CLI XOS Cheat Sheet

More information can be found in both "Concepts Guide and Command Reference"
http://www.extremenetworks.com/services/software-userguide.aspx

ACCOUNTS

    (Admin Accounts)
    Create account admin *<username>*
    (User Read-Only Accounts)
    Create account user *<username>*

    Show accounts

NOTE: By default one of each account is created (Admin/User) with no password. It is recommended that the password is changed on the Admin account and either changed on the User account or deleted.
    Configure account admin <cr>
    Configure account user <cr>
    Delete account user

CLI

    Config cli max-sessions 4
    Config cli max-failed-logins 2
    Disable clipaging (Disables pauses between screens – useful in show commands when logging)
    Enable clipaging

SHOW

    Show version
    Show switch
    Show config
    Show management
    Show port 1 info detail
    SHOW <TAB KEY> (Hitting the TAB KEY after part or all of a command will list next available command options)

REMOTE MONITORING - RMON
enable rmon

WEB – GUI MANAGEMENT
    Enable web http

PROCESS

    top
    show process
    show process detail
    show heartbeat process
    show memory
    terminate process tftpd graceful msm slot
    terminate process tftpd forceful
    start process tftpd

SAVE CONFIGURATION
    Save configuration (Saves configuration as existing name)
    Save config test (Saves configuration as new name)
    Ls (Lists all files including configurations on switch)
    Use config <*Config Name minus the .cfg*> (Will use saved configuration after next reboot)

NOTE: ExtremeXOS configurations are XML based. It is recommended that configuration backups are maintained in both XML for restoring and ASCII format for readability.

tftp put 192.168.5.116 vr "VR-Default" primary.cfg XMLBackup-4-27-2009.cfg
upload config 192.168.5.116 ASCIIBackup-4-27-2009.cfg vr vr-default

FILE MANAGEMENT – (Software Upgrades – Refer to Virtual Router)
    cp primary.cfg tested.cfg (Copies File)
    mv tested.cfg eleventhree.cfg (Moves file and renames)
    rm eleventhree.cfg (Removes file)
    tftp <*TFTP Server*> –v <*vr-default/vr-mgmt*> –p –l primary.cfg (Uploads "primary.cfg" to TFTP)
    use config <*primary/secondary/user created name*>

    download image <*TFTP Server*> filename vr <*vr-default/vr-mgmt*> <*primary/secondary*>
    download bootrom <*TFTP Server*> filename vr <*vr-default/vr-mgmt*>
    use image <*primary/secondary*>

RESET SWITCH TO FACTORY DEFAULTS
    unconfig switch all

NOTE: Any policies and/or user created configurations will remain in file system; execute the following to delete them as well:
    Rm *.*
    Rm <*filename.ext*>

VLAN
    create vlan blue
    config vlan blue tag 10 (Configures 802.1q Tag)
    config vlan blue add port 1-25 <*tagged/untagged*> (If tagged is specified 802.1q trunking is used)
    config vlan blue delete port 24
    config vlan blue ipaddress 192.168.1.1/24
    show vlan (Shows all VLANs)
    show vlan <*vlan name*>

SNMP
    enable snmp access
    enable snmp traps
    config snmp add trapreceiver 10.1.1.1 community public
    config snmp community readonly public
    config snmp delete trapreceiver 10.1.1.1 public/private/all
    config snmp sysname robs_switch (Change name of switch)
    config snmp syslocation dover (Changes location information)
    config snmp syscontact rob (Changes contact information)

SYSLOG

      config syslog add *<IP Address>* vr vr-default local6
      config log target syslog *<IP Address>* vr "VR-Default" local6 severity info
      enable syslog

      show log config
      show syslog

STP-Edge Protection - Recommended (Port to port in same switch loop protection)

      disable stpd s0 auto-bind vlan default
      disable stpd s0
      config stpd s0 mode dot1w
      enable stpd s0 auto-bind vlan *<ADD EACH VLAN>* (If Uplinks are all Tagged)
      OR
      Config stpd sdata add vlan *<ADD EACH VLAN>* ports 1-22 (Do not list uplink ports)
      config stpd s0 ports link-type edge <EDGE PORTS ONLY> edge-safeguard enable
      enable stpd s0

      show s0

STP

      config stpd s0 add vlan blue port 1-24
      config stpd s0 tag 10
      config stpd s0 priority 10
      config stpd s0 port cost auto
      enable stpd s0
      show stpd s0

LINK AGGREGATION – LAG Groups

      Enable sharing 1 group 1-7

LACP – Recommended if both sides support
enable sharing 1 grouping 1-2 lacp

show port sharing
show lacp

LLDP

      enable lldp ports
      config lldp
      show lldp

EAPS

  CREATE EAPS DOMAIN
      create eaps EAPS-Domain1
      config eaps EAPS-Domain1 mode *<transit/master>* (One switch in ring must be master the rest are
transit nodes)
      config eaps EAPS-Domain1 primary port 23
      config eaps EAPS-Domain1 secondary 24

CREATE EAPS CONTROL VLAN
> create vlan EAPS-Control1
> config vlan EAPS-Control1 tag 10
> config vlan EAPS-Control1 add port 23-24 tagged
> config eaps EAPS-Domain1 add control vlan EAPS-Control1

ADD PROTECTED VLAN – (All ports traversing ring must be tagged and therefore needed to be protected)
> create vlan purple
> config vlan purple tag 20
> config vlan purple add port 23-24 tagged
> config vlan purple add port 1 untagged
> config eaps EAPS-Domain1 add protect vlan purple

ENABLE
> enable eaps
> enable eaps EAPS-Domain1
>
> show eaps
> show eaps eaps-domain1

QOS *(Recommended for most VOIP deployments)*
> disable dot1p examination ports all
> create qosprofile qp5
> create qosprofile qp3
> create qosprofile qp4
> config diffserv examination code-point 31 qosprofile qp3
> config diffserv examination code-point 41 qosprofile qp4
> config diffserv examination code-point 46 qosprofile qp5
> enable diffserv examination ports all

QOS - Options
> Create qosprofile QP7
> Config qosscheduler weight-round-robin/strict-priority
> Config qosprofile QP7 weight (1-15)
> Config diffserv examination code-point 46 qosprofile qp7

ROUTING (Required to forward packets across L3 boundaries)
> enable ipforwarding (Enables routing globally on all VLANs)
> enable ipforwarding *<VLAN Name>*

STATIC ROUTES
> config iproute add 192.168.3.0/24 192.168.1.2
> config iproute add default 10.1.1.1

RIP
> config rip add vlan *<VLAN Name/ALL>*
> config rip delete vlan *<VLAN Name/ALL>*
> config rip rxmode/txmode v1/v2
> enable rip
> disable rip

unconfig rip

OSPF

        config ospf routerid 1.1.1.1
        config ospf add vlan *<VLAN Name>* area 0.0.0.0
        enable ospf
        create ospf area 1.1.1.1
        config ospf area stub/nssa

VRRP
 MASTER

        configure vlan vlan1 ipaddress 192.168.1.3/24
        create vrrp vlan vlan1 vrid 1
        configure vrrp vlan vlan1 vrid 1 prioirty 255
        configure vrrp vlan vlan1 vrid 1 add 192.168.1.3
        enable vrrp
 BACKUP

        configure vlan vlan1 ipaddress 192.168.1.5/24
        create vrrp vlan vlan1 vrid 1
        configure vrrp vlan vlan1 vrid 1 prioirty 100
        configure vrrp vlan vlan1 vrid 1 add 192.168.1.3
        enable vrrp

VIRTUAL ROUTER

INFO: By default ExtremeXOS based switches have two defined VR's (VR-Default & VR-Mgmt) thus separate address tables creating isolation between networks/ports. All of the front ports are members of the VR-Default VR and the out-of-band management port is a member of VR-Mgmt.

The above is important to know considering some commands require specifying the VR because the command or function may default to one or the other VR. For example, downloading software (XOS/Bootroms) default to VR-Mgmt so if not specified the command/function will not work if TFTP server is connected to front ports.

NOTE: User created VR's are only available on certain HW/SW - refer to Concepts Guide.

        create virtual-router vr-default
        config vr vr-default add port 1-24