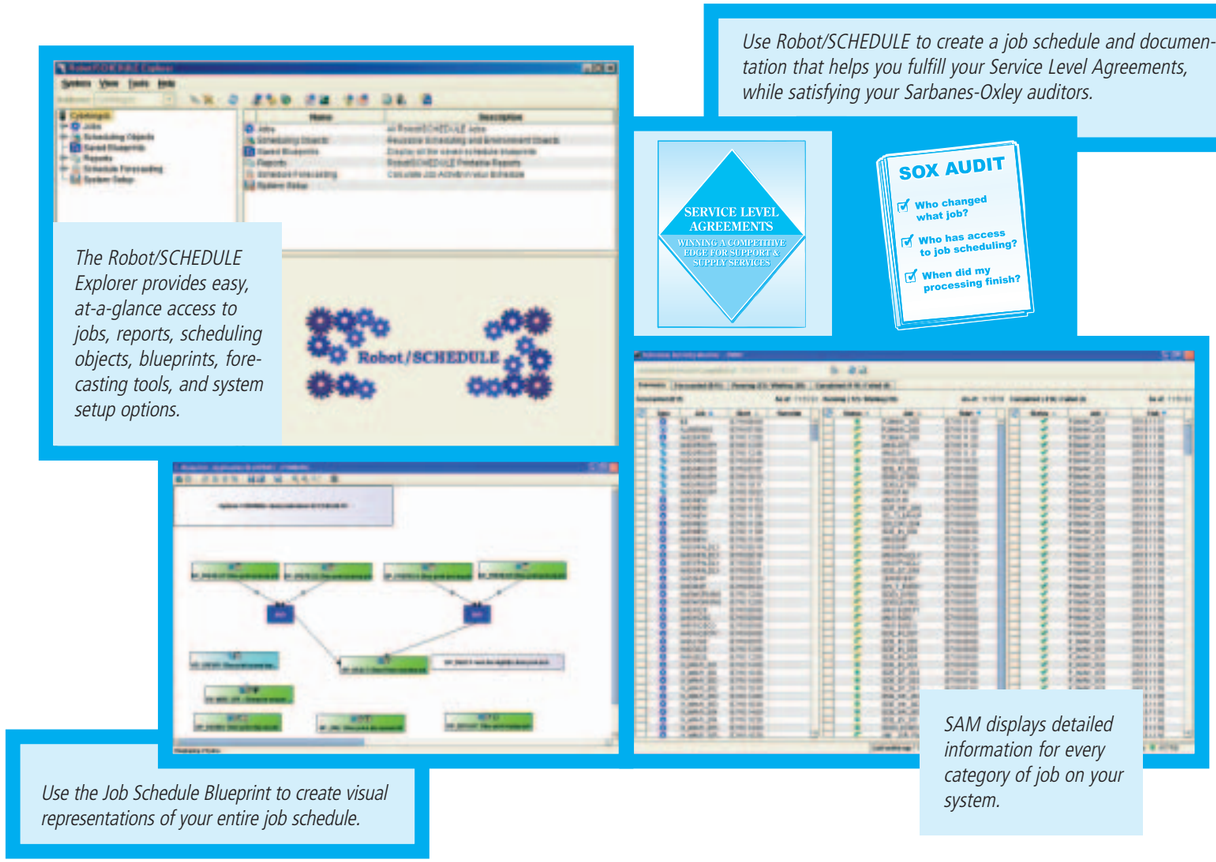
Frank Iaria
Global IT Operations Manager
Dentsply International

"Occasionally I meet people who think that their operation is too big to automate. The truth is, the bigger you are, the more you need automation. As for the human side of automation, I have automated hundreds and hundreds of processes and you don't lose jobs when you automate. My operators are now system administrators—they really appreciate working only during the day and being able to go home nights and weekends."

John Cirocco
Director of IT
Sorrento Lactalis

Simplify Control Of Your Job Schedule

With Robot/SCHEDULE, you can manage all aspects of your job schedule—design, creation, maintenance, and documentation—in a whole new way. With the help of the powerful Robot/SCHEDULE tools—the Explorer, the Schedule Activity Monitor (SAM), and the Blueprint—working with your job schedule has never been easier.



Use Robot/SCHEDULE to create a job schedule and documentation that helps you fulfill your Service Level Agreements, while satisfying your Sarbanes-Oxley auditors.

The Robot/SCHEDULE Explorer provides easy, at-a-glance access to jobs, reports, scheduling objects, blueprints, forecasting tools, and system setup options.

Use the Job Schedule Blueprint to create visual representations of your entire job schedule.

SAM displays detailed information for every category of job on your system.

Robot/SCHEDULE Explorer: Easy Job Schedule Management

Robot/SCHEDULE's easy-to-use graphical user interface, the Robot/SCHEDULE Explorer, is the primary navigation tool for your job schedule. Use the Explorer to manage your job schedule and access the tools for working with your jobs. Display all your jobs, make schedule changes, and monitor jobs on multiple systems—directly from your PC.

The true power of the Explorer lies in its simplicity. Just right-click on a job to display its properties, apply a schedule override code, view completion history, display properties and relationships graphically, clear completion codes, export the job to another system, and much more. Everything you need is just a click away.

From the Explorer, you can launch or display other Robot/SCHEDULE tools—the Job Monitor Events Log, the Job Creation Wizard, and the Job Schedule List Viewer—directly from the toolbar. You don't have to go through a series of menus or panels—they are right there, ready when you are.

If you're familiar with the green screen version of Robot/SCHEDULE, or don't have much experience using a graphical interface, simply click a toolbar button to launch Robot/GUIDE. Robot/GUIDE quickly walks you through the job setup process, step-by-step. You'll have no problem creating and scheduling all types of jobs in just a few seconds.

Blueprint: Your Complete Job Schedule Picture

A good blueprint gives you a complete picture of how everything fits together. And that's what the Job Schedule Blueprint does. The Blueprint shows you both the relationships between jobs and information such as job name, job type (user, Robot/SCHEDULE, group control, reactive), and override codes. Click on the job to see additional information or to modify it.

When you need to change your job schedule, use the Job Schedule Blueprint to anticipate the impact of the changes before you make them. For example, if you want to add a new job to your nightly processing procedures, open the Job Schedule Blueprint, add the new job, and drag it to where it should run in the schedule. You'll see the effect the new job has on any prerequisite or reactive jobs before you add it to the schedule.

You also can save or print your Job Schedule Blueprints for multiple uses:

- Find gaps or other inefficiencies in your job schedule.
- Use it as a reference tool during job schedule discussions or meetings with programmers.
- Train your new operators.

SAM: Job Schedule Detail

SAM, Robot/SCHEDULE's Schedule Activity Monitor, lets you see detailed job schedule information right from your desk. On a single, tabbed display, SAM shows every job on your system—forecasted, running, waiting, completed, failed—plus all the job monitor events, including jobs that ran long, completed too quickly, or started late.

- ***Need a snapshot of the current situation?***
  Click on the Running/Waiting tab to see jobs that are currently running and a list of submitted jobs.
- ***Waiting for a critical job to finish?***
  Right-click to see a job's completion percentage.
- ***Don't want a job to finish?***
  Right-click to hold the job.

SAM puts full control of your job schedule at your fingertips. Whether you're an IT manager looking for a quick summary of currently running jobs, or an operator who needs to hold jobs and apply schedule override codes, you and SAM will quickly become good friends.

Tame Service Level Agreements And Satisfy Sarbanes-Oxley Auditors

There is no doubt that automating your operations with Robot/SCHEDULE drastically reduces job scheduling errors, which ultimately saves you time and money. But, the benefits of using Robot/SCHEDULE don't stop there. Your users and customers benefit when you use Robot/SCHEDULE, too.

Robot/SCHEDULE's job monitors help to ensure that you meet your SLAs. You can specify what Robot/SCHEDULE should do in case a job runs too long, completes too quickly, or starts late. You can end the job or send a message to a message queue. If you have Robot/ALERT or Robot/NETWORK, you can be notified with a text, e-mail, or pager message or a message in the Robot/NETWORK Status Center. When you've agreed to provide a certain level of service, Robot/SCHEDULE helps you keep your word.

The Audit Log provides an enormous boost for reaching Sarbanes-Oxley (SOX) compliance. It tracks who created a new job, who changed the job setup or commands, and who forced a job to run outside the scheduled time. The Audit Log report provides the audit trail of jobs required by SOX auditors. Add the other SOX-related reports that Robot/SCHEDULE produces and you're well on your way to total SOX compliance.

Automate Batch Scheduling Across Your Network

Whether you need to manage one System i server (including partitions), a network of them, or an entire enterprise, Robot/SCHEDULE is ready. Robot/SCHEDULE works with Robot/NETWORK to send job statuses from multiple System i servers across your network to a central location. Combine it with Robot/CLIENT for enterprise-level job scheduling, resource monitoring, and event notification with Windows, UNIX, and Linux servers.

Use Robot/NETWORK To Schedule And Control Your System i Network

Robot/NETWORK allows each Robot/SCHEDULE on your System i network to communicate. Robot/SCHEDULE on the Host system distributes job setup and scheduling instructions to the other System i servers and partitions in your network. Each copy of Robot/SCHEDULE reports the status of each job it ran, including jobs that failed, to the Host. Your schedule becomes more efficient and reliable.

Robot/NETWORK monitors your systems and jobs across your entire network. A job completing on one system can start jobs on another. And, if an important System i job fails anywhere, Robot/NETWORK indicates the problem, or uses Robot/ALERT to send a message. Robot/NETWORK provides three unique ways to keep track of your System i network:

- Use the Robot/NETWORK Explorer to view your network, or a portion of it, in an expandable, online "tree" format. Drill down through your Host and Node structure to send packets, troubleshoot systems, see what's installed, and view the latest reports, including consolidated reports that span systems.
- Use the Robot/NETWORK Status Center—from your PC or using the Robot Browser Interface—to monitor and display statuses on any System i server or partition. Robot/SCHEDULE sends job statuses to the Host system that you can filter and sort by time, type, or priority.
- Use the Map Center to create a graphical overview so you can display and access different systems with a simple click.

Monitor and Schedule Across Your Systems

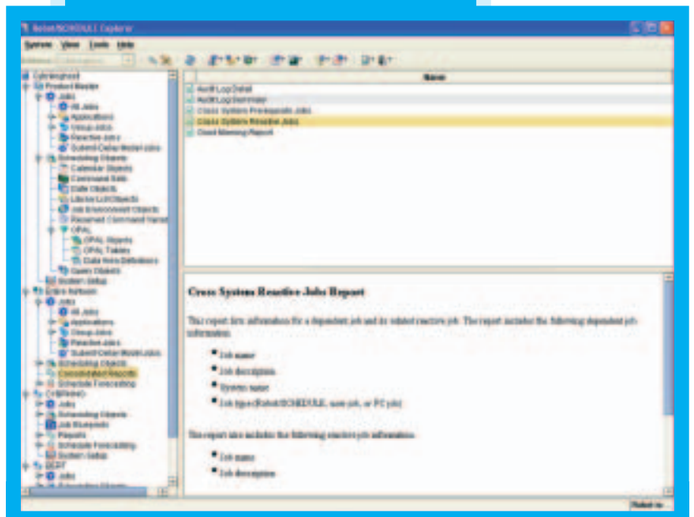
Batch job scheduling is often an enterprise-level issue. Nightly processes can require integration with non-System i servers, and System i data is often a prerequisite for batch processes to run on a UNIX, Windows, or Linux server. The trick is to build an event-driven schedule across all your systems for enterprise scheduling, coordinated batch processing, and cross-system monitoring.

Start with Robot/SCHEDULE on your System i servers. Then, add Robot/CLIENT to incorporate your non-System i servers—Windows, UNIX and Linux—and build a schedule that makes them as reliable and easy to use as your System i. Robot/CLIENT checks operational status, provides job status information, launches processes, monitors applications, transfers data, and more. Robot/CLIENT and Robot/SCHEDULE work together across all your systems to:

- Monitor essential applications and services.
- Schedule batch jobs across your enterprise.
- Rotate among System i servers and partitions, performing scheduled tasks.
- Poll attached servers to spot problems before your end users report them.
- Send text, e-mail, or pager messages (including attachments) using Robot/ALERT.

Robot/SCHEDULE, Robot/NETWORK, Robot/CLIENT, and Robot/ALERT are the keys to network and enterprise scheduling, monitoring, notification, and control. Read the Robot/NETWORK and the Enterprise Scheduling brochures to learn more.

And Across Your Entire Enterprise



Schedule jobs, monitor resources, and notify users across your System i network or your entire enterprise.

High-Level Control Down To The Details

Whether you need to check on local jobs, troubleshoot scheduling issues on remote systems, or forecast future scheduling needs for your systems, you get the knowledge and understanding you need, quickly.

The Past Holds The Answers

The Robot/SCHEDULE Job Completion History provides immediate information for all batch jobs submitted, running, or completed, including jobs submitted by humans. Robot/SCHEDULE creates a status record for each job so that you have a history of each batch job run. Robot/SCHEDULE updates this status record when the job enters a job queue, when it starts running, and at completion time.

You see the description of the job, when it ran, how long it took to run, whether it completed normally or terminated, and the history of the times it ran. You get the job information you need, when you need it. And, if there is a problem with a job, you can find it and fix it, quickly.

- ***Trying to locate nighttime batch problems?***
  Just restrict the display to jobs that terminated and you have a handy problem checklist.
- ***Jobs backing up on job queues?***
  Restrict the display to jobs waiting on job queues to see how long each job has been on a queue.
- ***Need to shut down your system for repairs?***
  Restrict the display to jobs currently running. For Robot/SCHEDULE jobs, you can see a forecast of the time needed to finish so you can cancel any job that will take too long.

Everything You Need To Know About Batch Jobs

For each job status record, Robot/SCHEDULE provides information to put you in control of your batch jobs. Here's just a partial list of what you'll see:

- Completion or running status
- Start and end times
- Duration
- Job log
- Job description
- Robot/SCHEDULE setup and documentation
- Journal records
- QHST entries
- Associated spooled files
- Job attributes

Look To The Schedule Forecast For Answers

It would be impossible for a person to forecast a batch job-processing schedule for 100 jobs that use Robot/SCHEDULE's multiple scheduling options. But, to run your department properly, schedule forecasting is something you have to do. Our powerful Schedule Forecast List gives you the information you need, that you can display or print anytime.

Choose a time period, date, and subsystem, and Robot/SCHEDULE forecasts the schedule based on a moving average of historical job run times. It calculates the time the job waits on the job queue, as well as the actual start time. Look for gaps in the schedule to spot time available for a new application or report request. Use the display to shift the workload to maximize system usage, or to signal when a system upgrade is needed.

Play "What If" With Robot/SCHEDULE

Can your schedule handle the big batch update runs required by a new application? Can you handle the president's request for a big report today, instead of next week? Use Robot/SCHEDULE to find out. Enter projected run times, forecast length, and start times and see the results immediately. If you are happy with what you see, just press a key to make the new start times permanent.

Experience The World's Most Versatile Job Scheduler

Need to handle a tricky automation challenge, like adding file transfers to your schedule, or automatically verifying that a certain device is available before you start backups? OPerator Assistance Language® (OPAL®), Help/Systems' powerful System i operations language, is the answer. You can use OPAL with Robot/SCHEDULE to create advanced scheduling options, check job prerequisites and statuses, monitor resources and events, and much more.

Expand Your Scheduling Horizons

Robot/SCHEDULE introduced the concept of object-oriented scheduling to the System i with six scheduling objects:

- OPAL
- Date
- Job environment
- Data area
- Job query
- Schedule forecast

With all of Robot/SCHEDULE's scheduling options and reactive scheduling, you may never need to use these objects. But, if you need something that is not in the Robot/SCHEDULE job setup, these powerful objects contain timing, job setup, event monitoring, job selection, and planning instructions. After you create a scheduling object, you can use it over and over to simplify the setup and maintenance of the Robot/SCHEDULE batch management system. The result—the world's most popular job scheduler is also the world's most versatile job scheduler.

OPAL Understands

OPerator Assistance Language (OPAL) is our powerful operations language that helps operate your System i. In Robot/SCHEDULE, OPAL lets you determine the status of devices, communications, database files, objects, and other Robot/SCHEDULE jobs. Based on those statuses, OPAL performs tasks that used to require an operator. Combine this status checking using AND-OR-ELSE logic to create a powerful tool for evaluating your System i.

OPAL Samples

Determine if three files being transferred from another system arrived in time to be processed in the current batch cycle.

File Transfer

Logic Operand	Variable	Operation	Operation Value
		RTVDTADFN	RDAY
IF	USRFLG1	EQ	Y
		SKIP	
IF	SKIPSTATUS	EQ	YES
		SENDMC	**Prompt to see command**
		PAGE	**Prompt to see command**
END			
		RTVOBJSTS	*LIBL/AGLID3
*FILE			
IF	OBJSTS	EQ	EXISTS
AND	OBJSTS	NE	RECORDS
		ADDMIN	5
END			
		RTVOBJSTS	*LIBL/AGTID3
*FILE			
IF	OBJSTS	EQ	EXISTS
AND	OBJSTS	NE	RECORDS
		ADDMIN	5
END			
		RTVOBJSTS	*LIBL/BR001
*FILE			
IF	OBJSTS	EQ	EXISTS
AND	OBJSTS	NE	RECORDS
		ADDMIN	5
ELSE			
		QUIT	
END			

Problem with Job, Page

Logic Operand	Variable	Operation	Operation Value
		RTVJOB	000000003424
IF	RBTJOBNBR	EQ	C
		SKIP	
ELSE			
		PAGE	** Prompt to see command **
END			

Check on the job completion status and send a pager message if the job has any status other than 'C'.

Run a job only on Monday or Friday.

If Today is Monday or Friday, Run Job

Logic Operand	Variable	Operation	Operation Value
IF	DAY	EQ	2
OR	DAY	EQ	3
OR	DAY	EQ	4
		SKIP	
END			

Is Tape Controller Active?

Logic Operand	Variable	Operation	Operation Value
IF	THISJOB	EQ	D
IF	ACTCTL	NE	TAPCTLD
		SNDMSG	MSG('controller is still not up....
		SKIP	
		QUIT	
END			
END			
IF	ACTCTL	NE	TAPCTLD
		SNDMSG	MSG('THE CONTROLLER IS NOT UP
command**			
END			

Check if a tape controller is active, try to vary it on, and send a message and skip the job if it cannot.

Check Object Status

Does an object exist? Is it locked? Does a file member exist and does it contain records? Use OPAL to prevent an application from "blowing up," either because transactions haven't arrived from another system, or because an interactive program has a lock on an object. OPAL also can read data areas and Robot/SCHEDULE Reserved Command Variables.

Check Device Status

Is the tape drive, controller, communication line, or printer up and running? If you have Robot/CLIENT, you can determine if a server is ready to receive instructions.

Check Work Management Statuses

Is a subsystem, user, or job active? What are the completion statuses of batch jobs that ran earlier? How many jobs are on a job queue? Is a job queue on hold?

Check Job Status

Need to check the current status of a job or the past completion status, along with dates and times? Force a job to pass a complex set of prerequisite tests before it can run.

Check Date Status

What day is it—the last day of the month; the third Friday of the month; some other special day?

Whatever Needs To Be Done, OPAL Can Do It

Here are just some of the operations OPAL can do in response to status checking:

- Change a Robot/SCHEDULE job dynamically to reflect changed conditions
- Change a data area
- Skip running a job at a certain time
- Delay running a job to a later time and then recheck
- Check if today is the last day of the month
- Start a job on another system
- Send a break message when backups start
- Send a message to a Robot/CONSOLE message center
- Delay a job if backups are running on another system
- Change night jobs to a different printer

From a set of OPAL instructions, you create an OPAL object that you can reuse on any Robot/SCHEDULE job in your System i network. With OPAL you can create your own advanced scheduling options, prerequisites, and event monitoring options.

Additional Scheduling Objects

Date Objects

Use date objects for schedules that are too complex to follow a repeatable time pattern. There are two types of date objects, those that contain run dates and those that contain 'do not run' dates. The *do not run* dates can veto a job, no matter what other scheduling options you used on it. For example, you can schedule a job to run every third workday, except March 26, June 21, and September 14. To make it even simpler, you can select dates from a graphic calendar page and assign a name to them.

Job Environment Objects

Use job environment objects to define job control options such as the job queue, job description, and output queue for a Robot/SCHEDULE job. Change an option on a job environment object, and all the jobs that use that object change automatically.

Data Area Objects

Using a fill-in-the-blanks process, you can define user fields to segment any data area or Local Data Area (LDA). These field definitions are stored as data area objects. OPAL uses data area objects to read and update data areas for enhanced interprogram and interjob communication.

Job Query Objects

Using simple fill-in-the-blanks setup, you can enter selection criteria based on Robot/SCHEDULE job setup options to create a job query object. You can use job query objects to sort and limit displays and reports to only jobs you want to see, and to perform mass updates of Robot/SCHEDULE jobs.

Build A Solution Set To Tackle Any Automation Problem

When you buy any Robot product from Help/Systems, you buy the opportunity to integrate other Robot products to create an automation solution set that solves your particular System i operations problems. You'll save money and enjoy all the benefits of automated operations by simplifying tasks, eliminating bottlenecks, speeding processing, reducing errors, and satisfying SOX auditors. Here are just a few of the problems you can resolve using Robot/SCHEDULE as part of an automation solution set.

Automate Backups and Recovery

Robot/SCHEDULE, Robot/SAVE®, Robot/CLIENT®, and Robot/ALERT®

Automating your backups has never been easier. Robot/SCHEDULE's seamless interface with Robot/SAVE, our backup, recovery, and tape management software, allows you to perform completely unattended backups at night, on weekends, or whenever your schedule dictates. Just set up Robot/SAVE and Robot/SCHEDULE takes over. It runs Robot/SAVE save procedures and tape management reporting day after day, automatically. Robot/SCHEDULE can even run unattended restricted state saves, such as *NONSYS and *SAVSYS, as easily as your daily backups.

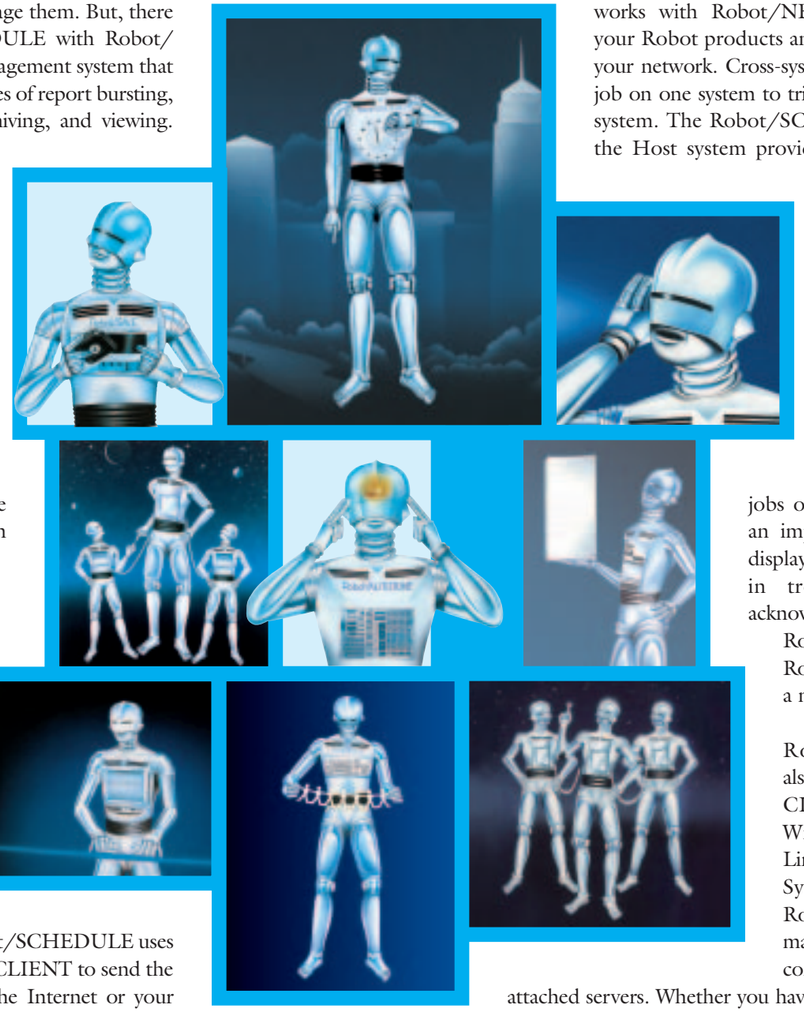
You already know that Robot/SCHEDULE on your System i can schedule tasks on attached PCs or servers. Combine Robot/SCHEDULE with Robot/SAVE and Robot/CLIENT, our server operations event manager, and you can back up your PC files and directories using the same easy-to-use procedures.

If a problem occurs during a backup session, Robot/SCHEDULE uses Robot/ALERT to send a text, e-mail, or pager message to the on-call operator. You can even tell Robot/SCHEDULE to notify you with the completion status when the job finishes. With Robot/SCHEDULE, Robot/SAVE, Robot/CLIENT, and Robot/ALERT, you create the exact backup schedule your business requires.

Automate Report Management

Robot/SCHEDULE, Robot/REPORTS®, Robot/ALERT, and Robot/CLIENT

All your applications and business solutions create reports—including the Robot products. In fact, receiving and viewing reports is so much a part of your day-to-day business environment that you may not realize there's a better way to manage them. But, there is: partner Robot/SCHEDULE with Robot/REPORTS, our report management system that automates the operator duties of report bursting, distribution, bundling, archiving, and viewing. When you combine Robot/SCHEDULE with Robot/REPORTS, you have the ideal automated report management system. Just select the Robot/SCHEDULE option for a report in Robot/REPORTS, and Robot/SCHEDULE uses the sophisticated report distribution functions in Robot/REPORTS to distribute the report—promptly and on schedule.



Use Robot/SCHEDULE with Robot/REPORTS' hierarchical report archive system to schedule a procedure that moves reports from one media to another and removes all expired reports, automatically.

When reports are ready for distribution, Robot/SCHEDULE uses Robot/ALERT or Robot/CLIENT to send the reports, electronically, via the Internet or your company's intranet. Report management has never been easier.

Automate Network Control

Robot/SCHEDULE, Robot/NETWORK®, Robot/CLIENT, and Robot/ALERT

Managing multiple systems in a network can be an all-consuming job. You need to coordinate jobs on each system and often have jobs on one system that are prerequisites to jobs on another system. Robot/SCHEDULE works with Robot/NETWORK to control your Robot products and job schedule across your network. Cross-system reactivity allows a job on one system to trigger a job on another system. The Robot/SCHEDULE Master on the Host system provides centralized distribution of product instructions and job setup information to other systems in the network.

The Robot/NETWORK Status Center allows you to monitor the status of your batch jobs on all your systems. If an important job fails, the display highlights the system in trouble. If no one acknowledges the problem, Robot/NETWORK uses Robot/ALERT to send a message.

Robot/SCHEDULE also works with Robot/CLIENT to integrate Windows, UNIX, and Linux servers into your System i procedures. Robot/CLIENT automates the scheduling and control of batch tasks on attached servers. Whether you have dozens of servers, or thousands, Robot/SCHEDULE and Robot/CLIENT work together to automate your server network.

Automate The Unautomatable

Robot/SCHEDULE, Robot/REPLAY,® and Robot/AUTOTUNE®

Some jobs require interactive input before they can run—you have to fill in screens, specify report names, provide dates, and so on. These jobs have always seemed unautomatable—you couldn't schedule them because someone always had to be there to enter information. Not any more. Robot/SCHEDULE has a seamless interface with Robot/REPLAY, our interactive job management system, so you can schedule any job—even those that require interactive input. Robot/REPLAY automates those interactive duties.

To submit your job, place Robot/REPLAY into learn mode and submit the job as you normally do. Robot/REPLAY records every keystroke and entry and stores them in a Replay object. You can play back, copy, and edit the object. Then, use Robot/SCHEDULE to schedule the object to run using the same options you use for your other batch jobs.

Robot/SCHEDULE also interfaces with Robot/AUTOTUNE, our performance tuning and monitoring software. Set your tuning and performance monitoring priorities and Robot/AUTOTUNE adjusts your system for optimal performance using the same techniques you would use if you had the time. Add Robot/SCHEDULE to change the subsystem pool size based on the job queue attached to the job. Schedule Robot/AUTOTUNE's performance history reports in Robot/SCHEDULE to run at regular intervals and provide performance benchmarks for your system.

Automate Message Management

Robot/SCHEDULE, Robot/CONSOLE®, and Robot/ALERT

Your System i generates thousands of messages each day—for every event that occurs on the system. Robot/SCHEDULE has a seamless interface with Robot/CONSOLE, our System i message, resource, and log management software to help you reduce operational crises. Robot/SCHEDULE can execute or schedule a batch job in reaction to a Robot/CONSOLE message. Now, you can initiate all your jobs that run in reaction to system or application events—automatically. Add Robot/ALERT to send a text, e-mail, or pager message to an expert if no one responds to a message.

Join The 15,000 Customers Using Our Automated Operations Solution

It's no accident that Robot/SCHEDULE is the world's best job scheduling software for the System i. When you combine committed development, marketing, sales, support, and administrative people with strong management, processes that really work, a powerful drive to succeed, and a complete dedication to quality, the results speak for themselves. Since 1982, Help/Systems has focused successfully on one goal: To deliver the highest quality software and training possible to help you manage your System i with "lights-out" automation.

Award-Winning Robot Automated Operations Solution

Whether you have a single System i, or a network of them, Help/Systems is committed to providing you with products that automate their operation.

The products of the Robot Automated Operations Solution look and act the same. All of the Help/Systems products talk to each other through the Solution's common component interface. This integration makes all the products powerful, yet easy to learn and use. Using Robot/SCHEDULE with our other products makes your investment in Robot/SCHEDULE much more valuable.

Our product expertise has won us many awards from numerous publications. And, our customers have awarded us 55,000 times with product purchases.

Learn More About Robot/SCHEDULE

Help/Systems offers regular training on Robot/SCHEDULE as part of our Educational and Consulting Services. Our ISO 9001-certified training teaches you strategies and techniques for basic job setup, handling schedule changes, working with completion history, forecasting schedules, using advanced scheduling, using OPAL, creating group and reactive jobs, and much, much more.

Learn more about Robot/SCHEDULE and the other products of the Robot Automated Operations Solution. Detailed class descriptions and schedules are available on our Web site at **www.helpsystems.com/education**.

Commitment To Excellence

Help/Systems became America's first ISO 9001-certified software company in 1992 and has maintained this level of quality ever since. This international quality standard covers software design, development, marketing, product support, and training. Help/Systems demonstrated that it has an excellent software quality assurance system in place, full management commitment to quality, and a well-trained and motivated staff. This certification applies to all company procedures for ensuring customer satisfaction, from those done by the receptionist to the duties of the president.

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