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Scalable Patforms CLI Reference Guide		Global execcution options
Version R81.20	`g_all, g_allc, g_alls <commands>`	Run command on all UP SGM
Plataform: Maestro	`g_all -a -b <SGM_ID>`	Run on all SGM, including DOWN

Scalable Platform SME	**Rev 007**	`g_<command>`	Some commands have g_variants
`member < 1_XX | 2_XX | cmm | ssmX >`	Navigate to other SGMs, SSMs, or active CMM	`asg_cp2blades -b <SMG_ID><file>`	Copy file to certain SGM, use -b all for all SMG
`m <1_XX | 2_XX | cmm | ssmX >`	# member 2_03 to change to Chassis 2 SGM3	`set blade-range <CH>_<SGM>,<CH_SGM>…`	Set SGM range for commands (gclish)
	# m 1_08 to change to Chassis 1 SGM 8	`gexec -b <SMG_ID> -c "<command>"`	execute a command in one SGM from other with jump
	# m ssm1 to change to orchestrator 1 from SGM	`asg log --file audit`	Check audit logs
	only in expert mode	`asg_unique_mac_utility`	Configure unique MAC per SG
`set global-mode [on | off ]`	Change between gclish and local clish	`g_fw vsx resctrl monitor enable`	Enable the resctrl
		`long_running_procs`	List the process running for long time
		`asg_log_servers`	Configure log distribution
		`add maestro auto-scale security-group-id`	Configure the Scale up policy rules:
		`set maestro auto-scale security-group-id`	Define spare units for scale
		`service masd status`	Check Auto Scale status on orchestrator
		`service masd status`	Check Auto Scale status on SG
		`set maestro fastforward rulebase-prefix enable prefix`	Set fastforward on Security Group
		`set maestro fastforward state on/off`	Enable/Disable fastforward on Security Group
		`tor_util fastforward`	Fastforward rules on orchestrator
		`g fw ctl set int fw cluster use delay sync 1/0`	Enable/disable delay notification
		`asg_session_control`	Session Rate Throttling.
		SGM String	
		`<command> -b <SGM_ID>`	Some commands take SGM string

General System Information		**Examples**	
`asg diag verify`	Global diagnostics - Should be run regulary (run in expert)	`g_all -b 1_1, 1_4 <command>`	Only members 1_1 and 1_4
`show smo verifiers [ last-run | lists | periodic | print | report ]`	asg diag verify from clish	`g_allc -b 1_01,1_03-1_05,1_08 <command>`	1_01, 1_03, 1_04, 1_05, and 1_08
`asg diag list`	list available diagnostics (run in expert)	`g_alls -b chassis1 <command>`	All UP members on Chassis 1
`show smo verifiers list`	list available diagnostics (run in clish)		

`cpview`	Generally same as maintrain (show only local SGM)	`Configuration and policy`	
`asg stat [-v]`	Security Group status overview (Whole SG)	`cpha blade config    pull config    all <SyncIP>`	Pull config from another SGM
`asg monitor [-v}`	Monitor system status	`cpha_blade_config full_sync <SyncIP>`	Fix Synchronization pnote
`asg resource [-v]`	SGM resource use (Disk space, RAM, etc)	`>set smo image auto-clone state on`	Enable image auto-clone
`asg_info - [ f | q | all | c | I | m | a | -user conf | d | h | v | u | uk | e | -list ]`	System info collection such cpinfo fo scalable plataforms defualt located on /var/log/	`Turn this off after using. Do not leave image auto-clone running indefinitely`	
`asg if`	System interface info	`> show smo image md5sum`	Show current image md5sum
`asg_bond`	System bonding information	`asg_policy unload` (BE VERY CAREFUL)	Unload policy for all SGMs
`asg_route`	Routing table information and revision for inconsistences	`asg_policy verify [ -v ]`	View installed policy for each SGM
`asg perf [ -v -a -p -k]`	Monitor system performance	`asg alert`	Configure Chassis Alerts (SNMP/SMS)
`asg_cores_util`	Show CPU utilization on all active members	`g update conf file        <file name> <var>=<value>`	Set kernel parameter for all members
`drop_monitor`	Monitor for dropped packets in real-time (replace asg drop_monitor)	`g_all fw ctl set -f int <var>=<value>`	Set parameter on the fly and add the entry on fwkern.conf
`asg_arp [-v]`	Show ARP table per SGMasg_drop_monitor	`asg_cores_stats`	Affinity config info for all members
`asg_serial_info`	Show serial numbers	`asg stat -i all_sync_ips`	Get a list of all sync IP on SG
`cat /etc/shmm.cfg | grep CHASSID`	Check CMM ID	`g_cat /etc/xfer_file_list`	File with related configuration
		`asg_blade_config get_smo_ip`	Get the IP of the Sync interface on the SMO
		`Asg_clear_table -b SGM_ID`	Delete connection table on SGM
`ccp_analyzer`	Used to process CCP traffic (-h for usage)	**Chassis/SGM Control**	
`g_cpmq`	Check / Set Multi-Queue Configuration Globally	`asg stat -i tasks`	Used to identify the SMO and more
`interface_verify -v`	Look for RX and TX drops on interfaces	`asg stat -I sgm_info`	Displays configured SGMs tasks and information
`asg_provision`	Review buid and hotfix matching in Whole Security Group	`set chassis id <id> admin-state <up|down>`	Administratively down/up a chassis
`core_dump_verifier -v`	Review if core dump exist	`g_clusterXL_admin -b <SGM_IDs> <up|down>`	Administratively down/up an SGM
		`g_reboot -b <Blade>`	Reboot SGM(s) #g_reboot -b chassis1 #g_reboot -b 1_01,1_3,1_5
		`asg hw_monitor`	Chassis Only
		`set chassis high-availability mode <0-3>`	Set chassis HA mode
		`set chassis high-availability factors <x>`	See admin guide for additional syntax
		`set chassis id [1|2] general unique_ip {IP}`	Configure UIPC
		`[add|delete] smo security-group <SGM_IDs>`	Modify the current Security Group
		`show smo security-group`	Show the current Security Group

		`asg_mac_resolver`	Check to make sure all types of mac are correct (BMAC, VMAC and SMAC)
		`smo security-group sgm-weight id {default | 0-512}`	Display/configure weight per SGM into SG
		`set smo security-group sgm-weight apply`	Apply configuration for sgm-weight
		`set config-lock on override`	Protect the Gaia gSlich database
		`fw ctl iflist`	List all interface on security group using gClish

		`fw dbgfile collect -f <Debug Output File> [-buf <Buffer Size>] [-m <Debug Module 1> <Debug Flags 1> [-m <Debug Module 2> <Debug Flags 2>] ... [-m <Debug Module N> <Debug Flags N>]]`
		
		`Sample: fw dbgfile collect -f <Debug Output File> [-buf <Buffer Size>] [-m <Debug Module 1> <Debug Flags 1> [-m <Debug Module 2> <Debug Flags 2>] ... [-m <Debug Module N> <Debug Flags N>]]`
			how the Security Group inspect traffic using gclish

		`asg_config`	Show/save the current configuration on security group.

Distribution Mode Commands		Orchestrator Commands	
`dxl stat [ -v ]`	Show distribution percetages	`rule_hits all`	Distribution rule hits
`{set /show } distribution configuration [auto-topology | manually-general]`	Display / Change distribution mode	`sx_api_ports_dump.py`	Ports status (up/down, speed, more)
`dxl cal <src><dst><interface>`	Calculate the distribution decision Need both direction for correction	`orch_stat -p`	same as sx_api_ports_dump.py with highlights
`{set / show} distribution l4-mode [enable | disabled]`	Display / Change L4 mode (must be disabled for all deployments)	`sx_api_lag_dump.py`	BPEth Bonds status Lagged
`dxl dist`	Show all interfaces and distribution modes	`orch_stat`	BPEth Bonds status Lagged
Packet Captures and Troubleshooting		`lldpctl`	LLDP peers (GW, other MHO)
`asg search -v`	Search SGM for a specific connection	`orch_stat -d`	Display information about MHO configuration SiteID, MHOID, more
`g_fw ctl zdebug drop`	zdebug drop across all UP SGMs	`orchd restart`	Restart services on Orchestrator
`g_fw ctl zdebug -m cluster + correction`	Correction debug across all UP SGMs	`orchd activate`	By default uplink ports are admin down
`asg log <audit|smd|ports> {-b <SGM_IDs>}`	View logs from all SGMs	`m <SG_ID> <SGM_ID>` `Example: # m 1 3`	Navigate to any SG, SGM from MHO Connect to Security Group 1, SGM3
`asg_conns [-b <SGM_IDs>]`	Show connections per SGM		
`g_tcpdump -ni host <src> and host <destination>`	Search SGM for specific connection, TCPDUMP might increase load traffic use CPPCAP sk141412	`{show/set } maestro configuration orchestrator-amount`	Display / Configure orchestrator amount per site
		`{show/set } maestro configuration orchestrator-site-amount`	Display / Configure site amount
VSX specific Commands		`{show/set } maestro configuration orchestrator-site-id`	Display / Configure Site ID

`asg_collect_vsx_logs`	Collect system-wide VSX-specific logs	`{show/set } maestro configuration orchestrators base-vlan`	Display / Configure Orchestrator related vlan configuration
`asg if vsx_topology`	Show VSX-specific topology info	`{show/set } maestro configuration orchestrator-member-id`	Display / Configure Orchestrator ID
`asg_span_port`	Span port (bridge mode VS only)	`{show/set } maestro lsp [configuration	history status]`	Display / Configure Link State Propagation
`asg stat vs {run in vs context too}`	info, problems, and SGM states	`{show/set } maestro configuration-site-vlan`	Display / Configure VLAN ID over site sync
`vsx stat -v`	Show Virtual Systems info	`{show/set } maestro configuration security-appliances inter-site [base-vlan	vlan]`	Display / Configure vlan ID for communication inter-sites
`set chassis high-availability mode …`	Change HA mode (VSLS is mode 3)	`{show/set } maestro port [admin-state	auto-negotiation	mtu	optic-info	qfsp-mode |type |vlans`	Display / Configure specific port (in order to change one port type like uplink to mgmt, that port must be unassigned to security group.
`vs_all <command>`	Run command on each VS	`{show/set } maestro security-group [id	verify-new-configuration]`	Verifies the new configuration in this Security Group that was not applied yet
		`tor_util set_qsfp_auto_config off`	In case of 40Gb splitter. Split is off by default, requiere restart orch services sk169372
		`show maestro security-group verify-new-config`	Display all changes before to be submited
		`set maestro security-group apply-new-config`	Apply new configuration to all security groups
VSLS specific commands		**SGM Commands**	
`show configuration vsls`	show vsls configuration		
`set chassis vsls default mode`	per VS primay chassis override	`lldpneighbors`	List discovered devices by Link Layer Discovery Protocol [use on SGM]

`fwha_mbs_vsls_chassis_sgm_ratio`	Kernel param - SGM ratio for chassis failover	`smo_rest_util`
		Examples:
		`smo_rest_util -c show-ports-link-state -i ssm2`
		`smo_rest_util -c show-connectivity-test -i ssm[1|2]`
			Use the SMO REST utility

`asg stat vs all`	Show active chassis and config on each VS	`{show/set } smo security-group site-amount`	If Dual site is configured on the MHO is must also be configured on the gateway.
		`g_reboot -b <ID>`	Reboot specific SGM
Multiple Security Groups (MSG) – For Chassis only, not Maestro		`g_reboot -a`	Reboot all SGM including DOWN
`$FWDIR/log/cpha_policy.log`	Contains important MSG messages	**Image Management**	
`fw ctl zdebug -m cluster + multi_sg`	debug flag for MSG flows	`show snapshots`	List current snapshots (gclish)
`cphaprob multi_sg list_active_sync_ips`	Show all MSG members	`[add	delete] snapshot <name>`	Local clish is recommended
`sgrm probe`	Show IP of current SGRM	`watch -d "g_all dbget snap:show:progress"`	View snapshot import progress
`$FWDIR/log/blade_config`	Contains important boot information	`set snapshot export <name> path <paht>`	Export snapshot to defined path
`show smo multiple-security-groups overview [interfaces	ssm-conf	system]`	Show MSG related configurations		