



Configuration Examples

This appendix shows some examples of the configuration in the Cisco 2600 series, Cisco 3600 series, and Cisco 3700 series routers.

Cisco 2600 Series Router Configuration Example

Following is an example of a configuration on a Cisco 2600 series router.

The following configuration command script was created:

```
hostname 2600
enable secret 5 $1$zxxT$YZMzUP1/wQvyLn5cWeyPu.
enable password guessme
line vty 0 4
password guessagain
snmp-server community public
!
no appletalk routing
no decnet routing
ip routing
no clns routing
no ipx routing
no vines routing
no xns routing
no apollo routing
no bridge 1
!
line 1 64
speed 115200
flowcontrol hardware
login local
autoselect during-login
autoselect ppp
modem dialin
ip local pool setup_pool 172.20.30.40 172.20.30.88
!
username user password passwd
line 1 64
modem output
transport input all
!
interface Ethernet0/0
no shutdown
ip address 255.255.255.0 255.255.0.0
lat enabled
```

```
no mop enabled
!
interface Serial0/0
encapsulation hdlc
clock rate 2000000
ip address 1.0.0.1 255.0.0.0
lat enabled
appletalk cable-range 3-3 3.3
appletalk zone myzone
ipx network 8
no vines metric
mop enabled
!
interface Ethernet0/1
ip address 255.255.255.1 255.255.0.0
lat enabled
no vines metric
mop enabled
!
interface Serial0/1
physical-layer sync
encapsulation ppp
ip address 2.0.0.1 255.0.0.0
lat enabled
appletalk cable-range 6-6 6.6
appletalk zone myzone
ipx network 6
no vines metric
xns network 7
mop enabled
!
interface Serial0/2
physical-layer async
ip address 3.0.0.1 255.0.0.0
lat enabled
appletalk cable-range 8-8 8.8
appletalk zone myzone
ipx network 8
no vines metric
mop enabled
!
interface Serial1/0
physical-layer sync
encapsulation frame-relay
frame-relay lmi-type cisco
clock rate 115200
ip address 4.0.0.1 255.0.0.0
no lat enabled
no vines metric
no mop enabled
!
interface Serial1/1
physical-layer async
ip address 5.0.0.1 255.0.0.0
no lat enabled
no vines metric
no mop enabled
!
interface Serial1/2
physical-layer sync
encapsulation x25 dte
x25 address 1234
x25 map ip 1.0.0.1 4321
x25 map ipx 6.0.0.1 -2132065964
```

```
x25 ltc 1
x25 htc 64
x25 win 7
x25 wout 7
x25 threshold 2
x25 ips 128
x25 ops 128
clock rate 115200
ip address 6.0.0.1 255.0.0.0
no lat enabled
no vines metric
no mop enabled
!
interface Serial1/3
physical-layer sync
encapsulation smds
smds address c141.5556.1415
no keepalive
smds static-map ip 2.0.0.1 c141.5556.1414
smds static-map ipx 2.0.0.1 c141.5556.1414
clock rate 115200
ip address 172.22.50.10 255.255.0.0
no lat enabled
no vines metric
no mop enabled
dialer-list 1 protocol ip permit
dialer-list 1 protocol ipx permit
!
router igrp 1
redistribute connected
network 172.21.0.0
!
end
```

Following is an example of a configuration on the Cisco 2691 router.

```
C2691#show running-config
Building configuration...

Current configuration : 1143 bytes
!
version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname C2691
!
enable password lab
!
voice-card 1
!
ip subnet-zero
!
!
no ip domain-lookup
ip host rtplab-dev 172.18.207.10
!
!
!
!
fax interface-type fax-mail
mta receive maximum-recipients 0
!
```

```
controller T1 1/0
  framing esf
  linecode b8zs
  ds0-group 1 timeslots 1-24 type e&m-wink-start
!
controller T1 1/1
  framing sf
  linecode ami
!
!
!
!
interface FastEthernet0/0
  ip address 172.18.193.171 255.255.255.0
  speed 100
  full-duplex
!
interface FastEthernet0/1
  ip address 50.0.0.4 255.0.0.0
  speed 100
  full-duplex
!
ip classless
ip route 172.18.207.0 255.255.255.0 172.18.193.1
ip http server
ip pim bidir-enable
!
!
!
call rsvp-sync
!
voice-port 1/0:1
  output attenuation 3
!
!
mgcp profile default
!
dial-peer cor custom
!
!
!
dial-peer voice 919 pots
  destination-pattern 919
  port 1/0:1
  prefix 919
!
dial-peer voice 408 voip
  destination-pattern 408
  session target ipv4:50.0.0.3
  dtmf-relay h245-alphanumeric
  codec g711alaw
!
!
line con 0
  exec-timeout 0 0
line aux 0
line vty 0 4
  password lab
  login
!
end
```


Cisco 3631 Router Configuration Example

Following is an example of the configuration on the Cisco 3631 router equipped with the following modules:

- IMA-8T1 in
- NM-4A/S
- WIC-2A/S
- WIC-1DSU-56k4

```
Building configuration...
00:45:06: %SYS-5-CONFIG_I: Configured from console by console
Current configuration : 3095 bytes
!
! Last configuration change at 12:12:59 PDT Tue Dec 4 2001
! NVRAM config last updated at 12:12:26 PDT Tue Dec 4 2001
!
version 12.2
service timestamps debug uptime
service timestamps log uptime
service password-encryption
!
hostname cisco3631
!
enable secret 5 $1$6UL.$w0aJJ5oZmIvIzRD11RMvo/
!
username USER password 7 01030717481C091D25
memory-size iomem 10
clock timezone PDT -8
ip subnet-zero
no ip domain-lookup
!
x29 profile linemode 2:1 3:2 15:1
x25 routing
!
chat-script test "" "ATDT\T" TIMEOUT 120 CONNECT \c
!
!
!
!
!
!
!
!
!
!
!
interface FastEthernet0/0
description FAST ETHERNET INTERFACE
ip address x.x.x.x x.x.x.x
duplex auto
speed auto
!
interface Serial0/0
description WIC-1DSU-56k4
ip address x.x.x.x x.x.x.x
encapsulation ppp
!
interface Serial0/1
description WIC-2A/S
physical-layer async
```

```
no ip address
encapsulation ppp
dialer in-band
dialer rotary-group 3
dialer-group 1
async mode dedicated
no fair-queue
!
interface Serial0/2
description WIC-2A/S
physical-layer async
no ip address
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer rotary-group 3
dialer-group 1
async default routing
async mode dedicated
no fair-queue
!
interface Serial1/0
description NM-4A/S
no ip address
encapsulation x25
x25 htc 8
!
interface Serial1/1
description NM-4A/S
no ip address
encapsulation x25 dce
x25 ips 256
x25 ops 256
clockrate 9600
!
interface Serial1/2
no ip address
shutdown
!
interface Serial1/3
no ip address
shutdown
!
interface ATM2/0
no ip address
shutdown
no atm ilmi-keepalive
no scrambling-payload
!
interface ATM2/1
no ip address
shutdown
no atm ilmi-keepalive
no scrambling-payload
!
interface ATM2/2
description ATM T1
ip address x.x.x.x x.x.x.x
no ip route-cache
no ip mroute-cache
no atm ilmi-keepalive
pvc atm71 0/71
protocol clns 47.0004.004d.0056.0000.0c00.0003.00 broadcast
```

```

protocol ip 12.0.0.2 broadcast
encapsulation aal5snap
!
scrambling-payload
impedance 120-ohm
!
interface ATM2/3
no ip address
shutdown
no atm ilmi-keepalive
no scrambling-payload
!
interface ATM2/4
no ip address
shutdown
no atm ilmi-keepalive
no scrambling-payload
!
interface ATM2/5
no ip address
shutdown
no atm ilmi-keepalive
no scrambling-payload
!
interface ATM2/6
no ip address
shutdown
no atm ilmi-keepalive
no scrambling-payload
!
interface ATM2/7
no ip address
shutdown
no atm ilmi-keepalive
no scrambling-payload
!
interface ATM2/IMA0
description ATM-IMA GROUP
ip address x.x.x.x x.x.x.x
no ip route-cache
no ip mroute-cache
no atm ilmi-keepalive
pvc atm71 0/71
protocol clns 47.0004.004d.0056.0000.0c00.0002.00 broadcast
protocol ip 12.0.0.1 broadcast
encapsulation aal5snap
!
interface Dialer3
ip address x.x.x.9 x.x.x.x
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout 500
dialer map ip x.x.x.10 name USER modem-script test broadcast
9,5551122
dialer map ip x.x.x.10 name USER modem-script test broadcast
9,5551123
dialer hold-queue 15
dialer load-threshold 5 either
dialer-group 1
no fair-queue
no cdp enable
ppp authentication chap

```



```
ppp multilink
group-range 4 5
!
router ospf 1
redistribute connected subnets
network X.X.X.X 0.0.0.X area 3
!
!
ip classless
no ip http server
ip pim bidir-enable
!
!
!
!
!
!
!
!
!
!
!
snmp-server view cutdown internet included
snmp-server view cutdown at excluded
snmp-server community public view cutdown RO
snmp-server community private view cutdown RW
!
call rsvp-sync
!
!
mgcp profile default
!
dial-peer cor custom
!
!
!
!
line con 0
line 3
modem InOut
transport input all
autohangup
stopbits 1
rxspeed 115200
txspeed 115200
flowcontrol hardware
line 5
modem InOut
transport input all
autohangup
stopbits 1
rxspeed 115200
txspeed 115200
flowcontrol hardware
line 6
line aux 0
password 7 08314D5D1A0E0A0516
login
modem InOut
transport input all
line vty 0 4
password 7 00141215174C04140B
login
```

```
!
end
```

Cisco 3725 Router Configuration Example

Following example shows the configuration on the Cisco 3725 router.

```
version 12.1
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname pipertdm
!
no logging buffered
logging rate-limit console 10 except errors
no logging console
!
!
!
ip subnet-zero
!
!
no ip finger
ip host rtplab-tftp2 172.18.207.16
ip host rtplab-dev 172.18.207.10
!
no ip dhcp-client network-discovery
no mgcp timer receive-rtcp
call rsvp-sync
!
!
!
!
!
fax interface-type modem
mta receive maximum-recipients 0
!
!
!
!
interface FastEthernet0/0
ip address 172.18.197.74 255.255.255.252
no keepalive
duplex auto
speed auto
no cdp enable
!
interface FastEthernet0/1
ip address 2.2.2.2 255.0.0.0
no keepalive
duplex auto
speed auto
no cdp enable
!
interface BRI1/0
no ip address
shutdown
!
interface FastEthernet1/0
```

```
ip address 1.1.1.1 255.0.0.0
no keepalive
duplex auto
speed auto
no cdp enable
!
interface Serial1/0
no ip address
shutdown
no fair-queue
clockrate 125000
!
interface FastEthernet1/1
ip address 3.3.3.3 255.0.0.0
no keepalive
shutdown
duplex auto
speed auto
no cdp enable
!
interface Serial1/1
no ip address
shutdown
clockrate 125000
!
ip kerberos source-interface any
ip classless
ip route 172.18.0.0 255.255.0.0 FastEthernet0/0
ip http server
!
!
!
!
snmp-server packetsize 4096
snmp-server chassis-id
snmp-server manager
!
!
dial-peer cor custom
!
!
!
!
line con 0
exec-timeout 0 0
transport input none
line 1 32
line 35 96
line aux 0
line vty 0 4
!
end
```

1-Port ADSL WAN Interface Card Configuration Examples

Following configuration examples are shown below:

- [VoATM over AAL2 on the ATM Interface Configuration Example, page A-12](#)
- [VoATM over AAL5 on the ATM Interface Configuration Example, page A-14](#)

VoATM over AAL2 on the ATM Interface Configuration Example

The following example shows VoATM over AAL2 on the ATM interface with an ADSL card:

```

Router#
version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname host1
!
memory-size iomem 10
voice-card 1
!
ip subnet-zero
ip host host2 225.255.255.224
!
no mgcp timer receive-rtcp
call rsvp-sync
!
!
controller T1 1/0
framing esf
linecode b8zs
ds0-group 0 timeslots 1 type e&m-wink-start
ds0-group 1 timeslots 2 type e&m-wink-start
.
.
ds0-group 23 timeslots 24 type e&m-wink-start
!
controller T1 1/1
framing esf
linecode b8zs
!
interface Ethernet0/0
ip address 1.6.46.119 255.255.255.224
half-duplex
no cdp enable
!
interface Serial0/0
no ip address
shutdown
!
interface ATM0/1
ip address 10.1.1.1 255.0.0.0
load-interval 30
atm vc-per-vp 256
no atm ilmi-keepalive
pvc 10/100
vbr-rt 672 672 512
encapsulation aal2

```

```
!
pvc 10/200
  protocol ip 10.1.1.2 broadcast
  encapsulation aal5snap
!
dsl operating-mode ansi-dmt
no fair-queue
!
interface Ethernet0/1
  no ip address
  shutdown
!
ip classless
ip route 223.255.254.254 255.255.255.224 Ethernet0/0
no ip http server
!
!
snmp-server engineID local 000000090200003080477F20
snmp-server manager
!
voice-port 1/0:0
  local-alerting
  timeouts wait-release 3
  connection trunk 3001
!
voice-port 1/0:1
  local-alerting
  timeouts wait-release 3
  connection trunk 3002
.
.
voice-port 1/0:23
  local-alerting
  timeouts wait-release 3
  connection trunk 3024
  shutdown
!
dial-peer cor custom
!
dial-peer voice 3001 voatm
  destination-pattern 3001
  called-number 4001
  session protocol aal2-trunk
  session target ATM0/1 pvc 10/100 31
  codec aal2-profile ITUT 1 g711ulaw
  no vad
!
dial-peer voice 3002 voatm
  destination-pattern 3002
  called-number 4002
  session protocol aal2-trunk
  session target ATM0/1 pvc 10/100 32
  codec aal2-profile custom 100 g726r32
  no vad
!
dial-peer voice 3003 voatm
  destination-pattern 3003
  called-number 4003
  session protocol aal2-trunk
  session target ATM0/1 pvc 10/100 33
  codec aal2-profile ITUT 7 g729abr8
  no vad
.
```

```

.
.
dial-peer voice 3024 voatm
 destination-pattern 3024
 called-number 3024
 session protocol aal2-trunk
 session target ATM0/1 pvc 10/100 54
 codec aal2-profile ITUT 7 g729abr8
 no vad
!
dial-peer voice 1 pots
 destination-pattern 4001
 port 1/0:0
!
dial-peer voice 2 pots
 destination-pattern 4002
 port 1/0:1
.
.
.
dial-peer voice 24 pots
 destination-pattern 4024
 port 1/0:23
!
line con 0
 exec-timeout 0 0
 transport input none
line aux 0
line vty 0 4
 login
!
no scheduler allocate
end

```

VoATM over AAL5 on the ATM Interface Configuration Example

The following example shows a Cisco 2600 series router configured for VoATM over AAL5 on the ATM interface with an ADSL card.

```

Router#
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname u2621
!
no logging buffered
no logging buffered
logging rate-limit console 10 except errors
!
memory-size iomem 15
voice-card 1
!
ip subnet-zero
!
no ip finger
no ip domain-lookup
!
no mgcp timer receive-rtcp
call rsvp-sync

```

```
!  
controller T1 1/0  
  framing esf  
  linecode b8zs  
  ds0-group 0 timeslots 1-24 type e&m-wink-start  
!  
controller T1 1/1  
!  
!  
interface ATM0/0  
  ip address 12.0.0.1 255.255.255.224  
  load-interval 30  
  atm vc-per-vp 256  
  no atm ilmi-keepalive  
  dsl operating-mode auto  
  no fair-queue  
!  
!  
interface FastEthernet0/0  
  ip address 1.7.73.1 255.255.255.224  
  duplex auto  
  speed auto  
!  
!  
interface FastEthernet0/1  
  ip address 192.168.2.1 255.255.255.224  
  load-interval 30  
  duplex auto  
  speed auto  
!  
ip classless  
ip route 223.255.254.0 255.255.255.224 FastEthernet0/0  
no ip http server  
!  
!  
snmp-server engineID local 0000000902000002163DB260  
snmp-server packetsize 4096  
snmp-server manager  
!  
voice-port 1/0:0  
!  
dial-peer cor custom  
!  
!  
dial-peer voice 5 pots  
  destination-pattern 777...  
  port 1/0:0  
  prefix 777  
!  
!  
dial-peer voice 100 voatm  
  destination-pattern 888....  
  session target atm0/0 pvc 0/72  
!  
!  
line con 0  
  exec-timeout 0 0  
  transport input none  
line aux 0  
line vty 0 4  
  login  
!  
end
```

NM-AIC-64, Contact Closure Network Configuration Examples

The following examples are documented below:

- [AIC IP Address Configuration Example, page A-16](#)
- [IP Route to the AIC Configuration Examples, page A-20](#)
 - [With an Unnumbered IP Address, page A-20](#)
 - [Without an Unnumbered IP Address, page A-21](#)

[AIC CLI Configuration for Alarms, page A-22](#)

AIC IP Address Configuration Example

The following example shows a Cisco 3600 router configured for AIC IP address:

```

version 12.2
no service single-slot-reload-enable
service tcp-keepalives-in
service tcp-keepalives-out
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname 3600-top
!
logging rate-limit console 10 except errors
!
memory-size iomem 15
ip subnet-zero
!
!
no ip finger
no ip domain-lookup
ip host moe 172.31.10.2
ip host mickey 10.1.1.2
!
no ip dhcp-client network-discovery
frame-relay switching
x25 routing
!
!
call-history-mib max-size 50
!
interface Ethernet0/0
 ip address 10.5.37.13 255.255.0.0
 ip helper-address 223.255.254.254
 no keepalive
 half-duplex
!
interface Serial0/0
 ip address 10.5.5.1 255.255.255.0
 encapsulation frame-relay
 no ip mroute-cache
 clockrate 500000
 frame-relay class voice-vc
 frame-relay traffic-shaping
 frame-relay map ip 10.5.5.2 990 broadcast
 frame-relay interface-dlci 990
 frame-relay intf-type dce

```



```
!
interface Ethernet0/1
  no ip address
  half-duplex
  no cdp enable
!
interface Serial0/1
  ip address 10.11.11.1 255.255.255.0
  encapsulation frame-relay
  no ip mroute-cache
  clockrate 256000
  frame-relay class voice-vc
  frame-relay traffic-shaping
  frame-relay interface-dlci 991
  frame-relay intf-type dce
!
interface Serial1/0
  ip address negotiated
!
router mobile
!
ip kerberos source-interface any
ip classless
ip route 223.255.254.254 255.255.255.255 10.5.0.1
ip route 223.255.254.254 255.255.255.255 Ethernet0/0
no ip http server
!
!
map-class frame-relay voice-vc
  frame-relay cir 800000
  frame-relay bc 512000
  no frame-relay adaptive-shaping
  frame-relay fair-queue
  frame-relay voice bandwidth 500000
  frame-relay fragment 100
  frame-relay ip rtp priority 16384 16383 512
!
map-class frame-relay fr1
  frame-relay cir 1000000
  frame-relay bc 1000
  no frame-relay adaptive-shaping
  frame-relay fair-queue
  frame-relay voice bandwidth 1000000
  frame-relay fragment 100
!
map-class frame-relay voice-vc2
  frame-relay cir 800000
  frame-relay bc 512000
  no frame-relay adaptive-shaping
  frame-relay voice bandwidth 800000
!
map-class frame-relay voice-data
access-list 1 deny 192.200.1.20
access-list 2 deny 10.10.1.10
dialer-list 1 protocol ip permit
dialer-list 1 protocol ipx permit
!
snmp-server packetsize 4096
snmp-server manager
!
alarm-interface 1
  ip address 10.4.3.2
  call rsvp-sync
!
```

```
mgcp modem passthrough voip mode ca
no mgcp timer receive-rtcp
!
mgcp profile default
!
dial-peer cor custom
!
dial-peer voice 1 pots
  destination-pattern 3
  direct-inward-dial
  forward-digits all
!
dial-peer voice 100 voip
  shutdown
  destination-pattern 3
  session target ipv4:10.2.81.1
  playout-delay maximum 300
!
dial-peer voice 2 pots
  shutdown
  destination-pattern 3002
!
dial-peer voice 3 pots
  shutdown
  destination-pattern 3003
!
dial-peer voice 4 pots
  shutdown
  destination-pattern 3004
!
dial-peer voice 2000 voip
  shutdown
  destination-pattern 2...
  session target ipv4:5.5.5.2
  playout-delay maximum 300
!
dial-peer voice 110 voip
  shutdown
  destination-pattern 1...
  session target ipv4:10.2.83.30
  playout-delay maximum 300
!
dial-peer voice 922 pots
  shutdown
  destination-pattern 9..
!
dial-peer voice 22 pots
  shutdown
  destination-pattern 22
!
dial-peer voice 6001 pots
  shutdown
  destination-pattern 6001
!
dial-peer voice 333 voip
  shutdown
  destination-pattern 1
  session target ipv4:10.2.79.55
  playout-delay maximum 300
!
dial-peer voice 200 vofr
  shutdown
  destination-pattern 1
!
```

```
dial-peer voice 7001 pots
 shutdown
 destination-pattern 7001
 !
dial-peer voice 5000 voip
 shutdown
 destination-pattern 5...
 session target ipv4:10.11.11.2
 playout-delay maximum 300
 !
dial-peer voice 20 voip
 shutdown
 destination-pattern 1
 session target ipv4:10.11.11.2
 playout-delay maximum 300
 !
dial-peer voice 2001 voip
 preference 2
 shutdown
 destination-pattern 2...
 session target ipv4:10.2.79.7
 playout-delay maximum 300
 !
dial-peer voice 1000 voip
 destination-pattern 1...
 session target ipv4:10.2.81.6
 playout-delay maximum 300
 no vad
 !
dial-peer voice 1001 voatm
 shutdown
 destination-pattern 1...
 !
dial-peer voice 1100 voifr
 shutdown
 destination-pattern 1...
 session target Serial0/0 990
 no vad
 !
gateway
 !
gateway
 !
gatekeeper
 shutdown
 !
 !
line con 0
 exec-timeout 0 0
 transport input none
line 33
 no exec
 transport preferred none
 transport input telnet
 transport output none
 stopbits 1
line aux 0
line vty 0 4
 login
 !
end
```

IP Route to the AIC Configuration Examples

Following examples show the configuration of an IP route to the AIC with an unnumbered and numbered IP address.

With an Unnumbered IP Address

The following example shows a Cisco 3660 router, with an IP route to an AIC, is configured with an unnumbered IP address:

```

version 12.1
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname uut2-3660
!
logging rate-limit console 10 except errors
no logging console
!
ip subnet-zero
!
!
no ip finger
no ip domain-lookup
!
call rsvp-sync
cns event-service server
!
interface FastEthernet0/0
 ip address 10.2.130.2 255.255.0.0
 duplex auto
 speed auto
no cdp enable
!
interface Serial5/0
 ip unnumbered FastEthernet0/0
!
ip kerberos source-interface any
ip classless
ip route 0.0.0.0 0.0.0.0 10.2.0.1
ip route 10.2.130.102 255.255.255.255 Serial5/0
ip http server
!
no cdp run
!
alarm-interface 5
 ip address 10.2.130.102
!
dial-peer cor custom
!
!
!
line con 0
 exec-timeout 0 0
 transport input none
line 161
 no exec
 transport preferred none
 transport input telnet

```

```
transport output none
stopbits 1
line aux 0
line vty 0 4
password lab
login
!
end
```

Without an Unnumbered IP Address

The following example shows a Cisco 2621 router configured without an unnumbered IP address:

```
uut5-2621#s run
Building configuration...

Current configuration :1318 bytes
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname uut5-2621
!
logging rate-limit console 10 except errors
no logging console
!
ip subnet-zero
!
no ip finger
no ip domain-lookup
!
no ip dhcp-client network-discovery
!
interface FastEthernet0/0
ip address 10.2.130.5 255.255.0.0
duplex auto
speed auto
no cdp enable
!
interface Serial1/0
ip address 172.128.12.1 255.255.255.252
!
router rip
network 10.0.0.0
!
ip kerberos source-interface any
ip classless
ip route 0.0.0.0 0.0.0.0 10.2.0.1
no ip http server
!
no cdp run
!
snmp-server packetsize 4096
snmp-server manager
!
!
alarm-interface 1
ip address 172.128.12.2
call rsvp-sync
```

```

!
dial-peer cor custom
!
line con 0
  exec-timeout 0 0
  transport input none
line 33
  no exec
  transport preferred none
  transport input telnet
  transport output none
  stopbits 1
line aux 0
line vty 0 4
  password lab
  login
!
no scheduler allocate
!
end

```

AIC CLI Configuration for Alarms

These examples are output from the **show alarm config #** command.

Discrete Alarm

```

description:west door
normally closed
normal state description:door closed
alarm state description:door open
SNMP trap:enabled

```

Analog Alarm Monitoring Current

```

description:thermostat
high-high state description:very hot
high state description:hot
normal state description:just right
low state description:cold
low-low state description:very cold
current-loop -5.2 5.4 15.0 25.0 35.1 45.6
SNMP trap:enabled

```

Analog Alarm Monitoring Current Configured as a Discrete

```

description:east door
configured as discrete
normal state description:door closed
alarm description:door open
current-loop 0.0 3.2 5.9
SNMP trap:enabled

```

Cisco 3640 Central Site Configuration to Support ISDN and Modem Calls

The following configuration allows remote LANs and standalone remote users with modems to dial in to a central site.

The following configuration example shows a Cisco 3640 router with the following hardware configuration:

- One 2-port ISDN-PRI network module installed in slot 1
- One digital modem network module installed in slot 2 and slot 3
- One 1-port Ethernet network module installed in slot 0



Note

Each MICA digital modem card has its own group async configuration. Additionally, a single range of async lines is used for each modem card. For additional interface numbering information, refer to the *Digital Modem Network Module Configuration Note*.

```

!
version 11.2
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
no service udp-small-servers
no service tcp-small-servers
!
hostname NAS
!
aaa new-model
aaa authentication login default local
aaa authentication login console enable
aaa authentication login vty local
aaa authentication login dialin local
aaa authentication ppp default local
aaa authentication ppp dialin if-needed local
enable secret cisco
!
username admin password cisco
username remotelan1 password dialpass1
username remotelan2 password dialpass2
username PCuser1 password dialpass3
username PCuser2 password dialpass4
async-bootp dns-server 10.1.3.1 10.1.3.2
isdn switch-type primary-5ess
!
controller T1 1/0
 framing esf
 clock source line
 linecode b8zs
 pri-group timeslots 1-24
!
controller T1 1/1
 framing esf
 clock source line
 linecode b8zs
 pri-group timeslots 1-24
!
interface Loopback0
 ip address 10.1.2.254 255.255.255.0

```

```

!
interface Ethernet0/0
 ip address 10.1.1.10 255.255.255.0
 ip summary address eigrp 10 10.1.2.0 255.255.255.0
!
interface Serial 1/0:23
 no ip address
 encapsulation ppp
 no keepalive
 isdn incoming-voice modem
 dialer rotary-group 0
 dialer-group 1
 no fair-queue
 no cdp enable
!
interface Serial 1/1:23
 no ip address
 encapsulation ppp
 no keepalive
 isdn incoming-voice modem
 dialer rotary-group 0
 dialer-group 1
 no fair-queue
 no cdp enable
!
interface Group-Async1
 ip unnumbered Loopback0
 encapsulation ppp
 async mode interactive
 peer default ip address pool dialin_pool
 no cdp enable
 ppp authentication chap pap dialin
 group-range 65 88
!
interface Group-Async2
 ip unnumbered Loopback0
 encapsulation ppp
 async mode interactive
 peer default ip address pool dialin_pool
 no cdp enable
 ppp authentication chap pap dialin
 group-range 97 120
!
interface Dialer0
 ip unnumbered Loopback0
 no ip mroute-cache
 encapsulation ppp
 peer default ip address pool dialin_pool
 dialer in-band
 dialer-group 1
 no fair-queue
 no cdp enable
 ppp authentication chap pap dialin
 ppp multilink
!
router eigrp 10
 network 10.0.0.0
 passive-interface Dialer0
 no auto-summary
!
ip local pool dialin_pool 10.1.2.1 10.1.2.50
ip default-gateway 10.1.1.1
ip classless
!

```



```

dialer-list 1 protocol ip permit
!
line con 0
  login authentication console
line 65 88
  autoselect ppp
  autoselect during-login
  login authentication dialin
  modem DialIn
line 97 120
  autoselect ppp
  autoselect during-login
  login authentication dialin
  modem DialIn
line aux 0
  login authentication console
line vty 0 4
  login authentication vty
  transport input telnet rlogin
!
end

```

Configuration in CPE Mode Example

The following example shows a G.SHDSL configuration of VoATM over AAL2, operating in customer premises equipment (CPE) mode, on a Cisco 2600 series router. This router in CPE mode can be linked to either a DSLAM or to another router that is configured to operate in central office (CO) mode.

```

Router#
version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname host1
!
memory-size iomem 10
voice-card 1
!
ip subnet-zero
ip host host2 225.255.255.224
!
no mgcp timer receive-rtcp
call rsvp-sync
!
!
controller T1 1/0
  framing esf
  linecode b8zs
  ds0-group 0 timeslots 1 type e&m-wink-start
  ds0-group 1 timeslots 2 type e&m-wink-start
.
.
.
ds0-group 23 timeslots 24 type e&m-wink-start
!
controller T1 1/1
  framing esf
  linecode b8zs
!

```

```

interface Ethernet0/0
 ip address 209.165.202.128 255.255.255.224
 half-duplex
 no cdp enable
!
interface Serial0/0
 no ip address
 shutdown
!
interface ATM0/1
 ip address 209.165.201.1 255.255.255.224
 dsl operating-mode gshdsl symmetric annex A
 dsl equipment-type cpe
 dsl linerate auto
 load-interval 30
 atm vc-per-vp 256
 no atm ilmi-keepalive
 pvc 10/100
  vbr-rt 672 672 512
  encapsulation aal2
!
 pvc 10/200
  protocol ip 209.165.202.159 broadcast
  encapsulation aal5snap
!
 no fair-queue
!
interface Ethernet0/1
 no ip address
 shutdown
!
 ip classless
 ip route 209.165.202.128 255.255.255.224 Ethernet0/0
 no ip http server
!
!
 snmp-server engineID local 00000009020003080477F20
 snmp-server manager
!
 voice-port 1/0:0
  local-alerting
  timeouts wait-release 3
  connection trunk 3001
!
 voice-port 1/0:1
  local-alerting
  timeouts wait-release 3
  connection trunk 3002
.
.
.
 voice-port 1/0:23
  local-alerting
  timeouts wait-release 3
  connection trunk 3024
  shutdown
!
 dial-peer cor custom
!
 dial-peer voice 3001 voatm
  destination-pattern 3001
  called-number 4001
  session protocol aal2-trunk
  session target ATM0/1 pvc 10/100 31

```

```

    codec aal2-profile ITUT 1 g711ulaw
    no vad
    !
dial-peer voice 3002 voatm
  destination-pattern 3002
  called-number 4002
  session protocol aal2-trunk
  session target ATM0/1 pvc 10/100 32
  codec aal2-profile custom 100 g726r32
  no vad
    !
dial-peer voice 3003 voatm
  destination-pattern 3003
  called-number 4003
  session protocol aal2-trunk
  session target ATM0/1 pvc 10/100 33
  codec aal2-profile ITUT 7 g729abr8
  no vad
    .
    .
    .
dial-peer voice 3024 voatm
  destination-pattern 3024
  called-number 3024
  session protocol aal2-trunk
  session target ATM0/1 pvc 10/100 54
  codec aal2-profile ITUT 7 g729abr8
  no vad
    !
dial-peer voice 1 pots
  destination-pattern 4001
  port 1/0:0
    !
dial-peer voice 2 pots
  destination-pattern 4002
  port 1/0:1
    .
    .
    .
dial-peer voice 24 pots
  destination-pattern 4024
  port 1/0:23
    !
    !
line con 0
  exec-timeout 0 0
  transport input none
line aux 0
line vty 0 4
  login
    !
no scheduler allocate
end

```

Configuration in CO Mode Example

The following example shows a G.SHDSL configuration of VoATM over AAL2, operating in central office (CO) mode, on a Cisco 2600 series router. This router in CO mode can be linked to another router that is configured to operate in CPE mode.

```
Router#
```

```

version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname host2
!
memory-size iomem 10
voice-card 1
!
ip subnet-zero
ip host host2 225.255.255.224
!
no mgcp timer receive-rtcp
call rsvp-sync
!
!
controller T1 1/0
framing esf
linecode b8zs
ds0-group 0 timeslots 1 type e&m-wink-start
ds0-group 1 timeslots 2 type e&m-wink-start
.
.
.
ds0-group 23 timeslots 24 type e&m-wink-start
!
controller T1 1/1
framing esf
linecode b8zs
!
interface Ethernet0/0
ip address 209.165.202.128 255.255.255.224
half-duplex
no cdp enable
!
interface Serial0/0
no ip address
shutdown
!
interface ATM0/1
ip address 209.165.201.1 255.255.255.224
dsl operating-mode gshdsl symmetric annex A
dsl equipment-type co
dsl linerate auto
load-interval 30
atm vc-per-vp 256
no atm ilmi-keepalive
pvc 10/100
vbr-rt 672 672 512
encapsulation aal2
!
pvc 10/200
protocol ip 209.165.202.159 broadcast
encapsulation aal5snap
!
no fair-queue
!
interface Ethernet0/1
no ip address
shutdown
!
ip classless
ip route 209.165.202.128 255.255.255.224 Ethernet0/0

```

```
no ip http server
!
!
snmp-server engineID local 000000090200003080477F20
snmp-server manager
!
voice-port 1/0:0
 local-alerting
  timeouts wait-release 3
  connection trunk 3001
!
voice-port 1/0:1
 local-alerting
  timeouts wait-release 3
  connection trunk 3002
.
.
.
voice-port 1/0:23
 local-alerting
  timeouts wait-release 3
  connection trunk 3024
 shutdown
!
dial-peer cor custom
!
dial-peer voice 3001 voatm
 destination-pattern 3001
 called-number 4001
 session protocol aal2-trunk
 session target ATM0/1 pvc 10/100 31
 codec aal2-profile ITUT 1 g711ulaw
 no vad
!
dial-peer voice 3002 voatm
 destination-pattern 3002
 called-number 4002
 session protocol aal2-trunk
 session target ATM0/1 pvc 10/100 32
 codec aal2-profile custom 100 g726r32
 no vad
!
dial-peer voice 3003 voatm
 destination-pattern 3003
 called-number 4003
 session protocol aal2-trunk
 session target ATM0/1 pvc 10/100 33
 codec aal2-profile ITUT 7 g729abr8
 no vad
.
.
.
dial-peer voice 3024 voatm
 destination-pattern 3024
 called-number 3024
 session protocol aal2-trunk
 session target ATM0/1 pvc 10/100 54
 codec aal2-profile ITUT 7 g729abr8
 no vad
!
dial-peer voice 1 pots
 destination-pattern 4001
 port 1/0:0
!
```

```
dial-peer voice 2 pots
 destination-pattern 4002
 port 1/0:1
.
.
.
dial-peer voice 24 pots
 destination-pattern 4024
 port 1/0:23
!
!
line con 0
 exec-timeout 0 0
 transport input none
line aux 0
line vty 0 4
 login
!
no scheduler allocate
end
```