# $\begin{tabular}{ll} HP & OPENVIEW \\ & Smart & Plug-in & for \\ & Microsoft^{\circledR} & Exchange & Server \\ \end{tabular}$

**Reference Guide** 



Smart Plug-in for Exchange Server Version A.03.30 January 2003

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# Conventions

**Boldface** Words in **boldface** type represent programs and commands. Capitalization Capitalized first letters represent company or product names. Computer font Words in computer font 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. Italics Words in *italics* 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.

# **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	August 2002

#### File Locations

The *HP OpenView Smart Plug-ins CD-ROM* is a collection of OpenView Operations Smart Plug-ins (SPIs) and OpenView supplementary management applications, for HP OpenView Operations for UNIX. The collection offers the convenience of having all SPIs on a single medium with a single Software Distributor depot. The Smart Plug-in for MS Exchange Server files are located according to operating system, as follows:

#### **Program Files:**

```
cdrom/OV_DEPOT/10.OHPUX.sdtape EXSPI
cdrom/OV_DEPOT/11.OHPUX.sdtape EXSPI
cdrom/OV_DEPOT/SOLARIS.sdtape EXSPI
cdrom/OV REPORTER/EXCHANGE SPI A.03.30/exspi Reporter.msi
```

#### **Documentation Files:**

```
OV_DOC/EXCHANGE_SPI_A.03.30/release_notes.pdf
OV_DOC/EXCHANGE_SPI_A.03.30/exspi_users_guide.pdf
OV_DOC/EXCHANGE_SPI_A.03.30/exspi_ref_guide.pdf
```

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**MS Exchange 2000 Templates** 

# **Summary MS Exchange 2000 Monitor Templates**

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	Г	Tampleta Craus	Townleto	Decembries		• p			gu
ld	У	Template Group	Template	Description	tld	I d e	n	6	ер
		EXSPI-60 Services and		Process Monitor (Monitors CPU time	w: 80 (r: 75)			every	
1	QS	Processes	EXSPI-60-0001	used by Exchange processes)	c: 99 (r: 85)	Reset		5min	EX_Perf
		EXSPI-60 Services and		Inactive Process Monitor (Checks that		W/O		every	
2	QS	Processes	EXSPI-60-0002	processes are using CPU)	w: 0.01	Reset	12h	10min	EX_Fault
					w: 20 (r: 25)			every	
5	AO	EXSPI-60 Transaction Log	EXSPI-60-0005	Low Log File Disk Space	c: 10 (r: 55)	Reset		15min	EX_Fault
					w: 100 (r: 90)			every	
6	AO	EXSPI-60 Transaction Log	EXSPI-60-0006	Transaction Log File Disc Space	c: 200 (r: 180)	Reset		day	EX Fault
Ť		EXSPI-60 Message Transfer		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	w: 60 (r: 50)			every	
10	QS	Agent	EXSPI-60-0010	MTA Message Delay	c: 300 (r: 250)	Reset		5min	EX Perf
10	αS	EXSPI-60 Message Transfer	EXOI 1-00-0010	WITA Wessage Delay	w: 50 (r: 40)	110301		every	LX_I GII
11	QS	Agent	EXSPI-60-0011	MTA Work Queue Length	c: 100 (r: 80)	Reset	10m	5min	EX Perf
- 1	QS		LX011-00-0011	WITA WORK Quede Length	, ,	110301	10111	JIIIII	LX_I GII
40		EXSPI-60 Message Transfer	EVODI 00 0040	NATA Failed Communication	w: 2 (r: 1)	D 4			EV Df
12	QS	Agent EXSPI-60 Message Transfer	EXSPI-60-0012	MTA Failed Conversions	c: 4 (r: 3) 250)	Reset		every 1h	EX_Perr
12	QS	Agent	EVEDI 60 0012	MTA Connection Message Delay	c: 600 (r: 500)	Ponet		every 5min	EX Perf
13	QS	EXSPI-60 Message Transfer	LX3F1-00-0013	WITA Connection Message Delay	w: 20 (r: 15)	Neset			LX_F GII
11	QS	Agent	EVEDI 60 0014	MTA Connection Queue Lengths	c: 40 (r: 30)	Reset		every 5min	EX Perf
14	QS	EXSPI-60 Message Transfer	LX3F1-00-0014	WITA Connection Quede Lengths	w: 3 (r: 2)	Neset		JIIIII	LX_F GII
15	QS	Agent	EXSPI-60-0015	MTA Failed Outbound Associations	c: 10 (r: 8)	Reset		every 1h	FX Perf
13	QU	EXSPI-60 Message Transfer	2,011000010	With the descent of t	w: 3 (r: 2)	110001		CVCIY III	L/_1 011
16	QS	Agent	EXSPI-60-0016	MTA Rejected Inbound Associations	c: 10 (r: 8)	Reset		every 1h	FX Perf
10	QU	EXSPI-60 Message Transfer	EXCIT 00 0010	min rejected inbound resociations	w: 2 (r: 1)	110001		CVCI y III	
17	QS	Agent	EXSPI-60-0017	MTA Rejected Inbound Messages	c: 4 (r: 3)	Reset		every 1h	EX Perf
		•			w. 10 (1.11)			CVCIÝ	_
30	QS	EXSPI-60 Information Store	EXSPI-60-0030	IS Public Average Delivery Time	c: 5 (r: 3)	Reset		5min	EX_Perf
					w: 10 (r: 7)			every	
31	QS	EXSPI-60 Information Store	EXSPI-60-0031	IS Public Average Local Delivery Time	c: 5 (r: 3)	Reset		5min	EX_Perf
		EVODI 00 I-f	EVODI 00 0000	IO Dublic Deslication Occasion	w: 30 (r: 20)	D 4		every	EV Df
32	QS	EXSPI-60 Information Store	EASPI-60-0032	IS Public Replication Queue Size	c: 15 (r: 10)	Reset		5min	EX_Perf
		EVODI CO Information C:	EVODI 60 0000	IO Dublis Deseite Occase Oise	w: 30 (r: 20)	D :		every	EV D(
33	QS	EXSPI-60 Information Store	EXSPI-60-0033	IS Public Receive Queue Size	c: 15 (r: 10)	Reset		5min	EX_Perf
١.		EVODI CO Information C:	EVODI 60 0004	IO Dublic Cond Course Cine	w: 30 (r: 20)	D :		every	EV D(
34	QS	EXSPI-60 Information Store	EXSPI-60-0034	IS Public Send Queue Size	c: 15 (r: 10)	Reset		5min	EX_Perf
١.,		EVODLOG L C C C	EVODI 00 00 10		w: 10 (r: 7)			every	EV D .
40	QS	EXSPI-60 Information Store	EXSPI-60-0040	IS Mailbox Average Delivery Time	c: 5 (r: 3)	Reset		5min	EX_Perf
Ι.				IS Mailbox Average Local Delivery	w: 10 (r: 7)			every	
41	QS	EXSPI-60 Information Store	EXSPI-60-0041	Time	c: 5 (r: 3)	Reset		5min	EX_Perf

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ld	r V	Template Group	Template	Description	lo tld	o p		l e	g u e p
14		rempiate ereap	Tompiato			" "	"		ОР
40	00	EVEDI 60 Information Store	EVEDI 60 0040	IS Mailbay Bassiya Oyoya Siza	w: 30 (r: 20)	Dooot		every	EV Dorf
42	QS	EXSPI-60 Information Store	EXSPI-60-0042	IS Mailbox Receive Queue Size	c: 15 (r: 10)	Reset		5min	EX_Perf
12	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
43	QS	EXOT 1-00 IIIIOIIIIalioii Olore	EXOI 1-00-0043	10 Mailbox Geria Quede Gize	w: 15 (r: 10)	reset		every	LX_I CII
50	QS	EXSPI-60 SMTP	EXSPI-60-0050	SMTP Categorizer Queue Length	c: 30 (r: 20)	Reset		5min	EX Perf
					w: 15 (r: 10)			every	_
51	QS	EXSPI-60 SMTP	EXSPI-60-0051	SMTP Local Queue Length	c: 30 (r: 20)	Reset		5min	EX_Perf
					w: 15 (r: 10)			every	
52	QS	EXSPI-60 SMTP	EXSPI-60-0052	SMTP Local Retry Queue Length	c: 30 (r: 20)	Reset		5min	EX_Perf
					w: 15 (r: 10)			every	
53	QS	EXSPI-60 SMTP	EXSPI-60-0053	SMTP Messages Pending Routing	c: 30 (r: 20)	Reset		5min	EX_Perf
					w: 15 (r: 10)			every	
54	QS	EXSPI-60 SMTP	EXSPI-60-0054	SMTP Remote Queue Length	c: 30 (r: 20)	Reset		5min	EX_Perf
				SMTP Remote Retry Queue	w: 15 (r: 10)			every	
55	QS	EXSPI-60 SMTP	EXSPI-60-0055	Length	c: 30 (r: 20)	Reset		5min	EX_Perf
		=\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			w: 2 (r: 1)				
56	QS	EXSPI-60 SMTP	EXSPI-60-0056	SMTP NDR Percentage	c: 4 (r: 3)	Reset		every 1h	EX_Perf
E 7	20	EXSPI-60 SMTP	EXSPI-60-0057	SMTP Outbound Connections Refused	w: 2 (r: 1)	Reset		overy 1h	EV Dorf
57	QS	EXSPI-00 SWIF	EXSPI-60-0057	Newsfeed Outbound Connections	c: 5 (r: 2) w: 2 (r: 1)	Reset		every in	EX_Perf
58	AO	EXSPI-60 NNTP	EXSPI-60-0058	Failed	c: 4 (r: 2)	Reset		every 1h	EX Perf
		EXSPI-60 CC:Mail			w: 20 (r: 15)			every	_
90	AO	Connector	EXSPI-60-0090	cc:Mail MTS-IN Queue Length	c: 50 (r: 40)	Reset		5min	EX_Perf
		EXSPI-60 CC:Mail			w: 20 (r: 15)			every	
91	AO	Connector	EXSPI-60-0091	cc:Mail MTS-OUT Queue Length	c: 50 (r: 40)	Reset		5min	EX_Perf
02	AO	EXSPI-60 CC:Mail Connector	EXSPI-60-0092	Exchange NDRs to cc:Mail	w: 2 (r: 1) c: 4 (r: 2)	Reset		ovory 1h	EX Perf
92	AO	EXSPI-60 CC:Mail	LX3F1-00-0092	Exchange NDINS to co.iviali	w: 2 (r: 1)	IVESEL		every iii	LX_F ell
93	AO	Connector	EXSPI-60-0093	cc:Mail NDRs to Exchange	c: 4 (r: 2)	Reset		every 1h	EX Perf
		EXSPI-60 Lotus Notes		Lotus Notes Inbound Queued	w: 20 (r: 15)			every	_
94	AO	Connector	EXSPI-60-0094	Messages Length	c: 50 (r: 40)	Reset		5min	EX Perf
		EXSPI-60 Lotus Notes		Lotus Notes Outbound Queued	w: 20 (r: 15)			every	_
95	AO	Connector	EXSPI-60-0095	Messages Length	c: 50 (r: 40)	Reset		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
30	7.0	EXSPI-60 Lotus Notes	_,(0,1,00-0030	Lotus Notes NDRs sent to		. 10001		5451 y 111	_/ 611
97	AO	Connector	EXSPI-60-0097	Microsoft Exchange	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX Perf
-	,10		2,131 1 00 0001	The court Exonange	S. F (1. Z)	. 10001		every	
##	QS	EXSPI-60 Information Store	EXSPI-60-0100	IS User Connection Count Low	w: 1 (r: 2)	Reset		15min	EX_Perf
		EXSPI-60 Site Replication		SRS Pending Replication	` '			every	_
##	AO	Service	EXSPI-60-0110	Synchronizations	c: 4 (r: 2)	Reset	30m	5min	EX_Fault
		EXSPI-60 Site Replication		SRS Remaining Replication		W/O		every	
##	AO	Service	EXSPI-60-0111	Updates	c: 0.5	Reset	30m	5min	EX_Fault
<i>"</i>		EXSPI-60 Conference	EVEDI 60 0000	MSExchangeCONF.Active	w: 5	W/O		every	EV Df
##	AO	Server	EXSPI-60-0800	Conferences	c: 10	Reset		10min	EX_Perf

# **Summary MS Exchange 2000 Monitor Templates**

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	g				as uh	h y		u	s r a o
	г				l o	0 p		ı i	gu
ld	v	Template Group	Template	Description	tid	Ide		ė	e p
	,	EXSPI-60 Conference	Tompia.		c: 1000 (r:			every	- P
##	AO	Server	EXSPI-60-0801	DCOM Calls To MCUs	500)	Reset		10min	EX Perf
	,	EXSPI-60 Conference			w: 5	W/O		every	
##	AO	Server	EXSPI-60-0802	Average Load Per MCU	c: 10	Reset		10min	EX Perf
					w: 90	W/O		every	
##	AO	EXSPI-60 MCU Server	EXSPI-60-0803	MCU Active Connections	c: 100	Reset		10min	EX_Perf
					w: 5	W/O		every	
##	AO	EXSPI-60 MCU Server	EXSPI-60-0804	MCU Load	c: 10	Reset		10min	EX Perf
""	,	EXSPI-60 Conferencing	27101 1 00 000 1		w: 5	W/O		every	
##	AO	Bridge	EXSPI-60-0805	Failed Conference Join Attempts	c: 10	Reset		10min	EX Perf
					w: 5	W/O			_
ш		EXSPI-60 Conferencing Bridge	EXSPI-60-0806	Video Conferences in Progress	w: 5 c: 10	Reset		every 10min	EX Perf
##	AO	-	EX3F1-00-0000	video Conferences in Frogress					EX_FeII
		EXSPI-60 Conferencing	EVODI 60 0007	In a small to Colle	w: 5	W/O		every	EV Df
##	AO	Bridge	EXSPI-60-0807	Incomplete Calls	c: 10	Reset		10min	EX_Perf
ш		EXSPI-60 Chat Service	EXSPI-60-0830	Active DNC leasen threads	w: 15 (r: 10)	Reset		every 15min	EV Dorf
##	AO	EXSPI-60 Chat Service	EX3PI-00-0030	Active DNS logon threads Chat Service Client Timeout	c: 30 (r: 20) w: 5 (r: 2)	Reset			EX_Perf
##	AO	EXSPI-60 Chat Service	EXSPI-60-0831	Related Disconnects	w. 5 (r. 2) c: 10 (r: 7)	Reset		every 15min	EX Perf
##	AU	EXSF 1-00 Chat Service	LX3F1-00-0031	Related Disconnects	w: 15 (r: 10)	Neset		every	LX_F ell
##	AO	EXSPI-60 Chat Service	EXSPI-60-0833	Chat Service.Anonymous Clients	c: 30 (r: 20)	Reset		15min	EX Perf
mm	70	Exer i de chat dervice	EXC1100 0000	Chat Service.Authenticated	w: 50 (r: 30)	110001		every	EX_I OII
##	AO	EXSPI-60 Chat Service	EXSPI-60-0834	Clients	c: 100 (r: 80)	Reset		15min	EX Perf
				Minnes of Fresh and Oheat	, ,				_
ш	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
##	AU	EXSF 1-00 Char Service	LX3F 1-00-0033		` ´	Neset			LX_F GII
ш		EXSPI-60 Chat Service	EXSPI-60-0836	Microsoft Exchange Chat	w: 5 (r: 2)	Reset		every 15min	EV Dowf
##	AO	EXSPI-60 Chat Service	EX3P1-00-0030	·	c: 10 (r: 7)			TOTTITI	EX_Perf
				MSExchangelM Virtual	w: 75	W/O			
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0841	Servers.Current Users Online	c: 100	Reset		every 1h	EX_Perf
				MSExchangelM Virtual	w: 75	W/O			
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0842	Servers.Current Subscriptions	c: 100	Reset		every 1h	EX_Perf
				MSExchangelM.Failed	w: 5	W/O			
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0845	Requests/sec	c: 10	Reset		every 1h	EX_Perf
				MSExchangelM.Rejected	w: 5	W/O			
##	AO	EXSPI-60 Instant Messaging	EXSPI-60-0846	Requests/sec	c: 10	Reset		everv 1h	EX Perf
		EXSPI-60 Services and	200 1 2 2 10	- 4		W/O		every	
##	QS	Processes	EXSPI-60-1001	MSExchange Services Monitor	m:1	Reset		5min	EX Fault
		EXSPI-60 End to End		MSExchange End to End	w: 300 (r:			every	
##	Ad	Message Ping	EXSPI-60-1002	Message Ping Monitor	240)	Reset		30min	EX_Perf

# **MS Exchange 2000 Schedule Data Collection Templates**

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r				0.11.01.01.01	Collection			
У	Template Group	Template	Description	Collection Metric	Туре	Schedule	Table	Report
				Mailbox.Average Local Delivery				
				Time			EXSPI_MULTI	
				582 : MSExchangelS			(for each	
				Mailbox.Average Delivery Time			Database	
				583 : MSExchangelS			instance)	
			Collect data on the	Public.Average Local Delivery Time		6:00-18:00	EXSPI_SINGLE	
	EXSPI-60 Information		average msg delivery	584 : MSExchangelS		every 5min,	(total over all	
QS	Store	Msg Del Time	times in core procs	Public.Average Delivery Time	Average/h	M-F	Databases)	
				deliveries				
1				541 : MSExchangelS			1	
1				Mailbox.Messages Delivered		1	1	
1				542 : MSExchangelS			EXSPI_MULTI	
				Mailbox.Messages Sent			(for each	
1				543 : MSExchangelS			Database	S: Exchange
				Mailbox.Messages Submitted			instance)	Messaging Trends
			Collect data on the vol	544 : MSExchangelS			EXSPI_SINGLE	
	EXSPI-60 Information		of messages processed		D 11 /1	6:00-18:00	(total over all	D: Exchange
QS	Store	Mailbox Msg Vol	by Mailbox IS	Delivered	Delta/h	hourly, M-F	Databases)	Messaging Trends
				Public.Messages Delivered				
				551 : MSExchangelS			EXSPI MULTI	
				Public.Messages Sent			(for each	
				552 : MSExchangelS			Database	S: Exchange
				Public.Messages Submitted			instance)	Messaging Trends
			Collect data on the vol	553 : MSExchangelS			EXSPI_SINGLE	for all Servers
	EXSPI-60 Information	EXSPI-60-DC-IS	of messages processed			6:00-18:00	(total over all	D: Exchange
QS	Store	Public Msg Vol	by Public IS	Delivered	Delta/h	hourly, M-F	Databases)	Messaging Trends
				570 : MSExchangeMTA.Work				
				Queue Length -				
				MSExchangeMTA.Deferred Delivery				
				Msgs				
				571 : MSExchangelS Mailbox.Send			5.4051 LUU TI	
1				Queue Size			EXSPI_MULTI	
1				572 : MSExchangelS			(for each	
1				Mailbox.Receive Queue Size 573 : MSExchangelS Public.Send			Database	
1		EXSPI-60-DC-	Collect data on the	Queue Size		6:00-18:00	instance) EXSPI SINGLE	
1	EXSPI-60 Message	MTA & IS Queue	length of message	574 : MSExchangelS		every 10min.	(total over all	
QS	Transfer Agent	Len	queues in core procs	Public.Receive Queue Size	Average/h	M-F	Databases)	
QU	aoioi / igorit		quouso in coro proce	. doi: 1000170 Quodo Oizo	, oragoni	1	za.abaocoj	
1				530 : MSExchangeMTA.Inbound		1	1	
1				Messages Total		1	1	
1				531 : MSExchangeMTA.Outbound		1	1	
1				Messages Total		1	1	
1				532 : MSExchangeMTA.Total		1	1	
1				Recipients Inbound		1	1	
1				533 : MSExchangeMTA.Total		1	1	
1				Recipients Outbound			1	S: Exchange
1		EV.		534 : MSExchangeMTA.Inbound				Messaging Trends
1	EVODI 00 ::	EXSPI-60-DC-	Collect data on the vol	Bytes Total		0.00 40.00		for all Servers
	EXSPI-60 Message	MTA Message	of messages processed		D - 14 - //-	6:00-18:00	EVODI CINICI E	D: Exchange
QS	Transfer Agent	Volume	by MTA	Bytes Total	Delta/h	hourly, M-F	EXSPI_SINGLE	Messaging Trends

# MS Exchange 2000 Schedule Data Collection Templates

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У	Template Group	Template	Description	Collection Metric	Collecti 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
	EXSPI-60 Services and	EXSPI-60-DC- User	Collect data on the number of	User Count 521 : MSExchangelS.User	Value	7:00-18:00	EXSPI_SINGL	D: Exchange User
QS AO	Processes  EXSPI-60 Chat Service	EXSPI-60-Dc- Chat Data Collection	users  Collects data about Exchange Chat Service clients and channels.	Count  837 : Microsoft Exchange Chat Service.Clients 338 : 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 : MSExchangelM Virtual Servers.Current Users Online 842 : MSExchangelM Virtual Servers.Current Subscriptions 845 : MSExchangelM.Failed Requests/sec 846 : MSExchangelM.Rejected Requests/sec	Value	hourly, every day	EXSPI_MULTI	D: Exchange 2000 Instant Messaging Availability and Usage Trends

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У	Template Group	Template	Description	Collection Metric	Туре	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	1002: SLA values of: Met SLA Almost Met SLA This schedule not only executes the sending of messages it also logs the data to the data store.	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	655: Server 656: Site 657: Organiztion	Value	23:00, daily	EXSPI_MULTI	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	630: Mailbox size (MB) 631: Number of messages 632: Storage limit 634: Last Logon Date 815: Database Instance	Value	1:00 every Saturday	EXSPI_MULTI EXSPI_DETAILS	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)	610: Physical DB size (EDB) 611: Number of Mailboxes 612: Number of Messages 613: Logical Size 614: MSExchangelS Mailbox.Single Instance Ratio	Value	23:00, M-S	exspi_single	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
	EXSPI-60 Reporter	EXSPI-60-DC- Public Folder	Collect data about all public folders on the	640: Folder Size		4:00 every		S: Exchange Top 100 Public Folders
Ad	Collection	Data	system	641: Number of Messages	Value	Saturday	EXSPI_MULTI	D: Exchange Folder Summary
Ad	EXSPI-60 Reporter Collection	EXSPI-60-DC- Public IS Sum. Data	Collect summary data about Public Info. Store (Folders)	620: Physical DB size (EDB) 621: Number of Folders 622: Number of Messages 623: Logical Size 624: MSExchangelS Public.Single Instance Ratio	Value	22:00, M-S	exspi_single	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	660: Email Senders 661: Email Recipients 662: Eamil Destinations 663: Email Sources	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

# **EXSPI-60-0001 (Process Monitor)**

Metric Number:	EXSPI-60-0001
Name:	Process Monitor
Description:	Process Monitor (Monitors CPU time used by Exchange processes).
Type:	With reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter: Process.% Processor Time
Text:	Probable cause(s): 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.
	Potential impact: Failure, Performance
	Suggested action(s):  (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'.
	NOTE: By default only Exchange processes are monitored. The 'Catch All' suppress condition prevents messages about other busy processes. To receive messages about other busy processes, simply add conditions before the 'Catch All'

Condition:	EXSPI-60-0001 Process - msexcimc.1
Severity:	Critical
Threshold:	99.0
Reset Value:	85.0
Duration:	n/a
Message Text:	EXSPI-60-0001.1: Exchange INTERNET MAIL CONNECTOR service (pid= <pid>) CPU processor time consumption (&lt;\$VALUE&gt;) too high (\\&gt;&lt;\$THRESHOLD&gt;)</pid>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Metric Number:	EXSPI-60-0002
Name:	Inactive Process Monitor
Description:	Monitors the core MS Exchange processes to check that they are using some CPU cycles. A process consistently at 0% could indicate a problem.
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Fault
Instruction Text:	Probable cause(s): Low CPU use during the day on an active system could indicate a problem with the process.
	Potential impact: Failure
	Suggested action(s): (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'.

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

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

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

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

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

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

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

Metric Number:	EXSPI-60-0005
Name:	Low Log File Disk Space
Description:	Monitors the free disk space remaining on the logical disk drive where the transaction log files for the IS public and private databases reside.
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Fault
Instruction Text:	Probable cause(s): The amount of free disk space on the disk drive where the Exchange transaction log files reside is getting low.
	Potential impact: Failure. Exchange will shutdown processing if there is no disk space for additional transaction log files.
	Suggested action(s): (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.

Condition:	EXSPI-60-0005.1: Critical threshold
Severity:	Critical
Threshold:	10.0
Reset Value:	55.0
Duration:	n/a
Message Text:	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)

Condition:	EXSPI-60-0005.2: Warning threshold
Severity:	Warning
Threshold:	20.0
Reset Value:	25.0
Duration:	n/a
Message Text:	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)

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

Metric Number:	EXSPI-60-0006
Name:	Transaction Log File Disc Space
Description:	Monitors the disk space used by the Exchange transaction and reserved transaction log files.
Type:	With Reset
Schedule:	Every day
Message Group:	EX_Fault
Instruction Text:	Probable cause(s): 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).
	A large amount of used disk space could indicate a possible problem with backups.
	Potential impact: Failure
	Suggested action(s): (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.

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

Condition:	EXSPI-60-0006.2: Warning threshold
Severity:	Warning
Threshold:	100.0
Reset Value:	90.0
Duration:	n/a
Message Text:	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)

Metric Number:	EXSPI-60-0010
Name:	Message Delay
Description:	Monitors the rate of delayed messages being processed in the MTA.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA.Work Queue Length
	Potential impact: Performance
	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) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(3) Verify that there are no network problems.

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

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

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

Metric Number:	EXSPI-60-0011
Name:	MTA Work Queue Length
Description:	Monitors the number of delayed messages being processed in the MTA
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA.Work Queue Length MSExchangeMTA.Deferred Delivery Msgs Probable cause(s): Delay of messages being processed could indicate problems with system load, the MTA, connectors, or the network.
	Potential impact: Performance
	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) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(3) Verify that there are no network problems.

Condition:	EXSPI-60-0011.1: Critical threshold
Severity:	Critical
Threshold:	100.0
Reset Value:	80.0
Duration:	10min
Message Text:	EXSPI-60-0011.1: MTA Work Queue Length (<\$VALUE>) too high (>=<\$THRESHOLD>)

Condition:	EXSPI-60-0011.2: Warning threshold
Severity:	Warning
Threshold:	50.0
Reset Value:	40.0
Duration:	10min
Message Text:	EXSPI-60-0011.2: MTA Work Queue Length (<\$VALUE>) too high (>=<\$THRESHOLD>)

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

Metric Number:	EXSPI-60-0012
Name:	MTA Failed Conversions
Description:	Monitors the ratio of failed and successful conversion of messages from one form to another
Type:	With Reset
Schedule:	Every 1hr
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA.Total Failed Conversions MSExchangeMTA.Total Successful Conversions Probable cause(s): There may be problems with the MTA converting messages from one format to another.
	Potential impact: Performance/Failure. A high failure rate could indicate problems with the MTA or how messages being received are formatted.
	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.

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

Condition:	EXSPI-60-0012.2: Warning threshold
Severity:	Warning
Threshold:	2.0
Reset Value:	1.0
Duration:	n/a
Message Text:	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)**

Metric Number:	EXSPI-60-0013
Name:	MTA Connection Message Delay
Description:	Monitors the time (secs) since the oldest message in this entity's queue was placed in the queue
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA Connections.Oldest Message Queued. <instance></instance>
	Probable cause(s): Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.
	A long delay time could indicate problems with connectors, system load, the MTA, or the network.
	Potential impact: Performance/Failure.
	Suggested action(s):  (1) Monitor queue length for the specific connection with NT Performance Monitor:
	(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.
	(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(4) Verify that there are no network problems.

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

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

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

Metric Number:	EXSPI-60-0014
Name:	MTA Connection Queue Lengths
Description:	Monitors the number of outstanding messages queued for transfer to another Exchange Server.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA Connections.Queue Length. <instance></instance>
	Probable cause(s): Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.
	A large queue length could indicate problems with connectors, system load, the MTA, or the network.
	Potential impact: Performance/Failure.
	Suggested action(s): (1) Monitor queue length for the specific connection with NT Performance Monitor:
	MSExchangeMTA Connections.Queue Length. CONNECTION>
	(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.
	(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(4) Verify that there are no network problems.

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

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

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

Metric Number:	EXSPI-60-0015
Name:	MTA Failed Outbound Associations
<b>Description:</b>	Monitors the percentage of failed outbound associations from the MTA
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA Connections.Failed Outbound Associations. <instance> MSExchangeMTA Connections.Cumulative Outbound Associations.<instance> Probable cause(s): 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.  Potential impact: Performance</instance></instance>
	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.

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

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

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

Metric Number:	EXSPI-60-0016
Name:	MTA Rejected Inbound Associations
<b>Description:</b>	Monitors the percentage of rejected inbound remote associations to the MTA
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA Connections.Rejected Inbound Associations. <instance></instance>

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

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

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

Metric Number:	EXSPI-60-0017
Name:	MTA Rejected Inbound Messages
Description:	Monitors the percentage of Messages submitted to the MTA that are rejected
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s):  MSExchangeMTA Connections.Inbound rejected Total. <instance> MSExchangeMTA Connections.Inbound Messages Total.<instance> Probable cause(s): 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.  Potential impact: Performance  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)</instance></instance>
	(4) Enable Diagnostics Logging for the MTA (using Exchange Administrator) to help in troubleshooting.

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

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

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

Metric Number:	EXSPI-60-0030
Name:	IS Public Average Delivery Time
Description:	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.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Public.Average Delivery Time. <instance></instance>
	Probable cause(s): Delivery of public folder messages to other Exchange servers may be delayed by the MTA.
	Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0031
Name:	IS Public Average Local Delivery Time
Description:	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.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIS Public.Average Local Delivery Time. <instance></instance>
	<b>Probable cause(s):</b> Delivery of public folder messages to local recipients may be delayed by the Information Store.
	Delay of messages being processed could indicate problems with system load or the Information Store.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0032
Name:	IS Public Replication Queue Length
Description:	Monitors the number of replication messages in the public information store's replication receive queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIS Public.Replication Receive Queue Size. <instance></instance>
	Probable cause(s): Delivery of replication messages to public folders may be delayed.
	A large queue length could indicate problems with system load or the Information Store process.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0033
Name:	IS Public Receive Queue Length
Description:	Monitors the number of messages in the public information store's receive queue
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX-Perf
Instruction Text:	Counter(s): MSExchangeIS Public.Receive Queue Size. <instance></instance>
	Probable cause(s): Delivery of replication messages to public folders may be delayed.
	A large queue length could indicate problems with system load or the Information Store process.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0034
Name:	IS Public Send Queue Length
Description:	Monitors the number of messages in the public information store's send queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Public.Send Queue Size. <instance></instance>
	<b>Probable cause(s)</b> : Delivery of replication messages to public folders may be delayed.
	A large queue length could indicate problems with system load or the Information Store process.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0040
Name:	IS Mailbox Average Delivery Time
Description:	Monitors the average time between submission of a message to the Mailbox information store and submission to the MTA for the last 10 messages
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Mailbox. Average Delivery Time. <instance></instance>
	Probable cause(s): Delivery of messages to other Exchange servers may be delayed by the MTA.
	Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0041
Name:	IS Mailbox Average Local Delivery Time
Description:	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.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Mailbox. Average Local Delivery Time. < instance >
	Probable cause(s): Delivery of messages to local recipients may be delayed by the Information Store.
	Delay of messages being processed could indicate problems with system load or the Information Store.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0042
Name:	IS Mailbox Receive Queue Size
Description:	Monitors the number of messages in the mailbox information store's receive queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Mailbox.Receive Queue Size. <instance></instance>
	Probable cause(s): Delivery of messages to mailboxes may be delayed.
	A large queue length could indicate problems with system load or the Information Store process
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0043
Name:	IS Mailbox Send Queue Size
Description:	Monitors the number of messages in the mailbox information store's send queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Mailbox.Send Queue Size. <instance></instance>
	Probable cause(s): Delivery of messages to other Exchange servers may be delayed by the MTA.
	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.
	There could be a problem with system load or the MTA process.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-60-0050
Name:	SMTP Categorizer Queue Length
Description:	Monitors the number of messages in the SMTP Categorizer Queue. The Categorizer performs lookups and checks limits and restrictions in Active Directory.
Туре:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf

Metric Number:	EXSPI-60-0050
Instruction	Counter(s): SMTP Server.Categorizer Queue Length. <instance></instance>
Text:	<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.
	Potential impact: Performance
	Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor. On Windows 2000, Performance Monitor is under Start->Programs->Administrative Tools->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.
	(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
	(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
	(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 Queue Length
	(4) Active Directory Lookups may be an issue. Consider implementing another Active Directory server.
	(5) If you have the Windows+ SPI, deploy the ADS policies to the Active Directory server. These policies may also have recommendations to increase Active Directory Lookup performance.

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

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

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

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

Metric Number:	EXSPI-60-0051
Instruction Text:	Counter(s): SMTP Server.Local Queue Length. <instance></instance>
iext:	<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.
	Potential impact: Performance
	Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor. On Windows 2000, Performance Monitor is under Start->Programs->Administrative Tools->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:
	(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
	(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 Queue Length
	(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.
	(4) Verify that the Information Store process (STORE) is running.

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

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

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

Metric Number:	EXSPI-60-0052
Name:	SMTP Local Retry Queue Length
Description:	Monitors the number of messages in the SMTP Local Retry queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf

Metric Number:	EXSPI-60-0052
Instruction Text:	Counter(s): SMTP Server.Local Retry Queue Length. <instance></instance>
	<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.
	Potential impact: Performance
	Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor. On Windows 2000, Performance Monitor is under Start->Programs->Administrative Tools->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:
	(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
	(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 Queue Length
	<ul> <li>(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.</li> <li>(4) Verify that the Information Store process (STORE) is running.</li> </ul>

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

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

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

Metric Number:	EXSPI-60-0053
Name:	SMTP Messages Pending Routing
Description:	Monitors the number of messages that have been categorized but not routed.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf

Metric Number:	EXSPI-60-0053
Instruction	Counter(s): SMTP Server.Messages Pending Routing. <instance></instance>
Text:	<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.
	Potential impact: Performance
	Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor, on Windows 2000, under Start->Programs->Administrative Tools->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:
	(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. <all instances=""> MSExchangeMTA.Work Queue Length</all>
	(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
	(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 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 SMTP Server.Remote Retry Queue Length

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

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

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

Metric Number:	EXSPI-60-0054
Name:	SMTP Remote Queue Length
Description:	Monitors the number of messages in the queue for remote delivery
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf

Metric Number:	EXSPI-60-0054
Instruction	Counter(s): SMTP Server.Remote Queue Length. <instance></instance>
Text:	<b>Probable cause(s):</b> Delivery of messages to other Exchange servers may be delayed by the SMTP Server.
	Potential impact: Performance
	Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor, on Windows 2000, under Start->Programs->Administrative Tools->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:
	(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. <all instances=""> MSExchangeMTA.Work Queue Length</all>
	(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
	(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 Queue Length SMTP Server.Remote Retry Queue Length
	flow.

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

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

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

Metric Number:	EXSPI-60-0055
Name:	SMTP Remote Retry Queue Length
Description:	Monitors the number of messages in the retry queue for remote delivery
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf

queue length could indicate problems with the network.  Potential impact: Performance  Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor, on Windows 2000, under Start->Programs->Administrative Tools->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:  (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. <all instances=""> MSExchangeMTA. Work Queue Length  (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 (3) Use Performance Monitor to watch the message queues. Monitor the following counters:</all>	Metric Number:	EXSPI-60-0055
servers may be delayed by the SMTP Server. A large remote retry queue length could indicate problems with the network.  Potential impact: Performance  Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor, on Windows 2000, under  Start->Programs->Administrative Tools->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:  (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. <all instances=""> MSExchangeMTA.Work Queue Length  (2) Use Performance Monitor to watch the message queues. Monitor the following counters: MSExchangeMTA.Adjacent MTA Associations SMTP Server.Message Received/Sec SMTP Server.Message Delivered/Sec SMTP Server.Message Sent/Sec SMTP Server.Inbound Connection Current SMTP Server.Inbound Connection Current SMTP Server.Inbound Connection Current</all>		
Suggested action(s): Use Performance Monitor to watch Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor, on Windows 2000, under Start->Programs->Administrative Tools->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:  (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. <all instances=""> MSExchangeMTA.Work Queue Length  (2) Use Performance Monitor to watch the message queues. Monitor the following counters: MSExchangeMTA.Adjacent MTA Associations SMTP Server.Message Received/Sec SMTP Server.Message Received/Sec SMTP Server.Message Delivered/Sec SMTP Server.Message Delivered/Sec SMTP Server.Outbound Connection Current SMTP Server.Inbound Connection Current (3) Use Performance Monitor to watch the message queues. Monitor the following counters:</all>		servers may be delayed by the SMTP Server. A large remote retry
Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor, on Windows 2000, under Start->Programs->Administrative Tools->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:  (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. <all instances=""> MSExchangeMTA.Work Queue Length  (2) Use Performance Monitor to watch the message queues. Monitor the following counters: MSExchangeMTA.Adjacent MTA Associations SMTP Server.Message Received/Sec SMTP Server.Message Received/Sec SMTP Server.Message Sent/Sec SMTP Server.Message Sent/Sec SMTP Server.Outbound Connection Current SMTP Server.Inbound Connection Current (3) Use Performance Monitor to watch the message queues. Monitor the following counters:</all>		Potential impact: Performance
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. <all instances=""> MSExchangeMTA.Work Queue Length  (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 (3) Use Performance Monitor to watch the message queues. Monitor the following counters:</all>		Exchange metrics. On NT, Performance Monitor is under Start->Programs->Administrative Tools (Common)->Performance Monitor, on Windows 2000, under Start->Programs->Administrative Tools->Performance. Hit the '+' button to add counters. Select the managed Exchange Server node as the source computer. Select performance objects, counters and
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    SMTP Server.Inbound Connection Current  (3) Use Performance Monitor to watch the message queues.    Monitor the following counters:		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. <all instances=""></all>
Monitor the following counters:		(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
MSExchangeM IA. 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 SMTP Server. Remote Retry Queue Length (4) Determine if network problems are preventing message flow.		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 Queue Length

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

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

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

Metric Number:	EXSPI-60-0056
Name:	SMTP NDR Percentage
Description:	Monitors the percentage of NDRs for each SMTP virtual server
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): SMTP Server.NDRs Generated. <instance></instance>
	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.
	<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.
	Potential impact: Performance
	Suggested action(s):
	(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.
	(2) Verify that there are no network problems.
	(3) Check other problems in the Message Reader to see if Exchange has been reporting problems with the SMTP server.
	(4) Enable diagnostics logging for the SMTP server (using Exchange System manager) to help in troubleshooting.

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

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

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

Metric Number:	EXSPI-60-0057
Name:	SMTP Outbound Connections Refused
Description:	Monitors the percentage of outbound SMTP connections refused by remote sites for each SMTP virtual server
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): SMTP Server.Outbound Connections Refused. <instance> SMTP Server.Outbound Connections Total.<instance></instance></instance>
	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.
	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.
	<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.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that there are no network problems.
	(2) Check the SMTP configuration using Exchange System Manager.
	(3) Check other messages in the Message Reader to see if Exchange has been reporting problems with the SMTP server.
	(4) Enable diagnostics logging for the SMTP server (using Exchange System manager) to help in troubleshooting.

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

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

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

Metric Number:	EXSPI-60-0058
Name:	Newsfeed Outbound Connections Failed
Description:	Monitors the percentage of outbound newsfeed connections that failed
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): NNTP Server.Total Outbound Connections Failed. <instance> NNTP Server.Total Outbound Connections.<instance></instance></instance>
	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.
	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.

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

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

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

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

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

Condition:	EXSPI-60-0090.2: Warning threshold
Severity:	Warning
Threshold:	20
Reset Value:	15
<b>Duration:</b>	n/a
Message Text:	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)

Metric Number:	EXSPI-60-0091
Name:	cc:Mail MTS-OUT Queue Length
Description:	Monitors the number of messages awaiting delivery to Lotus ccMail.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeCCMC.Microsoft Exchange MTS-OUT Potential impact: Performance

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

Condition:	EXSPI-60-0091.2: Warning threshold
Severity:	Warning
Threshold:	20
Reset Value:	15
Duration:	n/a
Message Text:	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)

Metric Number:	EXSPI-0092
Name:	cc:Mail NDRs to cc:Mail
Description:	Monitors the rate at which non-delivery reports are being sent to Lotus cc:Mail from MS Exchange.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeCCMC.NDRs to Lotus cc:Mail MSExchangeCCMC.Messages Sent to Lotus cc:Mail Potential impact: Performance

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

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

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

Metric Number:	EXSPI-0093
Name:	cc:Mail NDRs to Exchange
Description:	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus cc:Mail.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeCCMC.NDRs to Microsoft Exchange MSExchangeCCMC.Messages sent to Microsoft Exchange Potential impact: Performance

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

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

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

Metric Number:	EXSPI-60-0094
Name:	Lotus Notes Inbound Queued Messages Length
Description:	Monitors the number of messages awaiting delivery to Exchange from Lotus Notes.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeNMC.Message Queued Inbound Probable cause(s): The Lotus Notes Connector service has stopped or stalled and is not processing messages.  Potential impact: Performance Suggested action(s):  (1) Verify that the Network is not experiencing any problems. (2) Check for 'stuck' messages in the Connector for Lotus Notes queue. (3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active. (4) Verify that the Connector Processes are active (5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector. (6) Verify the Notes client can access the mailbox assigned to the Notes connector. (7) Stop and re-start the Exchange services from Step (3).

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

Condition:	EXSPI-60-0094.2: Warning threshold
Severity:	Warning
Threshold:	20
Reset Value:	15
Duration:	n/a
Message Text:	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)

Metric Number:	EXSPI-60-0095
Name:	Lotus Notes Outbound Queued Messages Length.
Description:	Monitors the number of messages awaiting delivery to Lotus Notes.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s): MSExchangeNMC.Message Queued Outbound
Text:	<b>Probable cause(s):</b> The Lotus Notes Connector service has stopped or stalled and is not processing messages.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that the Network is not experiencing any problems.
	(2) Check for 'stuck' messages in the Connector for Lotus Notes queue.
	(3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active.
	(4) Verify that the Connector Processes are active
	(5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector.
	(6) Verify the Notes client can access the mailbox assigned to the Notes connector.
	(7) Stop and re-start the Exchange services from Step (3)

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

Condition:	EXSPI-60-0095.2: Warning threshold
Severity:	Warning
Threshold:	20
Reset Value:	15
<b>Duration:</b>	n/a
Message Text:	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)**

Metric Number:	EXSPI-60-0096
Name:	Exchange NDRs sent to Lotus Notes
Description:	Monitors the rate at which non-delivery reports are being sent to Lotus Notes from MS Exchange.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeNMC.Messages from Notes rejected by Connector MSExchangeNMC.Messages Send
	Potential impact: Performance

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

Condition:	EXSPI-60-0096.2: Warning threshold
Severity:	Warning
Threshold:	2
Reset Value:	1
<b>Duration:</b>	n/a
Message Text:	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)

Metric Number:	EXSPI-60-0097
Name:	Lotus Notes NDRs sent to Microsoft Exchange
Description:	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus Notes.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s):  MSExchangeNMC.Messages from Exchange rejected by Connector  MSExchangeNMC.Messages Received  Potential impact: Performance

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

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

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

Metric Number:	EXSPI-60-0100
Name:	IS User Connection Count Low
Description:	Monitors the number of client processes connected to the information store.
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction	Counter(s): MSExchangeIS.User Count
Text:	Probable cause(s): The number of client processes logged on to the Information Store is low.
	A low user logon count during the day could indicate problems with the Information Store process or network connectivity.
	Potential impact: Performance, Fault
	Suggested action(s): (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.

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

## **EXSPI-60-0110 (SRS Pending Replication Synchronizations)**

Metric Number:	EXSPI-60-0110
Name:	SRS Pending Replication Synchronizations
Description:	SRS Pending Replication Synchronizations.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Fault
Instruction Text:	Counter(s): MSExchangeSRS.Pending Replication Synchronizations
	Probable cause(s): Replication of directory information may be delayed.
	A delay in processing replication updates could indicate problems with system load or the Site Replication Service process.
	Potential impact: Performance, Fault
	Suggested action(s): (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.

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

# **EXSPI-60-0111 (SRS Remaining Replication Updates)**

Metric Number:	EXSPI-60-0111
Name:	SRS Remaining Replication Updates
Description:	SRS Remaining Replication Updates.
Type:	Without Reset
Schedule:	Every 5min
Message Group:	EX_Fault
Instruction Text:	Counter(s): MSExchangeSRS.Remaining Replication Updates Probable cause(s): Replication of directory information may be delayed.  A delay in processing replication updates could indicate problems with system load or the Site Replication Service process.  Potential impact: Performance, Fault  Suggested action(s): (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.

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

### **EXSPI-60-0800** (Active Conferences)

Metric Number:	EXSPI-60-0800
Name:	Active Conferences
Description:	Monitors active MS Exchange Conferences
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeCONF.Active Conferences You have hit the threshold for the number of active conferences. Ensure that performance is not being impacted. If not, consider increasing the threshold.

Condition:	EXSPI-60-0800.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0800.1: The rate of the number of conferences in progress (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

Condition:	EXSPI-60-0800.1 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0800.1: The rate of the number of conferences in progress (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

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

Metric Number:	EXSPI-60-0801
Name:	DCOM Calls To MCU servers
Description:	Monitors DCOM calls to MCU servers
Type:	With Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeDcsMgr.DCOM Calls To MCUs Surpassing the threshold for the number of DCOM calls to the MCU indicates you may wish to add another MCU server.

Condition:	EXSPI-60-0801.1 Critical threshold
Severity:	Critical
Threshold:	1000.000000
Reset Value:	500.000000
Duration:	n/a
Message Text:	EXSPI-60-0801.1: The number of DCOM calls made to T.120 MCU servers (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

Condition:	EXSPI-60-0801.2 Warning threshold
Severity:	Warning
Threshold:	100.000000
Reset Value:	50.000000
Duration:	n/a
Message Text:	EXSPI-60-0801.2: The number of DCOM calls made to T.120 MCU servers (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

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

Metric Number:	EXSPI-60-0802
Name:	Average Load per MCU
Description:	Monitors average load per MCU server
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeDcsMgr.Average Load Per MCU Surpassing this threshold may indicate that you need to add another MCU server.

Condition:	EXSPI-60-0802.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0802.1: The average load per T.120 MCU server (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

Condition:	EXSPI-60-0802.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0802.2: The average load per T.120 MCU server (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

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

Metric Number:	EXSPI-60-0803
Name:	MCU Active Connections
Description:	Monitors active T.120 MCU connections
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeT120.Active Connections Surpassing this threshold indicates that you have more conference participants than expected.

Condition:	EXSPI-60-0803.1 Critical threshold
Severity:	Critical
Threshold:	100.000000
Reset Value:	n/a
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0803.1: The number of clients connected to this T.120 MCU server (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

Condition:	EXSPI-60-0803.2 Warning threshold
Severity:	Warning
Threshold:	90.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0803.2: The number of clients connected to this T.120 MCU server (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

### EXSPI-60-0804 (MCU Load)

Metric Number:	EXSPI-60-0804
Name:	MCU Load
Description:	Monitors load on MCU servers
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeT120.T.120 MCU Load Surpassing this threshold indicates that too much work has been offloaded to the MCU.

Condition:	EXSPI-60-0804.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0804.1: The amount of work being allocated to this MCU (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

Condition:	EXSPI-60-0804.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0804.2: The amount of work being allocated to this MCU (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

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

Metric Number:	EXSPI-60-0805
Name:	Failed Conference User Join Attempts
Description:	Monitors failed user attempts to join MS Exchange Conferences
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	<b>Counter</b> (s): MSExchangeIpconf.Failed User Join Attempts Failed logins could be a sign of an attempted security breach to your conferencing server.

Condition:	EXSPI-60-0805.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0805.1: The number of times users failed to join conferences (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

Condition:	EXSPI-60-0805.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0805.2: The number of times users failed to join conferences (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

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

Metric Number:	EXSPI-60-0806
Name:	Video Conferences in Progress
Description:	Monitors video conferences in progress
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIpconf.Video Conferences in Progress
	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.

Condition:	EXSPI-60-0806.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0806.1: The number of video conferences in progress in this site since the last iteration (<\$VALUE>%) is too high (>=<\$THRESHOLD>%)

Condition:	EXSPI-60-0806.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0806.2: The number of video conferences in progress in this site since the last iteration (<\$VALUE>%) is too high (>=<\$THRESHOLD>%))

### **EXSPI-60-0807** (Incomplete Calls)

Metric Number:	EXSPI-60-0807
Name:	Incomplete H.323 Calls
Description:	Monitors number of incomplete H.323 calls
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeH323.Incomplete Calls
	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.

Condition:	EXSPI-60-0807.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0807.1: The number of H.323 calls that could not be bridged since the last iteration (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

Condition:	EXSPI-60-0807.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0807.2: The number of H.323 calls that could not be bridged since the last iteration (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

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

Metric Number:	EXSPI-60-0830
Name:	Active DNS logon threads
Description:	Monitors number of worker threads waiting to process DNS lookup requests
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction Text:	Counter(s): Microsoft Exchange Chat Service. Active DNS logon threads
	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.

Condition:	EXSPI-60-0830.1 Critical threshold
Severity:	Critical
Threshold:	30.000000
Reset Value:	20.000000
Duration:	n/a
Message Text:	EXSPI-60-0830.1: The MS Exchange Chat Service Active DNS logon threads (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

Condition:	EXSPI-60-0830.2: Warning threshold
Severity:	Warning
Threshold:	15.000000
Reset Value:	10.000000
Duration:	n/a
Message Text:	EXSPI-60-0830.2: The MS Exchange Chat Service Active DNS logon threads (<\$VALUE>) is too high (\\> <\$THRESHOLD>)

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

Metric Number:	EXSPI-60-0831
Name:	Chat Service Timeout Disconnects
Description:	Monitors the number of Chat Service client timeout related disconnects
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction Text:	Counter(s): Microsoft Exchange Chat Service.Client Timeout Related Disconnects
	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.

Condition:	EXSPI-60-0831.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	7.000000
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0831.1: The Microsoft Exchange Chat Service Client Timeout Related Disconnects (<\$VALUE> disconnects) is too high (>=<\$THRESHOLD> disconnects)

Condition:	EXSPI-60-0831.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	2.000000
Duration:	n/a
Message Text:	EXSPI-60-0831.2: The Microsoft Exchange Chat Service Client Timeout Related Disconnects (<\$VALUE> disconnects) is too high (>=<\$THRESHOLD> disconnects))

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

Metric Number:	EXSPI-60-0833
Name:	Chat Service Anonymous Clients
Description:	Monitors number of anonymous clients actively connected to Chat services
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction Text:	Counter(s): Microsoft Exchange Chat Service. Anonymous Clients This is the number of anonymous clients currently connected to this chat community.

Condition:	EXSPI-60-0833.1 Critical threshold
Severity:	Critical
Threshold:	30.000000
Reset Value:	20.000000
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0833.1: The Microsoft Exchange Chat Service Anonymous clients (<\$VALUE> clients) is too high (>=<\$THRESHOLD> clients)

Condition:	EXSPI-60-0833.2 Warning threshold
Severity:	Warning
Threshold:	15.000000
Reset Value:	10.000000
Duration:	n/a
Message Text:	EXSPI-60-0833.2: The Microsoft Exchange Chat Service Anonymous clients (<\$VALUE> clients) is too high (>=<\$THRESHOLD> clients)

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

Metric Number:	EXSPI-60-0834
Name:	Chat Service Authenticated Clients
Description:	Monitors number of authenticated clients currently connected
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction Text:	Counter(s): Microsoft Exchange Chat Service. Authenticated Clients  This is the number of authenticated clients currently connected to this chat community.

Condition:	EXSPI-60-0834.1 Critical threshold
Severity:	Critical
Threshold:	100.000000
Reset Value:	80.000000
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0834.1: The Microsoft Exchange Chat Service Authenticated clients (<\$VALUE> clients) is too high (>=<\$THRESHOLD> clients)

Condition:	EXSPI-60-0834.2 Warning threshold
Severity:	Warning
Threshold:	50.000000
Reset Value:	30.000000
Duration:	n/a
Message Text:	EXSPI-60-0834.2: The Microsoft Exchange Chat Service Authenticated clients (<\$VALUE> clients) is too high (>=<\$THRESHOLD> clients)

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

Metric Number:	EXSPI-60-0835
Name:	Chat Service Authentication Failures
Description:	Monitors number of authentication failures to MS Exchange Chat Service
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction Text:	Counter(s): Microsoft Exchange Chat Service. Authentication Failures
	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.

Condition:	EXSPI-60-0835.1 Critical threshold
Severity:	Critical
Threshold:	20.000000
Reset Value:	15.000000
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0835.1: The Microsoft Exchange Chat Service Authentication failures (<\$VALUE> failures) is too high (>=<\$THRESHOLD> failures)

Condition:	EXSPI-60-0835.2 Warning threshold
Severity:	Warning
Threshold:	10.000000
Reset Value:	5.000000
Duration:	n/a
Message Text:	EXSPI-60-0835.2: The Microsoft Exchange Chat Service Authentication failures (<\$VALUE> failures) is too high (>=<\$THRESHOLD> failures)

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

Metric Number:	EXSPI-60-0836
Name:	Chat Service Operations Queued
Description:	Monitors queue of operations on the MS Exchange Chat Service server
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction Text:	Counter(s): Microsoft Exchange Chat Service. Server operations queued  This is the number of pending server operations. If this value is too high there could be a problem server load.

Condition:	EXSPI-60-0836.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	7.000000
Duration:	n/a
Message Text:	EXSPI-60-0836.1: The Microsoft Exchange Chat Service Server operations queued (<\$VALUE> operations) is too high (>=<\$THRESHOLD> operations)

Condition:	EXSPI-60-0836.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	2.000000
Duration:	n/a
Message Text:	EXSPI-60-0836.2: The Microsoft Exchange Chat Service Server operations queued (<\$VALUE> operations) is too high (>=<\$THRESHOLD> operations)

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

Metric Number:	EXSPI-60-0841
Name:	Active Users IM Virtual Servers
Description:	Monitors number of IM Virtual Servers users currently online
Type:	Without Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIM Virtual Servers.Current Users Online

<b>Condition:</b>	EXSPI-60-0841.1 Critical threshold
Severity:	Critical
Threshold:	100.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0841.1: The IM user count (<\$VALUE> users) is too high (>=<\$THRESHOLD> Users)

Condition:	EXSPI-60-0841.2 Warning threshold
Severity:	Warning
Threshold:	75.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0841.2: The IM user count (<\$VALUE> users) is too high (>=<\$THRESHOLD> Users)

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

Metric Number:	EXSPI-60-0842
Name:	IM Current Subscriptions
Description:	Monitors number of current IM Virtual Servers subscriptions
Type:	Without Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIM Virtual Servers.Current Subscriptions

<b>Condition:</b>	EXSPI-60-0842.1 Critical threshold
Severity:	Critical
Threshold:	100.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0842.1: The IM Current Subscriptions (<\$VALUE> subscriptions) is too high (>=<\$THRESHOLD> Subscriptions)

Condition:	EXSPI-60-0842.2 Warning threshold
Severity:	Warning
Threshold:	75.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	<b>EXSPI-60-0842.2:</b> The IM Current Subscriptions (<\$VALUE> subscriptions) is too high (>=<\$THRESHOLD> Subscriptions)

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

Metric Number:	EXSPI-60-0845
Name:	IM Failed Requests
Description:	Monitors number of IM failed requests per sec.
Type:	Without Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIM.Failed Requests/sec

Condition:	EXSPI-60-0845.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0845.1: The IM Failed Requests/sec (<\$VALUE> failures) is too high (>=<\$THRESHOLD> failures)

Condition:	EXSPI-60-0845.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0845.2: The IM Failed Requests/sec (<\$VALUE> failures) is too high (>=<\$THRESHOLD> failures)

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

Metric Number:	EXSPI-60-0846
Name:	IM Rejected Requests
Description:	Monitors number of rejected IM requests per sec.
Type:	Without Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIM.Rejected Requests/sec

<b>Condition:</b>	EXSPI-60-0846.1 Critical threshold
Severity:	Critical
Threshold:	10.000000
Reset Value:	n/a
<b>Duration:</b>	n/a
Message Text:	EXSPI-60-0846.1: The IM Rejected Requests/sec (<\$VALUE> rejections) is too high (>=<\$THRESHOLD> rejections)

Condition:	EXSPI-60-0846.2 Warning threshold
Severity:	Warning
Threshold:	5.000000
Reset Value:	n/a
Duration:	n/a
Message Text:	EXSPI-60-0846.2: The IM Rejected Requests/sec (<\$VALUE> rejections) is too high (>=<\$THRESHOLD> rejections)

## **EXSPI-60-1001** (Services Monitor)

Metric Number:	EXSPI-1001					
Name:	MSExchange Services Monitor					
Description:	Monitors Exchange Server process. Generates event if an Exchange service is currently stopped but configured startup automatic.					
Type:	Without Reset					
Schedule:	Every 5min					
Message Group:	EX_Fault					
Instruction Text:	<b>Probable cause(s)</b> : A service marked for automatic start-up is not running.					
	Potential impact: Failure					
	Suggested action(s):					
	(1) Unless the service is known to be down for maintenance, use the Services tool in the Control Panel to re-start the service.					
	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.					

Condition:	EXSPI-60-1001.1: Major threshold
Severity:	Major
Threshold:	1.000000
Reset Value:	n/a
Message Text:	EXSPI-60-1001: Service <pre>cyrefix&gt; <rest>is currently not running (startup config automatic)</rest></pre>

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

Metric Number:	EXSPI-60-1002
Name:	MSExchange End to End Message Ping Monitor
Description:	Monitors the round trip time for a message
Type:	With Reset
Schedule:	Every 30min
Message Group:	EX_Perf

#### MS Exchange 2000 Monitor Template Specifications

Metric Number:	EXSPI-60-1002
Instruction Text:	<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.
	Potential impact: Failure or Performance
	Suggested action(s):
	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.
	If the threshold is accurate, then evaluate the following suggestions on the source and destination servers:
	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.
	Select the Performance Monitor 'MS Exchange Server Health' to determine if the message queue to the destination system is large or growing.
	If the queues on either side or large or growing and the systems are not overloaded, run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	If there are no stuck messages, check if there are network problems between the two systems.
	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.

Condition:	EXSPI-60-1002.1: Warning threshold
Severity:	Warning
Threshold:	300
Reset Value:	240
Duration:	n/a
Message Text:	EXSPI-60-1002.1: End to End Message Ping round trip time (<\$VALUE> seconds) is too high (>=<\$THRESHOLD>) for systems <0bj>

Chapter: 1 MS Exchange 2000 Templates MS Exchange 2000 Monitor Template Specifications					

2

**MS Exchange 5.5 Templates** 

# **Summary MS Exchange 5.5 Monitor Templates**

	C a t e g o r				T D h e r f e a s u h l o	T h r e s T h y		S c h e d u I	M e s G s r a o g u
ld	У	Template Group  EXSPI-55 Services and	Template	Process Monitor (Monitors CPU time used	t I d w: 80 (r: 75)	l d e	n	every	ө р
1	QS	Processes	EXSPI-55-0001	by Exchange processes)	c: 99 (r: 85)	Reset		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 Message Transfer	EXSPI-55-0006	Transaction Log File Disk Space	w: 100 (r: 90) c: 300 (r: 250) w: 60 (r: 50)	Reset		every day	EX_Fault
10	QS	Agent	EXSPI-55-0010	MTA Message Delay	c: 300 (r: 250)	Reset		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
		EXSPI-55 Message Transfer			w: 300 (r: 250)			every 5	
13	QS	Agent	EXSPI-55-0013	MTA Connection Message Delay	c: 600 (r: 500)	Reset		min	EX_Perf
11	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
		EXSPI-55 Message Transfer			w: 3 (r: 2)				_
15	QS	Agent EXSPI-55 Message Transfer	EXSPI-55-0015	MTA Failed Outbound Associations	c: 10 (r: 8)	Reset		every 1h	EX_Perf
16	QS	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 Time for Delivery	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 Time for Local Delivery	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 Private Average Delivery Time	w: 10 (r: 7) c: 5 (r: 3)	Reset		every 5min	EX_Perf
41	QS	EXSPI-55 Information Store	EXSPI-55-0041	IS Private 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 Private 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 Private Send Queue Size	w: 30 (r: 20) c: 15 (r: 10)	Reset		every 5min	EX_Perf

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					f e		a	8	s G
	g				a s	s T		d	s r
	0				u h	h y			a o
ld	r v	Template Group	Template	Description	lo tld	o p			g u
I'U	У	EXSPI-55 Internet Mail	Tompiato	Description	w: 2 (r: 1)	1 4 6	"		өр
60	AO	Services	EXSPI-55-0060	IMS Failed Connections	c: 5 (r: 2)	Reset		every 1h	EX Perf
		EXSPI-55 Internet Mail			w: 2 (r: 1)			,	_
61	AO	Services	EXSPI-55-0061	IMS Rejected Connections	c: 5 (r: 2)	Reset		every 1h	EX_Perf
		EXSPI-55 Internet Mail	= VOD: == 0000		w: 15 (r: 10)			every	
62	AO	Services	EXSPI-55-0062	IMS MTS-IN Queue Length	c: 30 (r: 20)	Reset		5min	EX_Perf
63	AO	EXSPI-55 Internet Mail Services	EXSPI-55-0063	IMS MTS-OUT Queue Length	w: 15 (r: 10) c: 30 (r: 20)	Reset		every 5min	EX Perf
- 00	710	EXSPI-55 Internet Mail	27.0. 7 00 0000	inio ini o de l' queue Lengui	w: 15 (r: 10)	110001		every	2, 0
64	AO	Services	EXSPI-55-0064	IMS Queued Inbound	c: 30 (r: 20)	Reset		5min	EX_Perf
		EXSPI-55 Internet Mail			w: 15 (r: 10)			every	
65	AO	Services	EXSPI-55-0065	IMS Queued Outbound	c: 30 (r: 20)	Reset		5min	EX_Perf
		EXSPI-55 Internet Mail			w: 2 (r: 1)				
66	AO	Services	EXSPI-55-0066	IMS NDRs Inbound	c: 4 (r: 2)	Reset		every 1h	EX_Perf
67		EXSPI-55 Internet Mail Services	EXSPI-55-0067	IMS NDRs Outbound	w: 2 (r: 1) c: 4 (r: 2)	Reset		every 1h	EX Perf
07	AO	Gervices	EXGI 1-33-0007			110301		every iii	LX_I GII
	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
80	AU	EXSPI-33 News Service	EX3F1-33-0060			Reset		every III	EX_Pell
Ω1	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
01	AU	EXOT 1-35 News Service	EXGI 1-33-0001	IMESSAGES	w: 20 (r: 15)	110301		every	LX_I GII
90	AO	EXSPI-55 cc:Mail Connector	EXSPI-55-0090	cc:Mail MTS-IN Queue Length	c: 50 (r: 40)	Reset		5min	EX Perf
					w: 20 (r: 15)			every	_
91	AO	EXSPI-55 cc:Mail Connector	EXSPI-55-0091	cc:Mail MTS-OUT Queue Length	c: 50 (r: 40)	Reset		5min	EX_Perf
					w: 2 (r: 1)				
92	AO	EXSPI-55 cc:Mail Connector	EXSPI-55-0092	Exchange NDRs to cc:Mail	c: 4 (r: 2)	Reset		every 1h	EX_Perf
03	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
93	AO	EXSPI-55 Lotus Notes	EXCIT 60 0000	Lotus Notes Inbound Queued	w: 20 (r: 15)	110001		every	EX_I OII
94	AO	Connector	EXSPI-55-0094	Messages Length	c: 50 (r: 40)	Reset		5min	EX_Perf
		EXSPI-55 Lotus Notes		Lotus Notes Outbound Queued	w: 20 (r: 15)			every	
95	AO	Connector	EXSPI-55-0095	Messages Length	c: 50 (r: 40)	Reset		5min	EX_Perf
		EXSPI-55 Lotus Notes		Exchange NDRs sent to Lotus	w: 2 (r: 1)				
96	AO	Connector	EXSPI-55-0096	Notes	c: 4 (r: 2)	Reset		every 1h	EX_Perf
		EXSPI-55 Lotus Notes		Lotus Notes NDRs sent to Microsoft	w: 2 (r: 1)				
97	AO	Connector	EXSPI-55-0097	Exchange	c: 4 (r: 2)	Reset		every 1h	EX_Perf
								every	
100	QS	EXSPI-55 Information Store	EXSPI-55-0100	IS User Connection Count Low	w: 1 (r: 2)	Reset		15min	EX_Perf
110	QS	EXSPI-55 Directory Service	EXSPI-60-0110	DS Pending Synchronizations	o: 4 (r: 2)	Reset	30m	every 5min	EX Fault
110	us	LAGE 1-00 Directory Service	LASF1-00-0110	DO FERMING SYNCHRONIZATIONS	c: 4 (r: 2)	W/O	SUIII	every	∟∧_rault
111	QS	EXSPI-55 Directory Service	EXSPI-60-0111	DS Remaining Updates	c: 0.5	Reset	30m	5min	EX Fault
Ė		EXSPI-55 Services and		<u>O - Ivanes</u>		W/O		every	
###	QS	Processes	EXSPI-55-1001	MSExchange Services Monitor	m:1	Reset		5min	EX_Fault
l	<u>.</u>	EXSPI-55 End to End	EVOD: 55 40		w: 2 (r: 1)				
###	Ad	Message Ping	EXSPI-55-1002		c: 4 (r: 2)	Reset		every 1h	EX_Fault

## **MS Exchange 5.5 Schedule Data Collection Templates**

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9								
	Template Group	Tempiate	Description	Perfmon Counter	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	581 : MSExchangelS Mailbox Average Local Delivery Time 582 : MSExchangelS Mailbox Average Delivery Time 583 : MSExchangelS Public. Average Local Delivery Time 584 : MSExchangelS Public. Average Delivery Time	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	540 : MSExchangelS Mailbox.Local deliveries 541 : MSExchangelS Mailbox.Messages Delivered 542 : MSExchangelS Mailbox.Messages Sent 543 : MSExchangelS Mailbox.Messages Sent 543 : MSExchangelS Mailbox.Messages Submitted 544 : MSExchangelS Mailbox.Message Recipients Delivered	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	Doo: McCaclanged Public Messages Delivered 551: MSExchangelS Public Messages Sent 552: MSExchangelS Public Messages Submitted 553: MSExchangelS Public Message Recipients Delivered	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	Queue Length - MSExchangeMTA Deferred Delivery Msgs 571 : MSExchangeIS Mailbox.Send Queue Size 572 : MSExchangeIS Mailbox Receive Queue Size 573 : MSExchangeIS Public.Send Queue Size 574 : MSExchangeIS Public.Send Queue Size 574 : MSExchangeIS Public.Receive Queue Size 574 : MSExchangeIS	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	530 : MSExchangeMTA.Inbound Messages Total 531 : MSExchangeMTA.Outbound Messages Total 532 : MSExchangeMTA.Total Recipients Inbound 533 : MSExchangeMTA.Total Recipients Inbound 534 : MSExchangeMTA.Total Recipients Outbound 534 : MSExchangeMTA.Inbound Bytes Total 535 : MSExchangeMTA.Outbound Bytes Total 520 : MSExchangeMTA.Outbound	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	Count 521 : MSExchangelS.User Count	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	590 : MSExchangelMC.Inbound Messages Total 591 : MSExchangelMC.Outbound Messages Total 592 : MSExchangelMC.Total Inbound Kilobytes 593 : MSExchangelMC.Total Outbound Kilobytes 594 : MSExchangelMC.Total Inbound Recipients 595 : MSExchangelMC.Total Inbound Recipients Outbound Recipients	Delta/h	6:00-18:00 hourly, M-F		S: Exchange Messaging Trends for all Servers D: Exchange IMS Messaging Trends
AO	EXSPI-55 Internet Mail Services	EXSPI-55-DC- IMS Queue Length	vol. of messages processed by the IMS	600 : MSExchangelMC.Total Messages Queued	Average/h	6:00-18:00 10min, M-F	EXSPI_SINGLE	

C a t e g o r	Template							
У	Group	Template	Description	Perfmon Counter	Туре	Schedule	Table	Report
AO	EXSPI-55 News Service	EXSPI-55-DC- News Message Volume	Collect data on the vol. of news messages processed by IS	560: MSExchangelS.Newsfeed Messages Sent 561: MSExchangelS.Newsfeed Messages Received 562: MSExchangelS.NNTP Messages Read 563: MSExchangelS.NNTP Messages Posted	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	EXSPI M1002	S: Exchange SLA Message Delivery
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC- Exchange Info	Collect data on Exchange Parameters	655: Server 656: Site 657: Organiztion	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	630: Mailbox size (MB) 631: Number of messages 632: Storage limit 634: Last Logon Date 815: Database Instance	Value	1:00 every Saturday	EXSPI_MULTI	S: Exchange Top 100 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)	610: Physical DB size (EDB) 611: Number of Mailboxes 612: Number of Messages 613: Logical Size 614: MSExchangelS Mailbox.Single Instance Ratio	Value	23:00, M-S	EXSPI_SINGLE	S: Exchange System Information Summary D: Exchange Mailbox Summary D: Exchange Mailbox Usage Trends
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC- Public Folder Data	Collect data about all public folders on the system	640: Folder Size 641: Number of Messages	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)	620: Physical DB size (EDB) 621: Number of Folders 622: Number of Messages 623: Logical Size 624: MSExchangelS Public.Single Instance Ratio	Value	22:00, M-S	EXSPI_SINGLE	S: Exchange System Information Summary D: Exchange Folder Summary D: Exchange Folder Usage Trends
Ad	EXSPI-55 Reporter Collection	EXSPI-55-DC- TrackLog Data	Collect Tracking.Log data	660: Email Senders 661: Email Recipients 662: Email Destinations 663: Email Sources	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

# **MS Exchange 5.5 Monitor Template Specifications**

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

Metric Number:	EXSPI-55-0001					
Name:	Process Monitor					
Description:	Monitors CPU time used by Exchange processes					
Type:	With reset					
Schedule:	Every 5min					
Message Group:	EX_Perf					
Instruction	Counter(s): Process.% Processor Time					
Text:	Probable cause(s): 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.					
	Potential impact: Failure, Performance					
	Suggested action(s):  (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'.					
	NOTE: By default only Exchange processes are monitored. The 'Catch All' supress 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'.					

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Metric Number:	EXSPI-0002
Name:	Inactive Process Monitor
Description:	Monitors the core MS Exchange processes to check that they are using some CPU cycles. A process consistently at 0% could indicate a problem.
Type:	Without Reset
Schedule:	Every 10min
Message Group:	EX_Fault
Instruction Text:	Probable cause(s): Low CPU use during the day on an active system could indicate a problem with the process.
	<b>Potential impact:</b> Failure
	Suggested action(s): (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'.

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

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

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

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

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

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

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

Metric Number:	EXSPI-55-0005
Name:	Low Log File Disk Space
Description:	Monitors the free disk space remaining on the logical disk drive where the transaction log files for the IS public and private databases reside.
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Fault
Instruction Text:	Probable cause(s): The amount of free disk space on the disk drive where the Exchange transaction log files reside is getting low.
	Potential impact: Failure. Exchange will shutdown processing if there is no disk space for additional transaction log files.
	Suggested action(s): (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.

Condition:	EXSPI-55-0005.1: Critical threshold
Severity:	Critical
Threshold:	10.0
Reset Value:	55.0
Duration:	n/a
Message Text:	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)

Condition:	EXSPI-55-0005.2: Warning threshold
Severity:	Warning
Threshold:	20.0
Reset Value:	25.0
Duration:	n/a
Message Text:	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)

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

Metric Number:	EXSPI-55-0006
Name:	Transaction Log File Disc Space
Description:	Monitors the disk space used by the Exchange transaction and reserved transaction log files.
Type:	With Reset
Schedule:	Every day
Message Group:	EX_Fault
Instruction Text:	Probable cause(s): 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).
	A large amount of used disk space could indicate a possible problem with backups.
	Potential impact: Failure
	Suggested action(s):  (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.

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

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

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

Metric Number:	EXSPI-55-0010
Name:	MTA Message Delay
Description:	Monitors the rate of delayed messages being processed in the MTA.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA.Work Queue Length MSExchangeMTA.Deferred Delivery Msgs MSExchangeMTA.Messages/Sec
	Probable cause(s): Delay of messages being processed could indicate problems with system load, the MTA, connectors, or the network.
	Potential impact: Performance
	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) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(3) Verify that there are no network problems.

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

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

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

Metric Number:	EXSPI-55-0011
Name:	MTA Work Queue Length
<b>Description:</b>	Monitors the number of delayed messages being processed in the MTA
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA.Work Queue Length MSExchangeMTA.Deferred Delivery Msgs
	Probable cause(s): Delay of messages being processed could indicate problems with system load, the MTA, connectors, or the network.
	Potential impact: Performance
	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) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(3) Verify that there are no network problems.

Condition:	EXSPI-55-0011.1: Critical threshold
Severity:	Critical
Threshold:	100.0
Reset Value:	80.0
Duration:	10min
Message Text:	EXSPI-55-0011.1: MTA Work Queue Length (<\$VALUE>) too high (>=<\$THRESHOLD>)

Condition:	EXSPI-55-0011.2: Warning threshold
Severity:	Warning
Threshold:	50.0
Reset Value:	40.0
Duration:	10min
Message Text:	EXSPI-55-0011.2: MTA Work Queue Length (<\$VALUE>) too high (>=<\$THRESHOLD>)"

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

Metric Number:	EXSPI-55-0012
Name:	MTA Failed Conversions
Description:	Monitors the ratio of failed and successful conversion of messages from one form to another.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeMTA.Total Failed Conversions MSExchangeMTA.Total Successful Conversions
	<b>Probable cause(s):</b> There may be problems with the MTA converting messages from one format to another.
	Potential impact: Performance/Failure. A high failure rate could indicate problems with the MTA or how messages being received are formatted.
	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.

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

Condition:	EXSPI-55-0012.2: Warning threshold
Severity:	Warning
Threshold:	2.0
Reset Value:	1.0
Duration:	n/a
Message Text:	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)**

Metric Number:	EXSPI-55-0013
Name:	MTA Connection Message Delay
<b>Description:</b>	Monitors the time (secs) since the oldest message in this entity's queue was placed in the queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA Connections.Oldest Message Queued. <instance></instance>
	Probable cause(s): Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.
	A long delay time could indicate problems with connectors, system load, the MTA, or the network.
	Potential impact: Performance/Failure.
	Suggested action(s): (1) Monitor queue length for the specific connection with NT Performance Monitor:
	MSExchangeMTA Connections.Oldest Message Queued. <connection></connection>
	(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.
	(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(4) Verify that there are no network problems.

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

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

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

Metric Number:	EXSPI-55-0014
Name:	MTA Connection Queue Lengths
Description:	Monitors the number of outstanding messages queued for transfer to another Exchange Server.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA Connections.Queue Length. <instance></instance>
	Probable cause(s): Delivery of messages to another Exchange server may be delayed by the MTA because of possible problems with a connection.
	A large queue length could indicate problems with connectors, system load, the MTA, or the network.
	Potential impact: Performance/Failure.
	Suggested action(s): (1) Monitor queue length for the specific connection with NT Performance Monitor:
	MSExchangeMTA Connections.Queue Length. <connection></connection>
	(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.
	(3) Run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	(4) Verify that there are no network problems.

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

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

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

Metric Number:	EXSPI-55-0015
Name:	MTA Failed Outbound Associations
<b>Description:</b>	Monitors the percentage of failed outbound associations from the MTA.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeMTA Connections.Failed Outbound Associations. <instance></instance>
	MSExchangeMTA Connections.Cumulative Outbound Associations. <instance></instance>
	Probable cause(s): 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.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-55-0016
Name:	MTA Rejected Inbound Associations
Description:	Monitors the percentage of rejected inbound remote associations to the MTA.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeMTA Connections.Rejected Inbound Associations. <instance></instance>
	MSExchangeMTA Connections.Cumulative Inbound Associations. <a href="mailto:rinstance">rinstance</a>
	Probable cause(s): There may be problems with the MTA on a remote system making connections to this system.
	A high rejection rate could indicate problems with the local or remote MTA, the connector, or system load.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-55-0017
Name:	MTA Rejected Inbound Messages
Description:	Monitors the percentage of Messages submitted to the MTA that are rejected.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeMTA Connections.Inbound rejected Total. <instance></instance>
	MSExchangeMTA Connections.Inbound Messages Total. <instance></instance>
	Probable cause(s): 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.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-55-0030
Name:	IS Public Average Time for Delivery
Description:	Monitors the average time between the submission of a message to the public information store and submission to the MTA for the last 10 messages
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Public. Average Time for Delivery Probable cause(s): Delivery of public folder messages to other Exchange servers may be delayed by the MTA.  Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.  Potential impact: Performance  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
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Condition:	EXSPI-55-0030.1: Critical threshold
Severity:	Critical
Threshold:	10
Reset Value:	7
Duration:	n/a
Message Text:	EXSPI-55-0030.1: The IS Public Average Time for Delivery (<\$VALUE> secs) for last 10 messages is too high (>=<\$THRESHOLD> secs)

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

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

Metric Number:	EXSPI-55-0031
Name:	IS Public Average Time for Local Delivery
Description:	Monitors the average time between submission of a message to the public nformation store and the delivery to all local recipients (recipients on the same server) for the last 10 messages.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Public.Average Time for Local Delivery
	Probable cause(s): Delivery of public folder messages to local recipients may be delayed by the Information Store.
	Delay of messages being processed could indicate problems with system load or the Information Store.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-55-0032
Name:	IS Public Replication Queue Size
Description:	Monitors the number of replication messages in the public information store's replication receive queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIS Public.Replication Receive Queue Size
	Probable cause(s): Delivery of replication messages to public folders may be delayed.
	A large queue length could indicate problems with system load or the Information Store process.
	Potential impact: Performance
	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.

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

Condition:	EXSPI-55-0032.2:Warning threshold
Severity:	Warning
Threshold:	15
Reset Value:	10
Duration:	n/a
Message Text:	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)**

Metric Number:	EXSPI-55-0033
Name:	IS Public Receive Queue Size
Description:	Monitors the number of messages in the public information store's receive queue
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX-Perf
Instruction Text:	Counter(s):  MSExchangeIS Public.Receive Queue SizeProbable cause(s): Delivery of replication messages to public folders may be delayed.  A large queue length could indicate problems with system load or the Information Store process.  Potential impact: Performance  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.

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

Condition:	EXSPI-55-0033.2: Warning threshold
Severity:	Warning
Threshold:	15
Reset Value:	10
<b>Duration:</b>	n/a
Message Text:	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)

Metric Number:	EXSPI-55-0034
Name:	IS Public Send Queue Size
Description:	Monitors the number of messages in the public information store's send queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIS Public.Send Queue Size
	<b>Probable cause(s):</b> Delivery of replication messages to public folders may be delayed.
	A large queue length could indicate problems with system load or the Information Store process.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-55-0040
Name:	IS Private Average Delivery Time
Description:	Monitors the average time between submission of a message to the mailbox information store and submission to the MTA for the last 10 messages
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIS Private. Average Delivery Time  Probable cause(s): Delivery of messages to other Exchange servers may be delayed by the MTA.  Delay of messages being processed could indicate problems with system load, the Information Store, or the MTA.  Potential impact: Performance  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.

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

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

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

Metric Number:	EXSPI-55-0041
Name:	IS Private Average Local Delivery Time
Description:	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.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIS Private. Average Local Delivery Time
	Probable cause(s): Delivery of messages to local recipients may be delayed by the Information Store.
	Delay of messages being processed could indicate problems with system load or the Information Store.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-55-0042
Name:	IS Private Receive Queue Size
Description:	Monitors the number of messages in the mailbox information store's receive queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s): MSExchangeIS Private.Receive Queue Size
Text:	Probable cause(s): Delivery of messages to mailboxes may be delayed.
	A large queue length could indicate problems with system load or the Information Store process
	Potential impact: Performance
	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.

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

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

## **EXSPI-55-0043 (IS Private Send Queue Size)**

Metric Number:	EXSPI-55-0043
Name:	IS Private Send Queue Size
Description:	Monitors the number of messages in the mailbox information store's send queue.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s): MSExchangeIS Private.Send Queue Size
Text:	Probable cause(s): Delivery of messages to other Exchange servers may be delayed by the MTA.
	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.
	There could be a problem with system load or the MTA process.
	Potential impact: Performance
	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.

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

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

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

Metric Number:	EXSPI-55-0060
Name:	IMS Failed Connections
Description:	Monitors the rate at which SMTP connections to other hosts are failing for the Internet Mail Service.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s):  MSExchangeIMC.Connections Total Failed  MSExchangeIMC.Connections Total Outbound  Failure rate = number failed / total connections made since last checked.
	<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.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that there are no network problems.
	(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.
	(3)Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.
	(4) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.

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

Condition:	EXSPI-55-0060.2: Warning threshold
Severity:	Warning
Threshold:	2
Reset Value:	1
<b>Duration:</b>	n/a
Message Text:	EXSPI-55-0060.2: The rate of Failed IMS Outbound Connections (<\$VALUE> messages) is too high (\\><\$THRESHOLD> messages)

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

Metric Number:	EXSPI-55-0061
Name:	IMS Rejected Connections
Description:	Monitors the rate at which SMTP connections to the Internet Mail Services from other hosts are being rejected.
Туре:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeIMC.Connections Total Rejected MSExchangeIMC.Connections Total Inbound Failure rate = number rejected / total connections made since last checked.
	<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.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that there are no network problems.
	(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.
	(3) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.
	(4) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.

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

Condition:	EXSPI-55-0061.2: Warning threshold
Severity:	Warning
Threshold:	2
Reset Value:	1
<b>Duration:</b>	n/a
Message Text:	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)

Metric Number:	EXSPI-55-0062
Name:	IMS MTS-IN Queue Length
Description:	Monitors the number of messages awaiting final delivery in MS Exchange Server.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIMC.Queued MTS-IN
	Probable cause(s): 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.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that there are no network problems.
	(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.
	(3) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.
	(4) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.

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

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

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

Metric Number:	EXSPI-55-0063
Name:	IMS MTS-OUT Queue Length
Description:	Monitors the number of messages waiting to be converted to Internet Mail format.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIMC.Queued MTS-OUT
	Probable cause(s): 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.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that there are no network problems.
	(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.
	(3) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.
	(4) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.

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

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

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

Metric Number:	EXSPI-55-0064
Name:	IMS Queued Inbound
Description:	Monitors the number of messages from the Internet queued for delivery to the MS Exchange Server.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIMC.Queued Inbound
	Probable cause(s): 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.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that there are no network problems.
	(2) Check other messages in the 'Message Browser' to see if Exchange has been reporting problems with the IMS.
	(3) Enable diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.
	(4) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.

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

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

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

Metric Number:	EXSPI-55-0065
Name:	IMS Queued Outbound
Description:	Monitors the number of messages from MS Exchange Server that are queued for delivery to the Internet.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf

Metric Number:	EXSPI-55-0065
Instruction	Counter(s):
Text:	MSExchangeIMC.Queued Outbound
	Probable cause(s): 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.
	Potential impact: Performance
	Suggested action(s):
	(1) Verify that there are no network problems.
	(2) Run Exchange Administrator and check for 'stuck' messages in the IMS Outbound queue.
	(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).
	(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.
	(4) Enable Diagnostics Logging for the IMS (using Exchange Administrator) to help in troubleshooting.
	(5) Monitor system with Windows Task Manager or NT Performance Monitor to determine if the system is overloaded.

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

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

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

Metric Number:	EXSPI-55-0066
Name:	IMS NDRs Inbound
Description:	Monitors the rate at which non-delivery reports are being generated for inbound mail.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIMC.NDRs Total Inbound MSExchangeIMC.Inbound Message Total Non-delivery rate = number NDRs / total messages sent since last checked.
	<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.
	Potential impact: Performance
	Suggested action(s):
	(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.
	(2) Check other problems in the Message Browser to see if Exchange has been reporting problems with IMS.
	(3) Enable diagnostics logging for IMS (using Exchange Adminstrator) to help in troubleshooting.

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

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

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

Metric Number:	EXSPI-55-0067
Name:	IMS NDRs Outbound
Description:	Monitors the rate at which non-delivery reports are being generated for outbound mail
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIMC.NDRs Total Outbound MSExchangeIMC.Outbound Messages Total
	Non-delivery rate = number NDRs / total messages sent since last checked.
	<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.
	Potential impact: Performance
	Suggested action(s):
	(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.
	(2) Verify that there are no network problems.
	(3) Check other problems in the Message Browser to see if Exchange has been reporting problems with IMS.
	(4) Enable diagnostics logging for IMS (using Exchange Administrator) to help in troubleshooting.

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

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

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

Metric Number:	EXSPI-55-0080
Name:	Newsfeed Rejected Inbound Messages
Description:	Monitors the rate at which inbound newsfeed messages are being rejected because of duplicates or due to errors.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s):
	MSExchangeIS.Newsfeed Inbound Rejected Messages MSExchangeIS.Newsfeed Messages Received
	Potential impact: Performance

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

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

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

Metric Number:	EXSPI-55-0081
Name:	Newsfeed Rejected Outbound Messages
Description:	Monitors the rate at which outbound newsfeed messages are being rejected because of duplicates or due to errors.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeIS.Newsfeed Outbound Rejected Messages MSExchangeIS.Newsfeed Messages Sent
	Potential impact: Performance

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

Condition:	EXSPI-55-0081.2: Warning threshold
Severity:	Warning
Threshold:	2
Reset Value:	1
<b>Duration:</b>	n/a
Message Text:	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)

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

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

#### MS Exchange 5.5 Monitor Template Specifications

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

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

Metric Number:	EXSPI-55-0091
Name:	cc:Mail MTS-OUT Queue Length
Description:	Monitors the number of messages awaiting delivery to Lotus ccMail.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter(s): MSExchangeCCMC.Microsoft Exchange MTS-OUT Potential impact: Performance

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

#### MS Exchange 5.5 Monitor Template Specifications

Condition:	EXSPI-55-0091.2: Warning threshold
Severity:	Warning
Threshold:	20
Reset Value:	15
Duration:	n/a
Message Text:	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)

Metric Number:	EXSPI-0092
Name:	cc:Mail NDRs to cc:Mail
Description:	Monitors the rate at which non-delivery reports are being sent to Lotus cc:Mail from MS Exchange.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s):
	MSExchangeCCMC.NDRs to Lotus cc:Mail MSExchangeCCMC.Messages Sent to Lotus cc:Mail
	Potential impact: Performance

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

#### MS Exchange 5.5 Monitor Template Specifications

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

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

Metric Number:	EXSPI-0093
Name:	cc:Mail NDRs to Exchange
Description:	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus cc:Mail.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction Text:	Counter(s):
	MSExchangeCCMC.NDRs to Microsoft Exchange MSExchangeCCMC.Messages sent to Microsoft Exchange
	Potential impact: Performance

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

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

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

Metric Number:	EXSPI-55-0094
Name:	Lotus Notes Inbound Queued Messages Length
<b>Description:</b>	Monitors the number of messages awaiting delivery to Exchange from Lotus Notes.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeNOTES.Inbound Queued Messages
	<b>Probable cause(s)</b> : The Lotus Notes Connector service has stopped or stalled and is not processing messages.
	Potential impact: Performance
	Suggested action(s):
	<ul><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></ul>
	(3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active.
	(4) Verify that the Connector Processes are active
	(5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector.
	(6) Verify the Notes client can access the mailbox assigned to the Notes connector.
	(7) Stop and re-start the Exchange services from Step (3).

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

Condition:	EXSPI-55-0094.2: Warning threshold
Severity:	Warning
Threshold:	20
Reset Value:	15
<b>Duration:</b>	n/a
Message Text:	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)

Metric Number:	EXSPI-55-0095
Name:	Lotus Notes Outbound Queued Messages Length.
Description:	Monitors the number of messages awaiting delivery to Lotus Notes.
Type:	With Reset
Schedule:	Every 5min
Message Group:	EX_Perf
Instruction Text:	Counter: MSExchangeNOTES.Outbound Queued Messages Probable cause(s): The Lotus Notes Connector service has stopped or stalled and is not processing messages.  Potential impact: Performance Suggested action(s): (1) Verify that the Network is not experiencing any problems. (2) Check for 'stuck' messages in the Connector for Lotus Notes queue. (3) Verify that the Services - Microsoft Exchange Connectivity Controller and Microsoft Exchange Connector for Lotus notes are still active. (4) Verify that the Connector Processes are active (5) Check the 'Event Viewer' to see if Exchange has been reporting problems with the Lotus Notes connector. (6) Verify the Notes client can access the mailbox assigned to the Notes connector. (7) Stop and re-start the Exchange services from Step (3)

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

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

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

Metric Number:	EXSPI-55-0096
Name:	Exchange NDRs sent to Lotus Notes
Description:	Monitors the rate at which non-delivery reports are being sent to Lotus Notes from MS Exchange.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeNOTES.NDRs sent to Lotus Notes MSExchangeNOTES.Messages Sent to Lotus Notes
	Potential impact: Performance

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

#### Chapter 2: MS Exchange 5.5 Templates

### MS Exchange 5.5 Monitor Template Specifications

Condition:	EXSPI-55-0096.2: Warning threshold
Severity:	Warning
Threshold:	2
Reset Value:	1
<b>Duration:</b>	n/a
Message Text:	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)

Metric Number:	EXSPI-55-0097
Name:	Lotus Notes NDRs sent to Microsoft Exchange
Description:	Monitors the rate at which non-delivery reports are sent to MS Exchange from Lotus Notes.
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf
Instruction	Counter(s):
Text:	MSExchangeNOTES.NDRs sent to Microsoft Exchange MSExchangeNOTES.Messages sent to Microsoft Exchange
	Potential impact: Performance

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

#### Chapter 2: MS Exchange 5.5 Templates

### MS Exchange 5.5 Monitor Template Specifications

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

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

Metric Number:	EXSPI-55-0100
Name:	IS User Connection Count Low
Description:	Monitors the number of client processes connected to the information store.
Type:	With Reset
Schedule:	Every 15min
Message Group:	EX_Perf
Instruction	Counter(s): MSExchangeIS.User Count
Text:	Probable cause(s): The number of client processes logged on to the Information Store is low.
	A low user logon count during the day could indicate problems with the Information Store process or network connectivity.
	Potential impact: Performance, Fault
	Suggested action(s): (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.

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

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

Metric Number:	EXSPI-55-0110
Name:	DS Pending Synchronizations
Description:	Monitor directory replication to verify that synchronization updates are being processed efficiently.
Type:	With Reset
Schedule:	n/a
Message Group:	EX_Fault
Instruction	Counter(s):
Text:	MSExchangeDS.Pending Replication Synchronizations
	Probable cause(s): Replication of directory information may be delayed.
	A delay in processing replication updates could indicate problems with system load or the Directory Service process.
	Potential impact: Performance, Fault
	Suggested action(s): (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.

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

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

Metric Number:	EXSPI-55-0111
Name:	DS Remaining Updates
Description:	Monitor directory replication to verify that synchronization updates are being processed efficiently.
Type:	Without Reset
Schedule:	Every 5min
Message Group:	EX_Fault
Instruction	Counter(s):
Text:	MSExchangeDS.Remaining Replication Updates
	Probable cause(s): Replication of directory information may be delayed.
	A delay in processing replication updates could indicate problems with system load or the Directory Service process.
	Potential impact: Performance, Fault
	Suggested action(s): (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.

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

### **EXSPI-55-1001 (Services Monitor)**

Metric Number:	EXSPI-1001
Name:	MSExchange Services Monitor
Description:	Monitors Exchange Server process. Generates event if an Exchange service is currently stopped but configured startup automatic.
Type:	Without Reset
Schedule:	Every 5min
Message Group:	EX_Fault
Instruction Text:	<b>Probable cause(s)</b> : A service marked for automatic start-up is not running.
	Potential impact: Failure
	Suggested action(s):
	(1) Unless the service is known to be down for maintenance, use the Services tool in the Control Panel to re-start the service.
	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.

Condition:	EXSPI-55-1001.1: Major threshold
Severity:	Major
Threshold:	1.000000
Reset Value:	n/a
Message Text:	EXSPI-55-1001: Service <pre>cprefix&gt; <rest>is currently not running (startup config automatic)</rest></pre>

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

Metric Number:	EXSPI-55-1002
Name:	End to End Message Ping Monitor
Description:	Monitors the round trip time for a message
Type:	With Reset
Schedule:	Every 1h
Message Group:	EX_Perf

Metric Number:	EXSPI-55-1002
Instruction Text:	<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.
	Potential impact: Failure or Performance
	Suggested action(s):
	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.
	If the threshold is accurate, then evaluate the following suggestions on the source and destination servers:
	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.
	Select the Performance Monitor 'MS Exchange Server Health' to determine if the message queue to the destination system is large or growing.
	If the queues on either side or large or growing and the systems are not overloaded, run Exchange Administrator and check for 'stuck' messages in the MTA queue.
	If there are no stuck messages, check if there are network problems between the two systems.
	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.

### MS Exchange 5.5 Monitor Template Specifications

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