System Command Reference

Command Hierarchies

Configuration Commands

System Information Commands

```
config
    — system
        — atm
            — atm-location-id
            — oam
                — loopback-period period
                — retry-down retries
                — retry-up retries
        — boot-bad-exec file-url
        — no boot-bad-exec
        — boot-bad-execfile-url
        — no boot-bad-exec
        — chassis-mode {chassis-mode} [force]
        — clli-code clli-code
        — no clli-code
        — config-backup count
```

— **no config-backup**
— **contact** *contact-name*
— **no contact**
— **coordinates** *coordinates*
— **no coordinates**
— **dns**
    — **address-pref** {**ipv4-only** | **ipv6-first**}
    — **no address-pref**
    — **dnssec**
        — **ad-validation** *fall-through|drop*
— [**no**] **ad-validation**
— **lacp-system-priority** *lacp-system-priority*
— **no lacp-system-priority**
— **load-balancing**
    — [**no**] **l4-load-balancing**
    — **lsr-load-balancing** {**lbl-only|lbl-ip|ip-only|eth-encap-ip**}
    — **no lsr-load-balancing**
    — [**no**] **mc-enh-load-balancing**
    — [**no**] **service-id-lag-hashing**
    — [**no**] **system-ip-load-balancing**
— **location** *location*
— **no location**
— **name** *system-name*
— **no name**

System Alarm Commands

config
— **system**
— **thresholds**
— **cflash-cap-alarm** *cflash-id* **rising-threshold** *threshold* [**falling-threshold** *threshold*] **interval** *seconds* [*rmon-event-type*] [**startup-alarm** *alarm*-type]
— **no cflash-cap-alarm** *cflash-id*
— **cflash-cap-warn** *cflash-id* **rising-threshold** *threshold* [**falling-threshold** *threshold*] **interval** *seconds* [*rmon-event-type*] [**startup-alarm** *alarm*-type]
— **no cflash-cap-warn** *cflash-id*
— **kb-memory-use-alarm rising-threshold** *threshold* [**falling-threshold** *threshold*] **interval** *seconds* [*rmon-event-type*] [**startup-alarm** *alarm-type*]
— **no kb-memory-use-alarm**
— **kb-memory-use-warn rising-threshold** *threshold* [**falling-threshold** *threshold*] **interval** *seconds* [*rmon-event-type*] [**startup-alarm** *alarm-type*]
— **no kb-memory-use-warn**
— **memory-use-alarm rising-threshold** *threshold* [**falling-threshold** *threshold*] **interval** *seconds* [*rmon-event-type*] [**startup-alarm** *alarm*-type]
— **no memory-use-alarm**
— **memory-use-warn rising-threshold** *threshold* [**falling-threshold** *threshold*] **interval** *seconds* [*rmon-event-type*] [**startup-alarm** *alarm*-type]
— **no memory-use-warn**
— [**no**] **rmon**
— **alarm** *rmon-alarm-id* **variable-oid** *oid-string* **interval** *seconds* [*sample-type*] [**startup-alarm** *alarm-type*] [**rising-event** *rmon-event-id* **rising-threshold** *threshold*] [**falling event** *rmon-event-id* **falling-threshold** *threshold*] [**owner** *owner-string*]
— **no alarm** *rmon-alarm-id*
— **event** *rmon-event-id* [*event-type*] [**description** *description-string*] [**owner** *owner-string*]
— **no event** *rmon-event-id*

Persistence Commands

config
— **system**
— **persistence**
— **ancp**
— **description** *description-string*
— **no description**
— **location** *cflash-id*
— **no location**
— **application-assurance**
— **description** *description-string*
— **no description**
— **location** *cflash-id*
— **no location**
— **dhcp-server**
— **description** *description-string*
— **no description**
— **location** *cflash-id*
— **no location**
— **nat-port-forwarding**
— **description** *description-string*
— **no description**
— **location** *cflash-id*
— **no location**
— **python-policy-cache**
— **description** *description-string*
— **no description**
— **location** *cflash-id*
— **no location**
— **subscriber-mgmt**
— **description** *description-string*
— **no description**
— **location** *cflash-id*
— **no location**

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PTP Commands

```
config
    — system
        — ptp
            — anno-rx-timeout count
            — no anno-rx-timeout
            — clock-type boundary
            — clock-type ordinary {master|slave}
            — domain domain
            — no domain
            — local-priority local-priority
            — log-anno-interval log-interval
            — no log-anno-interval
            — network-type {sdh | sonet}
            — peer ip-address [create]
            — no peer ip-address
                — log-sync-interval log-interval
                — no log-sync-interval
                — local-priority local-priority
                — [no] shutdown
            — peer-limit limit
            — no peer-limit
            — port port-id [create]
            — no port port-id
                — address {01:1b:19:00:00:00|01:80:c2:00:00:0e}
                — no address
                — local-priority local-priority
                — log-delay-interval log-interval
                — log-sync-interval log-interval
                — no log-sync-interval
                — master-only {true | false}
                — [no] shutdown
            — priority1 priority
            — no priority1
            — priority2 priority
            — no priority2
            — profile {g8265dot1-2010 | ieee1588-2008 | g8275dot1-2014}
            — [no] shutdown
```

System Time Commands

root
— **admin**
— **set-time** [*date*] [*time*]
config
— **system**
— **time**
— [**no**] **ntp**
— [**no**] **authentication-check**
— **authentication-key** *key-id* **key** *key* [**hash** | **hash2**] **type** {**des** | **message-digest**}
— **no authentication-key** *key-id*
— [**no**] **broadcast** [**router** *router-name*] {**interface** *ip-int-name*} [**key-id** *key-id*] [**version** *version*] [**ttl** *ttl*]
— **broadcastclient** [**router** *router-name*] {**interface** *ip-int-name*} [**authenticate**]
— [**no**] **multicast** [**version** *version*] [**key-id** *key-id*]
— [**no**] **multicastclient** [**authenticate**]
— [**no**] **ntp-server** [**authenticate**]
— [**no**] **peer** {*ip-address* | *ipv6-address*} [**version** *version*] [**key-id** *key-id*] [**prefer**]
— [**no**] **server** {*ip-address* | *ipv6-address* | *ptp*} [**key-id** *key-id*] [**version** *version*] [**prefer**]
— [**no**] **shutdown**
— [**no**] **sntp**
— [**no**] **broadcast-client**
— **server-address** *ip-address* [**version** *version-number*] [**normal** | **preferred**] [**interval** *seconds*]
— **no server-address** *ip-address*
— [**no**] **shutdown**
— [**no**] **dst-zone** [*std-zone-name* | *non-std-zone-name*]
— **end** {*end-week*} {*end-day*} {*end-month*} [*hours-minutes*]
— **offset** *offset*
— **start** {*start-week*} {*start-day*} {*start-month*} [*hours-minutes*]
— **zone** *std-zone-name* | *non-std-zone-name* [*hh* [*:mm*]]
— **no zone**

Cron Commands

config
— **system**
— [**no**] **cron**
— [**no**] **schedule** *schedule-name* [**owner** *owner-name*]
— [**no**] **action** *action-name* [**owner** ***owner-name***]
— [**no**] **day-of-month** {*day-number* [*..day-number*] **all**}
— **count** *number*
— [**no**] **description** *description-string*
— [**no**] **end-time** *[date|day-name] time*
— [**no**] **hour** {*..hour-number* [*..hour-number*]|**all**}
— [**no**] **interval** *seconds*
— [**no**] **minute** {*minute-number* [*..minute-number*]|**all**}
— [**no**] **month** {*month-number* [*..month-number*]|*month-name* [*..month-name*]|**all**}
— **script-policy** *policy-name* [**owner** *policy-owner*]
— [**no**] **shutdown**
— **type** {*schedule-type*}
— [**no**] **weekday** {*weekday-number* [*..weekday-number*]|*day-name* [*..day-name*]|**all**}
— [**no**] **time-range** *name*
— **absolute start** *start-absolute-time* **end** *end-absolute-time*
— **no absolute start** *start-absolute-time*
— **daily start** *start-time-of-day* **end** *end-time-of-day*
— **no daily start** *start-time-of-day*
— **weekdays start** *start-time-of-day* **end** *end-time-of-day*
— **no weekdays start** *start-time-of-day*
— **weekend start** *start-time-of-day* **end** *end-time-of-day*
— **no weekend start** *start-time-of-day*
— **weekly start** *start-time-in-week* **end** *end-time-in-week*
— **no weekly start** *start-time-in-week*
— [**no**] **tod-suite**
— **egress**
— **filter ip** *ip-filter-id* [**time-range** *time-range-name*] [**priority** *priority*]
— **filter ipv6 filter** *ipv6-filter-id* [**time-range** *time-range-name*] [**priority** *priority*]
— **filter mac** *mac-filter-id* [**time-range** *time-range-name*] [**priority** *priority*]
— **no filter ip** *ip-filter-id* [**time-range** *time-range-name*]
— **no filterfilter ipv6** *ipv6-filter-id* [**time-range** *time-range-name*]
— **no filter mac** *mac-filter-id* [**time-range** *time-range-name*
— **qos** *policy-id* [**time-range** *time-range-name*] [**priority** *priority*]
— **no qos** *policy-id* [**time-range** *time-range-name*]
— **scheduler-policy** *scheduler-policy-name* [**time-range** *time-range-name*] [**priority** *priority*]
— **no scheduler-policy** *scheduler-policy-name* [**time-range** *time-range-name*]
— **ingress**
— **filter ip** *ip-filter-id* [**time-range** *time-range-name*] [**priority** *priority*]
— **filter ipv6** *ipv6-filter-id* [**time-range** *time-range-name*] [**priority** *priority*]
— **filter mac** *mac-filter-id* [**time-range** *time-range-name*] [**priority** *priority*]
— **no filter ip** *ip-filter-id* [**time-range** *time-range-name*]
— **no filter ipv6** *ipv6-filter-id* [**time-range** *time-range-name*]

> — **no** filter **mac** *mac-filter-id* [**time-range** *time-range-name*
> — qos *policy-id* [**time-range** *time-range-name*] [**priority** *priority*]
> — **no** qos *policy-id* [**time-range** *time-range-name*]
> — scheduler-policy *scheduler-policy-name* [**time-range** *time-range-name*] [**priority** *priority*]
> — **no** scheduler-policy *scheduler-policy-name* [**time-range** *time-range-name*]

Script Control Commands

config
— **system**
  — **script-control**
    — **script-policy** *policy-name* [**owner** *policy-owner*]
      — **expire-time** {*seconds* | **forever**}
      — **lifetime** {*seconds* | **forever**}
      — **max-completed** *unsigned*
      — **results** *file-url*
      — **no** results
      — **script** *script-name* [**owner** *script-owner*]
      — **no** script
      — [**no**] shutdown
    — **script** *script-name* [**owner** *script-owner*]
      — **description** *description-string*
      — **no** description
      — **location** *file-url*
      — **no** location
      — [**no**] shutdown

System Administration (Admin) Commands

root
— **admin**
— **application-assurance**
— **upgrade**
— **clear-policy-lock**
— **debug-save** *file-url*
— **disconnect** {**address** *ip-address* | **username** *user-name* | **console** | **telnet** | **ftp** | **ssh**}
— **display-config** [**detail** | **index**]
— [**no**] **enable-tech**
— **radius-discovery**
— **force-discover** [**svc-id** *service-id*]
— **reboot** [**active** | **standby** | **upgrade**] [**hold**] [**now**]
— **redundancy**
— [**no**] **cert-sync**
— **synchronize** {**boot-env**|**config**}
— **no synchronize**
— **save** [*file-url*] [**detail**] [**index**]
— **synchronize** [**boot-env** | **config**]
— **tech-support** [*file-url*]

System Synchronization Commands

config
— **system**
— **sync-if-timing**
— **abort**
— **begin**
— **bits**
— **input**
— [**no**] **shutdown**
— **interface-type** {**ds1** [{**esf** | **sf**}] | **e1** [{**pcm30crc** | **pcm31crc**}] **2048khz-g703**}
— **no interface-type**
— **output**
— **line-length** {**110, 220, 330, 440, 550, 660**}
— [**no**] **shutdown**
— **source** {**line-ref|internal-clock**}
— **ql-override** {**prs** | **stu** | **st2** | **tnc** | **st3e** | **st3** | **eec1** | **sec** | **prc** | **ssu-a** | **ssu-b** | **eec2**}
— **no ql-override**
— **ssm-bit** *sa-bit*
— **commit**
— **ref-order** *first second* [*third* [*fourth*]]
— **no ref-order**
— **ptp**
— **ql-override** {**prs** | **stu** | **st2** | **tnc** | **st3e** | **st3** | **eec1** | **sec** | **prc** | **ssu-a** | **ssu-b** | **eec2**}
— **no ql-override**
— [**no**] **shutdown**
— **ref1**
— **ql-override** {**prs** | **stu** | **st2** | **tnc** | **st3e** | **st3** | **eec1** | **sec** | **prc** | **ssu-a** | **ssu-b** | **eec2**}
— **no ql-override**
— [**no**] **shutdown**
— **source-port** *port-id*
— **no source-port**
— **ref2**
— **ql-override** {**prs** | **stu** | **st2** | **tnc** | **st3e** | **st3** | **eec1** | **sec** | **prc** | **ssu-a** | **ssu-b** | **eec2**}
— **no ql-override**
— [**no**] **shutdown**
— **source-port** *port-id*
— **no source-port**
— [**no**] **ql-selection**
— [**no**] **revert**

The following commands apply to the 7750 SR-c12 model.

config
— **system**
— **sync-if-timing**
— **abort**
— **begin**
— **commit**
— **ref-order** *first second* [*third*]
— **no ref-order**
— **ref1**
— **bits-interface-type** {**ds1** [{**esf** | **sf**}] | **e1** [{**pcm30crc** | **pcm31crc**}]}
— **no bits-interface-type**

— **ql-override** {**prs** | **stu** | **st2** | **tnc** | **st3e** | **st3** | **eec1** | **sec** | **prc** | **ssu-a** | **ssu-b** | **eec2**}
— **no ql-override**
— [**no**] **shutdown**
— **source-bits** *slot/mda*
— **no source-bits**
— **source-port** *port-id*
— **no source-port**
— **ssm-bit** *sa-bit*

— **ref2**

— **bits-interface-type** {**ds1** [{**esf** | **sf**}] | **e1** [{**pcm30crc** | **pcm31crc**}]}
— **no bits-interface-type**
— **ql-override** {**prs** | **stu** | **st2** | **tnc** | **st3e** | **st3** | **eec1** | **sec** | **prc** | **ssu-a** | **ssu-b** | **eec2**}
— **no ql-override**
— [**no**] **shutdown**
— **source-bits** *slot/mda*
— **no source-bits**
— **source-port** *port-id*
— **no source-port**
— **ssm-bit** *sa-bit*

— [**no**] **ql-selection**
— [**no**] **revert**

High Availability (Redundancy) Commands

```
root
    — admin
            — redundancy
            — display-config [detail |index]
            — redundancy
                    — force-switchover [now] [force-switchover]
                    — rollback-sync
                    — synchronize {boot-env | config}
config
    — system
            — switchover-exec file-url
            — no switchover-exec
    — redundancy
            — mgmt-ethernet
    — redundancy
            — multi-chassis
                    — [no] peer ip-address
                            — authentication-key [authentication-key | hash-key] [hash | hash2]
                            — no authentication-key
                            — description description-string
                            — no description
                            — [no] mc-endpoint
                                    — [no] bfd-enable
                                    — boot-timer interval
                                    — no boot-timer
                                    — hold-on-neighbor-failure multiplier
                                    — no hold-on-neighbor-failure
                                    — keep-alive-interval interval
                                    — no keep-alive-interval
                                    — [no] passive-mode
                                    — [no] shutdown
                                    — system-priority value
                                    — no system-priority
                            — [no] mc-lag
                                    — hold-on-neighbor-failure multiplier
                                    — no hold-on-neighbor-failure
                                    — keep-alive-interval interval
                                    — no keep-alive-interval
                                    — lag lag-id lacp-key admin-key system-id system-id [remote-lag
                                        remote-lag-id] system-priority system-priority source-bmac-lsb use-
                                        lacp-key
                                    — lag lag-id lacp-key admin-key system-id system-id [remote-lag
                                        remote-lag-id] system-priority system-priority source-bmac-lsb
                                        MAC-Lsb
                                    — lag lag-id lacp-key admin-key system-id system-id [remote-lag
                                        remote-lag-id] system-priority system-priority
                                    — lag lag-id [remote-lag remote-lag-id]
                                    — no lag lag-id
                                    — [no] shutdown
                            — [no] mc-mobile
                                    — bfd-enable [service service-id] interface interface-name
                                    — no bfd-enable
                                    — hold-on-neighbor-failure multiplier
```

— no **hold-on-neighbor-failure**
— **keep-alive-interval** *interval*
— no **keep-alive-interval**
— **ring** *sync-tag* [**create**]
— no **ring** *sync-tag*
— **in-band-control-path**
— **dst-ip** *ip-address*
— no **dst-ip**
— **interface** *ip-int-name*
— no **interface**
— **service-id** *service-id*
— no **service-id**
— [**no**] **path-b**
— [**no**] **range** *vlan-range*
— [**no**] **path-excl**
— [**no**] **range** *vlan-range*
— **ring-node** *ring-node-name* [**create**]
— no **ring-node** *ring-node-name*
— **connectivity-verify**
— **dst-ip** *ip-address*
— no **dst-ip**
— **interval** *interval*
— no **interval**
— **service-id** *service-id*
— no **service-id**
— [**no**] **shutdown**
— **src-ip** *ip-address*
— no **src-ip**
— **src-mac** *ieee-address*
— no **src-mac**
— **vlan** [**0..4094**]
— no **vlan**
— [**no**] **shutdown**
— **peer-name** *name*
— no **peer-name**
— [**no**] **shutdown**
— **source-address** *ip-address*
— no **source-address**
— [**no**] **sync**
— [**no**] **igmp**
— [**no**] **igmp-snooping**
— [**no**] **local-dhcp-server**
— [**no**] **mc-ring**
— [**no**] **mld-snooping**
— **port** [*port-id* | *lag-id*] [**sync-tag** *sync-tag*]
— no **port** [*port-id* | *lag-id*]
— **range** *encap-range* [**sync-tag** *sync-tag*]
— no **range** *encap-range*
— [**no**] python
— [**no**] **shutdown**
— [**no**] **srrp**
— [**no**] **sub-host-trk**
— [**no**] **sub-mgmt**
— **warm-standby**
— **bgp-multi-homing**

— **boot-timer** *seconds*
— **no boot-timer**
— **site-activation-timer** *seconds*
— **no site-activation-timer**
— **site-min-down-timer** *min-down-time*
— **no site-min-down-timer**
— [**no**] **cert-sync**
— [**no**] **rollback-sync**
— **synchronize** {**boot-env** | **config**}

LLDP System Commands

configure
— **system**
— **lldp**
— **message-fast-tx** *time*
— **no message-fast-tx**
— **message-fast-tx-init** *count*
— **no message-fast-tx-init**
— **notification-interval** *time*
— **no notification-interval**
— **reinit-delay** *time*
— **no reinit-delay**
— [**no**] **shutdown**
— **tx-credit-max** *count*
— **no tx-credit-max**
— **tx-hold-multiplier** *multiplier*
— **no tx-hold-multiplier**
— **tx-interval** *interval*
— **no tx-interval**

LLDP Ethernet Port Commands

configure
— **port** *port-id*
— **ethernet**
— **lldp**
— **dest-mac** {**nearest-bridge** | **nearest-non-tpmr** | **nearest-customer**}
— **admin-status** {**rx** | **tx** | **tx-rx** | **disabled**}
— [**no**] **notification**
— **tx-mgmt-address** [**system**]
— **no tx-mgmt-address**
— **tx-tlvs** [**port-desc**] [**sys-name**] [**sys-desc**] [**sys-cap**]
— **no tx-tlvs**

Show Commands

```
show
    — redundancy
        — mgmt-ethernet
        — multi-chassis
            — all [detail]
            — mc-endpoint statistics
            — mc-endpoint peer [ip-address] statistics
            — mc-endpoint endpoint [mcep-id] statistics
            — mc-endpoint peer [ip-address]
            — mc-mobile peer [ip-address | ipv6-address]
            — mc-lag [lag lag-id]
                — peer [peer ip-address [lag lag-id]] mc-lag
                — statistics
            — mc-ring peer ip-address statistics
            — mc-ring peer ip-address [ring sync-tag [detail | statistics] ]
            — mc-ring peer ip-address ring sync-tag ring-node [ring-node-name [detail | statistics] ]
            — mc-ring global-statistics
            — sync [port port-id | lag-id]
                — peer [port port-id]
                — detail
        — synchronization
    — time
    — system
        — card
            — cpu [sample-period seconds]
            — memory-pools
        — connections [address ip-address [interface interface-name]] [port port-number] [detail]
        — cpu [sample-period seconds]
        — cron
            — action
            — schedule
            — tod-suite tod-suite-name [detail]
            — tod-suite tod-suite-name associations
            — tod-suite tod-suite-name failed-associations
            — time-range name associations [detail]
        — information
        — lldp neighbor
        — load-balancing-alg [detail]
        — memory-pools
        — ntp
        — ptp [standby]
        — ptp peers [router router-instance|service-name service-name] [detail]
        — ptp port
        — ptp port port-id [detail]
        — ptp statistics
        — ptp unicast [router router-instance|service-name service-name]
        — rollback
        — script-control
            — script [script-name] [owner script-owner]
            — script-policy script-policy-name [owner owner-name]
            — script-policy run-history [run-state]
        — sntp
        — switch-fabric
```

— **sync-if-timing**
— **thresholds**
— **time**
— **uptime**

Clear Commands

clear
— **application-assurance**
    — **group** *isa-aa-group-id* **statistics**
    — **group** *isa-aa-group-id* **status**
— **redundancy**
    — **multi-chassis**
        — **mc-endpoint** **endpoint** [*mcep-id*] **statistics**
        — **mc-endpoint** **statistics**
        — **mc-endpoint** **peer** [*ip-address*] **statistics**
        — **mc-mobile** **statistics peer** {**ip-address** | **ipv6-address**}
        — **mc-lag** [**peer** *ip-address* [**lag** *lag-id*]]
        — **mc-ring**
            — **debounce** **peer** *ip-address* **ring** *sync-tag*
            — **ring-nodes** **peer** *ip-address* **ring** *sync-tag*
            — **statistics**
                — **global**
                — **peer** *ip-address*
                — **ring** **peer** *ip-address* **ring** *sync-tag*
                — **ring-node** **peer** *ip-address* **ring** *sync-tag* **node** *ring-node-name*
      — **sync-database** **peer** *ip-address* **all application** *application*
      — **sync-database** **peer** *ip-address* {**port** *port-id* | *lag-id* | **sync-tag** *sync-tag*} **application** *application*
      — **sync-database** **peer** *ip-address* **port** *port-id* | *lag-id* **sync-tag** *sync-tag* **application** *application*
— **screen** *action-name* [**owner** *owner-name*]
— **system**
    — **ptp**
        — **inactive-peers**
        — **peer** *ip-address* [**router** *router-instance*] **statistics**
        — **port** *port-id* **statistics**
        — **statistics**
    — **script-control**
        — **script-policy**
            — **completed** [*script-policy-name*] [**owner** *owner-name*]
    — **statistics**
        — **xmpp server** *xmpp-server-name*
    — **sync-if-timing** {**ref1** | **ref2** | **bits**}
— **trace**
    — **log**

Debug Commands

debug
— **sync-if-timing**
    — **force-reference** {**ref1** | **ref2** | **bits**}
    — **no force-reference**
— [**no**] **system**
    — **http-connections** [*host-ip-address/mask*]
    — **no http-connections**
    — **ntp** [**router** *router-name*] [**interface** *ip-int-name*]
    — **persistence**

Tools Commands

tools
— **dump**
  — **redundancy**
    — **multi-chassis**
      — **mc-endpoint peer** *ip-address*
      — **mc-ring**
      — **mc-ring peer** *ip-address* [ring *sync-tag*]
      — **sync-database** [**instance** *instance-id*] [**peer** *ip-address*]
      — **sync-database** [**peer** *ip-address*] [**port** *port-id* | *lag-id*] [**sync-tag** *sync-tag*] [**application** *application*] [**detail**] [**type** *type*]
— **perform**
  — **redundancy**
    — **mgmt-ethernet**
  — **set-fabric-speed** *speed*
— **perform**
  — **system**
    — **script-control**
      — **script-policy**
        — **stop** [*script-policy-name*] [**owner** *script-policy-owner*] [**all**]
    — **cron**
      — **tod**
        — **re-evaluate**
          — **customer**
          — **filter**
          — **service**
          — **tod-suite**