

Robot/REPORTS and Robot/SCHEDULE Help Knoll Design for a Green World

by Bob Balderson

Hans Knoll founded the furniture design firm, Knoll, in 1938. A few years later, his associate and wife to be, architect and designer Florence Schust, convinced him to expand their design concepts by working with architects. It worked so well, that today Knoll is recognized worldwide as a design leader in textiles, and home and office furniture. In fact, many of the furniture designs they've created are considered icons for the 20th century and beyond.



Generation by Knoll® is SMARt® Platinum-certified for environmental excellence.

In their own words, *Knoll is recognized internationally for creating workplace furnishings that inspire, evolve, and endure... Our products are exhibited in major art museums, with more than 40 pieces in the permanent Design Collection of The Museum of Modern Art in New York. Since our founding in 1938, design integrity has been our guiding principle... We believe good design is good business.*

Knoll also believes in policies and practices to protect the planet, conserve natural resources, and reduce waste. They are committed to safeguarding natural habitats and local communities by following environmental standards mandated by a comprehensive Environmental, Health & Safety Management Plan.

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Headquartered in East Greenville, Pennsylvania, Knoll serves clients in North America through a network of more than 200 dealerships, 20 showrooms, and four ISO 14001-certified manufacturing sites that mark their commitment to environmentally responsible practices. Knoll also has multiple showrooms in Europe, and is represented throughout Asia and Latin America by independently owned dealers and licensees.

Automated Operations for Minimal Problems

Steve Rainone is a Data Center Supervisor at Knoll. As he explains it, “I joined Knoll right after Y2K. I wanted to get out of consulting and back to the data center. Strangely enough, I’ve always loved the long hours, the night shift, and the environment. Currently, I’m responsible for staffing and running all of our jobs in the production environment and moving objects from our test environment to our production environment.”

“Robot/SCHEDULE and Robot/REPORTS provide accountability, accessibility, timeliness, and security.”

Computer operations at Knoll run mostly on a partitioned IBM Power Systems™ model 570 that hosts their production system, development system, and Web sites. With an IT staff of just 34 to support a company with worldwide revenues of about \$780 million, they like to run lean. So, they rely heavily on two of the Robot products from Help/Systems—Robot/SCHEDULE®, the automated job scheduler and batch management software, and Robot/REPORTS®, the automated report management software.

As Steve explains, “We started with the JD Edwards environment, which we modified to run our base Enterprise Resource Planning (ERP) system. We use Aldon on our development system to move jobs to the production environment, which run with Robot/SCHEDULE. We run about a million Robot/SCHEDULE jobs a year. And, when I look at my Good Morning Report, I like what I see. In the last year, 984,000 jobs ended normally and 209 ended abnormally. I like those numbers—only .002% abnormal is very, very good.”

Satisfying Sarbanes-Oxley

Knoll is a public company, so they have strict Sarbanes-Oxley (SOX) rules and regulations to maintain. “When we get a request from a customer for a new report to run through Robot/SCHEDULE and Robot/REPORTS, we set it up and check with the requester to verify we have met their needs. All of this has to be documented for the auditors as a change to our production environment. They often use the daily audit log to see what was added to, or deleted from, Robot/SCHEDULE, and they check to see if we had the proper authorization. We save the daily audit for 35 days and print it monthly for them. With Robot/SCHEDULE, the auditors can easily see what actions were performed on the system.”

Steve and the staff also keep a fair amount of job history. “The auditors want us to keep at least 18 months, but we actually never delete history. Everyone here gets concerned if we talk about purging because someday we may need it. You just never know.”



Dividends Horizon® workstation (shown with two Generation by Knoll chairs and the Moment™ chair) is the industry's first office systems product to receive level™ 3 certification, the highest award under BIFMA's furniture sustainability standard.

Currently, they have almost 6,000 Robot/SCHEDULE jobs set up. Steve likes Robot/SCHEDULE because, “It lets me schedule similar jobs using groups. Another great thing is reactivity: one job, or a group of jobs, can react to the completion of something else. If we had a manual schedule without Robot/SCHEDULE, it would be a nightmare. We run so many jobs, it would be impossible to manually check to make sure something finished before the next job ran. A lot of jobs update records and you can't go back without a programmer. Robot/SCHEDULE checks completion codes and if something doesn't run, it sends a message to QSYSOPR to indicate that we've got a problem.”

Massive Report Processing — Automated

Knoll uses Robot/REPORTS to handle their output processing. “Robot/REPORTS generates the reports that we e-mail or fax to customers, clients, and our dealers worldwide. We use Robot/REPORTS and output queue monitoring to move reports to our optical storage device to be accessible over the Internet.”

Steve likes to use OPAL® (OPerator Assistance Language®), the Robot/REPORTS easy-to-use programming language, for some reporting decisions. “Our shipping department creates packing lists, receiving sheets, and other documents, and we use OPAL to tell the system whether to print an item or move it to an index. Because of Robot/REPORTS security, a user can only see the reports assigned to them. But, after a report is moved to an index, anyone with access can look it up and print it.

“I do a lot of report segmenting. I might take a large report, break it by sales rep number, and e-mail each rep their sales for the week. In the old days, it could have taken a month for them to get those numbers. Now, we can process and e-mail them the same day.”

Steve acknowledges that Robot/REPORTS is a workhorse. “Most jobs have an associated report set. So,

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we have probably 5,500 report sets and several hundred recipients. Plus, we've got almost 2.7 million individual reports in long-term storage and 300,000 more in short term storage. We store long-term data on tape and short-term data in save files. Then, we pass reports from Robot/REPORTS to our optical storage system."

Steve has noticed viewing and printing trends with Robot/REPORTS. "Now, people view reports online and we've really reduced printing. In the last couple of years, I've helped several departments cut way back on printed reports. We use Robot/REPORTS to create a PDF to e-mail or have people view it online."

"Finally, there are all those friendly, helpful, knowledgeable people behind that great software. That's why we like Help/Systems."

Major Benefits With Automation

Steve likes what the Robot products have to offer. "Robot/SCHEDULE and Robot/REPORTS provide accountability, accessibility, timeliness, and security. Accountability—the ability to confirm that the jobs you expected to run did run—helps us meet SOX regulations. Accessibility and timeliness—our people can even get their reports e-mailed—really helps us keep our business running. And, Robot/REPORTS lets us really secure reports. People can't access reports they're not authorized to see. It helps us see who gets what information and it shows us how long information is available."

Steve sums it up. "Robot/SCHEDULE and Robot/REPORTS run in tandem. Several of our jobs or groups run in less than a minute. We need to do a lot of contingency processing—where one group waits for others to finish. That's why we like Robot/SCHEDULE. An operator couldn't possibly run the quantity of reports we do manually. That's why we like Robot/REPORTS. Finally, there are all those friendly, helpful, knowledgeable people behind that great software. That's why we like Help/Systems."



Knoll