

**HP OPENVIEW**  
**Smart Plug-in for**  
**Microsoft<sup>®</sup> Exchange Server**  
  
**Reference Manual**



**Smart Plug-in for Exchange Server**  
**Version A.03.30**  
**July 2002**

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# Conventions

<b>Boldface</b>	Words in <b>boldface</b> type represent programs and commands.
Capitalization	Capitalized first letters represent company or product names.
Computer font	Words in <code>computer font</code> represent file or path names, command syntax statements, prompts or messages that appear on your screen, or text you should type on your workstation or terminal.
<i>Italics</i>	Words in <i>italics</i> represent variables in syntax statements or words that are emphasized in the text.
{ }	Represents required elements in a syntax statement. When several elements are separated by the   symbol, you must select one of the elements.
[ ]	Represents optional elements in a syntax statement.

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## Printing History

New editions are complete revisions of the manual. The printing dates for each edition are listed below.

Edition 1	July 1999
Edition 2	April 2000
Edition 3	July 2002

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## File Locations

The following files are located on the CD for the OpenView Smart Plug-in for MS Exchange Server:

### **Program Files:**

/EXSPI\_HP-UX\_A.03.30.depot  
/EXSPI\_SOL\_A.03.30.depot  
/DSI2DDF\_A.01.12.00.sdtape  
/EXSPI-Reporter.msi

### **Documentation Files:**

/doc/A0330\_release\_notes.pdf  
/doc/exspiA0330\_users\_guide.pdf  
/doc/exspiA0330\_ref\_guide.pdf



## EXCHANGE SPI MONITOR AND DATA COLLECTION TEMPLATES

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**MS Exchange 2000 Templates**

# Summary MS Exchange 2000 Monitor Templates

Id	Category	Template Group	Template	Description	Thresholds		Duration	Schedule	Message Group
					w: (r:)	c: (r:)			
1	QS	EXSPI-60 Services and Processes	EXSPI-60-0001	time used by Exchange processes)	w: 80 (r: 75)	c: 99 (r: 85)	Reset	every 5min	EX_Perf
2	QS	EXSPI-60 Services and Processes	EXSPI-60-0002	Inactive Process Monitor (Checks that processes are using CPU)	w: 0.01		W/O Reset	12h every 10min	EX_Fault
5	AO	EXSPI-60 Transaction Log	EXSPI-60-0005	Low Log File Disk Space	w: 20 (r: 25)	c: 10 (r: 55)	Reset	every 15min	EX_Fault
6	AO	EXSPI-60 Transaction Log	EXSPI-60-0006	Transaction Log File Disc Space	w: 100 (r: 90)	c: 200 (r: 180)	Reset	every day	EX_Fault
10	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0010	MTA Message Delay	w: 60 (r: 50)	c: 300 (r: 250)	Reset	every 5min	EX_Perf
11	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0011	MTA Work Queue Length	w: 50 (r: 40)	c: 100 (r: 80)	Reset	10m every 5min	EX_Perf
12	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0012	MTA Failed Conversions	w: 2 (r: 1)	c: 4 (r: 3)	Reset	every 1h	EX_Perf
13	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0013	MTA Connection Message Delay	w: 250	c: 600 (r: 500)	Reset	every 5min	EX_Perf
14	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0014	MTA Connection Queue Lengths	w: 20 (r: 15)	c: 40 (r: 30)	Reset	every 5min	EX_Perf
15	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0015	MTA Failed Outbound Associations	w: 3 (r: 2)	c: 10 (r: 8)	Reset	every 1h	EX_Perf
16	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0016	MTA Rejected Inbound Associations	w: 3 (r: 2)	c: 10 (r: 8)	Reset	every 1h	EX_Perf
17	QS	EXSPI-60 Message Transfer Agent	EXSPI-60-0017	MTA Rejected Inbound Messages	w: 2 (r: 1)	c: 4 (r: 3)	Reset	every 1h	EX_Perf
30	QS	EXSPI-60 Information Store	EXSPI-60-0030	IS Public Average Delivery Time	w: 10 (r: 7)	c: 5 (r: 3)	Reset	every 5min	EX_Perf
31	QS	EXSPI-60 Information Store	EXSPI-60-0031	IS Public Average Local Delivery Time	w: 10 (r: 7)	c: 5 (r: 3)	Reset	every 5min	EX_Perf
32	QS	EXSPI-60 Information Store	EXSPI-60-0032	IS Public Replication Queue Size	w: 30 (r: 20)	c: 15 (r: 10)	Reset	every 5min	EX_Perf
33	QS	EXSPI-60 Information Store	EXSPI-60-0033	IS Public Receive Queue Size	w: 30 (r: 20)	c: 15 (r: 10)	Reset	every 5min	EX_Perf
34	QS	EXSPI-60 Information Store	EXSPI-60-0034	IS Public Send Queue Size	w: 30 (r: 20)	c: 15 (r: 10)	Reset	every 5min	EX_Perf
40	QS	EXSPI-60 Information Store	EXSPI-60-0040	IS Mailbox Average Delivery Time	w: 10 (r: 7)	c: 5 (r: 3)	Reset	every 5min	EX_Perf
41	QS	EXSPI-60 Information Store	EXSPI-60-0041	IS Mailbox Average Local Delivery Time	w: 10 (r: 7)	c: 5 (r: 3)	Reset	every 5min	EX_Perf

Chapter 1: MS Exchange 2000 Templates  
**Summary MS Exchange 2000 Monitor Templates**

id	Category	Template Group	Template	Description	T D e f a u l t i d	T h r e s h o l d	D u r a t i o n	S c h e d u l e	M e s s a g e s r e p l a c e m e n t
42	QS	EXSPI-60 Information Store	EXSPI-60-0042	IS Mailbox Receive Queue Size	w: 30 (r: 20) c: 15 (r: 10)		Reset	every 5min	EX_Perf
43	QS	EXSPI-60 Information Store	EXSPI-60-0043	IS Mailbox Send Queue Size	w: 30 (r: 20) c: 15 (r: 10)		Reset	every 5min	EX_Perf
50	QS	EXSPI-60 SMTP	EXSPI-60-0050	SMTP Categorizer Queue Length	w: 15 (r: 10) c: 30 (r: 20)		Reset	every 5min	EX_Perf
51	QS	EXSPI-60 SMTP	EXSPI-60-0051	SMTP Local Queue Length	w: 15 (r: 10) c: 30 (r: 20)		Reset	every 5min	EX_Perf
52	QS	EXSPI-60 SMTP	EXSPI-60-0052	SMTP Local Retry Queue Length	w: 15 (r: 10) c: 30 (r: 20)		Reset	every 5min	EX_Perf
53	QS	EXSPI-60 SMTP	EXSPI-60-0053	SMTP Messages Pending Routing	w: 15 (r: 10) c: 30 (r: 20)		Reset	every 5min	EX_Perf
54	QS	EXSPI-60 SMTP	EXSPI-60-0054	SMTP Remote Queue Length	w: 15 (r: 10) c: 30 (r: 20)		Reset	every 5min	EX_Perf
55	QS	EXSPI-60 SMTP	EXSPI-60-0055	SMTP Remote Retry Queue Length	w: 15 (r: 10) c: 30 (r: 20)		Reset	every 5min	EX_Perf
56	QS	EXSPI-60 SMTP	EXSPI-60-0056	SMTP NDR Percentage	w: 2 (r: 1) c: 4 (r: 3)		Reset	every 1h	EX_Perf
57	QS	EXSPI-60 SMTP	EXSPI-60-0057	SMTP Outbound Connections Refused	w: 2 (r: 1) c: 5 (r: 2)		Reset	every 1h	EX_Perf
58	AO	EXSPI-60 NNTP	EXSPI-60-0058	Newsfeed Outbound Connections Failed	w: 2 (r: 1) c: 4 (r: 2)		Reset	every 1h	EX_Perf
90	AO	EXSPI-60 CC:Mail Connector	EXSPI-60-0090	cc:Mail MTS-IN Queue Length	w: 20 (r: 15) c: 50 (r: 40)		Reset	every 5min	EX_Perf
91	AO	EXSPI-60 CC:Mail Connector	EXSPI-60-0091	cc:Mail MTS-OUT Queue Length	w: 20 (r: 15) c: 50 (r: 40)		Reset	every 5min	EX_Perf
92	AO	EXSPI-60 CC:Mail Connector	EXSPI-60-0092	Exchange NDRs to cc:Mail	w: 2 (r: 1) c: 4 (r: 2)		Reset	every 1h	EX_Perf
93	AO	EXSPI-60 CC:Mail Connector	EXSPI-60-0093	cc:Mail NDRs to Exchange	w: 2 (r: 1) c: 4 (r: 2)		Reset	every 1h	EX_Perf
94	AO	EXSPI-60 Lotus Notes Connector	EXSPI-60-0094	Lotus Notes Inbound Queued Messages Length	w: 20 (r: 15) c: 50 (r: 40)		Reset	every 5min	EX_Perf
95	AO	EXSPI-60 Lotus Notes Connector	EXSPI-60-0095	Lotus Notes Outbound Queued Messages Length	w: 20 (r: 15) c: 50 (r: 40)		Reset	every 5min	EX_Perf
96	AO	EXSPI-60 Lotus Notes Connector	EXSPI-60-0096	Exchange NDRs sent to Lotus Notes	w: 2 (r: 1) c: 4 (r: 2)		Reset	every 1h	EX_Perf
97	AO	EXSPI-60 Lotus Notes Connector	EXSPI-60-0097	Lotus Notes NDRs sent to Microsoft Exchange	w: 2 (r: 1) c: 4 (r: 2)		Reset	every 1h	EX_Perf
##	QS	EXSPI-60 Information Store	EXSPI-60-0100	IS User Connection Count Low	w: 1 (r: 2)		Reset	every 15min	EX_Perf
##	AO	EXSPI-60 Site Replication Service	EXSPI-60-0110	DS Pending Synchronizations	c: 4 (r: 2)		Reset	30m every 5min	EX_Fault
##	AO	EXSPI-60 Site Replication Service	EXSPI-60-0111	DS Remaining Updates	c: 0.5		W/O Reset	30m every 5min	EX_Fault
##	AO	EXSPI-60 Conference Server	EXSPI-60-0800	MExchangeCONF.Active Conferences	w: 5 c: 10		W/O Reset	every 10min	EX_Perf

Chapter: 1 MS Exchange 2000 Templates  
**Summary MS Exchange 2000 Monitor Templates**

Id	Category	Template Group	Template	Description	Threshold	Threshold	Duration	Schedule	Message Group
##	AO	EXSPI-60 Conference Server	EXSPI-60-0801	MSEExchangeDcsMgr.DCOM Calls To MCUs	c: 1000 (r: 500)	Reset		every 10min	EX_Perf
##	AO	EXSPI-60 Conference Server	EXSPI-60-0802	MSEExchangeDcsMgr.Average Load Per MCU	w: 5 c: 10	W/O Reset		every 10min	EX_Perf
##	AO	EXSPI-60 MCU Server	EXSPI-60-0803	MSEExchangeT120.Active Connections	w: 90 c: 100	W/O Reset		every 10min	EX_Perf
##	AO	EXSPI-60 MCU Server	EXSPI-60-0804	MSEExchangeT120.T.120 MCU Load	w: 5 c: 10	W/O Reset		every 10min	EX_Perf
##	AO	EXSPI-60 Conferencing Bridge	EXSPI-60-0805	MSEExchangeIpconf.Failed User Join Attempts	w: 5 c: 10	W/O Reset		every 10min	EX_Perf
##	AO	EXSPI-60 Conferencing Bridge	EXSPI-60-0806	MSEExchangeIpconf.Video Conferences in Progress	w: 5 c: 10	W/O Reset		every 10min	EX_Perf
##	AO	EXSPI-60 Conferencing Bridge	EXSPI-60-0807	MSEExchangeH323.Incomplete Calls	w: 5 c: 10	W/O Reset		every 10min	EX_Perf
##	AO	EXSPI-60 Chat Service	EXSPI-60-0830	Microsoft Exchange Chat Service.Active DNS logon threads	w: 15 (r: 10) c: 30 (r: 20)	Reset		every 15min	EX_Perf
##	AO	EXSPI-60 Chat Service	EXSPI-60-0831	Microsoft Exchange Chat Service.Client Timeout Related Disconnects	w: 5 (r: 2) c: 10 (r: 7)	Reset		every 15min	EX_Perf
##	AO	EXSPI-60 Chat Service	EXSPI-60-0833	Microsoft Exchange Chat Service.Anonymous Clients	w: 15 (r: 10) c: 30 (r: 20)	Reset		every 15min	EX_Perf
##	AO	EXSPI-60 Chat Service	EXSPI-60-0834	Microsoft Exchange Chat Service.Authenticated Clients	w: 50 (r: 30) c: 100 (r: 80)	Reset		every 15min	EX_Perf
##	AO	EXSPI-60 Chat Service	EXSPI-60-0835	Microsoft Exchange Chat Service.Authentication Failures	w: 10 (r: 5) c: 20 (r: 15)	Reset		every 15min	EX_Perf
##	AO	EXSPI-60 Chat Service	EXSPI-60-0836	Microsoft Exchange Chat Service.Server operations queued	w: 5 (r: 2) c: 10 (r: 7)	Reset		every 15min	EX_Perf
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0841	MSEExchangeIM Virtual Servers.Current Users Online	w: 75 c: 100	W/O Reset		every 1h	EX_Perf
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0842	MSEExchangeIM Virtual Servers.Current Subscriptions	w: 75 c: 100	W/O Reset		every 1h	EX_Perf
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0845	MSEExchangeIM.Failed Requests/sec	w: 5 c: 10	W/O Reset		every 1h	EX_Perf
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0846	MSEExchangeIM.Rejected Requests/sec	w: 5 c: 10	W/O Reset		every 1h	EX_Perf
##	QS	EXSPI-60 Services and Processes	EXSPI-60-1001	MSEExchange Services Monitor	m:1	W/O Reset		every 5min	EX_Fault
##	Ad	EXSPI-60 End to End Message Ping	EXSPI-60-1002	MSEExchange End to End Message Ping Monitor	w: 300 (r: 240)	Reset		every 30min	EX_Perf

# MS Exchange 2000 Data Collection Templates

C a t e g o r y							
	Template Group	Template	Description	Collection Type	Schedule	Table	Report
QS	EXSPI-60 Information Store	EXSPI-60-DC-IS Msg Del Time	Collect data on the average msg delivery times in core procs	Average/h	6:00-18:00 every 5min, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	
QS	EXSPI-60 Information Store	EXSPI-60-DC-IS Mailbox Msg Vol	Collect data on the vol of messages processed by Mailbox IS	Delta/h	6:00-18:00 hourly, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	S: Exchange Messaging Trends for all Servers D: Exchange Messaging Trends
QS	EXSPI-60 Information Store	EXSPI-60-DC-IS Public Msg Vol	Collect data on the vol of messages processed by Public IS	Delta/h	6:00-18:00 hourly, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	S: Exchange Messaging Trends for all Servers D: Exchange Messaging Trends
QS	EXSPI-60 Message Transfer Agent	EXSPI-60-DC-MTA & IS Queue Len	Collect data on the length of message queues in core procs	Average/h	6:00-18:00 every 10min, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	
QS	EXSPI-60 Message Transfer Agent	EXSPI-60-DC-MTA Message Volume	Collect data on the vol of messages processed by MTA	Delta/h	6:00-18:00 hourly, M-F	EXSPI_SINGLE	

Chapter: 1 MS Exchange 2000 Templates  
**MS Exchange 2000 Data Collection Templates**

C a t e g o r y								
	Template Group	Template	Description	Collection Metric	Collect on Type	Schedule	Table	Report
QS	EXSPI-60 SMTP	EXSPI-60-DcSMTP Message Queues	Populate Node database with queue metrics for graph.	50 : SMTP Server.Categorizer Queue Length 51 : SMTP Server.Local Queue Length 52 : SMTP Server.Local Retry Queue Length 53 : SMTP Server.Messages Pending Routing 54 : SMTP Server.Remote Queue Length 55 : SMTP Server.Remote Retry Queue Length	Value	5min, daily	EXSPI_MULTI	
QS	EXSPI-60 SMTP	EXSPI-60-DC-SMTP Message Volume	Collect data on the volume of SMTP messages processed.	670 : SMTP Server.Messages Sent Total 671 : SMTP Server.Messages Received Total 672 : SMTP Server.Bytes Sent Total 673 : SMTP Server.Bytes Received Total 674 : SMTP Server.Message Bytes Sent Total 675 : SMTP Server.Message Bytes Received Total	Delta/h	6:00-18:00 hourly, M-F	EXSPI_MULTI	S: Exchange Messaging Trends for all Servers D: Exchange Messaging Trends
QS	EXSPI-60 Services and Processes	EXSPI-60-DC-User Connections	Collect data on the number of users	User Count 521 : MExchangeIS.User Count	Value	7:00-18:00 hourly, M-F	EXSPI_SINGLE	D: Exchange User Connection
AO	EXSPI-60 Chat Service	EXSPI-60-Dc-Chat Data Collection	Collects data about Exchange Chat Service clients and channels.	837 : Microsoft Exchange Chat Service.Clients 838 : Microsoft Exchange Chat Service.Channels	Value	every 30min, M-F	EXSPI_MULTI	D: Exchange 2000 Chat Trends
AO	EXSPI-60 Conference Server	EXSPI-60-DC-ConfTrends	Collect data on trends in conferencing	MSExchangeCONF.Active Conferences 808 : MSExchangeDcsMgr.Local Conferences 809 : MSExchangeDcsMgr.Remote Conferences 810 :	Value	every 30min, M-F	EXSPI_MULTI	D: Exchange 2000 Conferencing Trends
AO	EXSPI-60 MCU Server	EXSPI-60-DC-MCU	Collect data on MCU conferencing trends	811 : MSExchangeT120.Data Messages Received 812 : MSExchangeT120.Data Messages Sent 813 : MSExchangeT120.KBytes Received 814 : MSExchangeT120.KBytes Sent	Delta/h	every 30min, M-F	EXSPI_MULTI	D: Exchange 2000 MCU Trends
AO	EXSPI-60 Instant Messaging	EXSPI-60-DC-InstMsg Enabled Usrs	Reporting Collection for InstMsg Enabled Users	843: Number IM enabled users on Server	Value	every 30min,daily	EXSPI_MULTI	D: Exchange 2000 Instant Messaging Users growth
AO	EXSPI-60 Instant Messaging	EXSPI-60-DC-Instant Messaging	Alarming metrics for Instant Messaging	841 : MExchangeIM Virtual Servers.Current Users Online 842 : MExchangeIM Virtual Servers.Current Subscriptions 845 : MExchangeIM.Failed Requests/sec 846 : MExchangeIM.Rejected Requests/sec	Value	hourly, every day	EXSPI_MULTI	D: Exchange 2000 Instant Messaging Availability and Usage Trends



C a t e g o r y	Template Group	Template	Description	Collecti o n			
				Type	Schedule	Table	Report
Ad	EXSPI-60 End to End Message Ping	EXSPI-60-End to End Message Ping	30m Scheduler for metric in End to End Message Ping group	Value	every 30min,daily	EXSPI_M1002	S: Exchange SLA Message Delivery
Ad	EXSPI-60 Reporter Collection	EXSPI-60-DC-Exchange Info	Collect data on Exchange Parameters	Value	23:00, daily	EXSPI_MULT	S: Exchange 2000 System Information Summary S: Exchange System Information Summary
Ad	EXSPI-60 Reporter Collection	EXSPI-60-DC-Mailbox Data	Collect data about all mailboxes on the system	Value	1:00 every Saturday	EXSPI_MULTI EXSPI_DETAIL S	S: Exchange 2000 Top 100 Mailboxes S: Exchange Top 100 Mailboxes D: Exchange 2000 Inactive Mailboxes D: Exchange 2000 Mailbox Details D: Exchange 2000 Mailbox Summary D: Exchange Mailbox Details D: Exchange Mailbox Summary
Ad	EXSPI-60 Reporter Collection	EXSPI-60-DC-Private IS Sum. Data	Collect summary data about Private Info. Store (Mailboxes)	Value	23:00, M-S	EXSPI_MULTI	S: Exchange 2000 System Information Summary S: Exchange System Information Summary D: Exchange 2000 Mailbox Summary D: Exchange 2000 Mailbox Usage Trends D: Exchange Mailbox Summary D: Exchange Mailbox Usage Trends
Ad	EXSPI-60 Reporter Collection	EXSPI-60-DC-Public Folder Data	Collect data about all public folders on the system	Value	4:00 every Saturday	EXSPI_MULTI	Folders D: Exchange Folder Summary
Ad	EXSPI-60 Reporter Collection	EXSPI-60-DC-Public IS Sum. Data	Collect summary data about Public Info. Store (Folders)	Value	22:00, M-S	EXSPI_MULTI	S: Exchange 2000 System Information Summary S: Exchange System Information Summary D: Exchange 2000 Mailbox Summary D: Exchange Folder Summary D: Exchange Folder Usage Trends
Ad	EXSPI-60 Reporter Collection	EXSPI-60-DC-TrackLog Data	Collect Tracking_Log data	Value	19:00 every Saturday	EXSPI_M0660 EXSPI_M0661 EXSPI_M0662 EXSPI_M0663	D: Exchange Top Destinations D: Exchange Top Recipients D: Exchange Top Senders D: Exchange Top Sources

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# MS Exchange 2000 Monitor Template Specifications

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## EXSPI-60-0001 (Process Monitor)

<b>Metric Number:</b>	EXSPI-60-0001
<b>Name:</b>	EXSPI Process Monitor
<b>Description:</b>	Process Monitor, monitors the amount of CPU time being used by the core Exchange processes.
<b>Type:</b>	With reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> High CPU use could indicate an overloaded system. An Exchange process consuming a lot of CPU but processing few messages could indicate a problem with the process.</p> <p><b>Potential impact:</b> Failure, Performance</p> <p><b>Suggested action(s):</b> (1) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the service. (2) Monitor Exchange processes with NT Performance Monitor (Process.% Processor Time) and verify CPU consumption over a period of time. Constantly high value may indicate a scalability problem. (3) Stop and re-start the Exchange service. Use the NT Administrative Tool 'Service Manager'.</p> <p>NOTE: By default only Exchange processes are monitored. The 'Catch All' suppress condition prevents messages about other busy processes. If you would like to receive messages about other busy processes, simply add conditions before the 'Catch All'</p>

<b>Condition:</b>	<b>EXSPI-60-0001 Process - msexcimc.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange INTERNET MAIL CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)
<b>Condition:</b>	<b>EXSPI-60-0001 Process - msexcimc.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange INTERNET MAIL CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0001 Process - store.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange INFORMATION STORE service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - store.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange INFORMATION STORE service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - emsmta.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange MESSAGE TRANSFER AGENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - emsmta.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange MESSAGE TRANSFER AGENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0001 Process - mad.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange SYSTEM ATTENDENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - mad.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange SYSTEM ATTENDENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - dsamain.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange DIRECTORY service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - dsamain.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange DIRECTORY service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0001 Process - inetinfo.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange IIS service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - inetinfo.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange IIS service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)



<b>Condition:</b>	<b>EXSPI-60-0001 Process - srsmain.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange DIRECTORY REPLICATION service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - srsmain.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange DIRECTORY REPLICATION service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0001 Process - adc.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange ACTIVE DIRECTORY CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - adc.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange ACTIVE DIRECTORY CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexim.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexim.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexout.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexout.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexnts.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexnts.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexdxa.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsmexdxa.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsntsmex.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0001 Process - lsntsmex.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

## EXSPI-60-0002 (Inactive Process Monitor)

<b>Metric Number:</b>	EXSPI-0002
<b>Name:</b>	MSX 5.5-Inactive Process Monitor
<b>Description:</b>	Monitors the core MS Exchange processes to check that they are using some CPU cycles. A process consistently at 0% could indicate a problem.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	Every 10min
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Low CPU use during the day on an active system could indicate a problem with the process.</p> <p><b>Potential impact:</b> Failure</p> <p><b>Suggested action(s):</b> (1) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the service. (2) Monitor Exchange processes with NT Performance Monitor (Process.% Processor Time) and verify CPU consumption over a period of time. Constantly high value may indicate a scalability problem. (3) Stop and re-start the Exchange service. Use the NT Administrative Tool 'Service Manager'.</p>



<b>Condition:</b>	<b>EXSPI-60-0002 Process - msexcimc</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-60-0002: Exchange INTERNET MAIL CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0002 Process - store</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-60-0002: Exchange INFORMATION STORE service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0002 Process - emsmta</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-60-0002: Exchange MESSAGE TRANSFER AGENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0002 Process - mad</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-60-0002: Exchange SYSTEM ATTENDENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0002 Process - dsamain</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-60-0002: Exchange DIRECTORY service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0002 Process - inetinfo</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-60-0002: Exchange IIS service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

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## EXSPI-60-0005 (Low Log File Disk Space)

<b>Metric Number:</b>	EXSPI-60-0005
<b>Name:</b>	EXSPI-Low Log File Disk Space
<b>Description:</b>	Monitors the free disk space remaining on the logical disk drive where the transaction log files for the IS public and private databases reside.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 15min
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The amount of free disk space on the disk drive where the Exchange transaction log files reside is getting low.</p> <p><b>Potential impact:</b> Failure. Exchange will shutdown processing if there is no disk space for additional transaction log files.</p> <p><b>Suggested action(s):</b> (1) Free up disk space on this drive. (2) If this drive is filling up because of many Exchange transaction log files, verify that Exchange backups are completing successfully (log files are removed when the i backup completes) and that backups are being done frequently enough.</p>

<b>Condition:</b>	<b>EXSPI-60-0005.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.0
<b>Reset Value:</b>	55.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0005.1: Free disk space (<\$VALUE>MB) on the disk drive where the Exchange transaction log files reside is getting low (\\<<\$THRESHOLD>MB)

<b>Condition:</b>	<b>EXSPI-60-0005.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20.0
<b>Reset Value:</b>	25.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0005.2: Free disk space (<\$VALUE>MB) on the disk drive where the Exchange transaction log files reside is getting low (\\<<\$THRESHOLD>MB)

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## EXSPI-60-0006 (Transaction Log File Disc Space)

<b>Metric Number:</b>	<b>EXSPI-60-0006</b>
<b>Name:</b>	EXSPI Transaction Log File Disc Space
<b>Description:</b>	Monitors the disk space used by the Exchange transaction and reserved transaction log files.
<b>Type:</b>	With Reset
<b>Schedule:</b>	M-F: 02:00
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The amount of disk space being used by the Exchange transaction log files is getting large (disk space being used by edb*.log and res*.log files in the mdbdata and dsadata directories).</p> <p>A large amount of used disk space could indicate a possible problem with backups.</p> <p><b>Potential impact:</b> Failure</p> <p><b>Suggested action(s):</b> (1) Verify that Exchange backups are completing successfully (log files are removed when the backup completes). (2) Verify that backups are being done frequently enough. If they are, the conditions can be edited to increase the threshold values so this message is not generated as often.</p>

<b>Condition:</b>	<b>EXSPI-60-0006.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	200.0
<b>Reset Value:</b>	180.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0006.1: The amount of disk space (<\$VALUE>MB) being used by the Exchange transaction log files is getting large (\\><\$THRESHOLD>MB)

<b>Condition:</b>	<b>EXSPI-60-0006.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	100.0
<b>Reset Value:</b>	90.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0006.2: The amount of disk space (<\$VALUE>MB) being used by the Exchange transaction log files is getting large (\\><\$THRESHOLD>MB)

## EXSPI-60-0010 (MTA Message Delay)

<b>Metric Number:</b>	EXSPI-60-0010
<b>Name:</b>	EXSPI Message Delay
<b>Description:</b>	Monitors the delay time in processing messages by the Message Transfer Agent.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delay of messages being processed could indicate problems with system load, the MTA, connectors, or the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Run Exchange Administrator and check for 'stuck' messages in the MTA queue. (3) Verify that there are no network problems.</p>



<b>Condition:</b>	<b>EXSPI-60-0010.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	300.0
<b>Reset Value:</b>	250.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0010.1: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-60-0010.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	60.0
<b>Reset Value:</b>	50.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0010.2: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD> secs)

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## EXSPI-60-0011 (MTA Work Queue Length)

<b>Metric Number:</b>	EXSPI-60-0011
<b>Name:</b>	EXSPI MTA Work Queue Length
<b>Description:</b>	Checks length of work queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delay of messages being processed could indicate problems with system load, the MTA, connectors, or the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Run Exchange Administrator and check for 'stuck' messages in the MTA queue. (3) Verify that there are no network problems.</p>

<b>Condition:</b>	<b>EXSPI-60-0011.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	100.0
<b>Reset Value:</b>	80.0
<b>Duration:</b>	10min
<b>Message Text:</b>	EXSPI-60-0011.1: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-60-0011.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	50.0
<b>Reset Value:</b>	40.0
<b>Duration:</b>	10min
<b>Message Text:</b>	EXSPI-60-0011.2: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD>)

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## EXSPI-60-0012 (MTA Failed Conversions)

<b>Metric Number:</b>	EXSPI-60-0012
<b>Name:</b>	EXSPI MTA Failed Conversions
<b>Description:</b>	Monitors the number of messages in the MTA work queue. This is the number of messages not yet processed to completion by the MTA (not counting messages with deferred delivery).
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s): There may be problems with the MTA converting messages from one format to another.</p> <p>Potential impact: Performance/Failure. A high failure rate could indicate problems with the MTA or how messages being received are formatted.</p> <p>Suggested action(s): (1) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems converting messages. (2) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0012.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4.0
<b>Reset Value:</b>	3.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0012.1: The rate of Failed MTA Conversions is <\$VALUE>% which has been higher than the set threshold (\\><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-60-0012.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2.0
<b>Reset Value:</b>	1.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0012.2: The rate of Failed MTA Conversions is <\$VALUE>% which has been higher than the set threshold (\\><\$THRESHOLD>%)

## EXSPI-60-0013 (MTA Connection Message Delay)

<b>Metric Number:</b>	<b>EXSPI-60-0013</b>
<b>Name:</b>	EXSPI MTA Connection Message Delay
<b>Description:</b>	Monitor processing of messages by the MTA to each connection to determine if there are problems with specific connections.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s): Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.</p> <p>A long delay time could indicate problems with connectors, system load, the MTA, or the network.</p> <p>Potential impact: Performance/Failure.</p> <p>Suggested action(s): (1) Monitor queue length for the specific connection with NT Performance Monitor: MSExchangeMTA Connections.Oldest Message Queued.&lt;CONNECTION&gt;</p> <p>(2) If queue lengths for multiple connections are large, that could indicate performance or network problems. Also check that the MTA process (emsmta) is running.</p> <p>(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.</p> <p>(4) Verify that there are no network problems.</p>

<b>Condition:</b>	<b>EXSPI-60-0013.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	600
<b>Reset Value:</b>	500
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0013.1: The oldest message queued for connection <con> has been in the queue for <\$VALUE> secs (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-60-0013.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	300
<b>Reset Value:</b>	250
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0013.1: The oldest message queued for connection <con> has been in the queue for <\$VALUE> secs (\\><\$THRESHOLD> secs)

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## EXSPI-60-0014 (MTA Connection Queue Lengths)

<b>Metric Number:</b>	<b>EXSPI-60-0014</b>
<b>Name:</b>	EXSPI MTA Connection Queue Lengths
<b>Description:</b>	Monitors the queue lengths for each connection established by the MTA to determine if there are problems with specific connections.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.</p> <p>A large queue length could indicate problems with connectors, system load, the MTA, or the network.</p> <p><b>Potential impact:</b> Performance/Failure.</p> <p><b>Suggested action(s):</b> (1) Monitor queue length for the specific connection with NT Performance Monitor: MSExchangeMTA Connections.Queue Length.&lt;CONNECTION&gt;</p> <p>(2) If queue lengths for multiple connections are large, that could indicate performance or network problems. Also check that the MTA process (emsmta) is running.</p> <p>(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.</p> <p>(4) Verify that there are no network problems.</p>



<b>Condition:</b>	<b>EXSPI-60-0014.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	40.0
<b>Reset Value:</b>	30.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0014.1: The MTA queue length (<\$VALUE> messages) for connection <con> is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0014.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20.0
<b>Reset Value:</b>	15.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0014.2: The MTA queue length (<\$VALUE> messages) for connection <con> is too high (\\><\$THRESHOLD> messages)

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## EXSPI-60-0015 (MTA Failed Outbound Associations)

<b>Metric Number:</b>	<b>EXSPI-60-0015</b>
<b>Name:</b>	EXSPI MTA Failed Outbound Associations
<b>Description:</b>	Monitors the rate at which outbound (locally initiated) associations to other systems have failed.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with the MTA making connections to another system. A high failure rate could indicate problems with the local or remote MTA, the connector, or the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0015.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	8
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0015.1: The rate (<\$VALUE>%) of Failed MTA Outbound Associations for connection <con> is too high (\\><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-60-0015.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	3
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0015.2: The rate (<\$VALUE>%) of Failed MTA Outbound Associations for connection <con> is too high (\\><\$THRESHOLD>%)

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## EXSPI-60-0016 (MTA Rejected Inbound Associations)

<b>Metric Number:</b>	<b>EXSPI-60-0016</b>
<b>Name:</b>	EXSPI MTA Rejected Inbound Associations
<b>Description:</b>	Monitors the rate at which inbound (remote initiated) associations have been rejected.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s): There may be problems with the MTA on a remote system making connections to this system.</p> <p>A high rejection rate could indicate problems with the local or remote MTA, the connector, or system load.</p> <p>Potential impact: Performance</p> <p>Suggested action(s): (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0016.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	8
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0016.1: The rate (<\$VALUE>%) of Rejected MTA Inbound Associations for connection <con> is too high (< ><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-60-0016.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	3
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0016.2: The rate (<\$VALUE>%) of Rejected MTA Inbound Associations for connection <con> is too high (< ><\$THRESHOLD>%)

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## EXSPI-60-0017 (MTA Rejected Inbound Messages)

<b>Metric Number:</b>	<b>EXSPI-60-0017</b>
<b>Name:</b>	EXSPI MTA Rejected Inbound Messages
<b>Description:</b>	Monitors the rate at which inbound messages are being rejected.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with the MTA on a remote system sending messages to this system. A high rate of rejected messages could indicate problems with the remote or local MTA or the connector.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0017.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0017.1: The rate (<\$VALUE>%) of Rejected MTA Inbound Messages for connection <con> is too high (< \><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-60-0017.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0017.2: The rate (<\$VALUE>%) of Rejected MTA Inbound Messages for connection <con> is too high (< \><\$THRESHOLD>%)

## EXSPI-60-0030 (IS Public Average Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-60-0030</b>
<b>Name:</b>	EXSPI IS Public Average Delivery Time
<b>Description:</b>	Monitors the time between the submission of a message to the public information store and submission to the MTA, by taking an average for the last 10 messages.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of public folder messages to other Exchange servers may be delayed by the MTA.</p> <p>Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>



<b>Condition:</b>	<b>EXSPI-60-0030.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0030.1: The IS Public Average Delivery time (<\$VALUE> secs) for last 10 messages is too high (!\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-60-0030.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0030.2: The IS Public Average Delivery time (<\$VALUE> secs) for last 10 messages is too high (!\><\$THRESHOLD> secs)

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## EXSPI-60-0031 (IS Public Average Local Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-60-0031</b>
<b>Name:</b>	EXSPI IS Public Average Local Delivery Time
<b>Description:</b>	Monitors the average time between submission of a message to the public information store and the delivery to all local recipients (recipients on the same server) for the last 10 messages.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of public folder messages to local recipients may be delayed by the Information Store.</p> <p>Delay of messages being processed could indicate problems with system load or the Information Store.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0031.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0031.1: The IS Public Average Local Delivery time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-60-0031.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0031.2: The IS Public Average Local Delivery time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

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## EXSPI-60-0032 (IS Public Replication Queue Size)

<b>Metric Number:</b>	<b>EXSPI-60-0032</b>
<b>Name:</b>	EXSPI IS Public Replication Queue Length
<b>Description:</b>	Monitors the number of replication messages in the public information store's replication receive queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of replication messages to public folders may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0032.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0032.1: The IS Public Replication Receive Queue length (<\$VALUE> messages) is too high (< ><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0032.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0032.2: The IS Public Replication Receive Queue length (<\$VALUE> messages) is too high (< ><\$THRESHOLD> messages)

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## EXSPI-60-0033 (IS Public Receive Queue Size)

<b>Metric Number:</b>	<b>EXSPI-60-0033</b>
<b>Name:</b>	EXSPI IS Public Receive Queue Length
<b>Description:</b>	Monitors the number of messages in the public information store's receive queue
<b>Type:</b>	
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	
<b>Instruction Text:</b>	<p>Probable cause(s): Delivery of replication messages to public folders may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process.</p> <p>Potential impact: Performance</p> <p>Suggested action(s): (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0033.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0033.1: The IS Public Receive Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0033.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0033.2: The IS Public Receive Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-60-0034 (IS Public Send Queue Size)

<b>Metric Number:</b>	EXSPI-60-0034
<b>Name:</b>	EXSPI IS Public Send Queue Length
<b>Description:</b>	Monitors the number of messages in the public information store's send queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s): Delivery of replication messages to public folders may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process.</p> <p>Potential impact: Performance</p> <p>Suggested action(s): (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>



<b>Condition:</b>	<b>EXSPI-60-0034.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0033.1: The IS Public Send Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0034.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0033.2: The IS Public Send Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-60-0040 (IS Mailbox Average Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-60-0040</b>
<b>Name:</b>	EXSPI IS Mailbox Average Delivery Time
<b>Description:</b>	Monitors the average time between submission of a message to the Mailbox information store and submission to the MTA for the last 10 messages
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the MTA.</p> <p>Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0040.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0040.1: The IS Mailbox Average Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-60-0040.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0040.2: The IS Mailbox Average Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

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## EXSPI-60-0041 (IS Mailbox Average Local Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-60-0041</b>
<b>Name:</b>	EXSPI IS Mailbox Average Local Delivery Time
<b>Description:</b>	Monitors the average time between submission of a message to the Mailbox information store and the delivery to all local recipients (recipients on the same server) for the last 10 messages.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to local recipients may be delayed by the Information Store.</p> <p>Delay of messages being processed could indicate problems with system load or the Information Store.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0041.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0041.1: The IS Mailbox Average Local Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-60-0041.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0041.2: The IS Mailbox Average Local Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

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## EXSPI-60-0042 (IS Mailbox Receive Queue Size)

<b>Metric Number:</b>	<b>EXSPI-60-0042</b>
<b>Name:</b>	EXSPI IS Mailbox Receive Queue Size
<b>Description:</b>	Monitors the number of messages in the mailbox information store's receive queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to mailboxes may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-60-0042.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0042.1: The IS Mailbox Receive Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0042.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0042.2: The IS Mailbox Receive Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-60-0043 (IS Mailbox Send Queue Size)

<b>Metric Number:</b>	EXSPI-60-0043
<b>Name:</b>	EXSPI IS Mailbox Send Queue Size
<b>Description:</b>	Monitors the number of messages in the mailbox information store's send queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the MTA.</p> <p>A large queue length could indicate that the MTA is not processing messages being sent by the Information Store at all or quickly enough so they are backing up in the queue.</p> <p>There could be a problem with system load or the MTA process.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running.</li><li>(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system.</li><li>(3) Verify that there are no network problems.</li><li>(4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</li></ol>



<b>Condition:</b>	<b>EXSPI-60-0043.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0043.1: The IS Mailbox Send Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0043.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0043.2: The IS Mailbox Send Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0050 (SMTP Categorizer Queue Length)

<b>Metric Number:</b>	EXSPI-60-0050
<b>Name:</b>	EXSPI SMTP Categorizer Queue Length
<b>Description:</b>	Monitors the number of messages in the SMTP Categorizer Queue. The Categorizer performs lookups and checks limits and restrictions in Active Directory.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Metric Number:</b>	<b>EXSPI-60-0050</b>
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the SMTP server. A large queue length could indicate problems with system load, access to the Active Directory, or the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools (Common)-&gt;Performance Monitor. On Windows 2000, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools-&gt;Performance. Hit the '+' button to add counters. Select the managed Exchange Server node as the source computer. Select performance objects, counters and instances as described below.</p> <p>(1) Use Performance Monitor to determine if the system is overloaded. Monitor the following counters:  System.% Total Processor Time  Process.% Processor Time for:  inetinfo (IIS, SMTP, etc.)  emsmta (Message Transfer Agent)  mad (System Attendant)  store (Information Store)  Memory.Pages/sec  MSExchangeMTA.Work Queue Length</p> <p>(2) Use Performance Monitor to determine if the Exchange Server is overloaded. Monitor the following counters:  MSExchangeMTA.Messages/Sec  MSExchangeMTA.Adjacent MTA Associations  SMTP Server.Message Received/sec  SMTP Server.Message Delivered/sec  SMTP Server.Message Sent/sec  SMTP Server.Outbound Connection Current  SMTP Server Inbound Connection.Current</p> <p>(3) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Work Queue Length  MSExchangeIS.Mailbox.Send Queue Size  MSExchangeIS.Mailbox.Receive Queue Size  SMTP Server.Categorizer Queue Length  SMTP Server.Local Queue Length  SMTP Server.Local Retry Queue Length  SMTP Server.Remote Queue Length  SMTP Server.Remote Retry Queue Length</p> <p>(4) Active Directory Lookups may be an issue. Consider implementing another Active Directory server.</p> <p>(5) If you have the Windows+ SPI, deploy the ADS policies to the Active Directory server. These policies may also have <del>recommendations to increase Active Directory Lookup performance.</del></p>

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0050.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0050.1: The SMTP Categorizer Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0050.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0050.2: The SMTP Categorizer Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-60-0051 (SMTP Local Queue Length)

<b>Metric Number:</b>	EXSPI-60-0051
<b>Name:</b>	EXSPI SMTP Local Queue Length
<b>Description:</b>	Monitors the number of messages to the SMTP Local Queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf

**MS Exchange 2000 Monitor Template Specifications**

<b>Metric Number:</b>	<b>EXSPI-60-0051</b>
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to the local Exchange server may be delayed by the Exchange Information Store. A large queue length could indicate problems with system load or the Information Store.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools (Common)-&gt;Performance Monitor. On Windows 2000, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools-&gt;Performance. Hit the '+' button to add counters. Select the managed Exchange Server node as the source computer. Select performance objects, counters and instances as described below:</p> <p>(1) Use Performance Monitor to determine if the system is overloaded. Monitor the following counters:  System.% Total Processor Time  Process.% Processor Time for:  inetinfo (IIS, SMTP, etc.)  emsmta (Message Transfer Agent)  mad (System Attendant)  store (Information Store)  Memory.Pages/sec  MSExchangeMTA.Work Queue Length</p> <p>(2) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Work Queue Length  MSExchangeIS.Mailbox.Send Queue Size  MSExchangeIS.Mailbox.Receive Queue Size  SMTP Server.Categorizer Queue Length  SMTP Server.Local Queue Length  SMTP Server.Local Retry Queue Length  SMTP Server.Remote Queue Length  SMTP Server.Remote Retry Queue Length</p> <p>(3) Determine the sizes of the Mailbox and Public Folder Stores. If you have Reporter, use the Summary Report 'Exchange System Information Summary'. Determine if messages are delayed due to Database sizes.</p> <p>(4) Verify that the Information Store process (STORE) is running.</p>

<b>Condition:</b>	<b>EXSPI-60-0051.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0051.1: The SMTP Local Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0051.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0051.2: The SMTP Local Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0052 (SMTP Local Retry Queue Length)

<b>Metric Number:</b>	EXSPI-60-0052
<b>Name:</b>	EXSPI SMTP Local Retry Queue Length
<b>Description:</b>	Monitors the number of messages in the SMTP Local Retry queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf



<b>Metric Number:</b>	<b>EXSPI-60-0052</b>
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to the local Exchange server may be delayed by the Exchange Information Store. A large retry queue length could indicate problems with system load or the Information Store.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools (Common)-&gt;Performance Monitor. On Windows 2000, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools-&gt;Performance. Hit the '+' button to add counters. Select the managed Exchange Server node as the source computer. Select performance objects, counters and instances as described below:</p> <p>(1) Use Performance Monitor to determine if the system is overloaded. Monitor the following counters:  System.% Total Processor Time  Process.% Processor Time for:      inetinfo (IIS, SMTP, etc.)      emsmta (Message Transfer Agent)      mad (System Attendant)      store (Information Store)  Memory.Pages/sec  MSExchangeMTA.Work Queue Length</p> <p>(2) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Work Queue Length  MSExchangeIS.Mailbox.Send Queue Size  MSExchangeIS.Mailbox.Receive Queue Size  SMTP Server.Categorizer Queue Length  SMTP Server.Local Queue Length  SMTP Server.Local Retry Queue Length  SMTP Server.Remote Queue Length  SMTP Server.Remote Retry Queue Length</p> <p>(3) Determine the sizes of the Mailbox and Public Folder Stores. If you have Reporter, use the Summary Report 'Exchange System Information Summary'. Determine if messages are delayed due to Database sizes.</p> <p>(4) Verify that the Information Store process (STORE) is running.</p>

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0052.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0052.1: The SMTP Local Retry Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0052.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0052.2: The SMTP Local Retry Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-60-0053 (SMTP Messages Pending Routing)

<b>Metric Number:</b>	<b>EXSPI-60-0053</b>
<b>Name:</b>	EXSPI SMTP Messages Pending Routing
<b>Description:</b>	Monitors the number of messages that have been categorized but not routed.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

**MS Exchange 2000 Monitor Template Specifications**

<b>Metric Number:</b>	<b>EXSPI-60-0053</b>
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to the local Exchange server may be delayed by the SMTP Server. A large number of pending messages could indicate problems with the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools (Common)-&gt;Performance Monitor, on Windows 2000, under Start-&gt;Programs-&gt;Administrative Tools-&gt;Performance. Hit the '+' button to add counters. Select the managed Exchange Server node as the source computer. Select performance objects, counters and instances as described below:</p> <p>(1) Use Performance Monitor to determine if the system is overloaded. Monitor the following counters:  System.% Total Processor Time  Process.% Processor Time for:  inetinfo (IIS, SMTP, etc.)  emsmta (Message Transfer Agent)  mad (System Attendant)  store (Information Store)  Memory.Pages/sec  LogicalDisk.% Disk Time.&lt;all instances&gt;  MSExchangeMTA.Work Queue Length</p> <p>(2) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Messages/Sec  MSExchangeMTA.Adjacent MTA Associations  SMTP Server.Message Received/Sec  SMTP Server Message Delivered/Sec  SMTP Server.Message Sent/Sec  SMTP Server.Outbound Connection Current  SMTP Server.Inbound Connection Current</p> <p>(3) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Work Queue Length  MSExchangeIS.Mailbox.Send Queue Size  MSExchangeIS.Mailbox.Receive Queue Size  SMTP Server.Categorizer Queue Length  SMTP Server.Local Queue Length  SMTP Server.Local Retry Queue Length  SMTP Server.Remote Queue Length  SMTP Server.Remote Retry Queue Length</p> <p>(4) Determine if network problems are preventing message flow.</p>

<b>Condition:</b>	<b>EXSPI-60-0053.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0053.1: The SMTP messages pending routing (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0053.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0053.2: The SMTP messages pending routing (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0054 (SMTP Remote Queue Length)

<b>Metric Number:</b>	EXSPI-60-0054
<b>Name:</b>	EXSPI SMTP Remote Queue Length
<b>Description:</b>	Monitors the number of messages in the queue for remote delivery
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Metric Number:</b>	<b>EXSPI-60-0054</b>
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the SMTP Server.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools (Common)-&gt;Performance Monitor, on Windows 2000, under Start-&gt;Programs-&gt;Administrative Tools-&gt;Performance. Hit the '+' button to add counters. Select the managed Exchange Server node as the source computer. Select performance objects, counters and instances as described below:</p> <p>(1) Use Performance Monitor to determine if the system is overloaded. Monitor the following counters:  System.% Total Processor Time  Process.% Processor Time for:  inetinfo (IIS, SMTP, etc.)  emsmta (Message Transfer Agent)  mad (System Attendant)  store (Information Store)  Memory.Pages/sec  LogicalDisk.% Disk Time.&lt;all instances&gt;  MSExchangeMTA.Work Queue Length</p> <p>(2) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Messages/Sec  MSExchangeMTA.Adjacent MTA Associations  SMTP Server.Message Received/Sec  SMTP Server.Message Delivered/Sec  SMTP Server.Message Sent/Sec  SMTP Server.Outbound Connection Current  SMTP Server.Inbound Connection Current</p> <p>(3) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Work Queue Length  MSExchangeIS.Mailbox.Send Queue Size  MSExchangeIS.Mailbox.Receive Queue Size  SMTP Server.Categorizer Queue Length  SMTP Server.Local Queue Length  SMTP Server.Local Retry Queue Length  SMTP Server.Remote Queue Length  SMTP Server.Remote Retry Queue Length</p> <p>(4) Determine if network problems are preventing message flow.</p>

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-0054.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0054.1: The SMTP Remote Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0054.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0054.2: The SMTP Remote Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)



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## EXSPI-60-0055 (SMTP Remote Retry Queue Length)

<b>Metric Number:</b>	EXSPI-60-0055
<b>Name:</b>	EXSPI SMTP Remote Retry Queue Length
<b>Description:</b>	Monitors the number of messages in the retry queue for remote delivery
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

**MS Exchange 2000 Monitor Template Specifications**

<b>Metric Number:</b>	<b>EXSPI-60-0055</b>
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the SMTP Server. A large remote retry queue length could indicate problems with the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start-&gt;Programs-&gt;Administrative Tools (Common)-&gt;Performance Monitor, on Windows 2000, under Start-&gt;Programs-&gt;Administrative Tools-&gt;Performance. Hit the '+' button to add counters. Select the managed Exchange Server node as the source computer. Select performance objects, counters and instances as described below:</p> <p>(1) Use Performance Monitor to determine if the system is overloaded. Monitor the following counters:  System.% Total Processor Time  Process.% Processor Time for:  inetinfo (IIS, SMTP, etc.)  emsmta (Message Transfer Agent)  mad (System Attendant)  store (Information Store)  Memory.Pages/sec  LogicalDisk.% Disk Time.&lt;all instances&gt;  MSExchangeMTA.Work Queue Length</p> <p>(2) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Messages/Sec  MSExchangeMTA.Adjacent MTA Associations  SMTP Server.Message Received/Sec  SMTP Server Message Delivered/Sec  SMTP Server.Message Sent/Sec  SMTP Server.Outbound Connection Current  SMTP Server.Inbound Connection Current</p> <p>(3) Use Performance Monitor to watch the message queues. Monitor the following counters:  MSExchangeMTA.Work Queue Length  MSExchangeIS.Mailbox.Send Queue Size  MSExchangeIS.Mailbox.Receive Queue Size  SMTP Server.Categorizer Queue Length  SMTP Server.Local Queue Length  SMTP Server.Local Retry Queue Length  SMTP Server.Remote Queue Length  SMTP Server.Remote Retry Queue Length</p> <p>(4) Determine if network problems are preventing message flow.</p>

<b>Condition:</b>	<b>EXSPI-60-0055.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0055.1: The SMTP Remote Retry Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0055.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0055.2: The SMTP Remote Retry Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0056 (SMTP NDR Percentage)

<b>Metric Number:</b>	EXSPI-60-0056
<b>Name:</b>	EXSPI SMTP Remote Queue Length
<b>Description:</b>	Monitors the percentage of NDRs for each SMTP virtual server
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>If this is the first time the metric is run or the counter values are less than the previous counter values, then the values are just stored and thresholds are not processed.</p> <p>The percentage is calculated by subtracting the previous counter values from the current counter values to get the number of NDRs and number of messages for the current interval. The formula used to get the metric value is: NDRs this interval / outbound messages this interval * 100.</p> <p><b>Probable cause(s):</b> A high rate of non-delivery reports could indicate problems with the SMTP configuration, the network, or how mail is being addressed.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) If the SMTP server has been configured to send notification of NDRs, check the configured mailbox for the system to get information about the NDRs. Otherwise, configure the SMTP server to send notifications for NDRs to help in troubleshooting.</li><li>(2) Verify that there are no network problems.</li><li>(3) Check other problems in the Message Reader to see if Exchange has been reporting problems with the SMTP server.</li><li>(4) Enable diagnostics logging for the SMTP server (using Exchange System manager) to help in troubleshooting.</li></ol>

<b>Condition:</b>	<b>EXSPI-60-0056.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4.000000
<b>Reset Value:</b>	3.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0056.1: The SMTP NDR percentage (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0056.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2.000000
<b>Reset Value:</b>	1.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0056.2: The SMTP NDR percentage (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0057 (SMTP Outbound Connections Refused)

<b>Metric Number:</b>	EXSPI-60-0057
<b>Name:</b>	EXSPI SMTP Outbound Connections Refused
<b>Description:</b>	Monitors the percentage of outbound SMTP connections refused by remote sites for each SMTP virtual server
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>If this is the first time the metric is run or the counter values are less than the previous counter values, then the values are just stored and thresholds are not processed.</p> <p>The percentage is calculated by subtracting the previous counter values from the current counter values to get the number of NDRs and number of messages for the current interval. The formula used to get the metric value is: NDRs this interval / outbound messages this interval * 100.</p> <p><b>Probable cause(s):</b> There may be a problem with the SMTP service making connections to remote systems. A high rate of failures could indicate problems with the network, remote systems or the SMTP configuration.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that there are no network problems.</li><li>(2) Check the SMTP configuration using Exchange System Manager.</li><li>(3) Check other messages in the Message Reader to see if Exchange has been reporting problems with the SMTP server.</li><li>(4) Enable diagnostics logging for the SMTP server (using Exchange System manager) to help in troubleshooting.</li></ol>

<b>Condition:</b>	<b>EXSPI-60-0057.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	2.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0057.1: SMTP connections refused (<\$VALUE> messages) is too high (&gt;<\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0057.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2.000000
<b>Reset Value:</b>	1.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0057.2: SMTP connections refused (<\$VALUE> messages) is too high (&gt;<\$THRESHOLD> messages)

## EXSPI-60-0058 (Newsfeed Outbound Connections Failed)

<b>Metric Number:</b>	EXSPI-60-0058
<b>Name:</b>	EXSPI Newsfeed Connections Failed
<b>Description:</b>	Monitors the percentage of outbound newsfeed connections that failed
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>If this is the first time the metric is run or the counter values are less than the previous counter values, then the values are just stored and thresholds are not processed.</p> <p>The percentage is calculated by subtracting the previous counter values from the current counter values to get the number of NDRs and number of messages for the current interval. The formula used to get the metric value is: <math>\text{NDRs this interval} / \text{outbound messages this interval} * 100</math>.</p>



<b>Condition:</b>	<b>EXSPI-60-0058.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4.000000
<b>Reset Value:</b>	2.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0058.1: The percentage of failed NNTP outbound connections (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0058.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2.000000
<b>Reset Value:</b>	1.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0058.2: The percentage of failed NNTP outbound connections (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0090 (cc:Mail MTS-IN Queue Length)

<b>Metric Number:</b>	<b>EXSPI-60-0090</b>
<b>Name:</b>	EXSPI cc:Mail MTS-IN Queue Length
<b>Description:</b>	Monitors the number of messages awaiting delivery to Exchange from Lotus ccMail.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-0090.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0090.1: The cc:Mail MTS-IN Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0090.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0090.2: The cc:Mail MTS-IN Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0091 (cc:Mail MTS-OUT Queue Length)

<b>Metric Number:</b>	<b>EXSPI-60-0091</b>
<b>Name:</b>	EXSPI cc:Mail MTS-OUT Queue Length
<b>Description:</b>	Monitors the number of messages awaiting delivery to Lotus ccMail.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-60-0091.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0091.1: The cc:Mail MTS-OUT Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0091.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0091.2: The cc:Mail MTS-OUT Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-60-0092 (Exchange NDRs to cc:Mail)

<b>Metric Number:</b>	EXSPI-0092
<b>Name:</b>	EXSPI cc:Mail NDRs to cc:Mail
<b>Description:</b>	Monitors the rate at which non-delivery reports are being sent to Lotus cc:Mail from MS Exchange.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	EXSPI-60-0092.1: Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0092.1: The rate of Exchange NDRs to cc:Mail (<\$VALUE>%) is too high (\\><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-60-0092.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0092.2: The rate of cc:Mail NDRs to cc:Mail (<\$VALUE>%) is too high (\\><\$THRESHOLD>%)

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## EXSPI-60-0093 (cc:Mail NDRs to Exchange)

<b>Metric Number:</b>	<b>EXSPI-0093</b>
<b>Name:</b>	EXSPI cc:Mail NDRs to Exchange
<b>Description:</b>	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus cc:Mail.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-60-0093.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0093.1: The rate of cc:Mail NDRs to Exchange (<\$VALUE>%) is too high (\\> <\$THRESHOLD>%)



<b>Condition:</b>	<b>EXSPI-60-0093.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0093.2: The rate of cc:Mail NDRs to Exchange (<\$VALUE>%) is too high (\\> <\$THRESHOLD>%)

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## EXSPI-60-0094 (Lotus Notes Inbound Queued Messages Length)

<b>Metric Number:</b>	<b>EXSPI-60-0094</b>
<b>Name:</b>	EXSPI Lotus Notes Inbound Queued Messages Length
<b>Description:</b>	Monitors the number of messages awaiting delivery to Exchange from Lotus Notes.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The Lotus Notes Connector service has stopped or stalled and is not processing messages.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that the Network is not experiencing any problems.</li><li>(2) Check for 'stuck' messages in the Connector for Lotus Notes queue.</li><li>(3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active.</li><li>(4) Verify that the Connector Processes are active</li><li>(5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector.</li><li>(6) Verify the Notes client can access the mailbox assigned to the Notes connector.</li><li>(7) Stop and re-start the Exchange services from Step (3).</li></ol>

<b>Condition:</b>	<b>EXSPI-60-0094.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0094.1: The Lotus Notes Inbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0094.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0094.2: The Lotus Notes Inbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

## EXSPI-60-0095 (Lotus Notes Outbound Queued Messages Length)

<b>Metric Number:</b>	<b>EXSPI-60-0095</b>
<b>Name:</b>	EXSPI Lotus Notes Outbound Queued Messages Length.
<b>Description:</b>	Monitors the number of messages awaiting delivery to Lotus Notes. Counter: MExchangeNOTES.Outbound Queued Messages
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The Lotus Notes Connector service has stopped or stalled and is not processing messages.</p> <p><b>Potential impact:</b> Performance</p> <p>Suggested action(s):</p> <ol style="list-style-type: none"><li>(1) Verify that the Network is not experiencing any problems.</li><li>(2) Check for 'stuck' messages in the Connector for Lotus Notes queue.</li><li>(3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active.</li><li>(4) Verify that the Connector Processes are active</li><li>(5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector.</li><li>(6) Verify the Notes client can access the mailbox assigned to the Notes connector.</li><li>(7) Stop and re-start the Exchange services from Step (3)</li></ol>

<b>Condition:</b>	<b>EXSPI-60-0095.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0095.1: The Lotus Notes Outbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-60-0095.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0095.2: The Lotus Notes Outbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

## EXSPI-60-0096 (Exchange NDRs sent to Lotus Notes)

<b>Metric Number:</b>	<b>EXSPI-60-0096</b>
<b>Name:</b>	EXSPI Exchange NDRs sent to Lotus Notes
<b>Description:</b>	Monitors the rate at which non-delivery reports are being sent to Lotus Notes from MS Exchange.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-60-0096.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0096.1: The rate of Exchange NDRs to Lotus Notes (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-60-0096.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0096.2: The rate of Lotus Notes NDRs to Lotus Notes (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

## EXSPI-60-0097 (Lotus Notes NDRs sent to MS Exchange)

<b>Metric Number:</b>	<b>EXSPI-60-0097</b>
<b>Name:</b>	EXSPI Lotus Notes NDRs sent to Microsoft Exchange
<b>Description:</b>	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus Notes.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-60-0097.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0097.1: The rate of Lotus Notes NDRs to Exchange (<\$VALUE>%) is too high (>= <\$THRESHOLD>%)"



<b>Condition:</b>	<b>EXSPI-60-0097.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0097.2: The rate of Lotus Notes NDRs to Exchange (<\$VALUE>%) is too high (>= <\$THRESHOLD>%)"

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## EXSPI-60-0100 (IS User Connection Count Low)

<b>Metric Number:</b>	<b>EXSPI-60-0100</b>
<b>Name:</b>	EXSPI IS User Connection Count Low
<b>Description:</b>	Monitors the number of client processes connected to the information store.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	Every 15min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The number of client processes logged on to the Information Store is low.</p> <p>A low user logon count during the day could indicate problems with the Information Store process or network connectivity.</p> <p><b>Potential impact:</b> Performance, Fault</p> <p><b>Suggested action(s):</b> (1) Verify that this system has active mailboxes. If it does not, this template should be removed from this system. (2) Using a test mailbox account, verify that you can connect to the server without problems. (3) Verify that there are no network problems.</p>

<b>Condition:</b>	<b>EXSPI-60-0100.1: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	1
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0100: The IS User Count (<\$VALUE>) is too low (&lt;&lt;<\$THRESHOLD> connections)

## EXSPI-60-0110 (DS Pending Synchronizations)

<b>Metric Number:</b>	<b>EXSPI-60-0110</b>
<b>Name:</b>	EXSPI DS Pending Synchronizations
<b>Description:</b>	Monitor directory replication to verify that synchronization updates are being processed efficiently.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Replication of directory information may be delayed. A delay in processing replication updates could indicate problems with system load or the Directory Service process.</p> <p><b>Potential impact:</b> Performance, Fault</p> <p><b>Suggested action(s):</b> (1) Check that the Directory process (dsamain) is running. (2) Verify that there are no network problems. (3) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</p>

<b>Condition:</b>	<b>EXSPI-60-0110.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	30min
<b>Message Text:</b>	EXSPI-60-0110: The DS Pending Replication Synchronizations value (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

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## EXSPI-60-0111 (DS Remaining Updates)

<b>Metric Number:</b>	EXSPI-60-0111
<b>Name:</b>	EXSPI DS Remaining Updates
<b>Description:</b>	Monitor directory replication to verify that synchronization updates are being processed efficiently.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Replication of directory information may be delayed. A delay in processing replication updates could indicate problems with system load or the Directory Service process.</p> <p><b>Potential impact:</b> Performance, Fault</p> <p><b>Suggested action(s):</b> (1) Check that the Directory process (dsamain) is running. (2) Verify that there are no network problems. (3) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</p>

<b>Condition:</b>	EXSPI-60-0111 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	0.5
<b>Reset Value:</b>	
<b>Duration:</b>	30min
<b>Message Text:</b>	EXSPI-60-0111: The DS Remaining Replication Updates value (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

## EXSPI-60-0800 (Active Conferences)

<b>Metric Number:</b>	EXSPI-60-0800
<b>Name:</b>	EXSPI Active Conferences
<b>Description:</b>	Monitors active MS Exchange Conferences
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0800.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0800.1: The rate of the number of conferences in progress (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	You have hit the threshold for the number of active conferences. Ensure that performance is not being impacted. If not, consider increasing the threshold.



<b>Condition:</b>	<b>EXSPI-60-0800.1 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0800.1: The rate of the number of conferences in progress (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	You have hit the threshold for the number of active conferences. Ensure that performance is not being impacted. If not, consider increasing the threshold.

## EXSPI-60-0801 (DCOM calls to MCUs)

<b>Metric Number:</b>	EXSPI-60-0801
<b>Name:</b>	EXSPI Active DCOM calls to MCU servers
<b>Description:</b>	Monitors active DCOM calls to MCU servers
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0801.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	1000.000000
<b>Reset Value:</b>	500.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0801.1: The number of DCOM calls made to T.10 MCU servers (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing the threshold for the number of DCOM calls to the MCU indicates you may wish to add another MCU server.

<b>Condition:</b>	<b>EXSPI-60-0801.1 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	100.000000
<b>Reset Value:</b>	50.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0801.1: The number of DCOM calls made to T.120 MCU servers (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing the threshold for the number of DCOM calls to the MCU indicates you may wish to add another MCU server.

## EXSPI-60-0802 (Average Load per MCU)

<b>Metric Number:</b>	EXSPI-60-0802
<b>Name:</b>	EXSPI Average Load per MCU
<b>Description:</b>	Monitors average load per MCU server
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0802.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0802.1: The average load per T.120 MCU server (<\$VALUE>) is too high (\ > <\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing this threshold may indicate that you need to add another MCU server.

<b>Condition:</b>	<b>EXSPI-60-0802.1 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0802.1: The average load per T.120 MCU server (<\$VALUE>) is too high (\ > <\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing this threshold may indicate that you need to add another MCU server.

## EXSPI-60-0803 (MCU Active Connections)

<b>Metric Number:</b>	EXSPI-60-0803
<b>Name:</b>	EXSPI MCU Active Connections
<b>Description:</b>	Monitors active T.120 MCU connections
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0803.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	100.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0803.1: The number of clients connected to this T.120 MCU server (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing this threshold indicates that you have more conference participants than expected.

<b>Condition:</b>	<b>EXSPI-60-0803.1 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	90.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0803.1: The number of clients connected to this T.120 MCU server (<\$VALUE>) is too high (\\><\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing this threshold indicates that you have more conference participants than expected.

## EXSPI-60-0804 (MCU Load)

<b>Metric Number:</b>	EXSPI-60-0804
<b>Name:</b>	EXSPI MCU Load
<b>Description:</b>	Monitors load on MCU servers
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0804.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0804.1: The amount of work being allocated to this MCU (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing this threshold indicates that too much work has been offloaded to the MCU.



<b>Condition:</b>	<b>EXSPI-60-0804.1 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0804.1: The amount of work being allocated to this MCU (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	Surpassing this threshold indicates that too much work has been offloaded to the MCU.

## EXSPI-60-0805 (Failed Conference Join Attempts)

<b>Metric Number:</b>	<b>EXSPI-60-0805</b>
<b>Name:</b>	EXSPI Failed Conference User Join Attempts
<b>Description:</b>	Monitors failed user attempts to join MS Exchange Conferences
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	<b>EXSPI-60-0805.1 Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0805.1: The number of times users failed to join conferences (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	Failed logins could be a sign of an attempted security breach to your conferencing server.

<b>Condition:</b>	<b>EXSPI-60-0805.1 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0805.1: The number of times users failed to join conferences (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	Failed logins could be a sign of an attempted security breach to your conferencing server.

## EXSPI-60-0806 (Active Video Conferences)

<b>Metric Number:</b>	EXSPI-60-0806
<b>Name:</b>	EXSPI Active Video Conferences
<b>Description:</b>	Monitors video conferences in progress
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0806.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0806.1: The number of video conferences in progress in this site since last iteration (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	The user-defined threshold has been surpassed. Ensure that performance with the conferencing server is adequate. You may wish to add another conferencing server or limit the number of conferencing servers.

<b>Condition:</b>	<b>EXSPI-60-0806.1 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0806.1: The number of video conferences in progress in this site since last iteration (<\$VALUE>) is too high (<\> <\$THRESHOLD>)
<b>Instruction Text:</b>	The user-defined threshold has been surpassed. Ensure that performance with the conferencing server is adequate. You may wish to add another conferencing server or limit the number of conferencing servers.

## EXSPI-60-0807 (Incomplete Calls)

<b>Metric Number:</b>	EXSPI-60-0807
<b>Name:</b>	EXSPI Incomplete H.323 Calls
<b>Description:</b>	Monitors number of incomplete H.323 calls
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0807.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0807.1: The number of H.323 calls that could not be bridged since the last iteration (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	The user-defined threshold has been surpassed. Ensure that performance with the conferencing server is adequate. You may wish to add another conferencing server or limit the number of conferencing servers.

<b>Condition:</b>	<b>EXSPI-60-0807.2 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0807.2: The number of H.323 calls that could not be bridged since the last iteration (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	The user-defined threshold has been surpassed. Ensure that performance with the conferencing server is adequate. You may wish to add another conferencing server or limit the number of conferencing servers.

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## EXSPI-60-0830 (Chat Service: Active Logons)

<b>Metric Number:</b>	EXSPI-60-0830
<b>Name:</b>	EXSPI Active DNS logon threads
<b>Description:</b>	Monitors number of worker threads waiting to process DNS lookup requests
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0830.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0830.1: The MS Exchange Chat Service Active DNS logon threads (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This counter is the total number of worker threads waiting to process DNS lookup requests. When this value is high, you may be experiencing DNS server failures.



<b>Condition:</b>	<b>EXSPI-60-0830.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0830.2: The MS Exchange Chat Service Active DNS logon threads (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This counter is the total number of worker threads waiting to process DNS lookup requests. When this value is high, you may be experiencing DNS server failures.

## EXSPI-60-0831 (Chat Service: Timeout Disconnects)

<b>Metric Number:</b>	EXSPI-60-0831
<b>Name:</b>	EXSPI Chat Service Timeout Disconnects
<b>Description:</b>	Monitors the number of Chat Service client timeout related disconnects
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0831.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	7.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0831.1: The MS Exchange Chat Service Client Timeout Related Disconnects (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This counter is the total number of clients disconnected because of a ping timeout. If this value is high it may indicate network lag or the client's computer is malfunctioning.

<b>Condition:</b>	<b>EXSPI-60-0831.2 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	2.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0831.2: The MS Exchange Chat Service Client Timeout Related Disconnects (<\$VALUE>) is too high (\\><\$THRESHOLD>)
<b>Instruction Text:</b>	This counter is the total number of clients disconnected because of a ping timeout. If this value is high it may indicate network lag or the client's computer is malfunctioning.

## EXSPI-60-0833 (Chat Service: Anonymous Clients)

<b>Metric Number:</b>	EXSPI-60-0833
<b>Name:</b>	EXSPI Chat Service Anonymous Clients
<b>Description:</b>	Monitors number of anonymous clients actively connected to Chat services
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0833.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	30.000000
<b>Reset Value:</b>	20.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0833.1: The MS Exchange Chat Service Anonymous clients (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This is the number of anonymous clients currently connected to this chat community.

<b>Condition:</b>	<b>EXSPI-60-0833.2 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0833.2: The MS Exchange Chat Service Anonymous clients (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This is the number of anonymous clients currently connected to this chat community.

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## EXSPI-60-0834 (Chat Service: Active Authenticated Clients)

<b>Metric Number:</b>	EXSPI-60-0834
<b>Name:</b>	EXSPI Chat Service Authenticated Clients
<b>Description:</b>	Monitors number of authenticated clients currently connected
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0834.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	100.000000
<b>Reset Value:</b>	80.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0834.1: The MS Exchange Chat Service Authenticated clients (<\$VALUE>) is too high (\\><\$THRESHOLD>)
<b>Instruction Text:</b>	This is the number of authenticated clients currently connected to this chat community.

<b>Condition:</b>	<b>EXSPI-60-0834.2 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	50.000000
<b>Reset Value:</b>	30.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0834.2: The MS Exchange Chat Service Authenticated clients (<\$VALUE>) is too high (&\\><\$THRESHOLD>)
<b>Instruction Text:</b>	This is the number of authenticated clients currently connected to this chat community.

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## EXSPI-60-0835 (Chat Service: Authentication Failures)

<b>Metric Number:</b>	EXSPI-60-0835
<b>Name:</b>	EXSPI Chat Service Authentication Failures
<b>Description:</b>	Monitors number of authentication failures to MS Exchange Chat Service
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0835.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	20.000000
<b>Reset Value:</b>	15.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0835.1: The MS Exchange Chat Service Authentication failures (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This is the total number of failed authentication attempts by users trying to connect to the chat server. If this value is high it may indicate an attack on your server to breach security.



<b>Condition:</b>	<b>EXSPI-60-0835.2 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	5.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0835.2: The MS Exchange Chat Service Authentication failures (<\$VALUE>) is too high (& ><\$THRESHOLD>)
<b>Instruction Text:</b>	This is the total number of failed authentication attempts by users trying to connect to the chat server. If this value is high it may indicate an attack on your server to breach security.

## EXSPI-60-0836 (Chat Service: Server Operations Queued)

<b>Metric Number:</b>	EXSPI-60-0836
<b>Name:</b>	EXSPI Chat Service Operations Queued
<b>Description:</b>	Monitors queue of operations on the MS Exchange Chat Service server
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf

<b>Condition:</b>	EXSPI-60-0836.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	7.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0836.1: The MS Exchange Chat Service Server operations queued (<\$VALUE>) is too high (&\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This is the number of pending server operations. If this value is too high there could be a problem server load.

<b>Condition:</b>	<b>EXSPI-60-0836.2 Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	2.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0836.2: The MS Exchange Chat Service Server operations queued <\$VALUE> is too high (\\> <\$THRESHOLD>)
<b>Instruction Text:</b>	This is the number of pending server operations. If this value is too high there could be a problem server load.

## EXSPI-60-0841 (IM: Active Users)

<b>Metric Number:</b>	EXSPI-60-0841
<b>Name:</b>	EXSPI Active Users IM Virtual Servers
<b>Description:</b>	Monitors number of IM Virtual Servers users currently online
<b>Type:</b>	With Reset
<b>Message Group:</b>	EX_Perf
<b>Condition:</b>	EXSPI-60-0841.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	100.000000
<b>Reset Value:</b>	100.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0841.1: The IM user count (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Condition:</b>	EXSPI-60-0841.2 Warning threshold
<b>Severity:</b>	Warning
<b>Threshold:</b>	75.000000
<b>Reset Value:</b>	75.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0841.2: The IM user count (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

## EXSPI-60-0842 (IM: Current Subscriptions)

<b>Metric Number:</b>	EXSPI-60-0842
<b>Name:</b>	EXSPI IM Current Subscriptions
<b>Description:</b>	Monitors number of current IM Virtual Servers subscriptions
<b>Type:</b>	With Reset
<b>Message Group:</b>	EX_Perf
<b>Condition:</b>	EXSPI-60-0842.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	100.000000
<b>Reset Value:</b>	100.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0842.1: The IM Current Subscriptions (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Condition:</b>	EXSPI-60-0842.2 Warning threshold
<b>Severity:</b>	Warning
<b>Threshold:</b>	75.000000
<b>Reset Value:</b>	75.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0842.2: The IM Current Subscriptions (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

## EXSPI-60-0845 (IM: Failed Requests)

<b>Metric Number:</b>	EXSPI-60-0845
<b>Name:</b>	EXSPI IM Failed Requests
<b>Description:</b>	Monitors number of IM failed requests per sec.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Condition:</b>	EXSPI-60-0845.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0845.1: The IM Failed Requests/sec (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Condition:</b>	EXSPI-60-0845.2 Warning threshold
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	5.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0845.2: The IM Failed Requests/sec ( (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

## EXSPI-60-0846 (IM: Rejected Requests)

<b>Metric Number:</b>	EXSPI-60-0846
<b>Name:</b>	EXSPI IM Rejected Requests
<b>Description:</b>	Monitors number of rejected IM requests per sec.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Condition:</b>	EXSPI-60-0846.1 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0846.1: The IM Rejected Requests/sec (<\$VALUE>) is too high (\\> <\$THRESHOLD>)
<b>Condition:</b>	EXSPI-60-0846.2 Warning threshold
<b>Severity:</b>	Warning
<b>Threshold:</b>	5.000000
<b>Reset Value:</b>	5.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-0846.2: The IM Rejected Requests/sec (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

## EXSPI-60-1001 (Services Monitor)

<b>Metric Number:</b>	<b>EXSPI-1001</b>
<b>Name:</b>	MSExchange Services Monitor
<b>Description:</b>	Monitors Exchange Server process. Generates event if an Exchange service is currently stopped but configured startup automatic.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> A service marked for automatic start-up is not running.</p> <p><b>Potential impact:</b> Failure</p> <p><b>Suggested action(s):</b></p> <p>(1) Unless the service is known to be down for maintenance, use the Services tool in the Control Panel to re-start the service.</p> <p>NOTE: By default only Exchange related services are monitored. If you would like to receive messages about other stopped services, simply add conditions. A value of 0.0 is sent for running services and 1.0 for stopped services.</p>

<b>Condition:</b>	<b>EXSPI-60-1001.1: Major threshold</b>
<b>Severity:</b>	Major
<b>Threshold:</b>	1.000000
<b>Reset Value:</b>	
<b>Message Text:</b>	EXSPI-60-1001: Service <prefix> <rest>is currently not running (startup config automatic)



## EXSPI-60-1002 (End to End Message Ping)

<b>Metric Number:</b>	EXSPI-60-1002
<b>Name:</b>	MSExchange End to End Message Ping Monitor
<b>Description:</b>	Monitors the round trip time for a message
<b>Type:</b>	With Reset
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Slow or non-reply of messages could indicate problems with system load, the MTA, connectors, or the network. The threshold could be too low. For the most accurate alarming, separate thresholds should be set for each ping system pair.</p> <p><b>Potential impact:</b> Failure or Performance</p> <p><b>Suggested action(s):</b></p> <p>If the threshold is too low, make it bigger. See the User's Guide for information on how to set the threshold differently for each system pair.</p> <p>If the threshold is accurate, then evaluate the following suggestions on the source and destination servers:</p> <p>Select the Performance Monitor 'MS Exchange Server Health' to determine if the source system is overloaded. Also check that the MTA process (emsmta) is running. (If it is not running, it will not be shown on the graph.) Re-start it if needed.</p> <p>Select the Performance Monitor 'MS Exchange Server Health' to determine if the message queue to the destination system is large or growing.</p> <p>If the queues on either side are large or growing and the systems are not overloaded, run Exchange Administrator and check for 'stuck' messages in the MTA queue.</p> <p>If there are no stuck messages, check if there are network problems between the two systems.</p> <p>If the connection between the source and destination system is not direct (e.g., the message travels through bridgehead servers), check the connector queue lengths and system load on those systems as well.</p>

**MS Exchange 2000 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-60-1002.1: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	300
<b>Reset Value:</b>	240
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-60-1002.1: End to End Message Ping round trip time (<\$VALUE> seconds) is too high (>=<\$THRESHOLD>) for systems <From system, To system>.

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## **MS Exchange 5.5 Templates**

## Summary MS Exchange 5.5 Monitor Templates

Id	Category	Template Group	Template	Description	Threshold	Threshold	Duration	Schedule	Message Group
					w: (r:)	c: (r:)	Reset	W/O Reset	Frequency
1	QS	EXSPI-55 Services and Processes	EXSPI-55-0001	Process Monitor (Monitors CPU time used by Exchange processes)	w: 80 (r: 75) c: 99 (r: 85)	Reset		every 5min	EX_Perf
2	QS	EXSPI-55 Services and Processes	EXSPI-55-0002		w: 0.01	W/O Reset	12h	every 10min	EX_Fault
5	QS	EXSPI-55 Transaction Log	EXSPI-55-0005	Low Log File Disk Space	w: 20 (r: 25) c: 10 (r: 55)	Reset		every 15min	EX_Fault
6	QS	EXSPI-55 Transaction Log	EXSPI-55-0006	Transaction Log File Disk Space	w: 100 (r: 90) c: 300 (r: 250)	Reset		every day	EX_Fault
10	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0010	MTA Message Delay	w: 60 (r: 50) c: 300 (r: 250)	Reset		every 5 min	EX_Perf
11	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0011	MTA Work Queue Length	w: 50 (r: 40) c: 100 (r: 80)	Reset	10m	every 5 min	EX_Perf
12	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0012	MTA Failed Conversions	w: 2 (r: 1) c: 4 (r: 3)	Reset		every 1h	EX_Perf
13	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0013	MTA Connection Message Delay	w: 300 (r: 250) c: 600 (r: 500)	Reset		every 5 min	EX_Perf
14	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0014	MTA Connection Queue Lengths	w: 20 (r: 15) c: 40 (r: 30)	Reset		every 5 min	EX_Perf
15	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0015	MTA Failed Outbound Associations	w: 3 (r: 2) c: 10 (r: 8)	Reset		every 1h	EX_Perf
16	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0016	MTA Rejected Inbound Associations	w: 3 (r: 2) c: 10 (r: 8)	Reset		every 1h	EX_Perf
17	QS	EXSPI-55 Message Transfer Agent	EXSPI-55-0017	MTA Rejected Inbound Messages	w: 2 (r: 1) c: 4 (r: 3)	Reset		every 1h	EX_Perf
30	QS	EXSPI-55 Information Store	EXSPI-55-0030	IS Public Average Delivery Time	w: 10 (r: 7) c: 5 (r: 3)	Reset		every 5min	EX_Perf
31	QS	EXSPI-55 Information Store	EXSPI-55-0031	IS Public Average Local Delivery Time	w: 10 (r: 7) c: 5 (r: 3)	Reset		every 5min	EX_Perf
32	QS	EXSPI-55 Information Store	EXSPI-55-0032	IS Public Replication Queue Size	w: 30 (r: 20) c: 15 (r: 10)	Reset		every 5min	EX_Perf
33	QS	EXSPI-55 Information Store	EXSPI-55-0033	IS Public Receive Queue Size	w: 30 (r: 20) c: 15 (r: 10)	Reset		every 5min	EX_Perf
34	QS	EXSPI-55 Information Store	EXSPI-55-0034	IS Public Send Queue Size	w: 30 (r: 20) c: 15 (r: 10)	Reset		every 5min	EX_Perf
40	QS	EXSPI-55 Information Store	EXSPI-55-0040	IS Mailbox Average Delivery Time	w: 10 (r: 7) c: 5 (r: 3)	Reset		every 5min	EX_Perf

Id	Category	Template Group	Template	Description	Threshold	Alert	Duration	Schedule	Message Group
					w: (r: 1) c: 5 (r: 3)	Reset		every 5min	EX_Perf
41	QS	EXSPI-55 Information Store	EXSPI-55-0041	IS Mailbox Average Local Delivery Time	w: 10 (r: 7) c: 5 (r: 3)	Reset		every 5min	EX_Perf
42	QS	EXSPI-55 Information Store	EXSPI-55-0042	IS Mailbox Receive Queue Size	w: 30 (r: 20) c: 15 (r: 10)	Reset		every 5min	EX_Perf
43	QS	EXSPI-55 Information Store	EXSPI-55-0043	IS Mailbox Send Queue Size	w: 30 (r: 20) c: 15 (r: 10)	Reset		every 5min	EX_Perf
60	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0060	MSX 5.5-IMS Failed Connections	w: 2 (r: 1) c: 5 (r: 2)	Reset		every 1h	EX_Perf
61	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0061	MSX 5.5-IMS Rejected Connections	w: 2 (r: 1) c: 5 (r: 2)	Reset		every 1h	EX_Perf
62	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0062	MSX 5.5-IMS MTS-IN Queue Length	w: 15 (r: 10) c: 30 (r: 20)	Reset		every 5min	EX_Perf
63	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0063	MSX 5.5-IMS MTS-OUT Queue Length	w: 15 (r: 10) c: 30 (r: 20)	Reset		every 5min	EX_Perf
64	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0064	MSX 5.5-IMS Queued Inbound	w: 15 (r: 10) c: 30 (r: 20)	Reset		every 5min	EX_Perf
65	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0065	MSX 5.5-IMS Queued Outbound	w: 15 (r: 10) c: 30 (r: 20)	Reset		every 5min	EX_Perf
66	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0066	MSX 5.5-IMS NDRs Inbound	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
67	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0067	MSX 5.5-IMS NDRs Outbound	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
80	AO	EXSPI-55 News Service	EXSPI-55-0080	Newsfeed Rejected Inbound Messages	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
81	AO	EXSPI-55 News Service	EXSPI-55-0081	Newsfeed Rejected Outbound Messages	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
90	AO	EXSPI-55 cc:Mail Connector	EXSPI-55-0090	cc:Mail MTS-IN Queue Length	w: 20 (r: 15) c: 50 (r: 40)	Reset		every 5min	EX_Perf
91	AO	EXSPI-55 cc:Mail Connector	EXSPI-55-0091	cc:Mail MTS-OUT Queue Length	w: 20 (r: 15) c: 50 (r: 40)	Reset		every 5min	EX_Perf
92	AO	EXSPI-55 cc:Mail Connector	EXSPI-55-0092	Exchange NDRs to cc:Mail	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
93	AO	EXSPI-55 cc:Mail Connector	EXSPI-55-0093	cc:Mail NDRs to Exchange	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
94	AO	EXSPI-55 Lotus Notes Connector	EXSPI-55-0094	Lotus Notes Inbound Queued Messages Length	w: 20 (r: 15) c: 50 (r: 40)	Reset		every 5min	EX_Perf
95	AO	EXSPI-55 Lotus Notes Connector	EXSPI-55-0095	Lotus Notes Outbound Queued Messages Length	w: 20 (r: 15) c: 50 (r: 40)	Reset		every 5min	EX_Perf
96	AO	EXSPI-55 Lotus Notes Connector	EXSPI-55-0096	Exchange NDRs sent to Lotus Notes	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
97	AO	EXSPI-55 Lotus Notes Connector	EXSPI-55-0097	Lotus Notes NDRs sent to Microsoft Exchange	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Perf
100	QS	EXSPI-55 Information Store	EXSPI-55-0100	IS User Connection Count Low	w: 1 (r: 2)	Reset		every 15min	EX_Perf
###	QS	EXSPI-55 Services and Processes	EXSPI-55-1001	MSExchange Services Monitor	m:1	W/O Reset		every 5min	EX_Fault
###	Ad	EXSPI-55 End to End Message Ping	EXSPI-55-1002		w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX_Fault

# MS Exchange 5.5 Data Collection Templates

Category							
	Template Group	Template	Description	Collection Type	Schedule	Table	Report
QS	EXSPI-55 Information Store	EXSPI-55-DC-IS Msg Del Time	Collect data on the average msg delivery times in core procs	Average/h	6:00-18:00 every 10min, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	
QS	EXSPI-55 Information Store	EXSPI-55-DC-IS Mailbox Msg Vol	Collect data on the vol of messages processed by Mailbox IS	Delta/h	6:00-18:00 hourly, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	S: Exchange Messaging Trends for all Servers D: Exchange Messaging Trends
QS	EXSPI-55 Information Store	EXSPI-55-DC-IS Public Msg Vol	Collect data on the vol of messages processed by Public IS	Delta/h	6:00-18:00 hourly, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	S: Exchange Messaging Trends for all Servers D: Exchange Messaging Trends
QS	EXSPI-55 Message Transfer Agent	EXSPI-55-DC-MTA & IS Queue Lengths	Collect data on the length of message queues in core procs	Average/h	6:00-18:00 every 10min, M-F	EXSPI_MULTI (for each Database instance) EXSPI_SINGLE (total over all Databases)	
QS	EXSPI-55 Message Transfer Agent	EXSPI-55-DC-MTA Message Volume	Collect data on the vol. of messages processed by MTA	Delta/h	6:00-18:00 hourly, M-F	EXSPI_SINGLE	S: Exchange Messaging Trends for all Servers D: Exchange Messaging Trends
QS	EXSPI-55 Services and Processes	EXSPI-55-DC-User Connections	Collect data on the number of users	Value	7:00-18:00 hourly, M-F	EXSPI_SINGLE	D: Exchange User Connection
AO	EXSPI-55 Internet Mail Services	EXSPI-55-DC-IMS Message Volume	Collect data on the vol. of messages processed by the IMS	Delta/h	6:00-18:00 hourly, M-F	EXSPI_SINGLE	S: Exchange Messaging Trends for all Servers D: Exchange IMS Messaging Trends
AO	EXSPI-55 Internet Mail Services	EXSPI-55-DC-IMS Queue Length	Collect data on the vol. of messages processed by the IMS	Average/h	6:00-18:00 10min, M-F	EXSPI_SINGLE	
AO	EXSPI-55 News Service	EXSPI-55-DC-News Message Volume	Collect data on the vol. of news messages processed by IS	Delta/h	6:00-18:00 hourly, M-F	EXSPI_SINGLE	
Ad	EXSPI-55 End to End Message Ping	EXSPI-55-End to End Message Ping	30 m Scheduler for metric in End to End Message Ping group	Value	every 30min, daily	EXSPI_M1002	S: Exchange SLA Message Delivery
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC-Exchange Info	Collect data on Exchange Parameters	Value	23:00, daily	EXSPI_MULTI	S: Exchange System Information Summary
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC-Mailbox Data	Collect data about all mailboxes on the system	Value	1:00 every Saturday	EXSPI_MULTI	Mailboxes D: Exchange Mailbox Details D: Exchange Mailbox Summary
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC-Private IS Sum. Data	Collect summary data about Private Info. Store (Mailboxes)	Value	23:00, M-S	EXSPI_MULTI	S: Exchange System Information Summary D: Exchange Mailbox Summary D: Exchange Mailbox Usage Trends

C a t e g o r y							
	Template Group	Template	Description	Collection Type	Schedule	Table	Report
Ad	EXSPI-60 Reporter Collection	EXSPI-55-DC-TrackLog Data	Collect Tracking.Log data	Value	19:00 every Saturday	EXSPI_M0660 EXSPI_M0661 EXSPI_M0662 EXSPI_M0663	D: Exchange Top Destinations D: Exchange Top Recipients D: Exchange Top Senders D: Exchange Top Sources
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC-Public Folder Data	Collect data about all public folders on the system	Value	4:00 every Saturday	EXSPI_MULTI	S: Exchange Top 100 Public Folders D: Exchange Folder Summary
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC-Public IS Sum. Data	Collect summary data about Public Info. Store (Folders)	Value	22:00, M-S	EXSPI_MULTI	S: Exchange System Information Summary D: Exchange Folder Summary D: Exchange Folder Usage Trends

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## MS Exchange 5.5 Monitor Template Specifications

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### EXSPI-55-0001 (Process Monitor)

<b>Metric Number:</b>	EXSPI-55-0001
<b>Name:</b>	EXSPI Process Monitor
<b>Description:</b>	Process Monitor, monitors the amount of CPU time being used by the core Exchange processes.
<b>Type:</b>	With reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> High CPU use could indicate an overloaded system. An Exchange process consuming a lot of CPU but processing few messages could indicate a problem with the process.</p> <p><b>Potential impact:</b> Failure, Performance</p> <p><b>Suggested action(s):</b> (1) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the service. (2) Monitor Exchange processes with NT Performance Monitor (Process.% Processor Time) and verify CPU consumption over a period of time. Constantly high value may indicate a scalability problem. (3) Stop and re-start the Exchange service. Use the NT Administrative Tool 'Service Manager'.</p> <p>NOTE: By default only Exchange processes are monitored. The 'Catch All' suppress condition prevents messages about other busy processes. If you would like to receive messages about other busy processes, simply add conditions before the 'Catch All'.</p>



<b>Condition:</b>	<b>EXSPI-55-0001 Process - msexcimc.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange INTERNET MAIL CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - msexcimc.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange INTERNET MAIL CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-0001 Process - store.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange INFORMATION STORE service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - store.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange INFORMATION STORE service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - emsmta.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange MESSAGE TRANSFER AGENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - emsmta.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange MESSAGE TRANSFER AGENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-0001 Process - mad.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange SYSTEM ATTENDENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - mad.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange SYSTEM ATTENDENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - dsamain.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange DIRECTORY service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - dsamain.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange DIRECTORY service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-0001 Process - inetinfo.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange IIS service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - inetinfo.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange IIS service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - srsmain.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange DIRECTORY REPLICATION service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - srsmain.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange DIRECTORY REPLICATION service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-0001 Process - adc.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange ACTIVE DIRECTORY CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - adc.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange ACTIVE DIRECTORY CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)



<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexim.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexim.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexout.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexout.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexnts.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexnts.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexdxa.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsmexdxa.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsntsmex.1</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	99.0
<b>Reset Value:</b>	85.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.1: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0001 Process - lsntsmex.2</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	80.0
<b>Reset Value:</b>	75.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0001.2: Exchange LOTUS NOTES CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too high (\\><\$THRESHOLD>)

## EXSPI-55-0002 (Inactive Process Monitor)

<b>Metric Number:</b>	EXSPI-0002
<b>Name:</b>	MSX 5.5-Inactive Process Monitor
<b>Description:</b>	Monitors the core MS Exchange processes to check that they are using some CPU cycles. A process consistently at 0% could indicate a problem.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	Every 10min
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Low CPU use during the day on an active system could indicate a problem with the process.</p> <p><b>Potential impact:</b> Failure</p> <p><b>Suggested action(s):</b> (1) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the service. (2) Monitor Exchange processes with NT Performance Monitor (Process.% Processor Time) and verify CPU consumption over a period of time. Constantly high value may indicate a scalability problem. (3) Stop and re-start the Exchange service. Use the NT Administrative Tool 'Service Manager'.</p>

<b>Condition:</b>	<b>EXSPI-55-0002 Process - msexcime</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-55-0002: Exchange INTERNET MAIL CONNECTOR service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0002 Process - store</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-55-0002: Exchange INFORMATION STORE service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-0002 Process - emsmta</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-55-0002: Exchange MESSAGE TRANSFER AGENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0002 Process - mad</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-55-0002: Exchange SYSTEM ATTENDENT service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)



<b>Condition:</b>	<b>EXSPI-55-0002 Process - dsamain</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-55-0002: Exchange DIRECTORY service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0002 Process - inetinfo</b>
<b>Severity:</b>	
<b>Threshold:</b>	0.01
<b>Reset Value:</b>	
<b>Duration:</b>	12h
<b>Message Text:</b>	EXSPI-55-0002: Exchange IIS service (pid=<pid>) CPU processor time consumption (<\$VALUE>) too low (\\<<\$THRESHOLD>)

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## EXSPI-55-0005 (Low Log File Disk Space)

<b>Metric Number:</b>	EXSPI-55-0005
<b>Name:</b>	EXSPI-Low Log File Disk Space
<b>Description:</b>	Monitors the free disk space remaining on the logical disk drive where the transaction log files for the IS public and private databases reside.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 15min
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The amount of free disk space on the disk drive where the Exchange transaction log files reside is getting low.</p> <p><b>Potential impact:</b> Failure. Exchange will shutdown processing if there is no disk space for additional transaction log files.</p> <p><b>Suggested action(s):</b> (1) Free up disk space on this drive. (2) If this drive is filling up because of many Exchange transaction log files, verify that Exchange backups are completing successfully (log files are removed when the i backup completes) and that backups are being done frequently enough.</p>

<b>Condition:</b>	<b>EXSPI-55-0005.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10.0
<b>Reset Value:</b>	55.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0005.1: Free disk space (<\$VALUE>MB) on the disk drive where the Exchange transaction log files reside is getting low (\\<<\$THRESHOLD>MB)

<b>Condition:</b>	<b>EXSPI-55-0005.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20.0
<b>Reset Value:</b>	25.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0005.2: Free disk space (<\$VALUE>MB) on the disk drive where the Exchange transaction log files reside is getting low (\\<<\$THRESHOLD>MB)

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## EXSPI-55-0006 (Transaction Log File Disc Space)

<b>Metric Number:</b>	<b>EXSPI-55-0006</b>
<b>Name:</b>	EXSPI Transaction Log File Disc Space
<b>Description:</b>	Monitors the disk space used by the Exchange transaction and reserved transaction log files.
<b>Type:</b>	With Reset
<b>Schedule:</b>	M-F: 02:00
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The amount of disk space being used by the Exchange transaction log files is getting large (disk space being used by edb*.log and res*.log files in the mdbdata and dsadata directories).</p> <p>A large amount of used disk space could indicate a possible problem with backups.</p> <p><b>Potential impact:</b> Failure</p> <p><b>Suggested action(s):</b> (1) Verify that Exchange backups are completing successfully (log files are removed when the backup completes). (2) Verify that backups are being done frequently enough. If they are, the conditions can be edited to increase the threshold values so this message is not generated as often.</p>

<b>Condition:</b>	<b>EXSPI-55-0006.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	200.0
<b>Reset Value:</b>	180.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0006.1: The amount of disk space (<\$VALUE>MB) being used by the Exchange transaction log files is getting large (\\><\$THRESHOLD>MB)

<b>Condition:</b>	<b>EXSPI-55-0006.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	100.0
<b>Reset Value:</b>	90.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0006.2: The amount of disk space (<\$VALUE>MB) being used by the Exchange transaction log files is getting large (\\><\$THRESHOLD>MB)

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## EXSPI-55-0010 (MTA Message Delay)

<b>Metric Number:</b>	EXSPI-55-0010
<b>Name:</b>	EXSPI MTA Message Delay
<b>Description:</b>	Monitors the delay time in processing messages by the Message Transfer Agent.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>PWindows Task Manager</b>robable cause(s): Delay of messages being processed could indicate problems with system load, the MTA, connectors, or the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Run Exchange Administrator and check for 'stuck' messages in the MTA queue. (3) Verify that there are no network problems.</p>

<b>Condition:</b>	<b>EXSPI-55-0010.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	300.0
<b>Reset Value:</b>	250.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0010.1: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-55-0010.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	60.0
<b>Reset Value:</b>	50.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0010.2: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD> secs)

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## EXSPI-55-0011 (MTA Work Queue Length)

<b>Metric Number:</b>	EXSPI-55-0011
<b>Name:</b>	EXSPI MTA Work Queue Length
<b>Description:</b>	Checks length of work queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delay of messages being processed could indicate problems with system load, the MTA, connectors, or the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Run Exchange Administrator and check for 'stuck' messages in the MTA queue. (3) Verify that there are no network problems.</p>



<b>Condition:</b>	<b>EXSPI-55-0011.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	100.0
<b>Reset Value:</b>	80.0
<b>Duration:</b>	10min
<b>Message Text:</b>	EXSPI-55-0011.1: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0011.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	50.0
<b>Reset Value:</b>	40.0
<b>Duration:</b>	10min
<b>Message Text:</b>	EXSPI-55-0011.2: Delivery of messages to other Exchange servers may be delayed (<\$VALUE> secs) by the MTA (\\><\$THRESHOLD>)

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## EXSPI-55-0012 (MTA Failed Conversions)

<b>Metric Number:</b>	EXSPI-55-0012
<b>Name:</b>	EXSPI MTA Failed Conversions
<b>Description:</b>	Monitors the number of messages in the MTA work queue. This is the number of messages not yet processed to completion by the MTA (not counting messages with deferred delivery).
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s): There may be problems with the MTA converting messages from one format to another.</p> <p>Potential impact: Performance/Failure. A high failure rate could indicate problems with the MTA or how messages being received are formatted.</p> <p>Suggested action(s): (1) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems converting messages. (2) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0012.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4.0
<b>Reset Value:</b>	3.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0012.1: The rate of Failed MTA Conversions is <\$VALUE>% which has been higher than the set threshold (\\><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-55-0012.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2.0
<b>Reset Value:</b>	1.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0012.2: The rate of Failed MTA Conversions is <\$VALUE>% which has been higher than the set threshold (\\><\$THRESHOLD>%)

## EXSPI-55-0013 (MTA Connection Message Delay)

<b>Metric Number:</b>	<b>EXSPI-55-0013</b>
<b>Name:</b>	EXSPI MTA Connection Message Delay
<b>Description:</b>	Monitor processing of messages by the MTA to each connection to determine if there are problems with specific connections.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s): Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.</p> <p>A long delay time could indicate problems with connectors, system load, the MTA, or the network.</p> <p>Potential impact: Performance/Failure.</p> <p>Suggested action(s): (1) Monitor queue length for the specific connection with NT Performance Monitor: MSExchangeMTA Connections.Oldest Message Queued.&lt;CONNECTION&gt;</p> <p>(2) If queue lengths for multiple connections are large, that could indicate performance or network problems. Also check that the MTA process (emsmta) is running.</p> <p>(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.</p> <p>(4) Verify that there are no network problems.</p>

<b>Condition:</b>	<b>EXSPI-55-0013.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	600
<b>Reset Value:</b>	500
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0013.1: The oldest message queued for connection <con> has been in the queue for <\$VALUE> secs (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-55-0013.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	300
<b>Reset Value:</b>	250
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0013.2: The oldest message queued for connection <con> has been in the queue for <\$VALUE> secs (\\><\$THRESHOLD> secs)

## EXSPI-55-0014 (MTA Connection Queue Lengths)

<b>Metric Number:</b>	<b>EXSPI-55-0014</b>
<b>Name:</b>	EXSPI MTA Connection Queue Lengths
<b>Description:</b>	Monitors the queue lengths for each connection established by the MTA to determine if there are problems with specific connections.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.</p> <p>A large queue length could indicate problems with connectors, system load, the MTA, or the network.</p> <p><b>Potential impact:</b> Performance/Failure.</p> <p><b>Suggested action(s):</b> (1) Monitor queue length for the specific connection with NT Performance Monitor: MSExchangeMTA Connections.Queue Length.&lt;CONNECTION&gt;</p> <p>(2) If queue lengths for multiple connections are large, that could indicate performance or network problems. Also check that the MTA process (emsmta) is running.</p> <p>(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.</p> <p>(4) Verify that there are no network problems.</p>

<b>Condition:</b>	<b>EXSPI-55-0014.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	40.0
<b>Reset Value:</b>	30.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0014.1: The MTA queue length (<\$VALUE> messages) for connection <con> is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0014.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20.0
<b>Reset Value:</b>	15.0
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0014.2: The MTA queue length (<\$VALUE> messages) for connection <con> is too high (\\><\$THRESHOLD> messages)

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## EXSPI-55-0015 (MTA Failed Outbound Associations)

<b>Metric Number:</b>	<b>EXSPI-55-0015</b>
<b>Name:</b>	EXSPI MTA Failed Outbound Associations
<b>Description:</b>	Monitors the rate at which outbound (locally initiated) associations to other systems have failed.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with the MTA making connections to another system. A high failure rate could indicate problems with the local or remote MTA, the connector, or the network.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>



<b>Condition:</b>	<b>EXSPI-55-0015.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	8
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0015.1: The rate (<\$VALUE>%) of Failed MTA Outbound Associations for connection <con> is too high (\\><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-55-0015.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	3
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0015.2: The rate (<\$VALUE>%) of Failed MTA Outbound Associations for connection <con> is too high (\\><\$THRESHOLD>%)

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## EXSPI-55-0016 (MTA Rejected Inbound Associations)

<b>Metric Number:</b>	<b>EXSPI-55-0016</b>
<b>Name:</b>	EXSPI MTA Rejected Inbound Associations
<b>Description:</b>	Monitors the rate at which inbound (remote initiated) associations that have been rejected.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s): There may be problems with the MTA on a remote system making connections to this system.</p> <p>A high rejection rate could indicate problems with the local or remote MTA, the connector, or system load.</p> <p>Potential impact: Performance</p> <p>Suggested action(s): (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0016.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	8
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0016.1: The rate (<\$VALUE>%) of Rejected MTA Inbound Associations for connection <con> is too high (\\><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-55-0016.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	3
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0016.2: The rate (<\$VALUE>%) of Rejected MTA Inbound Associations for connection <con> is too high (\\><\$THRESHOLD>%)

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## EXSPI-55-0017 (MTA Rejected Inbound Messages)

<b>Metric Number:</b>	<b>EXSPI-55-0017</b>
<b>Name:</b>	EXSPI MTA Rejected Inbound Messages
<b>Description:</b>	Monitors the rate at which inbound messages are being rejected.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with the MTA on a remote system sending messages to this system.</p> <p>A high rate of rejected messages could indicate problems with the remote or local MTA or the connector.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running.</p> <p>(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system.</p> <p>(3) Verify that there are no network problems.</p> <p>(4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0017.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0017.1: The rate (<\$VALUE>%) of Rejected MTA Inbound Messages for connection <con> is too high (\\><\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-55-0017.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0017.2: The rate (<\$VALUE>%) of Rejected MTA Inbound Messages for connection <con> is too high (\\><\$THRESHOLD>%)

## EXSPI-55-0030 (IS Public Average Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-55-0030</b>
<b>Name:</b>	EXSPI IS Public Average Delivery Time
<b>Description:</b>	Monitors the time between the submission of a message to the public information store and submission to the MTA, by taking an average for the last 10 messages.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of public folder messages to other Exchange servers may be delayed by the MTA.</p> <p>Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0030.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0030.1: The IS Public Average Delivery time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-55-0030.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0030.2: The IS Public Average Delivery time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

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## EXSPI-55-0031 (IS Public Average Local Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-55-0031</b>
<b>Name:</b>	EXSPI IS Public Average Local Delivery Time
<b>Description:</b>	Monitors the average time between submission of a message to the public information store and the delivery to all local recipients (recipients on the same server) for the last 10 messages.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of public folder messages to local recipients may be delayed by the Information Store.</p> <p>Delay of messages being processed could indicate problems with system load or the Information Store.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>



<b>Condition:</b>	<b>EXSPI-55-0031.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0031.1: The IS Public Average Local Delivery time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-55-0031.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0031.2: The IS Public Average Local Delivery time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

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## EXSPI-55-0032 (IS Public Replication Queue Size)

<b>Metric Number:</b>	<b>EXSPI-55-0032</b>
<b>Name:</b>	EXSPI IS Public Replication Queue Size
<b>Description:</b>	Monitors the number of replication messages in the public information store's replication receive queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of replication messages to public folders may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0032.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0032.1: The IS Public Replication Receive Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0032.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0032.2: The IS Public Replication Receive Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0033 (IS Public Receive Queue Size)

<b>Metric Number:</b>	<b>EXSPI-55-0033</b>
<b>Name:</b>	EXSPI IS Public Receive Queue Size
<b>Description:</b>	Monitors the number of messages in the public information store's receive queue
<b>Type:</b>	
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	
<b>Instruction Text:</b>	<p>Probable cause(s): Delivery of replication messages to public folders may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process.</p> <p>Potential impact: Performance</p> <p>Suggested action(s): (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0033.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0033.1: The IS Public Receive Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0033.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0033.2: The IS Public Receive Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0034 (IS Public Send Queue Size)

<b>Metric Number:</b>	EXSPI-55-0034
<b>Name:</b>	EXSPI IS Public Send Queue Size
<b>Description:</b>	Monitors the number of messages in the public information store's send queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p>Probable cause(s):            Delivery of replication messages to public folders may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process.</p> <p>Potential impact:            Performance</p> <p>Suggested action(s):            (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running.            (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system.            (3) Verify that there are no network problems.            (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0034.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0034.1: The IS Public Send Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0034.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0034.2: The IS Public Send Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-55-0040 (IS Mailbox Average Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-55-0040</b>
<b>Name:</b>	EXSPI IS Mailbox Average Delivery Time
<b>Description:</b>	Monitors the average time between submission of a message to the mailbox information store and submission to the MTA for the last 10 messages
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the MTA.</p> <p>Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>



<b>Condition:</b>	<b>EXSPI-55-0040.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0040.1: The IS Mailbox Average Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-55-0040.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0040.2: The IS Mailbox Average Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

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## EXSPI-55-0041 (IS Mailbox Average Local Delivery Time)

<b>Metric Number:</b>	<b>EXSPI-55-0041</b>
<b>Name:</b>	EXSPI IS Mailbox Average Local Delivery Time
<b>Description:</b>	Monitors the average time between submission of a message to the mailbox information store and the delivery to all local recipients (recipients on the same server) for the last 10 messages.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to local recipients may be delayed by the Information Store.</p> <p>Delay of messages being processed could indicate problems with system load or the Information Store.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running. (2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system. (3) Verify that there are no network problems. (4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0041.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	10
<b>Reset Value:</b>	7
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0041.1: The IS Mailbox Average Local Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

<b>Condition:</b>	<b>EXSPI-55-0041.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	5
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0041.2: The IS Mailbox Average Local Delivery Time (<\$VALUE> secs) for last 10 messages is too high (\\><\$THRESHOLD> secs)

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## EXSPI-55-0042 (IS Mailbox Receive Queue Size)

<b>Metric Number:</b>	<b>EXSPI-55-0042</b>
<b>Name:</b>	EXSPI IS Mailbox Receive Queue Size
<b>Description:</b>	Monitors the number of messages in the mailbox information store's receive queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to mailboxes may be delayed.</p> <p>A large queue length could indicate problems with system load or the Information Store process</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b> (1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running.</p> <p>(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system.</p> <p>(3) Verify that there are no network problems.</p> <p>(4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0042.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0042.1: The IS Mailbox Receive Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0042.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0042.2: The IS Mailbox Receive Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-55-0043 (IS Mailbox Send Queue Size)

<b>Metric Number:</b>	EXSPI-55-0043
<b>Name:</b>	EXSPI IS Mailbox Send Queue Size
<b>Description:</b>	Monitors the number of messages in the mailbox information store's send queue.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the MTA.</p> <p>A large queue length could indicate that the MTA is not processing messages being sent by the Information Store at all or quickly enough so they are backing up in the queue.</p> <p>There could be a problem with system load or the MTA process.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded. Also check that the MTA process (emsmta) is running.</li><li>(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the MTA service on either the problem system or the remote system.</li><li>(3) Verify that there are no network problems.</li><li>(4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.</li></ol>

<b>Condition:</b>	<b>EXSPI-55-0043.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0043.1: The IS Mailbox Send Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0043.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0043.2: The IS Mailbox Send Queue size (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-55-0060 (IMS Failed Connections)

<b>Metric Number:</b>	EXSPI-55-0060
<b>Name:</b>	EXSPI IMS Failed Connections
<b>Description:</b>	Monitors the rate at which SMTP connections to other hosts are failing for the Internet Mail Service.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with the Internet Mail Service making connections to remote systems. A high rate of failures could indicate problems with the network, remote systems, or the IMS configuration.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that there are no network problems.</li><li>(2) Check the IMS configuration using Exchange Administration. If all Internet mail is being forwarded to a specific host, check if that system is having problems.</li><li>(3) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.</li><li>(4) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.</li></ol>



<b>Condition:</b>	<b>EXSPI-55-0060.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	5
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0060.1: The rate of Failed IMS Outbound Connections (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0060.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15.000000
<b>Reset Value:</b>	10.000000
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0060.2: The rate of Failed IMS Outbound Connections (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0061 (IMS Rejected Connections)

<b>Metric Number:</b>	EXSPI-55-0061
<b>Name:</b>	EXSPI IMS Rejected Connections
<b>Description:</b>	Monitors the rate at which SMTP connections to the Internet Mail Services from other hosts are being rejected.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with the Internet Mail Service making connections to remote systems. A high rate of rejections could indicate problems with the network, remote systems, or the IMS configuration.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that there are no network problems.</li><li>(2) Check the IMS configuration using Exchange Administration. If all Internet mail is being forwarded to a specific host, check if that system is having problems.</li><li>(3) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.</li><li>(4) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.</li></ol>

<b>Condition:</b>	<b>EXSPI-55-0061.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	5
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0061.1: The rate of Rejected IMS Inbound Connections (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0061.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0061.2: The rate of Rejected IMS Inbound Connections (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0062 (IMS MTS-IN Queue Length)

<b>Metric Number:</b>	EXSPI-55-0062
<b>Name:</b>	EXSPI SMTP Local Retry Queue Length
<b>Description:</b>	Monitors the number of messages awaiting final delivery in M Exchange Server.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages from the Internet may be delayed. A large queue length could indicate that the Information Store process is not processing incoming messages quickly enough or at all so they are backing up in the queue. There could be problems with system load or the Information Store process.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that there are no network problems.</li><li>(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.</li><li>(3) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.</li><li>(4) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</li></ol>

<b>Condition:</b>	<b>EXSPI-55-0062.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0062.1: The IMS MTS-IN Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0062.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0062.2: The IMS MTS-IN Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-55-0063 (IMS MTS-OUT Queue Length)

<b>Metric Number:</b>	<b>EXSPI-55-0063</b>
<b>Name:</b>	EXSPI IMS MTS-OUT Queue Length
<b>Description:</b>	Monitors the number of messages waiting to be converted to Internet Mail format.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages from the Internet may be delayed. A large queue length could indicate that the Internet Mail Service process is not processing outgoing messages quickly enough or at all, so they are backing up in the queue. There could be problems with system load or the Internet Mail Service.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that there are no network problems.</li><li>(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.</li><li>(3) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.</li><li>(4) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</li></ol>

<b>Condition:</b>	<b>EXSPI-55-0063.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0063.1: The IMS MTS-OUT Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0063.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0063.2: The IMS MTS-OUT Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0064 (IMS Queued Inbound)

<b>Metric Number:</b>	EXSPI-55-0064
<b>Name:</b>	EXSPI IMS Queued Inbound
<b>Description:</b>	Monitors the number of messages from the Internet queued for delivery to the MS Exchange Server.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages from the Internet may be delayed. A large queue length could indicate that the Internet Mail Service process is not processing incoming messages quickly enough or at all so they are backing up in the queue. There could be problems with system load or the Internet Mail Service.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that there are no network problems.</li><li>(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.</li><li>(3) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.</li><li>(4) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</li></ol>



<b>Condition:</b>	<b>EXSPI-55-0064.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0064.1: The IMS Inbound Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0064.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0064.2: The IMS Inbound Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0065 (IMS Queued Outbound)

<b>Metric Number:</b>	EXSPI-55-0065
<b>Name:</b>	EXSPI IMS Queued Outbound
<b>Description:</b>	Monitors the number of messages from MS Exchange Server that are queued for delivery to the Internet.
<b>Type:</b>	With Reset
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Delivery of messages from the Internet may be delayed. A large queue length could indicate that the Internet Mail Service process is not processing outgoing messages quickly enough or at all, so they are backing up in the queue. The maximum number of outbound connections may be too low. There could be problems with system load or the Internet Mail Service.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"> <li>(1) Verify that there are no network problems.</li> <li>(2) Run Exchange Administrator and check for 'stuck' messages in the IMS Outbound queue.</li> <li>(3) For systems processing large volumes of Internet Mail, the maximum number of outbound connections and number of messages sent in a connection may need to be increased. Use Exchange Administrator to increase these values if needed (using the Advanced button on the Connections tab of the Internet Mail Service Connection Properties).</li> <li>(4) If the queue length continues to increase and the system is not overloaded, there could be a problem with the Internet Mail Service. Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS service. Try stopping and re-starting the IMS service.</li> <li>(4) Enable Diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.</li> <li>(5) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</li> </ol>

<b>Condition:</b>	<b>EXSPI-55-0065.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	30
<b>Reset Value:</b>	20
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0065.1: The IMS Outbound Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0065.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	15
<b>Reset Value:</b>	10
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0065.2: The IMS Outbound Queue length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0066 (IMS NDRs Inbound)

<b>Metric Number:</b>	EXSPI-55-0066
<b>Name:</b>	EXSPI IMS NDRs Inbound
<b>Description:</b>	Monitors the rate at which non-delivery reports are being generated for inbound mail.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with addressing of mail being received from the Internet. A high rate of non-delivery reports could indicate problems with the IMS configuration or how mail is being addressed.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <p>(1) If the IMS has been configured to send notification of NDRs, check the Administrator's mailbox for the system to get information about the NDRs. Otherwise, configure the IMS to send notifications for NDRs to help in troubleshooting.</p> <p>(2) Check other problems in the Message Browser to see if Exchange has been reporting problems with IMS.</p> <p>(3) Enable diagnostics logging for IMS (using Exchange Administrator) to help in troubleshooting.</p>

<b>Condition:</b>	<b>EXSPI-55-0066.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	3
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0066.1: The rate of IMS Inbound Non-delivery Reports (<\$VALUE>) is too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0066.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0066.2: The rate of IMS Inbound Non-delivery Reports (<\$VALUE>) is too high (\\><\$THRESHOLD>)

## EXSPI-55-0067 (IMS NDRs Outbound)

<b>Metric Number:</b>	EXSPI-55-0067
<b>Name:</b>	EXSPI IMS NDRs Outbound
<b>Description:</b>	Monitors the rate at which non-delivery reports are being generated for outbound mail
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> There may be problems with addressing of mail being received from the Internet. A high rate of non-delivery reports could indicate problems with the IMS configuration or how mail is being addressed.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) If the IMS has been configured to send notification of NDRs, check the Administrator's mailbox for the system to get information about the NDRs. Otherwise, configure the IMS to send notifications for NDRs to help in troubleshooting.</li><li>(2) Verify that there are no network problems.</li><li>(3) Check other problems in the Message Browser to see if Exchange has been reporting problems with IMS.</li><li>(4) Enable diagnostics logging for IMS (using Exchange Administrator) to help in troubleshooting.</li></ol>

<b>Condition:</b>	<b>EXSPI-55-0067.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0067.1: The rate of IMS Outbound Non-delivery Reports (<\$VALUE>) is too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0067.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0067.2: The rate of IMS Outbound Non-delivery Reports (<\$VALUE>) is too high (\\><\$THRESHOLD>)

## EXSPI-55-0080 (Newsfeed Rejected Inbound Messages)

<b>Metric Number:</b>	<b>EXSPI-55-0080</b>
<b>Name:</b>	EXSPI Newsfeed Rejected Inbound Messages
<b>Description:</b>	Monitors the rate at which inbound newsfeed messages are being rejected because of duplicates or due to errors.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance



<b>Condition:</b>	<b>EXSPI-55-0080.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0080.1: The rate of Newsfeed Rejected Inbound Messages (<\$VALUE>) is too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0080.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0080.2: The rate of Newsfeed Rejected Inbound Messages (<\$VALUE>) is too high (\\><\$THRESHOLD>)

## EXSPI-55-0081 (Newsfeed Rejected Outbound Messages)

<b>Metric Number:</b>	<b>EXSPI-55-0081</b>
<b>Name:</b>	EXSPI Newsfeed Rejected Outbound Messages
<b>Description:</b>	Monitors the rate at which outbound newsfeed messages are being rejected because of duplicates or due to errors.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-55-0081.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0081.1: The rate of Newsfeed Rejected Outbound messages (<\$VALUE>) is too high (\\><\$THRESHOLD>)

<b>Condition:</b>	<b>EXSPI-55-0081.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0081.2: The rate of Newsfeed Rejected Outbound messages (<\$VALUE>) is too high (\\><\$THRESHOLD>)

## EXSPI-55-0090 (cc:Mail MTS-IN Queue Length)

<b>Metric Number:</b>	<b>EXSPI-55-0090</b>
<b>Name:</b>	EXSPI cc:Mail MTS-IN Queue Length
<b>Description:</b>	Monitors the number of messages awaiting delivery to Exchange from Lotus ccMail.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-0090.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0090.1: The cc:Mail MTS-IN Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0090.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0090.1: The cc:Mail MTS-IN Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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## EXSPI-55-0091 (cc:Mail MTS-OUT Queue Length)

<b>Metric Number:</b>	<b>EXSPI-55-0091</b>
<b>Name:</b>	EXSPI cc:Mail MTS-OUT Queue Length
<b>Description:</b>	Monitors the number of messages awaiting delivery to Lotus ccMail.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-55-0091.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0091.1: The cc:Mail MTS-OUT Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0091.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0091.2: The cc:Mail MTS-OUT Queue Length (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

## EXSPI-55-0092 (Exchange NDRs to cc:Mail)

<b>Metric Number:</b>	<b>EXSPI-0092</b>
<b>Name:</b>	EXSPI cc:Mail NDRs to cc:Mail
<b>Description:</b>	Monitors the rate at which non-delivery reports are being sent to Lotus cc:Mail from MS Exchange.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-55-0092.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0092.1: The rate of Exchange NDRs to cc:Mail (<\$VALUE>%) is too high (\\><\$THRESHOLD>%)



<b>Condition:</b>	<b>EXSPI-55-0092.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0092.2: The rate of cc:Mail NDRs to cc:Mail (<\$VALUE>%) is too high (\\><\$THRESHOLD>%)

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## EXSPI-55-0093 (cc:Mail NDRs to Exchange)

<b>Metric Number:</b>	<b>EXSPI-0093</b>
<b>Name:</b>	EXSPI cc:Mail NDRs to Exchange
<b>Description:</b>	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus cc:Mail.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-55-0093.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0093.1: The rate of cc:Mail NDRs to Exchange (<\$VALUE>%) is too high (\\> <\$THRESHOLD>%)

<b>Condition:</b>	<b>EXSPI-55-0093.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0093.2: The rate of cc:Mail NDRs to Exchange (<\$VALUE>%) is too high (\\> <\$THRESHOLD>%)

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## EXSPI-55-0094 (Lotus Notes Inbound Queued Messages Length)

<b>Metric Number:</b>	<b>EXSPI-55-0094</b>
<b>Name:</b>	EXSPI Lotus Notes Inbound Queued Messages Length
<b>Description:</b>	Monitors the number of messages awaiting delivery to Exchange from Lotus Notes.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The Lotus Notes Connector service has stopped or stalled and is not processing messages.</p> <p><b>Potential impact:</b> Performance</p> <p><b>Suggested action(s):</b></p> <ol style="list-style-type: none"><li>(1) Verify that the Network is not experiencing any problems.</li><li>(2) Check for 'stuck' messages in the Connector for Lotus Notes queue.</li><li>(3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active.</li><li>(4) Verify that the Connector Processes are active</li><li>(5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector.</li><li>(6) Verify the Notes client can access the mailbox assigned to the Notes connector.</li><li>(7) Stop and re-start the Exchange services from Step (3).</li></ol>

<b>Condition:</b>	<b>EXSPI-55-0094.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0094.1: The Lotus Notes Inbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0094.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0094.2: The Lotus Notes Inbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

## EXSPI-55-0095 (Lotus Notes Outbound Queued Messages Length)

<b>Metric Number:</b>	EXSPI-55-0095
<b>Name:</b>	EXSPI Lotus Notes Outbound Queued Messages Length.
<b>Description:</b>	Monitors the number of messages awaiting delivery to Lotus Notes. Counter: MExchangeNOTES.Outbound Queued Messages
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The Lotus Notes Connector service has stopped or stalled and is not processing messages.</p> <p><b>Potential impact:</b> Performance</p> <p>Suggested action(s):</p> <ol style="list-style-type: none"><li>(1) Verify that the Network is not experiencing any problems.</li><li>(2) Check for 'stuck' messages in the Connector for Lotus Notes queue.</li><li>(3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active.</li><li>(4) Verify that the Connector Processes are active</li><li>(5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector.</li><li>(6) Verify the Notes client can access the mailbox assigned to the Notes connector.</li><li>(7) Stop and re-start the Exchange services from Step (3)</li></ol>

<b>Condition:</b>	<b>EXSPI-55-0095.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	50
<b>Reset Value:</b>	40
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0095.1: The Lotus Notes Outbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

<b>Condition:</b>	<b>EXSPI-55-0095.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	20
<b>Reset Value:</b>	15
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0095.2: The Lotus Notes Outbound Queued Messages Length (<\$VALUE> messages) is too high (>=<\$THRESHOLD> messages)

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## EXSPI-55-0096 (Exchange NDRs sent to Lotus Notes)

<b>Metric Number:</b>	<b>EXSPI-55-0096</b>
<b>Name:</b>	EXSPI Exchange NDRs sent to Lotus Notes
<b>Description:</b>	Monitors the rate at which non-delivery reports are being sent to Lotus Notes from MS Exchange.
<b>Type:</b>	With Reset
<b>Schedule:</b>	Every 1h
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-55-0096.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0096.1: The rate of Exchange NDRs to Lotus Notes (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)



<b>Condition:</b>	<b>EXSPI-55-0096.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0096.2: The rate of Lotus Notes NDRs to Lotus Notes (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

## EXSPI-55-0097 (Lotus Notes NDRs sent to MS Exchange)

<b>Metric Number:</b>	<b>EXSPI-55-0097</b>
<b>Name:</b>	EXSPI Lotus Notes NDRs sent to Microsoft Exchange
<b>Description:</b>	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus Notes.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<b>Potential impact:</b> Performance

<b>Condition:</b>	<b>EXSPI-55-0097.1: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0097.1: The rate of Lotus Notes NDRs to Exchange (<\$VALUE>%) is too high (>= <\$THRESHOLD>%)"

<b>Condition:</b>	<b>EXSPI-55-0097.2: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	2
<b>Reset Value:</b>	1
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0097.2: The rate of Lotus Notes NDRs to Exchange (<\$VALUE>%) is too high (>= <\$THRESHOLD>%)"

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## EXSPI-55-0100 (IS User Connection Count Low)

<b>Metric Number:</b>	<b>EXSPI-55-0100</b>
<b>Name:</b>	EXSPI IS User Connection Count Low
<b>Description:</b>	Monitors the number of client processes connected to the information store.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	Every 15min
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> The number of client processes logged on to the Information Store is low.</p> <p>A low user logon count during the day could indicate problems with the Information Store process or network connectivity.</p> <p><b>Potential impact:</b> Performance, Fault</p> <p><b>Suggested action(s):</b> (1) Verify that this system has active mailboxes. If it does not, this template should be removed from this system. (2) Using a test mailbox account, verify that you can connect to the server without problems. (3) Verify that there are no network problems.</p>

<b>Condition:</b>	<b>EXSPI-55-0100: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	1
<b>Reset Value:</b>	2
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-0100: The IS User Count (<\$VALUE>) is too low (<\< <\$THRESHOLD> connections)

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## EXSPI-55-0110 (DS Pending Synchronizations)

<b>Metric Number:</b>	<b>EXSPI-55-0110</b>
<b>Name:</b>	EXSPI DS Pending Synchronizations
<b>Description:</b>	Monitor directory replication to verify that synchronization updates are being processed efficiently.
<b>Type:</b>	With Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Replication of directory information may be delayed. A delay in processing replication updates could indicate problems with system load or the Directory Service process.</p> <p><b>Potential impact:</b> Performance, Fault</p> <p><b>Suggested action(s):</b> (1) Check that the Directory process (dsamain) is running. (2) Verify that there are no network problems. (3) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</p>

<b>Condition:</b>	<b>EXSPI-55-0110: Critical threshold</b>
<b>Severity:</b>	Critical
<b>Threshold:</b>	4
<b>Reset Value:</b>	2
<b>Duration:</b>	30min
<b>Message Text:</b>	EXSPI-55-0110: The DS Pending Replication Synchronizations value (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

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## EXSPI-55-0111 (DS Remaining Updates)

<b>Metric Number:</b>	EXSPI-55-0111
<b>Name:</b>	EXSPI DS Remaining Updates
<b>Description:</b>	Monitor directory replication to verify that synchronization updates are being processed efficiently.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	Every 5min
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Replication of directory information may be delayed. A delay in processing replication updates could indicate problems with system load or the Directory Service process.</p> <p><b>Potential impact:</b> Performance, Fault</p> <p><b>Suggested action(s):</b> (1) Check that the Directory process (dsamain) is running. (2) Verify that there are no network problems. (3) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.</p>



<b>Condition:</b>	EXSPI-55-0111 Critical threshold
<b>Severity:</b>	Critical
<b>Threshold:</b>	0.5
<b>Reset Value:</b>	
<b>Duration:</b>	30min
<b>Message Text:</b>	EXSPI-55-0111: The DS Remaining Replication Updates value (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

## EXSPI-55-1001 (Services Monitor)

<b>Metric Number:</b>	<b>EXSPI-1001</b>
<b>Name:</b>	MSExchange Services Monitor
<b>Description:</b>	Monitors Exchange Server process. Generates event if an Exchange service is currently stopped but configured startup automatic.
<b>Type:</b>	Without Reset
<b>Schedule:</b>	
<b>Message Group:</b>	EX_Fault
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> A service marked for automatic start-up is not running.</p> <p><b>Potential impact:</b> Failure</p> <p><b>Suggested action(s):</b></p> <p>(1) Unless the service is known to be down for maintenance, use the Services tool in the Control Panel to re-start the service.</p> <p>NOTE: By default only Exchange related series are monitored. If you would like to receive messages about other stopped services, simply add conditions. A value of 0.0 is sent for running services and 1.0 for stopped services.</p>

<b>Condition:</b>	<b>EXSPI-55-1001.1: Major threshold</b>
<b>Severity:</b>	Major
<b>Threshold:</b>	1.000000
<b>Reset Value:</b>	
<b>Message Text:</b>	EXSPI-55-1001: Service <prefix> <rest>is currently not running (startup config automatic)

## EXSPI-55-1002 (End to End Message Ping)

<b>Metric Number:</b>	EXSPI-55-1002
<b>Name:</b>	EXSPI End to End Message Ping Monitor
<b>Description:</b>	Monitors the round trip time for a message
<b>Type:</b>	With Reset
<b>Message Group:</b>	EX_Perf
<b>Instruction Text:</b>	<p><b>Probable cause(s):</b> Slow or non-reply of messages could indicate problems with system load, the MTA, connectors, or the network. The threshold could be too low. For the most accurate alarming, separate thresholds should be set for each ping system pair.</p> <p><b>Potential impact:</b> Failure or Performance</p> <p><b>Suggested action(s):</b></p> <p>If the threshold is too low, make it bigger. See the User's Guide for information on how to set the threshold differently for each system pair.</p> <p>If the threshold is accurate, then evaluate the following suggestions on the source and destination servers:</p> <p>Select the Performance Monitor 'MS Exchange Server Health' to determine if the source system is overloaded. Also check that the MTA process (emsmta) is running. (If it is not running, it will not be shown on the graph.) Re-start it if needed.</p> <p>Select the Performance Monitor 'MS Exchange Server Health' to determine if the message queue to the destination system is large or growing.</p> <p>If the queues on either side are large or growing and the systems are not overloaded, run Exchange Administrator and check for 'stuck' messages in the MTA queue.</p> <p>If there are no stuck messages, check if there are network problems between the two systems.</p> <p>If the connection between the source and destination system is not direct (e.g., the message travels through bridgehead servers), check the connector queue lengths and system load on those systems as well.</p>

**MS Exchange 5.5 Monitor Template Specifications**

<b>Condition:</b>	<b>EXSPI-55-1002.1: Warning threshold</b>
<b>Severity:</b>	Warning
<b>Threshold:</b>	300
<b>Reset Value:</b>	240
<b>Duration:</b>	
<b>Message Text:</b>	EXSPI-55-1002.1: End to End Message Ping round trip time (<\$VALUE> seconds) is too high (>=<\$THRESHOLD>) for systems <From system, To system>.