

IBM 8250 Management Modules Command Quick Reference Guide

SA33-0233-04

This guide provides a quick reference to commands and options when you are operating the following 8250 Management Modules:

- Ethernet Management Module (EMM)
- Token Ring Management Module (TRMM)
- FDDI Management Module (FMM)

This guide includes the following information:

- Terminal Keystroke Functions
- IBM[®] 8250 Management Module Commands

Refer to the *8250 Management Commands Guide* (Document Number SA33-0302) for more information on command use.

Terminal Keystroke Functions

Table 1 is a quick reference for terminal keystrokes and their functions.

Table 1. Terminal Keystroke Functions

Keystroke	Function
Backspace	Moves the cursor back one character and deletes that character.
Ctrl-C	Terminates the current command and returns to a blank command line at any time.
Ctrl-D	Closes a TELNET session.
Ctrl-R	Retypes the previous command string on the command line.
Delete	Same as Backspace.
Enter	Enters the command.
Space Bar	Completes a command through <i>command completion</i> .
?	Displays the available command options.

The command table that follows uses the following notations:

- ¹ Command is only available through Maintenance Mode.
- ² Command is only available using Advanced EMM software (that is, not available using Basic EMM, or other 8250 management modules).
- ³ Command is only available using Advanced TRMM software (that is, not available using Basic TRMM, or other 8250 management modules).
- ⁴ Command is only available using FMM software.

Command	Parameters		
CLEAR (continued)	login	1 to 10 all	
	rmon ⁴	alarm event host matrix ringstation statistics mac_layer statistics promiscuous statistics sourcerouting topN_hosts	all <i>index</i>
	schedule ³	1 to 20 all	
	script ³	1 to 8 all	
	security ^{2, 3} autolearn	<i>slot.all</i> <i>slot.port</i>	mac_address <i>address</i>
	security ^{2, 3} intruder_list		
	security port ^{2, 3}	<i>slot.all</i> <i>slot.port</i>	mac_address <i>address</i>
	tftp result ²		
	threshold ³	all 1 to 10	
	COPY	script	1 to 8
DOWNLOAD	inband ²	all_fddi_port_module ⁴ device ⁴	
	out_of_band ²	boot ^{3, 4} flash ^{3, 4} media ⁴	
LOGOUT			
MAINTAIN			
1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM			

Command	Parameters		
MONITOR (EMM and FMM)	0:05 seconds to 30 minutes	module <i>slot</i> network port <i>slot.port</i>	
MONITOR (TRMM)	device network 0:05 seconds to 30 minutes port <i>slot.port</i>	errors, traffic ² errors, traffic ² station all station <i>mac_address</i>	by_frames, by_mac_address, by_octets
	top_errors ² top_receivers ² top_senders ²	1 to 18, all, last value 1 to 18, all, last value 1 to 18, all, last value	
PING	ip_address name	<i>ip_address</i> <i>host name</i> (EMM only)	<i># of packets, 1 packet</i> <i># of packets, 1 packet</i>
REMOTE_ LOGIN ²	ip_address mac_address name	<i>ip address</i> <i>mac address</i> <i>name</i>	
RESET	concentrator device mastership module power_supply	<i>slot</i>	
RUN SCRIPT	1 to 8		

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters		
REVERT or SAVE	alert all bootp community concentrator device group ³ host login module_port schedule scripts security ² terminal threshold ³ tftp ²		
SET ALERT	authentication change console_display ⁴ filter hello port_filter ⁴ port_up_down filter ^{2, 3} screen script port_up_down		disable, enable disable, enable disable, enable disable, enable disable, enable disable, enable disable, enable disable, enable disable, enable, filter
SET BOOTP ³	power_up_mode server_ip_address	disable, enable <i>ip address</i>	
SET CLOCK	<i>time</i> (hh:mm)	<i>date</i> (yy/mm/dd)	<i>day</i> (day of week)
SET COMMUNITY	all <i>name</i>	<i>ip address</i> , all	all, oldall, oldtrap, read_oldtrap, read_only, read_trap, read_write, trap
SET CONCENTRATOR	platform	8250-006, 8250-006_FT, 8250-017	
1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM			

Command	Parameters	
SET COUNTER	port_statistics	disable, enable
SET DEVICE	beacon_recovery	disable, enable
	beacon_timeout	<i>time</i> (0 to 100 seconds)
	beacon_trunk_retry	<i>value</i> (0 to 255)
	contact	<i>contact name</i>
	default_gateway	<i>ip_address</i>
	ip_address	<i>ip_address</i>
	subnet_mask	<i>hex_mask</i>
		all (EMM and TRMM)
		isolated (EMM)
		network_1 (EMM)
		network_2 (EMM)
		network_3 (EMM)
		token_ring_1 (TRMM)
		token_ring_2 (TRMM)
		token_ring_3 (TRMM)
		token_ring_4 (TRMM)
		token_ring_5 (TRMM)
		token_ring_6 (TRMM)
		token_ring_7 (TRMM)
	diagnostics	disable, enable
	dip_configuration	disable, enable
	location	<i>location name</i>
	monitor_contention	disable, enable
	name	<i>device name</i>
	password (EMM)	administrator user
		<i>password</i>
		<i>password</i>
	reset_mastership	disable, enable
	trap_receive ²	disable, enable
SET DOWNLOAD ²	network	1, 2, 3

1 = Maintenance Mode, 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters		
SET GROUP ³	group1 to group8	mode	disable, enable
		name	<i>name</i>
		network	token_ring_1 (TRMM) token_ring_2 (TRMM) token_ring_3 (TRMM) token_ring_4 (TRMM) token_ring_5 (TRMM) token_ring_6 (TRMM) token_ring_7 (TRMM)
		port	<i>slot.port</i>
SET HOST	<i>host name</i>	<i>ip address</i>	
SET LOGIN ⁴	administrator password super_user user access super_user		
SET MODULE	<i>slot</i>	autopartition_threshold	31_collisions 63_collisions 127_collisions 255_collisions
	<i>slot</i>	cable_impedance	100ohm, 150ohm
	<i>slot</i> connector 1 <i>slot</i> connector 2	network	ethernet_1 ethernet_2 ethernet_3 isolated_1 isolated_2
	<i>slot</i>	crossover	disable enable
	<i>slot</i> (EMM)	fifo_fill_level	7 8
	<i>slot</i> (TRMM)	locally_administered_address	<i>mac address</i>
	<i>slot</i>	low_light_warning	disable, enable

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters			
SET MODULE (continued)	<i>slot</i>	mac_address_type	burned_in locally_administered	
	<i>slot</i>	mac_path	primary, secondary	
	<i>slot</i>	master_network ³	isolated token_ring_1 token_ring_2 token_ring_3 token_ring_4 token_ring_5 token_ring_6 token_ring_7 no_change	
	<i>slot</i>	mastership_priority	1 to 10	
	<i>slot</i>	module_bypass	bypass, insert	
	<i>slot</i>	network	ethernet_1 ethernet_2 ethernet_3 fddi_1 fddi_2 fddi_3 fddi_4 isolated token_ring_1 token_ring_2 token_ring_3 token_ring_4 token_ring_5 token_ring_6 token_ring_7	
	<i>slot</i>	per_port_counters_connector	1, 2	
	<i>slot</i>	probe_mode	disable, enable	
	<i>slot</i>	ring_speed	4mbps, 16mbps	
	1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM			

Command	Parameters		
SET PORT	<i>slot.2</i>	active_connector	db9, rj45
	<i>slot.all</i>	alert	disable, enable
	<i>slot.port</i>		
	<i>slot.port</i>	alert_filter	disable, enable
	<i>slot.all</i>		
	<i>slot.port</i>	collision	normal, alternate
	<i>slot.all</i>		
	<i>slot.port</i>	half_step	disable, enable
	<i>slot.all</i>		
	<i>slot.port</i>	high_power	disable, enable
	<i>slot.all</i>		
	<i>slot.port</i>	link_integrity	disable, enable
	<i>slot.all</i>		
	<i>slot.port</i>	low_light_warning	disable, enable
	<i>slot.all</i>		
<i>slot.port mode</i>	disable, enable		
<i>slot.all mode</i>	disable, enable		
<i>slot.port mode</i>	local, remote		
<i>slot.all mode</i>	local, remote		
<i>slot.port mode</i>	redundant		<i>slot.port</i>
<i>slot.all mode</i>	non_redundant		<i>slot.port</i>
<i>slot.port mode</i>	remote_diagnostics		
<i>slot.all mode</i>	non_remote_diagnostics		
<i>slot.port mode</i>	remote_failure_signaling		

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters		
SET PORT (continued)	<i>slot.port</i> <i>slot.all</i>	network	isolated ethernet_1 ethernet_2 ethernet_3 front_panel token_ring_1 token_ring_2 token_ring_3 token_ring_4 token_ring_5 token_ring_6 token_ring_7
	<i>slot.port</i> <i>slot.all</i>	personality	sddi, tpddi
	<i>slot.port</i> <i>slot.all</i>	receive_jabber	disable, enable
	<i>slot.port</i> <i>slot.all</i>	ring_speed	4mbps, 16mbps
	<i>slot.port</i> <i>slot.all</i>	sqe_test	disable, enable
	<i>slot.port</i> <i>slot.all</i>	squelch	low, normal
	<i>slot.port</i> <i>slot.all</i>	station_type	mac_present mac_not_present
	<i>slot.port</i> <i>slot.all</i>	type	master, slave
SET RMON	alarm	token_ring_(ml or ps)stat.1 rising <i>threshold event</i> falling <i>threshold event time trigger alarm_type</i>	
	event	log log_trap none trap	<i>community</i>
	host	interface <i>interface</i>	
	matrix	interface <i>interface</i>	
	ringstation	interface <i>interface</i>	

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters		
SET RMON (continued)	statistics	mac_layer promiscuous sourcerouting	
	topn_hosts	host index	in_octets in_packets out_bccasts out_errors out_mcasts out_octets out_packets
			hh:mm
SET SCHEDULE ³	exclude_date	mm/dd, holiday	1 to 8, all
	include_date	mm/dd, holiday	1 to 8, all
1 to 20, all	exclude_day	sunday	1 to 8, all
	include_day	monday	1 to 8, all
		tuesday	1 to 8, all
		wednesday	1 to 8, all
		thursday	1 to 8, all
		friday	1 to 8, all
		saturday	1 to 8, all
	mode	enable disable	1 to 8, all
	remove_date	mm/dd	1 to 8, all
	time	hh:mm	1 to 8, all
SET SCHEDULE HOLIDAY ³	include date		all, mm/dd
	remove_date		all, mm/dd
SET SCHEDULE STARTUP_REPLAY_TIME ³		1 to 24 since_midnight	
SET SCHEDULE ³	weekday	include_day, remove_day	all
	weekend	include_day, remove_day	sunday monday tuesday wednesday thursday friday saturday

1 = Maintenance Mode, 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters			
SET SCRIPT ³	1 to 8	delete	1 to 15	
		insert	1 to 15	
		name	<i>name</i>	
		overwrite	1 to 15	
SET SECURITY ³	autolearn ²	<i>slot.port</i>	capture	disable
		<i>slot.all</i>		enable
		<i>slot.port</i>	download	
		<i>slot.all</i>		
		<i>slot.port</i>	mac_address	<i>address</i>
		<i>slot.all</i>		
		<i>slot.port</i>	mask	disable
		<i>slot.all</i>		enable
SET SECURITY AUTOLEARN ²	<i>slot.port</i>	capture	disable, enable	
		mask	disable, enable	
		download	disable, enable	
		mac_address	<i>mac_address</i>	
SET SECURITY PORT ²	<i>slot.port</i>	mac_address	<i>mac_address</i>	
		mode	disable, enable	
		action_on_intrusion	disable_and_trap	
			disable_only	
			no_action	
			trap_only	
		security_type	eavesdropping_only	
			intrusion_only	
			full	
SET TERMINAL	auxiliary ⁴ console	baud	300, 1200, 2400, 4800, 9600, 19200, 38400	
		data_bits	7, 8	
		hangup	disable, enable	
		parity	even, odd, none	
		stop_bits	1, 2	

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters		
SET TERMINAL (continued)	console auxiliary ⁴	terminal_type	<i>terminal type</i>
	baud	300, 1200, 2400, 4800, 9600, 19200, 38400	
	data_bits	7, 8	
	hangup	disable, enable	
	parity	even, odd, none	
	prompt	<i>prompt</i>	
	stop_bits	1, 2	
	terminal_type	<i>terminal type</i>	
	timeout	<i>0 to 30 minutes</i>	
SET TFTP	file_name	<i>file name</i>	
	file_type	ascii, boot, flash	
	server_ip_address	<i>ip address</i>	
SET THRESHOLD ³ index number	action	script_only script_trap trap_only	1 to 8
	description	<i>description</i>	
	interval	<i>interval</i>	hours, minutes, seconds
	mode	disable, enable	
	network	broadcast_frames frames hard_errors multicast_frames octets soft_errors	

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters		
SET THRESHOLD ³ index number (continued)	port station	<i>slot.port</i> <i>mac address</i>	broadcast_frames errors frames multicast_frames octets
	value	<i>value</i>	
SET TRUNK <i>slot</i>	ring_in. <i>trunk</i> ring_out. <i>trunk</i>	cable_monitor	disable, enable
	ring_in.1 ring_out.1	compatibility_mode	disable, enable
	ring_in.2 ring_out.2	external_beacon_recovery	exists, non_exists
	ring_in. <i>trunk</i> ring_out. <i>trunk</i>	mode	disable, enable
	ring_in. <i>trunk</i> ring_out. <i>trunk</i>	mode	redundant, non_redundant
	ring_in. <i>trunk</i>	network_map	external, internal
1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM			

Command	Parameters																																								
SHOW	alert bootp clock community concentrator counter <table border="0" style="margin-left: 20px;"> <tr> <td>device</td> <td>all, slot</td> </tr> <tr> <td>module</td> <td></td> </tr> <tr> <td>network</td> <td>errors traffic</td> </tr> <tr> <td>port</td> <td>errors traffic</td> </tr> <tr> <td>port_statistics</td> <td>slot.all slot.port</td> </tr> </table> counter station <table border="0" style="margin-left: 20px;"> <tr> <td>MAC Address</td> <td>errors</td> </tr> <tr> <td>all</td> <td>traffic³</td> </tr> </table> counter top_errors <table border="0" style="margin-left: 20px;"> <tr> <td>by_frames</td> <td># of stations</td> </tr> <tr> <td>by_mac_address</td> <td>all</td> </tr> </table> counter top_receivers top_senders <table border="0" style="margin-left: 20px;"> <tr> <td>by_frames</td> <td># of stations</td> </tr> <tr> <td>by_mac_address</td> <td>all</td> </tr> <tr> <td>by_octets</td> <td></td> </tr> </table> device download ² <table border="0" style="margin-left: 20px;"> <tr> <td>network</td> <td></td> </tr> </table> event_log group ² <table border="0" style="margin-left: 20px;"> <tr> <td>all</td> <td></td> </tr> <tr> <td>group1 to group8</td> <td></td> </tr> </table> host log <table border="0" style="margin-left: 20px;"> <tr> <td>event_log</td> <td></td> </tr> <tr> <td>system_event</td> <td></td> </tr> <tr> <td>trap_log</td> <td></td> </tr> </table> login module <table border="0" style="margin-left: 20px;"> <tr> <td>all</td> <td>verbose, no_verbose</td> </tr> <tr> <td>slot</td> <td></td> </tr> </table>	device	all, slot	module		network	errors traffic	port	errors traffic	port_statistics	slot.all slot.port	MAC Address	errors	all	traffic ³	by_frames	# of stations	by_mac_address	all	by_frames	# of stations	by_mac_address	all	by_octets		network		all		group1 to group8		event_log		system_event		trap_log		all	verbose, no_verbose	slot	
device	all, slot																																								
module																																									
network	errors traffic																																								
port	errors traffic																																								
port_statistics	slot.all slot.port																																								
MAC Address	errors																																								
all	traffic ³																																								
by_frames	# of stations																																								
by_mac_address	all																																								
by_frames	# of stations																																								
by_mac_address	all																																								
by_octets																																									
network																																									
all																																									
group1 to group8																																									
event_log																																									
system_event																																									
trap_log																																									
all	verbose, no_verbose																																								
slot																																									

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters														
SHOW (continued)	<table border="0"> <tr> <td>network_paths</td> <td>all ethernet fddi token_ring</td> </tr> <tr> <td>port</td> <td><i>slot.all</i> <i>slot.port</i> no_verbose verbose</td> </tr> <tr> <td>rmon</td> <td>alarm event host matrix ringstation topn_hosts distribution promiscuous host data <i>control_index</i> log data matrix data <i>index</i> ringstation data <i>index</i> statistics mac_layer promiscuous sourcerouting topn_hosts data <i>index</i></td> </tr> </table>	network_paths	all ethernet fddi token_ring	port	<i>slot.all</i> <i>slot.port</i> no_verbose verbose	rmon	alarm event host matrix ringstation topn_hosts distribution promiscuous host data <i>control_index</i> log data matrix data <i>index</i> ringstation data <i>index</i> statistics mac_layer promiscuous sourcerouting topn_hosts data <i>index</i>								
network_paths	all ethernet fddi token_ring														
port	<i>slot.all</i> <i>slot.port</i> no_verbose verbose														
rmon	alarm event host matrix ringstation topn_hosts distribution promiscuous host data <i>control_index</i> log data matrix data <i>index</i> ringstation data <i>index</i> statistics mac_layer promiscuous sourcerouting topn_hosts data <i>index</i>														
	<table border="0"> <tr> <td></td> <td>data <i>index</i> all</td> </tr> <tr> <td></td> <td>all by_creation_order by_mac_address mac_address <i>mac</i> <i>address</i></td> </tr> <tr> <td></td> <td>all <i>index</i></td> </tr> <tr> <td></td> <td>all by_insertion_order <i>index</i> involving <i>mac</i> <i>address</i></td> </tr> <tr> <td></td> <td>all order host_address <i>mac_address</i></td> </tr> <tr> <td></td> <td>control <i>index</i> data</td> </tr> <tr> <td></td> <td><i>all</i> data_index</td> </tr> </table>		data <i>index</i> all		all by_creation_order by_mac_address mac_address <i>mac</i> <i>address</i>		all <i>index</i>		all by_insertion_order <i>index</i> involving <i>mac</i> <i>address</i>		all order host_address <i>mac_address</i>		control <i>index</i> data		<i>all</i> data_index
	data <i>index</i> all														
	all by_creation_order by_mac_address mac_address <i>mac</i> <i>address</i>														
	all <i>index</i>														
	all by_insertion_order <i>index</i> involving <i>mac</i> <i>address</i>														
	all order host_address <i>mac_address</i>														
	control <i>index</i> data														
	<i>all</i> data_index														

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

Command	Parameters			
SHOW (continued)	schedule	all		
		holiday		
		1 to 8		
		startup_replay_time		
		weekday		
		weekend		
		script	all	no_verbose, verbose
			1 to 8	
		security	autolearn	
			intruder_list	
security port	all	no_verbose, verbose		
	<i>slot.all</i> <i>slot.port</i>			
terminal				
tftp				
threshold	1 to 10			
	all			
trunk <i>slot</i>	all	no_verbose, verbose		
	backplane_in			
	backplane_out			
	ring_in. <i>trunk</i>			
	ring_out. <i>trunk</i>			
SHOW NETWORK_ MAP	fddi token_ring	logical		
		mac_address	<i>mac address</i>	
		physical		
		port		
ethernet	all	mac_address <i>address</i>	by_frames,	
		module <i>slot</i>	by_mac_address,	
		port <i>slot.port</i>	by_octets,	
			by_port,	
			by_time	
1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM				

Command	Parameters
SMT_GET	access mac_timers path_timers user_data
SMT_SET	access permissive restrictive mac_tmax <i>number</i> (10.4860 to 1342.1777 milliseconds) mac_tmin <i>number</i> (0 to 5.24288 milliseconds) mac_treq <i>number</i> (0 to 1342.1777 milliseconds) path_tvx <i>number</i> (0.02048 to 5.24288 milliseconds) user_data <i>data</i>
TELNET	<i>ip address</i> <i>port number</i> <i>telnet port</i> host name 23

1 = Maintenance Mode , 2 = Advanced EMM, 3 = Advanced TRMM, 4 = FMM

