

RoboMon NT/2000 - Exchange 2000 Intelligent Solution Set

Automated management for Microsoft® Exchange 2000 Server

Manage Any Exchange Environment Better

RoboMon's Exchange Intelligent Solution Set provides easily configurable proactive monitoring and problem solving for any size Exchange environment, from stand-alone email servers to the distributed, clustered messaging and collaboration configurations required by global eBusiness. RoboMon's automated, out-of-the-box Exchange Intelligent Solution Set operates through an integrated set of rules that detect and correct problems before your users experience failures or slowdowns. It monitors all aspects of Exchange availability and performance, including:

- Basic operations, such as whether email addresses are reachable and the Exchange services are running,
- Efficient use of disk space by the Exchange database and log files, and
- Performance criteria and security issues with POP3, IMAP4, NNTP, SMTP, NSPI Proxy, Data Conferencing, and Chat.

RoboMon can diagnose and correct problems on the spot, or escalate them to your attention at a central monitoring location. Performance and event data are archived to help you evaluate your hardware and software needs, and to plan realistically for growth.

Key Benefits

- Works out of the box, with no setup time
- Automatically configures to any size Exchange 2000 environment
- Fixes problems automatically, focuses your staff's time on the issues you target
- Allows centralized monitoring of remote systems
- May be precisely customized for each environment
- Provides intuitive, graphical interface for management and customization
- Integrates with RoboMon's enterprise-wide total eBusiness infrastructure management solution (see below)



What RoboMon's Exchange 2000 Intelligent Solution Set Monitors

RoboMon's Exchange 2000 Intelligent Solution Set provides comprehensive monitoring and management of running Exchange systems. Specific rules are designed to:

Monitor general operations and performance:

- Resource usage of processes such as CPU, working set, paged and non-paged pool
- Basic system performance indicators such as CPU, I/O, and memory usage
- Number of active users in the Information Store
- Reachability and response time of specified e-mail addresses
- Domains, servers, sites and users receiving or sending excessive mail
- Keep an historic record of Exchange 2000 performance for use in resource planning

Monitor folders and mailboxes for:

- Inactivity, number of messages, total size of messages, storage limit status, send and receive queue lengths, message delivered and submitted rates, average time for local and remote message delivery, and replication receive queue length

RoboMon NT/2000 Event Monitor

EventDateTime	Class	SubClass	Computer	!	RuleName
09/02/00 04:02:58 PM	EXCHANGE2000	SMTP SERVER	TRAFFIC	!	SMTP_RETRIES
09/02/00 04:00:18 PM	AUTOMATION	NETWORK	EAST	!	UNREACHABLE_COMPUTERS
09/02/00 04:00:18 PM	AUTOMATION	NETWORK	EAST	!	UNREACHABLE_COMPUTERS
09/02/00 02:01:32 PM	IIS	IIS CACHE	GLOBAL	!	IIS_CACHE_ALERT
09/02/00 02:01:28 PM	IIS	IIS PROCESS	GLOBAL	!	IIS_PROCESS_POOL_LEAK
09/02/00 11:00:09 AM	AUTOMATION	PAGE_FILE	EAST	!	PAGE_FILE_LOAD
09/02/00 11:00:01 AM	IIS	IIS SERVICES	EAST	!	IIS_SERVICES

Updated severity 1 problem for computer TRAFFIC at 9/2/00 04:02:58 PM.
Generated by rule SMTP_RETRIES of type SMTP SERVER in EXCHANGE2000.

Acknowledged by KAB at 9/2/00 04:26:39 PM.

High average number of retries per local delivery on SMTP server TRAFFIC during the last 15 minutes.

The average number of retries per local delivery is 6.

Consequences: A retry indicates that one or more delivery attempts of a message have failed. A high average number of retries may indicate a message flow problem within your intranet which can delay the processing of messages.

What RoboMon's Exchange 2000 Intelligent Solution Set Monitors cont.

Monitor the Message Transfer Agent (MTA) and MTA connections for:

- Work queue length and looping messages, age of oldest message in a queue, failed outbound associations and rejected inbound associations

Monitor the Directory Store for:

- Access denials, pending replication synchronizations, remaining replication updates, inter-site and local replication activity

Monitor various messaging protocols such as IMAP4, POP3, and NNTP for, as appropriate:

- Login failures, rejected and failed connections, byte rate, service activity, and current connections

Monitor the NSPI Proxy for:

- Failed client or server connections, and failed reads/writes

Monitor the Data Conferencing and T.120 MCU server for:

- MCU conference activity and CPU load, stopped or failing MCUs, and connected clients

Monitor the Chat server for:

- Authentication failures, client connections, message rate, user load, pending DNS lookup requests, and DNS lookup failures

Monitor the PC Microsoft Mail Connector (PCMTA) for:

- Failed connections, rate of file operations failing because of contention, messages sent and received activity

Monitor the SMTP server for:

- Queue lengths, activity, retries and failed connections

What Rules Mean to You

RoboMon rules work out-of-the-box, with no tweaking, for any size Exchange 2000 configuration. In addition, each RoboMon rule may be completely customized, allowing precise control over threshold settings through the Solutions Manager, as well as actions to be taken, required notifications and alerts.

RoboMon's intuitive, graphical Rule Designer allows you to tailor rules and create new rules without writing a single line of code. Customized rules may be deployed to individual machines, domains or throughout the enterprise, via simple, efficient, drag & drop operations in the RoboMon Enterprise Manager.

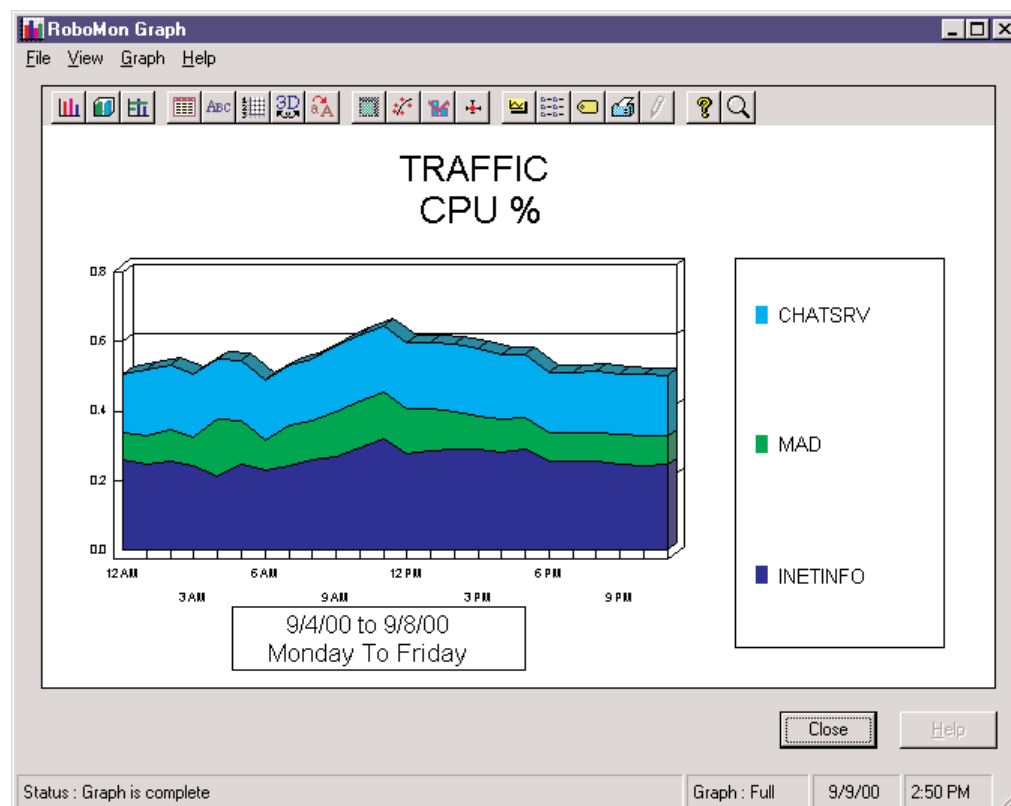
The Total RoboMon Solution

RoboMon for Windows NT/2000 is automated eBusiness infrastructure management software that detects and corrects complex application, system and network problems to ensure the highest levels of availability and performance.

RoboMon includes a suite of pre-defined rules, called Intelligent Solution Sets, that work out of the box to detect and correct problems with applications, systems and networks, including Windows NT/2000, Microsoft BackOffice, and SNMP-based network components.

RoboMon may be configured to notify staff of problems in real time, or to take corrective action independently and monitor the results for success. RoboMon's many notification options include paging, e-mail, SNMP trap, net send messages, and centralized event reporting through the Event Monitor, enabling it to integrate with and supplement your current staff notification practices.

RoboMon NT/2000 Graphing



Where RoboMon's Exchange Intelligent Solution Set Gets Its Data

- Perfmon counters
- Win32 API
- ASCII log files, including Exchange tracking log
- NT event log

RoboMon's Exchange Rules

CHATS_Activity

Checks the message rate and user load on the Chat server.

CHATS_Authentication_Fails

Checks number of authentication failures on the Chat server.

CHATS_Current_Client_Conns

Checks for high number of client connections on Chat server.

CHATS_DNS_Lookup_Reqs_Fails

Checks the number of DNS lookup failures.

CHATS_DNS_Lookup_Requests

Checks the number of DNS lookup requests to be processed.

CONF_CPU_Load

Checks the CPU load on conferencing.

CONF_MCU_Active_Conferences

Checks the number of conferences in progress in the site.

CONF_MCU_Activity

Checks the MCU activity.

CONF_Stopped_or_Failing_MCUs

Checks for stopped or failing MCUs.

Database_Disks_2K

Checks the free space of the disks that hold the Exchange2000 database files.

Database_Size_2K

Checks the size of the database files.

Domns_Recv_Excess_Mail_2K

Checks for domains receiving excessive mail.

Domns_Send_Excess_Mail_2K

Checks for domains sending excessive mail.

DS_Access_Cache_Efficiency

Checks for low hit rate on the DS cache.

Email_Address_Reachable_2K

Tests if an email address is reachable with Microsoft Exchange. It also tests the time it takes to send the email and receive notification.

Exchange2K_Performance_Checks

Checks some basic performance indicators, such as CPU busy percentage, file I/O rate, page fault rate, page files used, and physical memory used.

Exchange2K_Process_Resources

Checks if any of the Exchange 2000 processes are using abnormally high resources.

Exchange2K_Service_Not_Running

Checks for Exchange 2000 services that are auto-started, but are not running.

Folder_Inactive_2K

Checks for public folders that have been inactive for too long (based on last access date).

Folder_Too_Many_Messages_2K

Checks for public folders with too many messages.

Folder_Too_Much_Storage_2K

Checks for public folders with too many bytes of total storage.

IMAP4_Login_Failures

Checks the number of IMAP4 login failures.

IMC_Recv_Excess_Mail_2K

Displays an event message if any of the Internet Mail Connectors are receiving excessive mail.

IMC_Send_Excess_Mail_2K

Displays an event message if any of the Internet Mail Connectors are sending excessive mail.

IS_Active_User_Count_2K

Checks the Information Store active user count.

IS_Folder_Local_Delivery

Checks the public folder store's average time for local delivery.

IS_Folder_Queue

Checks the size of the public folder store queues.

IS_Folder_Remote_Delivery

Checks public folder store's average time for remote delivery.

IS_Folder_Repl_Recv_Que

Checks size of the public folder store replication receive queue.

IS_Folder_Usage

Checks the public folder store's message recipients delivered rate and message submitted rate.

IS_Mailbox_Local_Delivery

Checks the mailbox store's average time for local delivery.

IS_Mailbox_Queue

Checks the size of the mailbox store queues.

IS_Mailbox_Remote_Delivery

Checks the mailbox store's average time for remote delivery.

IS_Mailbox_Usage

Checks the mailbox store's message recipients delivered rate and message submitted rate.

Mailbox_Inactive_2K

Checks for mailboxes that have been inactive for too long (based on last logon date).

Mailbox_No_Limit_Check_2K

Checks for mailboxes that do not have a limit check.

Mailbox_Reaching_Limit_2K

Checks for mailboxes whose storage limit status is either "ISSUE_WARNING" or "PROHIBIT_SEND."

Mailbox_Too_Many_Messages_2K

Checks for mailboxes with too many messages.

Mailbox_Too_Much_Storage_2K

Checks for mailboxes with too many bytes of total storage.

MTA_Conn_Failed_Outbd

Checks the number of failed outbound associations to the MTA connection.

MTA_Conn_Oldest_Msg_Queued

Checks the length of time the oldest message has been in an entity's queue.

MTA_Conn_Queue_2K

Checks the length of the MTA Connections queues.

RoboMon's Exchange Rules cont.

MTA_Conn_Rejected_Inbd

Checks the number of the MTA Connections rejected inbound associations.

MTA_Message_Loop

Checks the length of the MTA message loop.

MTA_Work_Queue_2K

Checks the length of the MTA work queue.

NNTPC_Logon_Attempts

Checks for high number of logon failures to logon attempts on NNTP servers.

NNTPS_Activity

Checks for high bytes rate on the NNTP server.

NNTPS_Current_Conn

Checks the number of current connections to the NNTP server.

NSPI_Failed_Client_Connections

Checks the number of failed client connections on the NSPI.

NSPI_Failed_Server_Connections

Checks the number of failed server connections on the NSPI.

PCMTA_Activity

Checks for high PCMTA activity.

PCMTA_Failed_Connections

Checks the number of PCMTA failed connections.

POP3_Failed_Connections

Checks the number of POP3 rejected and failed connections.

POP3_Login_Failures

Checks the number of POP3 login failures.

Sites_Recv_Excess_Mail_2K

Checks for sites receiving excessive mail.

Sites_Send_Excess_Mail_2K

Checks for sites sending excessive mail.

SMTP_Activity

Checks for high SMTP activity.

SMTP_Cat_Msgs_Que

Checks the size of the SMTP Server categorizer queue lengths of messages.

SMTP_Categorization_Failures

Checks for categorization failures.

SMTP_Connection_Errors

Checks for connection errors

SMTP_LDAP_Connection_Errors

Checks for LDAP connection errors.

SMTP_Local_Queue

Checks the size of the SMTP local queues.

SMTP_Local_Retry_Queue

Checks the size of the SMTP local retry queues.

SMTP_Pickup_Dir_Queue

Checks the number of messages in the directory pickup queue.

SMTP_Remote_Queue

Checks the size of the SMTP remote queues.

SMTP_Remote_Retry_Queue

Checks the size of the SMTP remote retry queues.

SMTP_Retries

Checks the number of retries.

SRS_Access_Denials

Checks for Site Replication Service access denials.

SRS_InterSite_Repl_Activity

Checks for high incoming and outgoing inter-site replication activity for the Site Replication Service.

SRS_Local_Repl_Activity

Checks for high local replication activity for the Site Replication Service.

SRS_Replication

Checks for high number of synchronizations that are queued but not yet processed for the Site Replication Service on this server.

Svrs_Recv_Excess_Mail_2K

Checks for servers receiving excessive mail.

Svrs_Send_Excess_Mail_2K

Checks for servers sending excessive mail.

Transaction_Log_Disks_2K

Checks the free space of the disks that hold the Exchange 2000 transaction log files.

Users_Recv_Excess_Mail_2K

Checks for users receiving excessive mail.

Users_Send_Excess_Mail_2K

Checks for users sending excessive mail.

Microsoft, Windows, and the Windows Logo are registered trademarks of Microsoft Corporation in the United States and/or other countries.



Find it. Fix it. Forget it.

www.heroix.com

Corporate Headquarters

120 Wells Avenue

Newton, MA 02459

tel: 800.229.6500 / 617.627.1550

fax: 617.527.6132 : email: info@heroix.com

Boston ■ New York ■ Atlanta ■ Chicago ■ Dallas ■ San Francisco

Features and support may vary by platform. Heroix Corporation believes that the information in this document is accurate as of its publication date; such information is subject to change without notice. Heroix is not responsible for any inadvertent errors.

Heroix, the Heroix logo, and Heroix eQ are trademarks of Heroix Corporation. All other trademarks are property of their respective owners.

© 2003 Heroix Corporation. All rights reserved.