# A GUIDE TO...

# IBM i MESSAGE MANAGEMENT AND RESOURCE MONITORING



AUTOMATION SOLUTIONS • PRODUCT GUIDES • TIPS



# TABLE OF CONTENTS

#### 1 OVERVIEW

- 3 SECTION 1: Why Automation Software?
- 4 SECTION 2: Robot/NETWORK®
- 7 SECTION 3: Robot/CONSOLE®
- 9 SECTION 4: Robot/ALERT®

### **OVERVIEW**

When you work with IBM i servers, you know that critical system messages require special attention, while others can be ignored or answered automatically. Important system resources require constant monitoring and fast response in the event of problems. And, certain system events must be escalated efficiently for fast resolution.

You also know that software that can perform these tasks accurately and automatically means happy customers, content users, satisfied auditors, solid Service Level Agreements, and good news for your bottom line.

The answer is to automate message management, resource monitoring, escalation, and notification across your network of IBM i systems using the best software solution set for your IBM i networks and enterprises.

### **OVERVIEW**

### ROBOT/**NETWORK** Network Management

Robot/NETWORK manages your IBM i network centrally, and helps you control your Robot products, devices, and other applications, throughout your enterprise.

- Redirect messages between systems using Robot/NETWORK and Robot/ CONSOLE for response or escalation.
- Monitor your enterprise from a single workstation using Robot/NETWORK's SNMP interface to enterprise monitors, such as Tivoli and HP OpenView.
- View detailed and summary performance metrics for your connected IBM i servers.

### ROBOT/**CONSOLE** Message Management & Resource Monitoring

Robot/CONSOLE can handle any type of message—it can suppress them, forward them to an expert, or reply to them automatically, using a canned reply, or a reply determined by the contents of the message.

Meanwhile, Robot/CONSOLE automatically monitors your critical systems resources—lines, devices, controllers, and subsystems—to make sure everything runs smoothly.

### ROBOT/ALERT Automatic Notification

Robot/ALERT notifies you when messages need replies, or resources need attention. Robot/CONSOLE works with Robot/ALERT to notify you when an important message needs a response; Robot/NETWORK works with Robot/ALERT to let you know when a system issue (status) needs resolution, anywhere in the network. With Robot/ ALERT, you can:

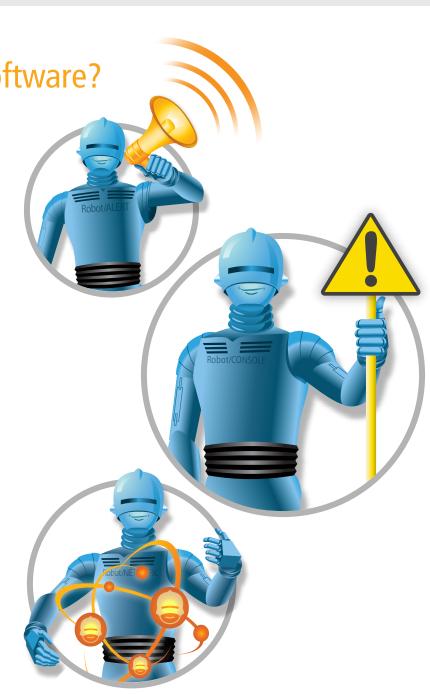
- Automatically escalate messages, to one or more recipients, and request a response.
- Respond anywhere from your favorite communication device.

# Why Automation Software?

The perfect solution set of automation software can take over your error-prone manual processes and make them run smoothly, reliably, and on time.

Robot/**NETWORK**, Robot/**CONSOLE**, and Robot/**ALERT** work together to eliminate your stress, increase your efficiency, keep you informed, and save you time, effort, and money:

- Manage the pulse of your operations, anywhere.
- Monitor messages, resources, and performance automatically, across systems, from a central location.
- Keep track of critical jobs, subsystems, devices, and more.
- Take the pain out of **meet**ing your **Service Level Agreements**.
- Spend less time "fighting fires" and troubleshooting problems.
- Respond to critical issues quickly for maximum efficiency.
- **Stop** small **problems** from turning into big crises.



# Robot/NETWORK

Managing a network of IBM i servers can be difficult. Managing a complete enterprise of different devices, systems, and hardware platforms is even more complex. You need good software to stay in control. Luckily, Help/Systems has a great solution: Robot/NETWORK, our network control package. Robot/NETWORK lets you manage all of the Robot products on your IBM i networks, as well as all the other devices and user applications throughout your enterprise. And, you can do all of this from the most secure and reliable hardware platform in the world.

### **Monitor Networks of IBM i Servers**

Use Robot/NETWORK to monitor a network of IBM i servers or partitions, configured as Hosts and Nodes. A product on a Node sends a status message to the Host for a response. If no one on the Host responds, or if the Host is unavailable, Robot/NETWORK can use Robot/ALERT to send a text, email, or pager message. If the status message remains unacknowledged, Robot/ NETWORK can escalate it using Robot/ALERT, a user program, or an SNMP trap.

### **Monitor Performance Across IBM i**

The Robot/NETWORK Performance Center displays summary and detailed performance metrics for the IBM i servers in your network. Use its customizable dashboards with graphs and charts or drill down into current and historical data including CPU usage, System ASP usage, and more.

The Performance Center allows you to create multiple threshold levels for performance statistics—and notification if they're exceeded—on each Node and easily identifies them in different areas of the center. It also gives you drill-down ability to monitor thresholds on a summary tab.

#### Manage Your Entire Network Centrally

Robot/NETWORK lets you monitor network events (status messages) from a single PC display. Use the Robot/NETWORK Status Center to respond to status messages and manage the Host, Nodes, Robot products, and other applications in your network. You can monitor and maintain your entire network of IBM i servers and Robot products.

- Display product metrics (job, status, resource monitoring, and more) and system performance information on dashboards with drill-down capabilities.
- Update Robot/NETWORK from the Help/Systems website.
- Manage the licensing for your Robot products from a central location.
- Monitor the other software applications on all of the IBM i servers in your network.

# Robot/**NETWORK**

#### **Map Your Network Graphically**

The Robot/NETWORK Map Center displays your IBM i systems (Host and Nodes) as icons and shows their relationships. You see the number of status messages waiting for a response on a Host, the most critical statuses waiting, and the current state of communication between a Node system and the Host

system. You can use the Map Center to monitor your network, display system properties, and respond to statuses. And, you can customize each Map Center background display with the graphical image of your choice.



#### **Monitor Your Enterprise**

You can use Robot/NETWORK with enterprise monitoring packages, such as Tivoli Enterprise Console,<sup>®</sup> HP OpenView,<sup>®</sup> IBM Tivoli<sup>®</sup> Netcool,<sup>®</sup> BMC PATROL Enterprise Manager,<sup>®</sup> and CA Unicenter.<sup>®</sup> You can monitor any device in your enterprise using two-way SNMP traps. With Robot/NETWORK, SNMP traps, and your enterprise monitor, you enjoy the power and reliability of the IBM i server as your enterprise monitoring platform.

### Centralize Product Control For Your IBM i Servers

Use Robot/NETWORK to instruct your remote IBM i servers from a central location so they operate independently and unattended. Robot/NETWORK works with the other products of the Robot Automated Operations Solution to distribute product instructions and objects for networked IBM i servers and partitions.

# Robot/**NETWORK**

Robot/SCHEDULE works with Robot/NETWORK in Host mode to create and distribute jobs and setup instructions, and print consolidated reports from multiple systems.

Robot/CONSOLE works with Robot/NETWORK in Host mode to send setup information, such as message sets, message groups, and message tables; message instructions; and resource monitoring information.

### Enjoy Fast, Easy Point-And-Click Access

The Robot/NETWORK Explorer is Robot/NETWORK's powerful, easy-to-use graphical interface for network monitoring and management. The Explorer displays your network components, such as Hosts, Nodes, and products, in a top-down vertical tree structure.

The Explorer also displays information about distribution lists, applications, instruction packets, system setup, and reports (including network-wide, consolidated reports). You can expand or collapse the tree for more or less detail, and right-click to display menu options.

All notification options at your disposal on Robot/ NETWORK—SNMP traps, calling a user program, and Robot/ALERT messages—can be combined to escalate statuses. From the new "My Waiting Statuses" tab, users can see details about the message, add notes, reply to the status, unassign and reassign, and more. For any system, you can respond to a status or acknowledge an event, including QSYSOPR messages, from one or more systems. Use the Status Center to monitor and respond to statuses; escalate them to a text message, email message, SNMP trap, or user program; or assign them to an expert. The display will auto-refresh with the latest statuses because Robot/NETWORK informs you when new statuses arrive.

Туре	Text				
	Restore canceled	anceled			
1	Restore started	re started			
1	Restore completed	completed			
	EOMSALES-Job en	EOMSALES-Job ended abnormally			
1	TOMGRPWIN-ROBOT group job TOMGRPWIN complete with status cod				
	TOMWNFTP-Job ended abnormally.				
1	Pointer or paramter error (C G D F).				
	Error message CPF4103 appeared during OPEN for file RBC270D (C S D F).				
	The call to "LIBL/REP690 ended in error (C G D F).				
	SQUSERS1-MARKA/SQUSERS1 User Job.				
1	CYBERKING : ASP 1 reached event Threashold 1. Threashold: 85%. Used: 87				
	ACMSCREATE-STEVEH/ACMSCREATE User Job.				
	TRNQWATCH2-RBTUSER/TRNQWATCH2 User Job.				
	CYBERKING : ASP 1 reached event Threashold 1. Threashold: 85%. Used: 87				
1	ACMSCREATE-STE	VEH/ACMSCREATE User Job.			
Severity:	Atte	ntion			
Received	on Host at: 03/10/	2012 14:38:33 CDT			
Sent fron	Node at: 03/10/	03/10/2012 12:38:33 CDT			
Text:	EOMS	EOMSALES-Job ended abnormally			

# \_Did You Know?\_

You can use Robot/**NETWORK** to create new messaging and monitoring rules and share them with Robot/CONSOLE throughout your network.

# Robot/CONSOLE

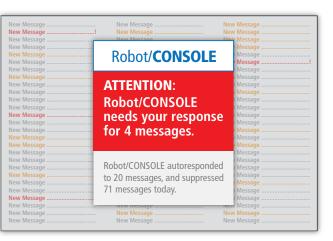
When your IBM i system sends a message, who sees it? When a resource is unavailable, how long before anyone notices? When someone changes a security value or makes an FTP request, can you check who did it? The on-duty operators should be monitoring everything, but messages get missed, servers go down, and FTP requests are often unmonitored.

To make the most of your IBM i server, don't wait for an operator's help. To make the most of your operators, don't tie them to a console. You need an intelligent, hardworking assistant who sorts through incoming messages, monitors resources, and notifies a human if it can't handle a situation. Robot/CONSOLE is that intelligent, untiring assistant for a fraction of an operator's salary.

### Handle IBM i Messages Automatically

You tell Robot/CONSOLE how to handle each type of message and it does automatically. As you work with Robot/CONSOLE, it becomes more experienced and can handle more and more of your messages automatically. It knows which messages:

- Can be suppressed—no one needs to see them.
- Indicate a serious problem and should be forwarded to an expert.



- Can be replied to automatically, using a canned reply or a reply determined by the message contents.
- Need a response so the system can continue working (such as tape mount or paper out messages).

Robot/CONSOLE doesn't let you miss important messages—it makes sure you see them right away. If you're unavailable, Robot/CONSOLE escalates the message until someone responds. Robot/CONSOLE works with Robot/ ALERT to send important messages to your favorite device: phone, pager, or email.

# Did You Know?

Robot/**CONSOLE** can suppress unimportant, informational messages to cut the clutter. It can also make messages response-required and escalate them to the correct people for fast response.

Robot/CONSOLE

#### **Monitor IBM i Resources Proactively**

3

Robot/CONSOLE monitors your resources. You don't need to worry if a line, device, server, job, subsystem, or other resource becomes unavailable. Robot/CONSOLE checks your system resources at regular intervals and takes immediate action if there is a problem.

Robot/CONSOLE can use its powerful message-handling capabilities to react to the situation by executing a procedure or notifying an expert. The result—you never have to check resources manually, or write your own monitoring programs.

#### Manage System Logs Effortlessly

Robot/CONSOLE also monitors system logs to help you manage FTP requests, the security audit journal (QAUDJRN), and the system history log (QHST). You can see at a glance who requested an FTP transaction, who modified a system value, the number of objects not saved in the last backup, and more. And, Robot/CONSOLE can handle these events.

### **Use OPAL For Real Automation Muscle**

Behind the scenes, OPerator Assistance Language<sup>®</sup> (OPAL<sup>®</sup>) provides extra automation muscle for Robot/CONSOLE. You can use OPAL to easily create message-processing procedures for even the most complex scenarios. OPAL can check the contents of messages and decide which actions to take, including executing commands, calling programs, starting or cancelling jobs, calling an expert for help, or a combination of options. OPAL is so powerful, you can use it to automate any procedure.

Robot/CONSOLE Explorer X						
Name	Туре	Application	Priority	Hold Status		
DELAYTEST	JOB	А	1	Held		
DELAYTEST	JOB	ATMONITOR	1	Held		
DEVD2	DEVD		3	Released		
DEVD3	DEVD		3	Held		
DEVHALL	DEVD		2	Released		
DFASDFAD	CTLD		2	Released		
DNS_SERVER	SERVER		3	Held		
DOMINO	DOMINO	JIMBO	3	Held		
DOUGO	OUTQ		1	Released		
Server Information Resource Information						
Port Number:	53	Expected	I Status:	ACTIVE		
Port Type:	*TCP					
Job Name:	QTOBDNS					

#### **Network-Wide Control and History**

Robot/CONSOLE works with Robot/NETWORK to centrally manage your network messages and resources. Use Robot/CONSOLE to send message and resource management information—such as message sets, groups, tables, instructions, and resource monitoring information—to your networked systems.

And, auditing and troubleshooting are easy because Robot/CONSOLE keeps detailed message and reply history. You can print different summary and detail message reports, and its Good Morning report summarizes all messages handled overnight.



# Robot/ALERT

f you plan to run your IBM i system unattended, Robot/ALERT, the message notification software, is a key player. Using Robot/ALERT, Robot/CONSOLE notifies you when an important message needs a response; Robot/NETWORK lets you know when a system status needs resolution.

### Send Messages Anywhere, To Any Device

Robot/ALERT sends email, text, or pager messages quickly and easily. Robot/ALERT can communicate with laptops, cell phones, pagers, and other devices to keep you in touch anywhere. And, with two-way messaging, you can answer the message from your device without logging on to the IBM i server.

With Robot/ALERT, you can send messages from the Robot products to your operations staff, and you can send messages using a web browser and the Robot Browser Interface.

### **Broadcast Your Message**

Robot/ALERT's powerful broadcast list feature lets you send a message to everybody on a list, or just the person on duty. And, Robot/ALERT can check the schedules of the people in the list to send the message to the correct person. In an emergency, Robot/ALERT escalates the problem until it gets a response.

### Fast, Easy Setup

You don't need new equipment or a new messaging service. Robot/ALERT takes care of the complexities. You just need a communication line and an IBM-compatible modem or TCP/IP. Robot/GUIDE, Robot/ALERT's online assistant, makes setup a snap. And, Robot/ALERT works with any local or national paging service and supports the protocols of more than 90 paging services.



# Did You Know?

Robot/**ALERT** can send an email, text, or cell phone message to any user or group of users, or send an SNMP trap message to your enterprise monitoring software.

# To learn more about this solution set and the other offerings from Help/Systems, visit our website at **www.helpsystems.com.**





© Help/Systems, LLC. All trademarks and registered trademarks are the property of their respective owners. Robot/CONSOLE," Robot/NETWORK," Robot/ALERT. A111MM2