White Paper Robot/CONSOLE[®] Robot/NETWORK[®] Robot/ALERT[®] Robot/TRAPPER[®]

How the Robot products address enterprise management

by Tom Huntington V.P. of Technical Services

Management by exception is the key

What is at the center of your computing universe? For users of Help/Systems products, the answer often is the IBM[®] System i[™] and i5/OS. That's where the most important applications run. But, the IT universe is a lot bigger than it used to be. You may have multiple copies of i5/OS to monitor (either on separate System i systems or separate partitions). You also probably have Windows, UNIX, and Linux servers to manage. Plus, you have printers and many other devices to monitor. So, how can the Help/Systems products help?

If you have Robot/CONSOLE, Robot/NETWORK, Robot/ALERT, and Robot/TRAPPER, you have the foundation for i5/OS-based enterprise management. This product group lets you "manage by exception." (The meaning and power of this phrase will become clear by the end of this article.)

"Be quiet and let me think!"

Did your mother ever say, "Be quiet and let me think!"? Most moms have said something like that to their noisy children. And, as often is the case, mom was right.

Everything we try to manage is sending us a flood of messages, most of which require no action on our part. Let's look at how to tackle the "noise" so we can manage our systems—and our enterprise—more efficiently.

Robot/CONSOLE manages the messages in the message queues you specify. Some important queues to automate include QSYSOPR, QSYSMSG, and printer message queues. Message queues are filled with both important and unimportant messages. The noise is all of the events that are not important or urgent, don't require action, or are unnecessary. Robot/CONSOLE suppresses unimportant messages and escalates important ones. Most i5/OS environments can suppress 85 to 90 percent of their messages. This is the first phase of management by exception—reduce the noise by suppressing unimportant messages.

Phase two is to have Robot/CONSOLE answer messages that always require the same reply. This is easy to set up and further reduces traffic in the network.

Phase three is to identify informational messages that should be response-required. This forces your Operations team to acknowledge critical informational messages. And, after an item is acknowledged, the Operation team member's user ID is assigned to the event.

The fourth phase is to start using Robot/CONSOLE's OPerator Assistance Language[®] (OPAL[®]). OPAL acts like a macro that is executed on receipt of a specified message. With OPAL, a very small set of code can perform some very powerful processing (such as executing any i5/OS command). For example, you can increase the size of a file based on the file name contained in the message. OPAL automatically delivers a set of variables, such as file, line, controller, subsystem, program, user, job, and device name, to be used by your OPAL macro. OPAL is powerful automation.

Automate at the source

To manage by exception, you need to automate at the source of the problem. For message management, Robot/CONSOLE must be installed with each copy of i5/OS. By interconnecting these copies with Robot/ NETWORK (the network management software), you can develop rules for each system or partition so that filtering occurs at the source of the problem. This reduces network traffic. You can use Robot/NETWORK's Robot/CONSOLE Product Master to create and distribute message management rules, called Message Sets, to each i5/OS environment. The rules act independently on each copy of i5/OS. All exceptions not automated at the local level are sent to the consolidated Robot/NETWORK Status Center.

Consolidate consoles

Robot/NETWORK is truly a console consolidation product. It lets you monitor all Robot product events by exception from one location. It works with Robot/ALERT to notify you of problems even when you aren't watching the monitor. Robot/ALERT sends a text, pager, or e-mail message to a device such as a cell phone, a pager, or a PDA. So, while you are fixing a paper jam or mounting a tape, you're still notified of exceptions immediately.

In lights-out operations, Robot/ALERT notifies the computer staff of any after-hours computer problems. Many companies now use two-way paging or e-mail to answer critical events directly from a hand-held device.

Managing non-i5/OS events

You can deploy two easy-to-use mechanisms—pings and SNMP traps—to make sure other environments are up and running. Robot/TRAPPER uses pings to check availability and SNMP traps to receive events from any SNMP-enabled device in your network. Exceptions are converted to i5/OS messages for Robot/CONSOLE to process. For instance, you can change the text of an encrypted, hard-to-read SNMP trap to something meaningful to your Operations staff.

We know that environmental monitors, printers, Windows, UNIX, Linux, and Domino servers, routers, and many other devices use SNMP when an event occurs. Robot/TRAPPER and Robot/CONSOLE can automate the entire monitoring process.

One Help/Systems customer, a cable company in Wisconsin, uses these products to make sure that the payper-view feature of their cable service is working. Let i5/OS be the central administrator for your network, too.

The key to running today's computer environment is management by exception. You and your staff have to deal with the problems, so you need to be aware of them before they become major. The more your team uses Robot/CONSOLE and its related products—Robot/NETWORK, Robot/TRAPPER, and Robot/ALERT—the more successfully you will manage your computer systems.

