

Acme Packet SBC sample config for Remote Workers

This is a sample config for an Acme Packet Net-Net 3820 sbc to enable Remote Workers with sipXecs 4.4 in a distributed environment. It includes basic SIPVicious protection. This is a work in progress as the config will require some tweaking to get all sipX features working for Remote phones. Additionally, the config for passing phone provisioning through the sbc is not included, but hopefully will be added at some time.

```
apkt01-phx2# sh run
certificate-record
  name                SDcert
  country             US
  state              xx
  locality           YYY
  organization       zzz
  unit
  common-name        pub.ip.goes.here
  key-size           1024
  alternate-name
  trusted            enabled
  key-usage-list
                    digitalSignature
                    keyEncipherment
  extended-key-usage-list
                    serverAuth
  options
  last-modified-by   admin
  last-modified-date 2010-11-01 14:58:49
host-routes
  dest-network       <sipx>
  netmask            <netmask>
  gateway            <gateway>
  description        sipXecs
  last-modified-by   admin@console
  last-modified-date 2010-11-15 19:12:42
host-routes
  dest-network       <ntp-source>
  netmask            <netmask>
  gateway            <gateway>
  description        ntp
  last-modified-by   admin
  last-modified-date 2011-03-29 09:13:26
local-policy
  from-address
                    *
  to-address
                    *
  source-realm
                    outside
  description        Remote_Worker_Route_Policy_to_Core
  activate-time      N/A
  deactivate-time    N/A
  state              enabled
  policy-priority    none
  last-modified-by   admin@10.10.10.12
  last-modified-date 2010-10-14 09:45:39
  policy-attribute
    next-hop         sag:sipXecs
    realm            inside
    action           none
    terminate-recursion disabled
    carrier
    start-time       0000
    end-time         2400
    days-of-week     U-S
    cost             0
    app-protocol     SIP
    state            enabled
    methods
    media-profiles
media-manager
  state              enabled
```

```

latching                               enabled
flow-time-limit                         86400
initial-guard-timer                     300
subsq-guard-timer                       300
tcp-flow-time-limit                     86400
tcp-initial-guard-timer                 300
tcp-subsq-guard-timer                   300
tcp-number-of-ports-per-flow           2
hnt-rtcp                                disabled
algd-log-level                          NOTICE
mabcd-log-level                         NOTICE
red-flow-port                           1985
red-mgcp-port                           1986
red-max-trans                            10000
red-sync-start-time                     5000
red-sync-comp-time                      1000
media-policing                           enabled
max-signaling-bandwidth                 1041040
max-untrusted-signaling                 11
min-untrusted-signaling                 10
app-signaling-bandwidth                 0
tolerance-window                        30
rtcp-rate-limit                         0
min-media-allocation                    2000
min-trusted-allocation                  4000
deny-allocation                         32000
anonymous-sdp                           disabled
arp-msg-bandwidth                       32000
fragment-msg-bandwidth                   0
rfc2833-timestamp                       disabled
default-2833-duration                   100
rfc2833-end-pkts-only-for-non-sig      enabled
translate-non-rfc2833-event             disabled
dnssalg-server-failover                 disabled
last-modified-by                        admin
last-modified-date                      2011-04-20 13:24:26
network-interface
  name                                   s0p0
  sub-port-id                            0
  description                            Public_Network_Interface_Remote_Worker
  hostname
  ip-address                              pub.ip.goes.here
  pri-utility-addr
  sec-utility-addr
  netmask                                 255.255.255.0
  gateway                                 pub.ip.gw.here
  sec-gateway
  gw-heartbeat
    state                                 disabled
    heartbeat                             0
    retry-count                           0
    retry-timeout                         1
    health-score                           0
  dns-ip-primary
  dns-ip-backup1
  dns-ip-backup2
  dns-domain
  dns-timeout                             11
  hip-ip-list
  ftp-address
  icmp-address
  snmp-address
  telnet-address
  last-modified-by                       admin
  last-modified-date                     2011-04-20 13:07:53
network-interface
  name                                   s1p0
  sub-port-id                            0
  description                            Network_Interface_Connected_to_Internal_Network
  hostname
  ip-address                              <sipX_ip>

```

```

pri-utility-addr
sec-utility-addr
netmask <netmask>
gateway <gateway>
sec-gateway
gw-heartbeat
    state disabled
    heartbeat 0
    retry-count 0
    retry-timeout 1
    health-score 0
dns-ip-primary
dns-ip-backup1
dns-ip-backup2
dns-domain
dns-timeout 11
hip-ip-list <sipX_ip>
ftp-address <sipX_ip>
icmp-address <sipX_ip>
snmp-address
telnet-address
last-modified-by admin@10.10.10.12
last-modified-date 2010-10-14 10:46:37
ntp-config
server <ntp_ip>
last-modified-by admin@console
last-modified-date 2010-10-14 09:15:15
phy-interface
name s0p0
operation-type Media
port 0
slot 0
virtual-mac
admin-state enabled
auto-negotiation enabled
duplex-mode FULL
speed 100
last-modified-by admin@10.10.10.12
last-modified-date 2010-10-14 09:19:50
phy-interface
name s1p0
operation-type Media
port 0
slot 1
virtual-mac
admin-state enabled
auto-negotiation enabled
duplex-mode FULL
speed 100
last-modified-by admin@console
last-modified-date 2011-02-18 12:29:05
realm-config
identifier outside
description Remote_Worker_to_SBC
addr-prefix 0.0.0.0
network-interfaces s0p0:0
mm-in-realm enabled
mm-in-network enabled
mm-same-ip enabled
mm-in-system enabled
bw-cac-non-mm disabled
msm-release disabled
qos-enable disabled
generate-UDP-checksum disabled
max-bandwidth 0
fallback-bandwidth 0
max-priority-bandwidth 0
max-latency 0
max-jitter 0
max-packet-loss 0

```

observ-window-size	0
parent-realm	
dns-realm	
media-policy	
in-translationid	
out-translationid	
in-manipulationid	addRouteHdr
out-manipulationid	
manipulation-string	
class-profile	
average-rate-limit	0
access-control-trust-level	medium
invalid-signal-threshold	1
maximum-signal-threshold	4000
untrusted-signal-threshold	0
nat-trust-threshold	0
deny-period	60
ext-policy-svr	
symmetric-latching	enabled
pai-strip	disabled
trunk-context	
early-media-allow	
enforcement-profile	
additional-prefixes	
restricted-latching	none
restriction-mask	32
accounting-enable	enabled
user-cac-mode	none
user-cac-bandwidth	0
user-cac-sessions	0
icmp-detect-multiplier	0
icmp-advertisement-interval	0
icmp-target-ip	
monthly-minutes	0
net-management-control	disabled
delay-media-update	disabled
refer-call-transfer	disabled
codec-policy	
codec-manip-in-realm	disabled
constraint-name	
call-recording-server-id	
stun-enable	disabled
stun-server-ip	0.0.0.0
stun-server-port	3478
stun-changed-ip	0.0.0.0
stun-changed-port	3479
match-media-profiles	
qos-constraint	
last-modified-by	admin
last-modified-date	2011-12-01 16:18:18
realm-config	
identifier	inside
description	SBC_TO_SIPX
addr-prefix	0.0.0.0
network-interfaces	
mm-in-realm	slp0:0
mm-in-network	enabled
mm-same-ip	enabled
mm-in-system	enabled
bw-cac-non-mm	disabled
msm-release	disabled
qos-enable	disabled
generate-UDP-checksum	disabled
max-bandwidth	0
fallback-bandwidth	0
max-priority-bandwidth	0
max-latency	0
max-jitter	0
max-packet-loss	0
observ-window-size	0

```

parent-realm
dns-realm
media-policy
in-translationid
out-translationid
in-manipulationid
out-manipulationid
manipulation-string
class-profile
average-rate-limit          0
access-control-trust-level   high
invalid-signal-threshold     0
maximum-signal-threshold     0
untrusted-signal-threshold   0
nat-trust-threshold          0
deny-period                  30
ext-policy-svr
symmetric-latching          disabled
pai-strip                    disabled
trunk-context
early-media-allow
enforcement-profile
additional-prefixes
restricted-latching         none
restriction-mask             32
accounting-enable            enabled
user-cac-mode                none
user-cac-bandwidth           0
user-cac-sessions            0
icmp-detect-multiplier       0
icmp-advertisement-interval  0
icmp-target-ip
monthly-minutes              0
net-management-control       disabled
delay-media-update           disabled
refer-call-transfer          disabled
codec-policy
codec-manip-in-realm         disabled
constraint-name
call-recording-server-id
stun-enable                  disabled
stun-server-ip               0.0.0.0
stun-server-port             3478
stun-changed-ip              0.0.0.0
stun-changed-port            3479
match-media-profiles
qos-constraint
last-modified-by             admin
last-modified-date           2011-04-20 12:37:50
response-map
last-modified-by             admin
last-modified-date           2011-10-07 14:40:55
name                          503Rogue
entries
503 -> 677 (Rogue)
session-agent
hostname                      <sipX_ip>
ip-address                    <sipX_ip>
port                          5060
state                          enabled
app-protocol                  SIP
app-type
transport-method              UDP
realm-id                       *
egress-realm-id
description                    To_Core_sipXecs_1
carriers
allow-next-hop-lp             enabled
constraints                    disabled
max-sessions                   0
max-inbound-sessions          0

```

```

max-outbound-sessions      0
max-burst-rate             0
max-inbound-burst-rate    0
max-outbound-burst-rate   0
max-sustain-rate          0
max-inbound-sustain-rate  0
max-outbound-sustain-rate 0
min-seizures              5
min-asr                    0
time-to-resume             10
ttr-no-response           16
in-service-period         0
burst-rate-window         0
sustain-rate-window       0
req-uri-carrier-mode      None
proxy-mode
redirect-action
loose-routing              enabled
send-media-session        enabled
response-map
ping-method                OPTIONS;hops=0
ping-interval              60
ping-send-mode            keep-alive
ping-in-service-response-codes
out-service-response-codes
options                    trans-timeouts=1
media-profiles
in-translationid
out-translationid
trust-me                   disabled
request-uri-headers
stop-recurse
local-response-map
ping-to-user-part
ping-from-user-part
li-trust-me                disabled
in-manipulationid
out-manipulationid
manipulation-string
p-asserted-id
trunk-group
max-register-sustain-rate 0
early-media-allow
invalidate-registrations  disabled
rfc2833-mode              transparent
rfc2833-payload           0
codec-policy
enforcement-profile
refer-call-transfer        disabled
reuse-connections         NONE
tcp-keepalive             none
tcp-reconn-interval       0
max-register-burst-rate   0
register-burst-window     0
last-modified-by         admin
last-modified-date        2011-09-06 20:59:24
session-agent
hostname                   10.12.13.14
ip-address
port                       5060
state                      disabled
app-protocol              SIP
app-type
transport-method          UDP
realm-id                   *
egress-realm-id
description                 SIPVicious Protection
carriers
allow-next-hop-lp         enabled
constraints                disabled
max-sessions              0

```

```

max-inbound-sessions      0
max-outbound-sessions     0
max-burst-rate            0
max-inbound-burst-rate    0
max-outbound-burst-rate   0
max-sustain-rate          0
max-inbound-sustain-rate  0
max-outbound-sustain-rate 0
min-seizures              5
min-asr                   0
time-to-resume            0
ttr-no-response           0
in-service-period         0
burst-rate-window         0
sustain-rate-window       0
req-uri-carrier-mode      None
proxy-mode
redirect-action
loose-routing              enabled
send-media-session        enabled
response-map
ping-method
ping-interval             0
ping-send-mode            keep-alive
ping-in-service-response-codes
out-service-response-codes
media-profiles
in-translationid
out-translationid
trust-me                  disabled
request-uri-headers
stop-recurse
local-response-map        503Rogue
ping-to-user-part
ping-from-user-part
li-trust-me               disabled
in-manipulationid
out-manipulationid
manipulation-string
p-asserted-id
trunk-group
max-register-sustain-rate 0
early-media-allow
invalidate-registrations  disabled
rfc2833-mode              none
rfc2833-payload           0
codec-policy
enforcement-profile
refer-call-transfer       disabled
reuse-connections        NONE
tcp-keepalive             none
tcp-reconn-interval       0
max-register-burst-rate   0
register-burst-window      0
last-modified-by         admin
last-modified-date        2011-10-07 14:41:34
session-group
group-name                sipXecs
description
state                     enabled
app-protocol              SIP
strategy                  Hunt
dest
                           <sipX_ip>
trunk-group
sag-recursion              enabled
stop-sag-recurse         401,407
last-modified-by         admin
last-modified-date        2012-01-09 22:34:11
sip-config
state                     enabled

```

```

operation-mode                dialog
dialog-transparency          enabled
home-realm-id                inside
egress-realm-id              inside
nat-mode                     None
registrar-domain             *
registrar-host               *
registrar-port               5060
register-service-route        always
init-timer                   500
max-timer                    4000
trans-expire                 32
invite-expire                180
inactive-dynamic-conn        32
enforcement-profile
pac-method
pac-interval                 10
pac-strategy                 PropDist
pac-load-weight              1
pac-session-weight           1
pac-route-weight             1
pac-callid-lifetime          600
pac-user-lifetime            3600
red-sip-port                 1988
red-max-trans                10000
red-sync-start-time          5000
red-sync-comp-time           1000
add-reason-header            disabled
sip-message-len              4096
enum-sag-match               disabled
extra-method-stats           enabled
registration-cache-limit     0
register-use-to-for-lp        disabled
options                       cache-challenges
                               max-register-forward=5000
                               max-register-refresh=112
                               max-udp-length=0
                               reg-overload-protect
                               register-grace-timer=120
                               reject-register=refresh
                               set-inv-exp-at-100-resp
add-ucid-header              disabled
proxy-sub-events
last-modified-by             admin
last-modified-date           2011-10-07 14:38:53
sip-interface
state                        enabled
realm-id                     outside
description                   Remote_Worker_to_SBC
sip-port
    address                   pub.ip.goes.here
    port                       5060
    transport-protocol         UDP
    tls-profile
    allow-anonymous           registered
    ims-aka-profile
sip-port
    address                   pub.ip.goes.here
    port                       5061
    transport-protocol         TLS
    tls-profile                SSA
    allow-anonymous           registered
    ims-aka-profile
carriers
trans-expire                 0
invite-expire                0
max-redirect-contacts        0
proxy-mode
redirect-action              Proxy
contact-mode                 none
nat-traversal                always

```



```

nat-interval 45
tcp-nat-interval 90
registration-caching enabled
min-reg-expire 300
registration-interval 3600
route-to-registrar enabled
secured-network disabled
teluri-scheme disabled
uri-fqdn-domain
options reg-via-key
trust-mode all
max-nat-interval 3600
nat-int-increment 10
nat-test-increment 30
sip-dynamic-hnt disabled
stop-recurse 401,407
port-map-start 0
port-map-end 0
in-manipulationid
out-manipulationid
manipulation-string
sip-ims-feature disabled
operator-identifier
anonymous-priority none
max-incoming-conns 0
per-src-ip-max-incoming-conns 0
inactive-conn-timeout 0
untrusted-conn-timeout 0
network-id
ext-policy-server
default-location-string
charging-vector-mode pass
charging-function-address-mode pass
ccf-address
ecf-address
term-tgrp-mode none
implicit-service-route disabled
rfc2833-payload 101
rfc2833-mode transparent
constraint-name
response-map
local-response-map
ims-aka-feature disabled
enforcement-profile
refer-call-transfer disabled
route-unauthorized-calls
tcp-keepalive none
add-sdp-invite disabled
add-sdp-profiles
last-modified-by admin
last-modified-date 2011-11-29 21:09:06
sip-interface
state enabled
realm-id inside
description PBX_to_SBC
sip-port
address <sipX_ip>
port 5060
transport-protocol UDP
tls-profile
allow-anonymous all
ims-aka-profile
carriers
trans-expire 0
invite-expire 0
max-redirect-contacts 0
proxy-mode
redirect-action Recurse
contact-mode none
nat-traversal none
nat-interval 30

```

```

tcp-nat-interval          90
registration-caching     disabled
min-reg-expire           300
registration-interval    3600
route-to-registrar       disabled
secured-network          disabled
teluri-scheme            disabled
uri-fqdn-domain
trust-mode               all
max-nat-interval         3600
nat-int-increment        10
nat-test-increment       30
sip-dynamic-hnt          disabled
stop-recurse             401,407
port-map-start           0
port-map-end             0
in-manipulationid
out-manipulationid
manipulation-string
sip-ims-feature          disabled
operator-identifier
anonymous-priority       none
max-incoming-conns       0
per-src-ip-max-incoming-conns 0
inactive-conn-timeout    0
untrusted-conn-timeout   0
network-id
ext-policy-server
default-location-string
charging-vector-mode     pass
charging-function-address-mode pass
ccf-address
ecf-address
term-tgrp-mode           none
implicit-service-route   disabled
rfc2833-payload          101
rfc2833-mode             transparent
constraint-name
response-map
local-response-map
ims-aka-feature          disabled
enforcement-profile
refer-call-transfer      disabled
route-unauthorized-calls
tcp-keepalive            none
add-sdp-invite           disabled
add-sdp-profiles
last-modified-by         admin@10.10.10.12
last-modified-date       2010-10-14 09:36:42
sip-manipulation
  name                   addRouteHdr
  description             SIPVicious Protection
  header-rule
    name                 isScanner
    header-name           User-Agent
    action                store
    comparison-type       pattern-rule
    match-value           ^friend.*
    msg-type              any
    new-value
    methods
  header-rule
    name                 addNullRoute
    header-name           Route
    action                add
    comparison-type       boolean
    match-value           $isScanner.$0
    msg-type              request
    new-value             "<sip:10.12.13.14;lr>"
    methods
  last-modified-by       admin<sipX_ip>

```

```

    last-modified-date          2011-10-07 14:40:26
steering-pool
    ip-address                  <sipX_ip>
    start-port                  31000
    end-port                    34999
    realm-id                    inside
    network-interface
    last-modified-by          admin
    last-modified-date        2011-10-07 14:35:54
steering-pool
    ip-address                  pub.ip.goes.here
    start-port                  31000
    end-port                    34999
    realm-id                    outside
    network-interface
    last-modified-by          admin
    last-modified-date        2011-10-07 14:36:04
system-config
    hostname
    description
    location
    mib-system-contact
    mib-system-name
    mib-system-location
    snmp-enabled                enabled
    enable-snmp-auth-traps      disabled
    enable-snmp-syslog-notify   disabled
    enable-snmp-monitor-traps   disabled
    enable-env-monitor-traps    disabled
    snmp-syslog-his-table-length 1
    snmp-syslog-level           WARNING
    system-log-level            WARNING
    process-log-level           NOTICE
    process-log-ip-address      0.0.0.0
    process-log-port            0
    collect
        sample-interval         5
        push-interval           15
        boot-state              disabled
        start-time              now
        end-time                never
        red-collect-state       disabled
        red-max-trans           1000
        red-sync-start-time     5000
        red-sync-comp-time      1000
        push-success-trap-state disabled
    call-trace                  disabled
    internal-trace              disabled
    log-filter                  all
    default-gateway             <gateway>
    restart                     enabled
    exceptions
    telnet-timeout              0
    console-timeout             0
    remote-control              enabled
    cli-audit-trail             enabled
    link-redundancy-state       disabled
    source-routing              enabled
    cli-more                    disabled
    terminal-height             24
    debug-timeout               0
    trap-event-lifetime         0
    cleanup-time-of-day         00:00
    last-modified-by          admin
    last-modified-date        2010-11-15 17:17:39
tls-profile
    name                        SSA
    end-entity-certificate      SDCert
    trusted-ca-certificates
    cipher-list

```

ALL

verify-depth	10
mutual-authenticate	disabled
tls-version	compatibility
last-modified-by	admin
last-modified-date	2011-11-29 20:13:14
capture-receiver	
state	disabled
address	
network-interface	slp0:0
last-modified-by	admin
last-modified-date	2010-11-01 14:19:17