

Automation Brings A Season Of Changes To White-Rodgers

Many seasons have passed since 1937 when White-Rodgers first started in the business of making people more comfortable. Today, as a part of Emerson Climate Technologies, White-Rodgers serves the worldwide market for thermostats, ignition controls, humidifiers, electronic air cleaners, and many other quality products that help people everywhere breathe easier.

White-Rodgers relies on two IBM® i5™ systems: one hosts the production PeopleSoft ERP system, the other serves both as a high-availability target using Data Mirror, and for testing and IT development. The machines used to be staffed 24/7 by a team of six operators.

When the IT department was challenged with meeting a major cost reduction goal, they decided to eliminate staffing during nights and weekends by automating their System i5 operations. To meet their deadline, the project had to be completed in slightly over four weeks.

Bob Burnham, Director of Applications Development, and Brian Hoefener, Supervisor of Applications Development, became a two-person implementation team. They determined they needed three automation components:

1. A job scheduler that could start jobs based on the completion of other jobs, either on the same system or the remote system, and support other complex schedules
2. A message manager that could manage the system operator message queue, respond to messages, and notify staff when a problem required attention
3. A reliable way to page IT staff members when necessary.

They selected the Robot suite of products from Help/Systems and began a 30-day trial of Robot/SCHEDULE® (job scheduling and batch management), Robot/CONSOLE® (message management), Robot/ALERT® (automated paging and e-mail), and Robot/NETWORK® (network management).

Job schedule automation. Bob started the automation process by automating the jobs that run every day (updates, reports, and backups), since they yielded the quickest learning experience with the software. These were followed by weekly, monthly, and special-request jobs.

White-Rodgers relies heavily on some key Robot/SCHEDULE features. Group jobs let several individual jobs execute in sequence, allowing the company to reduce the number of individual schedules that have to be created and maintained. They also rely on reactive jobs that start based on a status change on one or more other jobs. The group and reactive jobs can include jobs run on multiple systems connected by Robot/NETWORK.



One of the challenges Bob had to overcome during implementation involved tape management during backups. The i5 systems shared a 3590-tape drive with a 10-cartridge magazine loader, yet their weekend backups required 15 tapes. To solve the problem, Bob modified the backup schedule and managed to reduce the weekend requirement to nine tapes. On three-day weekends, some libraries were simply saved to save files and an operator saved the files to tape on the first day back at work.

Message management and paging. Brian took on the responsibility of implementing Robot/CONSOLE and Robot/ALERT to provide message management and notification services. He created message sets that contain instructions for managing messages based on their severity and other user-defined criteria. Some messages are ignored, while others are answered automatically. Messages that require a response are routed to a message set that sends a pager message using Robot/ALERT. Important informational messages also result in a page.

White-Rodgers uses a Robot/ALERT notification list to make sure someone sees important messages. Four senior developers provide on-call support, each the primary contact one week per month, on a rotating basis. Robot/ALERT is configured to page the first person on the list up to three times at ten minute intervals, then repeat with the next person on the list. The paging continues until someone responds or acknowledges the message, ensuring that messages are not missed.

White-Rodgers used Robot/NETWORK to configure a central monitoring facility for both i5 systems. This allows them to use one copy of Robot/ALERT to handle pages for problems on both systems.

Results. White-Rodgers completed the initial phase of the automation project in time to meet their deadline. Computer room staffing was reduced to three operators providing support 13 hours a day, 5 days a week. This resulted in an initial ROI of 242 percent. No significant scheduling or work management issues arose in the months following the implementation.

Since then, the company has continued to add other jobs to the schedule and improve schedule management to ensure that critical jobs start on time. And, they continue to monitor jobs and page when jobs run abnormally long.

Nine months after the initial implementation, the tape drive was upgraded, doubling the tape capacity and totally eliminating operator involvement during holiday weekends. This allowed the company to reduce the operations staff to one Help Desk technician who spends just one to two hours a day monitoring job schedules and managing tapes.

For White-Rodgers, the automation project has been a huge success. They exceeded their expected savings without schedule interruptions and without compromising the monitoring or control of their i5 systems.

