

```

!
configure
!
description
  hostname XR4015002A579
  location ""
exit
!
contact-info
  name ""
  phone ""
  email ""
exit
!
position-info
  x          0.000000
  y          0.000000
  z          0.000000
  scale      0.000000
  angle      0.000000
  mount      face-down
  scope      map
  map        ""
  gps latitude      0.000000
  gps longitude    0.000000
  gps elevation    0.000000
  gps reference    map
exit
!
system-info
! hardware-configuration
! =====
! model: XR4820, 1.0GB-ECC (700MHz)
!
! component      part number      serial number      date
! -----
! system          XR4820          XR4015002A579     2011-Dec-13 22:29
! controller      100-0114-001.C2 0000173433        2011-Dec-14  4:51
! iap module 1    100-0119-003.C 0500007839        2011-Dec-09  4:59
! iap module 2    100-0119-003.C 0500007840        2011-Dec-09  4:59
! iap module 3    100-0119-003.C 0700002967        2011-Dec-09  5:26
! iap module 4    100-0119-003.C 0500007838        2011-Dec-09  4:59
! iap module 5    100-0119-003.C 0700002970        2011-Dec-09  5:26
! iap module 6    100-0119-003.C 0500007845        2011-Dec-09  4:59
! iap module 7    100-0119-003.C 0700002972        2011-Dec-09  5:26
! iap module 8    100-0119-003.C 0700002973        2011-Dec-09  5:26
!
! fpga status      boot version      s/w version
! -----
! switching engine 3000-00.022      3000-00.022
!
! interface      mac address(es)
! -----
! iaps           00:0f:7d:9e:07:80-9e:07:ff

```

```

! gigabit 1 00:0f:7d:02:a5:79
! gigabit 2 00:0f:7d:02:a5:7a
!
! software-configuration
! =====
! component          version
! -----
! scd firmware       4.03 (May 3 2012), Build: 4503
! boot loader        7.1.0 (Feb 08 2016), Build: 7059
! iap driver         3.1.0 (Feb 23 2016), Build: 4033
! system software    7.6.1 (Feb 23 2016), Build: 6268-beta
! app signatures     navl_signatures-7.6.0.tar.gz
! license key        OPB8U-XE4VJ-A88QP-XCJ4W
! license features   AOS 8.0 for 8 4x4 radios + RF Performance Manager
+ RF Analysis Manager + RF Security Manager + Application Control +
802.11ac + 802.11n
exit
!
boot-env ! (local boot images)
  verify bootfile_active XS-7.6.1-6268-beta.bin
  verify bootfile_backup XS-7.5.4-6089.bin
exit
!
administrator
  reset
  !
  privilege-name
    level 0 "read-only"
    level 1 "read-write"
    level 2 "2"
    level 3 "3"
    level 4 "4"
    level 5 "5"
    level 6 "6"
    level 7 "7"
  exit
  edit admin password enc "$1$30c0e241$LVnlsyCzqY0L9VjKx6pnI0" privilege
read-write
!
radius
  primary      secret enc
  primary      port 1812
  primary      server
  secondary    secret enc
  secondary    port 1812
  secondary    server
  timeout      600
  auth-type    chap
  disable
exit
!
privilege-section
  acl          "read-write"
  admin        "read-write"

```

```
boot-env      "read-write"
cdp           "read-write"
cluster       "read-write"
console       "read-write"
contact-info  "read-write"
date-time     "read-write"
description   "read-write"
dhcp-server   "read-write"
dns           "read-write"
file          "read-write"
filter        "read-write"
gig           "read-write"
group         "read-write"
iap           "read-write"
lldp          "read-write"
location      "read-write"
management    "read-write"
mdm           "read-write"
netflow       "read-write"
auth          "read-write"
proxy-fwd     "read-write"
proxy-mgmt    "read-write"
radius-server "read-write"
reboot        "read-write"
reset         "read-write"
roam-assist   "read-write"
run-tests     "read-write"
security      "read-write"
snmp          "read-write"
ssid          "read-write"
sta-assurance "read-write"
syslog        "read-write"
tunnel        "read-write"
vlan          "read-write"
wifi-tag      "read-write"
exit
exit
!
interface console
  baud      115200
  bytesize 8
  parity    none
  stopbits  1
  timeout   300
  management on
exit
!
vlan
  reset
  !
  add "10-5-35-0" number 501
  management off
  fast-roam off
  ip addr
```

```
    ip mask
    ip gateway
    tunnel server
    tunnel secret enc
    tunnel port 0
exit
!
add "10-5-36-0" number 502
    management off
    fast-roam off
    ip addr
    ip mask
    ip gateway
    tunnel server
    tunnel secret enc
    tunnel port 0
exit
!
default-route none
native-vlan none
exit
!
interface gig1
    autoneg on
    mtu 1500
    ip dhcp
    management on
    led on
    bond bond1
up
exit
!
interface gig2
    autoneg on
    mtu 1500
    led on
    bond bond1
up
exit
!
interface bond1
    bond-mode link-backup
    active-vlans all
    mirror off
exit
!
interface bond2
    bond-mode link-backup
    active-vlans all
    mirror off
exit
!
dns
    domain dcs.byu.edu
```

```

server1 10.8.0.19
server2 10.8.0.26
server3
use-dhcp on
exit
!
interface iap ! (global settings)
!
global-settings
all-down
rf-monitor      timeshare scanning-interval 6
rf-monitor      timeshare station-threshold 10
rf-monitor      timeshare traffic-threshold 100
rf-monitor      off
management     off
beacon-rate     100
beacon-dtim     1
broadcast-rates optimized
arp-filter      pass-thru
ipv6-filter     off
multicast       convert+snoop+prune
multicast       convert-exclude mDNS
multicast       forward address mDNS
multicast       forward vlans "10-5-35-0" "10-5-36-0"
mdns-filter     allow AirTunes Apple-TV Internet-Printing
long-retries    4
short-retries   7
country-code    US
dot11h-support  on
dot11k-support  on
radio-assurance off
max-stations    unlimited
max-iap-stations 64
sta2sta         forward
inactive-time   300
reauth-period   0
auth-timeout    300
extract-sta-info ip-address hostname netbios-name user-agent-str
extract-sta-info ip-dhcp-period 0
led enable      iap-up
led-activity    tx-data tx-mgmt rx-data rx-mgmt assoc
auto-channel    power-up off
auto-channel    schedule ""
load-balancing  on
sharp-cell     off
wfa-mode        off
dot11u         interworking          off
dot11u         access-network-type private-network
dot11u         internet           unspecified
dot11u         asra               disable
dot11u         hessid
dot11u         ipv4-avail          not-known
dot11u         ipv6-avail          not-known
dot11u         venue group         unspecified type unspecified

```

```

dot11u          venue name          reset
dot11u          roam-consortium      reset
dot11u          domain              reset
dot11u          cell-network         reset
dot11u          nai-realm            reset
dot11u          network-auth-type    reset
hotspot20       off
hotspot20       dgaf                  on
hotspot20       wan                  link-status    up
hotspot20       wan                  downlink-speed 0
hotspot20       wan                  uplink-speed   0
hotspot20       conn-cap              reset
hotspot20       conn-cap              edit "ICMP"          protocol 1
port    0 status open
hotspot20       conn-cap              edit "FTP"          protocol 6
port    20 status open
hotspot20       conn-cap              edit "SSH"          protocol 6
port    22 status open
hotspot20       conn-cap              edit "HTTP"         protocol 6
port    80 status open
hotspot20       conn-cap              edit "TLS VPN"      protocol 6
port   443 status open
hotspot20       conn-cap              edit "PPTP VPN"    protocol 6
port  1723 status open
hotspot20       conn-cap              edit "VoIP TCP"    protocol 6
port  5060 status open
hotspot20       conn-cap              edit "IKEv2 ISAKMP" protocol 17
port    500 status open
hotspot20       conn-cap              edit "VoIP UDP"    protocol 17
port  5060 status open
hotspot20       conn-cap              edit "IKEv2 IPSec" protocol 17
port  4500 status open
hotspot20       conn-cap              edit "ESP"          protocol 50
port    0 status open
hotspot20       oper-friendly-name  reset
wmm-power-save  on
wmm-acm         video off
wmm-acm         voice off
wmm-acm         cac-max-bw    100
dscp-mapping    off
dscp-mapping    qos 0 dscp not 8 24 26 40 46 48
dscp-mapping    qos 1 dscp 8
dscp-mapping    qos 2 dscp 24 26 40
dscp-mapping    qos 3 dscp 46 48
fast-roaming    reset-targets
fast-roaming    mode tunnel in-range
fast-roaming    layer 2-only
dot11w-support  disable
okc             off
!
intrude-detect
!
rogue-ap
reset

```

```

    add "00:0f:7d:*" known    bssid
    add "48:c0:93:*" known    bssid
    add "50:60:28:*" known    bssid
    auto-block rssi -50
    auto-block enc none
    auto-block type all
exit
!
dos-attack
    beacon-flood      manual  threshold 20000 period 60
    probe-req-flood   manual  threshold 1000  period 60
    auth-flood        manual  threshold 100   period 60
    assoc-flood       manual  threshold 100   period 60
    disassoc-flood    manual  threshold 100   period 60
    deauth-flood      manual  threshold 100   period 60
    eap-flood         manual  threshold 100   period 60
    null-probe-resp   off     threshold 2     period 60
    mic-error-attack  on      threshold 2     period 60
    disassoc-attack   off     threshold 1     period 60
    deauth-attack     off     threshold 1     period 60
    duration-attack   on      threshold 10    period 2   nav
10000
exit
!
impersonation
    ap-impersonation  off     threshold 1   period 60
    sta-impersonation off     threshold 5   period 600
    seq-num-anomaly   off     gap 10
    evil-twin         on
exit
!
off
exit
exit
!
global-a-settings
    rates basic      6 12 24
    rates supported  6 9 12 18 24 36 48 54
    frag-threshold   2346
    rts-threshold    2347
    auto-channel     list 36 40 44 48 52 56 60 64 100 104 108 112 132 136
149 153 157 161
    auto-cell        overlap 50
    auto-cell        min-tx 10
    auto-cell        max-rx -80
    auto-cell        period none
    auto-cell        by-channel on
    max-stations     unlimited
    max-iap-stations 64
exit
!
global-bg-settings
    dot11g-only      off
    dot11g-protect   auto-cts

```

```

slot-time          auto-time
preamble           auto-length
rates basic        1 2 5 11
rates supported    1 2 5 11 6 9 12 18 24 36 48 54
frag-threshold     2346
rts-threshold      2347
auto-channel       list 1 6 11
auto-cell          overlap    50
auto-cell          min-tx     10
auto-cell          max-rx     -80
auto-cell          period     none
auto-cell          by-channel on
max-stations       unlimited
max-iap-stations  64
exit
!
global-n-settings
tx-chains          2
rx-chains          2
guard-interval     20MHz     short
guard-interval     40MHz     short
auto-bond          on
bonded-width       5GHz      dynamic
bonded-width       2.4GHz    dynamic
rates basic        none
rates supported    all
enable             on
exit
exit
!
management
xircon            timeout 300
xircon            port    22612
xircon            aos-only
!
telnet            timeout 300
telnet            port    23
telnet            off
!
ssh               timeout 12000
ssh               port    22
ssh               on
!
https             timeout 12000
https             port    443
https             on
!
standby           mode     off
standby           target
!
network-assurance period 300
network-assurance on
!
personal-wifi     all-sta 4

```



```
personal-wifi      per-sta  1
personal-wifi      expires  never
!
activation         interval 1
activation         server   https://activate.xirrus.com
!
cloud disable
cloud server
cloud retry        5
cloud timeout      60
cloud scheme       wss
cloud port         443
!
spanning-tree      off
pci-audit          off
fips               off
status-led         on
reauth-period      0
max-auth-attempts 3
!
banner pre-login   none
banner post-login  none
exit
!
syslog
  console          off
  sta-format       standard
  time-format      rfc3164
  sta-url-log      off
  local-file       size      2000
  primary          ip        10.11.65.3
  secondary        ip        10.11.16.53
  tertiary         ip
  primary          port      514
  secondary        port      5506
  tertiary         port      514
  email            port      25
  email            server
  email            user
  email            password  enc
  email            from
  email            to-list
  console          level     6
  local-file       level     7
  primary          level     7
  secondary        level     7
  tertiary         level     6
  email            level     4
on
exit
!
date-time
  timezone         -7 0
  dst-adjust       on
```

```
ntp primary tick.byu.edu
ntp primary auth none
ntp primary key-id 1
ntp primary key enc
ntp secondary tock.byu.edu
ntp secondary auth none
ntp secondary key-id 2
ntp secondary key enc
ntp on
exit
!
snmp
!
v2
community read-write enc 9f2092522cbc
community read-only enc 9f2092522cbce0773720c333b1106f85
on
exit
!
v3
user read-write name xirrus-rw
user read-write auth-password enc 9f2092522cbc927725
user read-write priv-password enc 9f2092522cbc927725
user read-only name xirrus-ro
user read-only auth-password enc 9f2092522cbc92773d
user read-only priv-password enc 9f2092522cbc92773d
authentication sha
privacy aes
off
exit
!
trap
host 1 Xirrus-XMS
host 2
host 3
host 4
port 1 162
port 2 162
port 3 162
port 4 162
auth enable
keepalive 60
exit
exit
!
dhcp-server
reset
exit
!
mdm
airwatch api url
airwatch api key
airwatch api username
airwatch api password enc
```

```

airwatch api timeout      5
airwatch api poll-period  5
airwatch api access-error block
airwatch redirect-url
exit
!
security wpa ! (global settings)
  passphrase enc
  eap          on
  psk          off
  aes          on
  tkip         off
  rekey        never
exit
!
security wep ! (global settings)
  key 1 size not-set
  key 2 size not-set
  key 3 size not-set
  key 4 size not-set
  default-key 1
exit
!
ssid
  reset
  edit "xirrus" disable
  !
  add "BYUWiFi-CP-XIRRUS"
    band          both
    broadcast     on
    vlan          "10-5-35-0"
    vlan pool     none
    qos           2
    dhcp          none
    fast-roam     layer 2-only
    time-on       always
    time-off      never
    days-on       all
    stations      unlimited
    traffic       limit-ssid pps unlimited
    traffic       limit-ssid kbps unlimited
    traffic       limit-sta pps unlimited
    traffic       limit-sta kbps unlimited
    encryption   none unique-settings
    auth         open
    authentication-server use external-radius
    authentication-server external primary secret enc
8530954335aade772220d41f
    authentication-server external primary port 1812
    authentication-server external primary server cpeval2.byu.edu
    authentication-server external secondary secret enc
    authentication-server external secondary port 1812
    authentication-server external secondary server
    authentication-server external timeout 600

```

```

authentication-server external accounting on
authentication-server external accounting primary secret enc
8530954335aade772220d41f
authentication-server external accounting primary port 1813
authentication-server external accounting primary server
cpeval2.byu.edu
authentication-server external accounting secondary secret enc
authentication-server external accounting secondary port 1813
authentication-server external accounting secondary server
authentication-server external accounting interval 300
web-page screen login
web-page server external
web-page https on
web-page auth-type chap
web-page auth-timeout 120
web-page redir-url
https://cpeval2.byu.edu/guest/nonregisteredguestxirrus.php
web-page land-url
web-page secret enc 9f2092522cbc
web-page redirect on
web-page background page_bg.jpg
web-page logo-image xirrus_logo.gif
web-page header-text
web-page footer-text
web-page personal-wifi disable
mdm-auth none
acl
reset
off
exit
fallback none
dhcp-opt disable
date-on none
date-off none
expiration never
enable
exit
!
add "BYUWi-Fi-ISE-XIRRUS"
band both
broadcast on
vlan "10-5-35-0"
vlan pool none
qos 2
dhcp none
fast-roam layer 2-only
time-on always
time-off never
days-on all
stations unlimited
traffic limit-ssid pps unlimited
traffic limit-ssid kbps unlimited
traffic limit-sta pps unlimited
traffic limit-sta kbps unlimited

```

```

encryption none unique-settings
auth radius-mac
authentication-server use external-radius
authentication-server external primary secret enc
d67bd3146cf9883d6b71
authentication-server external primary port 1812
authentication-server external primary server 10.3.34.40
authentication-server external secondary secret enc
authentication-server external secondary port 1812
authentication-server external secondary server
authentication-server external timeout 600
authentication-server external accounting on
authentication-server external accounting primary secret enc
d67bd3146cf9883d6b71
authentication-server external accounting primary port 1813
authentication-server external accounting primary server
10.3.34.40
authentication-server external accounting secondary secret enc
authentication-server external accounting secondary port 1813
authentication-server external accounting secondary server
authentication-server external accounting interval 300
web-page screen splash
web-page timeout none
web-page server internal
web-page auth-timeout 120
web-page redir-url
web-page land-url
web-page secret enc
web-page redirect on
web-page background page_bg.jpg
web-page logo-image xirrus_logo.gif
web-page header-text
web-page footer-text
web-page personal-wifi disable
mdm-auth none
acl
  reset
  off
exit
fallback none
dhcp-opt disable
date-on none
date-off none
expiration never
enable
exit
!
add "EDUROAM-CP-XIRRUS"
  band both
  broadcast on
  vlan "10-5-35-0"
  vlan pool none
  qos 2
  dhcp none

```

```

fast-roam    layer 2-only
time-on     always
time-off    never
days-on    all
stations    unlimited
traffic     limit-ssid pps unlimited
traffic     limit-ssid kbps unlimited
traffic     limit-sta pps unlimited
traffic     limit-sta kbps unlimited
encryption  wpa2 unique-settings
auth        802-1x
passphrase  enc
eap         on
psk         off
aes         on
tkip        off
u-psk      cache-timeout 60
u-psk      server-conn-error block
authentication-server use external-radius
authentication-server external primary secret enc
8530954335aade772220d41f
authentication-server external primary port 1812
authentication-server external primary server cpeval2.byu.edu
authentication-server external secondary secret enc
authentication-server external secondary port 1812
authentication-server external secondary server
authentication-server external timeout 600
authentication-server external accounting off
authentication-server external accounting primary secret enc
8530954335aade772220d41f
authentication-server external accounting primary port 1813
authentication-server external accounting primary server
cpeval2.byu.edu
authentication-server external accounting secondary secret enc
authentication-server external accounting secondary port 1813
authentication-server external accounting secondary server
authentication-server external accounting interval 300
web-page    redirect off
mdm-auth    none
acl
  reset
  off
exit
fallback    none
dhcp-opt    disable
date-on     none
date-off    none
expiration  never
enable
exit
!
add "EDUROAM-ISE-XIRRUS"
  band      both
  broadcast on

```

```

vlan          "10-5-35-0"
vlan pool    none
qos          2
dhcp         none
fast-roam    layer 2-only
time-on      always
time-off     never
days-on     all
stations     unlimited
traffic      limit-ssid pps unlimited
traffic      limit-ssid kbps unlimited
traffic      limit-sta pps unlimited
traffic      limit-sta kbps unlimited
encryption   wpa2 unique-settings
auth         802-1x
passphrase   enc
eap          on
psk          off
aes          on
tkip         off
u-psk        cache-timeout 60
u-psk        server-conn-error block
authentication-server use external-radius
authentication-server external primary secret enc
d67bd3146cf9883d6b71
authentication-server external primary port 1812
authentication-server external primary server 10.3.34.40
authentication-server external secondary secret enc
authentication-server external secondary port 1812
authentication-server external secondary server
authentication-server external timeout 600
authentication-server external accounting on
authentication-server external accounting primary secret enc
d67bd3146cf9883d6b71
authentication-server external accounting primary port 1813
authentication-server external accounting primary server
10.3.34.40
authentication-server external accounting secondary secret enc
authentication-server external accounting secondary port 1813
authentication-server external accounting secondary server
authentication-server external accounting interval 300
web-page     redirect off
mdm-auth     none
acl
  reset
  off
exit
fallback     none
dhcp-opt     disable
date-on      none
date-off     none
expiration   never
enable
exit

```

```
!
del "xirrus"
exit
!
ssid ! (iap mappings)
edit "BYUWiFi-CP-XIRRUS" active-iaps all
edit "BYUWiFi-ISE-XIRRUS" active-iaps all
edit "EDUROAM-CP-XIRRUS" active-iaps all
edit "EDUROAM-ISE-XIRRUS" active-iaps all
exit
!
group
reset
!
add "CP_Allowed"
radius-id "cpallowed"
device-id ""
vlan "10-5-35-0"
vlan pool none
qos 2
dhcp none
fast-roam layer 2-only
time-on always
time-off never
days-on all
stations unlimited
traffic limit-group pps unlimited
traffic limit-group kbps unlimited
traffic limit-sta pps unlimited
traffic limit-sta kbps unlimited
web-page redirect off
fallback none
enable
exit
!
add "CP_Register"
radius-id "cpregistration"
device-id ""
vlan "10-5-35-0"
vlan pool none
qos 2
dhcp none
fast-roam layer 2-only
time-on always
time-off never
days-on all
stations unlimited
traffic limit-group pps unlimited
traffic limit-group kbps unlimited
traffic limit-sta pps unlimited
traffic limit-sta kbps unlimited
web-page whitelist add *.byu.edu.
web-page whitelist add 10.11.64.55
web-page redirect off
```



```
    fallback none
    enable
exit
!
add "Public"
    radius-id "public"
    device-id ""
    vlan      "10-5-35-0"
    vlan pool none
    qos       2
    dhcp      none
    fast-roam layer      2-only
    time-on   always
    time-off  never
    days-on   all
    stations unlimited
    traffic   limit-group pps unlimited
    traffic   limit-group kbps unlimited
    traffic   limit-sta   pps unlimited
    traffic   limit-sta   kbps unlimited
    web-page  redirect    off
    fallback  none
    enable
exit
!
add "allowed"
    radius-id "allowed"
    device-id ""
    vlan      "10-5-35-0"
    vlan pool none
    qos       2
    dhcp      none
    fast-roam layer      2-only
    time-on   always
    time-off  never
    days-on   all
    stations unlimited
    traffic   limit-group pps unlimited
    traffic   limit-group kbps unlimited
    traffic   limit-sta   pps unlimited
    traffic   limit-sta   kbps unlimited
    web-page  redirect    off
    fallback  none
    enable
exit
!
add "blacklist"
    radius-id "blacklist"
    device-id ""
    vlan      "10-5-35-0"
    vlan pool none
    qos       2
    dhcp      none
    fast-roam layer      2-only
```

```

time-on    always
time-off   never
days-on   all
stations   unlimited
traffic    limit-group pps unlimited
traffic    limit-group kbps unlimited
traffic    limit-sta   pps unlimited
traffic    limit-sta   kbps unlimited
web-page   screen      login
web-page   server      external
web-page   https       on
web-page   auth-type   chap
web-page   auth-timeout 120
web-page   redir-url

https://byuise1.byu.edu:8443/portal/PortalSetup.action?portal=98dc5e00-
fc20-11e5-bb11-00505695a05b&action=cwa
web-page   land-url
web-page   whitelist add *.byu.edu
web-page   secret      enc
web-page   redirect    on
web-page   background  page_bg.jpg
web-page   logo-image  xirrus_logo.gif
web-page   header-text
web-page   footer-text
fallback   none
enable

exit
!
add "registration"
radius-id "registration"
device-id ""
vlan      "10-5-35-0"
vlan pool none
qos       2
dhcp      none
fast-roam layer      2-only
time-on   always
time-off  never
days-on  all
stations  unlimited
traffic   limit-group pps unlimited
traffic   limit-group kbps unlimited
traffic   limit-sta   pps unlimited
traffic   limit-sta   kbps unlimited
web-page  screen      login
web-page  server      external
web-page  https       on
web-page  auth-type   chap
web-page  auth-timeout 120
web-page  redir-url

https://byuise1.byu.edu:8443/portal/gateway?portal=f6561b90-d108-11e5-
b161-00505695a05b&action=cwa
web-page  land-url
web-page  whitelist add 10.3.34.40

```

```
web-page whitelist add *.byu.edu.
web-page secret          enc d67bd3146cf9883d6b71
web-page redirect       on
web-page background     page_bg.jpg
web-page logo-image     xirrus_logo.gif
web-page header-text
web-page footer-text
fallback none
enable
exit
exit
!
authentication-server ! (global settings)
  use external-radius
  !
  active-directory
    domain-admin
    domain-controller
    workgroup
    realm
  exit
  !
  external
    primary          secret enc
    primary          port   1812
    primary          server
    secondary        secret enc
    secondary        port   1812
    secondary        server
    timeout          600
    das-port         3799
    das-time-window  300
    das-event-timestamp optional
    called-sta-id-format bssid-ssid
    sta-mac-format   lower
    nas-identifier
  !
  accounting
    primary          secret enc
    primary          port   1813
    primary          server
    secondary        secret enc
    secondary        port   1813
    secondary        server
    interval         300
  off
  exit
exit
!
internal
  reset
exit
exit
!
```

```

acl
  reset
  off
exit
!
filter
  reset
  stateful enable
  track-apps disable
  enable
  !
  add-list "CP_LIST"
    add "CP_FLTR" allow layer 3 prot any-ip port any src any dst
10.11.64.55 enable
    enable
  exit
  !
  add-list "ISE"
    add "ISE_FLTR" allow layer 3 prot any-ip port any src any dst
10.3.34.40/32 enable
    enable
  exit
  !
  add-list "Public-Only"
    add "Permit-DHCP" allow layer 3 prot any-ip port bootpc-dhcp
src any dst 10.8.0.0 /26 enable
    add "Permit-DNS-UDP" allow layer 3 prot any-ip port dns
src any dst 10.8.0.0 /26 enable
    add "Permit-ISE" allow layer 3 prot any-ip port any
src any dst 10.3.34.40/32 enable
    add "Deny-Private-Nets" deny layer 3 prot any-ip port any
src any dst 10.0.0.0 /8 enable
    add "Permit-Any" allow layer 3 prot any port any
src any dst any enable
    enable
  exit
exit
!
ssid ! (filter mappings)
  edit "BYUWiFi-CP-XIRRUS" filter-list ""
  edit "BYUWiFi-ISE-XIRRUS" filter-list ""
  edit "EDUROAM-CP-XIRRUS" filter-list ""
  edit "EDUROAM-ISE-XIRRUS" filter-list ""
exit
!
group ! (filter mappings)
  edit "CP_Allowed" filter-list ""
  edit "CP_Register" filter-list "CP_LIST"
  edit "Public" filter-list "Public-Only"
  edit "allowed" filter-list ""
  edit "blacklist" filter-list ""
  edit "registration" filter-list ""
exit
!

```

```
tunnel
  reset
exit
!
interface iap1
  description ""
  band      5GHz
  antenna   internal directional
  channel   149
  channel   unlocked
  bond-40Mhz on
  mode      an
  cellsize  max
  rx-threshold -90
  tx-power   20
  link-distance
  up
exit
!
interface iap2
  description ""
  band      5GHz
  antenna   internal directional
  channel   157
  channel   unlocked
  bond-40Mhz on
  mode      an
  cellsize  small
  rx-threshold -82
  tx-power   5
  link-distance
  up
exit
!
interface iap3
  description ""
  band      2.4GHz
  antenna   internal directional
  channel   1
  channel   unlocked
  bond-40Mhz off
  mode      bgn
  cellsize  small
  rx-threshold -82
  tx-power   5
  link-distance
  up
exit
!
interface iap4
  description ""
  band      5GHz
  antenna   internal directional
  channel   132
```

```
channel        unlocked
bond-40Mhz     on
mode           an
cellsize       small
rx-threshold  -82
tx-power       5
link-distance
up
exit
!
interface iap5
description    ""
band           5GHz
antenna        internal directional
channel        36
channel        unlocked
bond-40Mhz     on
mode           an
cellsize       small
rx-threshold  -82
tx-power       5
link-distance
up
exit
!
interface iap6
description    ""
band           5GHz
antenna        internal directional
channel        108
channel        unlocked
bond-40Mhz     on
mode           an
cellsize       small
rx-threshold  -82
tx-power       5
link-distance
up
exit
!
interface iap7
description    ""
band           2.4GHz
antenna        internal directional
channel        11
channel        unlocked
bond-40Mhz     off
mode           bgn
cellsize       small
rx-threshold  -82
tx-power       5
link-distance
up
exit
```

```
!  
interface iap8  
  description  ""  
  band         5GHz  
  antenna      internal directional  
  channel      52  
  channel      unlocked  
  bond-40Mhz   on  
  mode         an  
  cellsize     small  
  rx-threshold -82  
  tx-power     5  
  link-distance  
up  
exit  
!  
interface iap  
  !  
  wds  
  reset  
  allow-stations off  
  roam-threshold 6  
  roam-avg-weight 50  
  !  
  client-link 1  
  target  
  max-iap      1  
  iap          clear  
  ssid         ""  
  username     ""  
  password     enc  
  off  
exit  
!  
  client-link 2  
  target  
  max-iap      1  
  iap          clear  
  ssid         ""  
  username     ""  
  password     enc  
  off  
exit  
!  
  client-link 3  
  target  
  max-iap      1  
  iap          clear  
  ssid         ""  
  username     ""  
  password     enc  
  off  
exit  
!
```

```
client-link 4
  target
  max-iap 1
  iap clear
  ssid ""
  username ""
  password enc
  off
exit
!
host-link 1 iap clear
host-link 2 iap clear
host-link 3 iap clear
host-link 4 iap clear
exit
exit
!
wifi-tag
  udp-port 1144
  tag-channel-bg none
  disable
  server
exit
!
location-reporting
  url
  cust-key enc
  period 15
  per-radio-data disable
  rf-finger-print disable
  bias base 100.000000
  bias range 10.000000
  bias factor 1.000000
  disable
exit
!
station-assurance
  enable
  period 60
  assoc-time 20
  auth-failures 10
  error-rate 20
  retry-rate 35
  data-rate 10
  rssi -85
  snr 10
  distance 2000
exit
!
roaming-assist
  disable
  period 120
  threshold 0
  data-rate 20
```



```
    devices    phone tablet player
exit
!
auth
    reset
exit
!
proxy-fwd
    proxy            off
    bluecoat-url     proxy.threatpulse.net
    netboxblue-url  xirrus.netboxblue.com
exit
!
proxy-mgmt
    off
    http             off
    http  host
    http  port       3128
    http  username
    http  password
    !
    https            off
    https  host
    https  port       3128
    https  username
    https  password
    !
    socks            off
    socks  ip
    socks  port       1080
    socks  username
    socks  password
    socks  type       SOCKS5
    !
    socks whitelist set net01 network
    socks whitelist set net01 mask
    socks whitelist set net02 network
    socks whitelist set net02 mask
    socks whitelist set net03 network
    socks whitelist set net03 mask
    socks whitelist set net04 network
    socks whitelist set net04 mask
    socks whitelist set net05 network
    socks whitelist set net05 mask
    socks whitelist set net06 network
    socks whitelist set net06 mask
    socks whitelist set net07 network
    socks whitelist set net07 mask
    socks whitelist set net08 network
    socks whitelist set net08 mask
    socks whitelist set net09 network
    socks whitelist set net09 mask
    socks whitelist set net10 network
    socks whitelist set net10 mask
```

```
exit
!
netflow
  collector host
  collector port 2055
  off
exit
!
cdp
  interval 60
  hold-time 180
  off
exit
!
lldp
  interval 30
  hold-time 120
  off
  request-power off
exit
!
cluster
  reset
exit
!
end
!
```