Thermo Fisher Scientific
Plays It Again With Robot/REPLAY®

By Bob Balderson

You don't have to go far in the today's world to hear automation stories with happy endings. Stories about how much time, money, and work was saved by automating job scheduling, message management, and reporting on IBM Power Systems™ running IBM i (iSeries®). Stories about how cutting out tedious, monotonous tasks and increasing productivity without adding extra hours, made for happier employees. It's a lot rarer to hear stories about automating interactive processes—processes that usually require a person to stand by, watch for, and enter information. Stories like Thermo Fisher Scientific Inc.

Thermo Fisher Scientific, a manufacturing company with more than 125 years of experience, is located in Dubuque, Iowa along the Mississippi River. As a corporation, Thermo Fisher Scientific Inc. is the world leader in serving science, helping their customers make the world healthier, cleaner, and safer. They have more than 30,000 employees and serve over 350,000 customers within pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions, and government agencies. In Dubuque, they design and manufacture labor-saving laboratory and dental products including NANOpure Diamond water systems, Mega-Pure water distillation systems, and many others.

Internally, over 500 employees from Dubuque to Malaysia use an IBM Power 520. Their main IBM i business application is Infor XA. They also have several LAN servers, including a Windows server, and a Orion server/application that is used as a data warehouse to download Infor XA information for Access or other query functions.

The company began using the Robot family of products from Help/Systems in 1998. Prior to that, they had two computer operators working a day shift and one working a night shift. Because their Infor XA software did not offer scheduling features, all jobs had to be submitted manually. And, many required a certain job to complete before the next job could run. As a result, all backup and resource-intensive jobs had to run during the second shift. In addition, they needed an operator to work a 15-hour shift for their month-end processing. So, they needed scheduling help in a big way. That's when they discovered the team of Robot/SCHEDULE,® the automatic job scheduler, and Robot/REPLAY, the plug-in to Robot/SCHEDULE that automates interactive jobs.

Officially, Brenda Hefel is the iSeries Operations Coordinator for Thermo Fisher Scientific in Dubuque. But, as Brenda describes it, "My title should be Automation Manager, iSeries Coordinator, and Robot Lover. The Robot products were the answer to all our questions! All our Infor XA screens are interactive, so we needed a job scheduler that could work interactively. Much of the data, such as dates and menu options, had to be entered manually. For example, to use Infor XA to run a backup, you have to choose from a menu. So, we were locked into having somebody there.

> *"My title should be Automation Manager, iSeries Coordinator, and Robot Lover. The Robot products were the answer to all of our questions!"*

"Robot/REPLAY is absolutely perfect. You start Robot/REPLAY, you capture your screens once, you end Robot/REPLAY, and you submit the job at a scheduled time using Robot/SCHEDULE. Robot/REPLAY runs the interactive screen images just as if they were batch processed. Add the wonderful reactivity feature of Robot/SCHEDULE and you can streamline and organize everything. You know a second job's not going to start until the previous job has completed successfully. It's built-in dependency processing. We currently have about 260 Robot/SCHEDULE jobs and we use Robot/REPLAY for 150 of them.

"We use Robot/SCHEDULE's reserved command variables to enter dates and it works beautifully. Many of our screens are daily or monthly screens, so we manipulate the system date to whatever we need

it to be. The processing runs unattended and enters the correct date every time—no keystroke errors. So far, we have automated about 80% of our Infor XA processing. We even use Robot/SCHEDULE to schedule IPLs. All of our system maintenance is unattended, including backups.

"With reserved command variables, we have also eliminated keystroke errors, such as entering the wrong date. And, we don't run a job (or jobs) out of order, which often takes three times longer to fix. We know that our nightly processing is going to run correctly, every time. Now we can run our Infor XA backups and jobs during third shift when no one is here, giving our second shift a full eight hours of dedicated processing time. Automating our operations has definitely made our company more productive."

Brenda also loves the PC interface. "The Robot/SCHEDULE PC interface is fabulous! Using Robot/SCHEDULE was always easy, but with this interface you just right-click and your answer is there. You have a wealth of information right at your fingertips—job history, reactivity, group jobs, and group members. It's great."
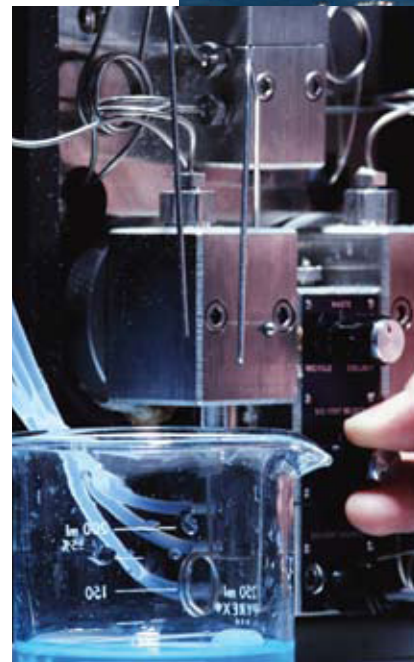
Another area they were able to tackle with automation was parallel processing in multiple environments. As Brenda describes, "In 2005 we opened our Malaysia plant. We brought them onto our iSeries box in a separate partition. With Robot/REPLAY and Robot/SCHEDULE we do not need a computer operator. All of the processing is on the Dubuque iSeries, and both production environments can run the same jobs at the same time. This would be almost impossible if an operator had to handle both systems at the same time. With Robot/SCHEDULE and reactivity, we've been able to process in parallel and shorten our processing time. Before, our end-of-month process took about 15 hours. Now, it takes less than two hours. We save time and overtime hours—both good things for the company.

Two other products, Robot/REPORTS® and Robot/ALERT® brought in other big benefits. As Brenda explains, "I keep track of the pages of paper we save per month by using Robot/ REPORTS

"With Robot/SCHEDULE, you have a wealth of information right at your fingertips—job history, reactivity, group jobs, and group members. It's great."

for online viewing or e-mail. It amounts to about 35,000 pages of paper, or 10 boxes, each month. Besides that, we enjoy the benefit of the time saved. We're e-mailing reports to end-users and using online viewing for our bigger reports. When a person only wants to see the last page, they view it online. They've been trained to print the last totals page from whatever report segment they need. "Another nice feature of Robot/REPORTS is bursting. We used to print an MRP report and then burst it manually. Now we let Robot/REPORTS handle that and e-mail only the specific section for each recipient. The report is generated once, split different ways, and each recipient gets only their segment. Now that distributing and bursting reports manually has gone away, we can put our operators to better use on other projects, such as more LAN-oriented duties.

"We've been lights-out for over 10 years and we run the majority of our jobs unattended, during nonwork hours. If there is a problem, we use Robot/ALERT to page us. For example, if a backup fails or there's a problem, we get paged immediately and can resolve it quickly, before first shift arrives. "We also use Robot/SCHEDULE, Robot/ALERT, and some custom coding with Infor XA. For example, we can't have a batch file open when we run our backup. So our program checks to see if any batch files are open and sends a page so we can respond proactively, before the backup fails."

The final piece to the whole operation is technical support. A big secret that Help/Systems learned a long time ago was that having great support goes a long way with customers and Brenda agrees completely. "Robot/SCHEDULE is easy enough that you can train yourself. And because of the excellent support staff, if you call with a question, it's answered immediately. After working with Help/Systems for more than a decade, I don't call as frequently. But when I do, I still talk to some of the same people I have from day one. They are great, very knowledgeable. Like I said before, my real title is Automation Manager, iSeries Coordinator, and Robot Lover."