



Comprehensive Configuration Examples



Note

The information herein applies to the Cisco AS5350, Cisco AS5400, and Cisco AS5400HPX universal gateways. Note that the latter requires use of Cisco IOS release 12.2(2)XB or later.

This appendix includes sample outputs of the **show config** command after completing the procedures in “Chapter 2, “Verifying Basic Setup”” and configuring various advanced features.

The following examples are useful references for you only if you are experienced with the Cisco IOS software:

- [CT3 CAS/ISDN with RADIUS, page C-1](#)
- [CT3 CAS/ISDN Without RADIUS, page C-11](#)
- [CT3 Without Resource Pooling, page C-20](#)
- [CT3 CAS with Resource Pooling, page C-26](#)
- [Two 8 T1/PRI ISDN with Modems, page C-32](#)
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- [Two 8 T1/PRI CAS with RADIUS \(AAA\) and Resource Pooling, page C-54](#)
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- [CT3 with Resource Pooling, AAA, and Modem, page C-75](#)

CT3 CAS/ISDN with RADIUS

```
AS5400# show config
```

```
Building configuration ...
```

```
Current configuration:
```

```
!  
version 12.1  
no service pad  
service timestamps debug uptime  
service timestamps log uptime  
no service password-encryption  
service internal
```

```

!
hostname CT3-Mixed-UUT
!
no boot startup-test
logging buffered 32000 debugging
aaa new-model
aaa group server radius aaa.router
  server 192.168.1.137 auth-port 1645 acct-port 1646
  server 192.168.1.138 auth-port 1645 acct-port 1646
!
aaa authentication ppp default group aaa.router local
aaa authorization network default group aaa.router local
aaa authorization network no-author none
aaa accounting update newinfo periodic 30
aaa accounting network default start-stop group aaa.router
enable password lab
!
username cisco password password
!
!
resource-pool disable
!
!
!
!
dial-tdm-clock priority 1 1/0:1
!
!
!
!
ip subnet-zero
no ip domain-lookup
ip host tftpboot 172.22.254.253
!
mgcp package-capability trunk-package
mgcp default-package trunk-package
isdn switch-type primary-5ess
isdn voice-call-failure 0
modemcap entry factory:MSC=&f
modemcap entry test:MSC=s30=28800
cns event-service server
mta receive maximum-recipients 0
!
!
controller T3 1/0
  framing m23
  clock source line
  t1 1 controller
  t1 2 controller
  t1 3 controller
  t1 4 controller
  t1 5 controller
  t1 6 controller
  t1 7 controller
  t1 8 controller
  t1 9 controller
  t1 10 controller
  t1 11 controller
  t1 12 controller
  t1 13 controller
  t1 14 controller
  t1 15 controller
  t1 16 controller
  t1 17 controller

```

```
t1 18 controller
t1 19 controller
t1 20 controller
t1 21 controller
t1 22 controller
t1 23 controller
t1 24 controller
t1 25 controller
t1 26 controller
t1 27 controller
t1 28 controller
!
controller T1 1/0:1
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:2
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:3
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:4
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:5
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:6
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:7
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:8
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:9
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:10
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:11
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:12
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:13
    framing esf
    pri-group timeslots 1-24
!
```

```
controller T1 1/0:14
  framing esf
  pri-group timeslots 1-24
!
controller T1 1/0:15
  framing esf
  pri-group timeslots 1-24
!
controller T1 1/0:16
  framing esf
  pri-group timeslots 1-24
!
controller T1 1/0:17
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:18
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:19
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:20
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:21
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:22
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:23
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:24
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:25
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:26
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
```

```
controller T1 1/0:27
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 1/0:28
  framing esf
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
!
!
!
!
interface FastEthernet0/0
  description VLAN 6
  ip address 192.168.6.100 255.255.255.0
  no ip directed-broadcast
  no ip mroute-cache
  duplex auto
  speed auto
!
interface FastEthernet0/1
  description VLAN 7
  ip address 172.22.36.36 255.255.254.0
  no ip directed-broadcast
  no ip mroute-cache
  duplex auto
  speed auto
!
interface Serial0/0
  ip address 172.22.123.2 255.255.255.0
  no ip directed-broadcast
  clockrate 8000000
!
interface Serial0/1
  ip address 172.22.124.2 255.255.255.0
  no ip directed-broadcast
  encapsulation ppp
  ppp authorization no-author
!
interface Serial1/0:1:23
  ip address 10.1.0.2 255.255.255.0
  no ip directed-broadcast
  encapsulation ppp
  ip mroute-cache
  logging event link-status
  no keepalive
  dialer idle-timeout 72000 either
  dialer-group 1
  isdn switch-type primary-5ess
  isdn incoming-voice data
  no fair-queue
  no cdp enable
  ppp authentication chap
!
interface Serial1/0:2:23
  ip address 10.1.1.2 255.255.255.0
  no ip directed-broadcast
  encapsulation ppp
  ip mroute-cache
  logging event link-status
  no keepalive
  dialer idle-timeout 72000 either
```

```
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
isdn T203 10000
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:3:23
ip address 10.1.2.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:4:23
ip address 10.1.3.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:5:23
ip address 10.1.4.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:6:23
ip address 10.1.5.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
```

```
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:7:23
 ip address 10.1.6.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice data
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:8:23
 ip address 10.1.7.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice data
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:9:23
 ip address 10.1.8.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice data
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:10:23
 ip address 10.1.9.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice data
 no fair-queue
 no cdp enable
 ppp authentication chap
!
```

```
interface Serial1/0:11:23
 ip address 10.1.10.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:12:23
 ip address 10.1.11.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:13:23
 ip address 10.1.12.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:14:23
 ip address 10.1.13.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 fair-queue 64 256 0
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:15:23
 ip address 10.1.14.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
```

```
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
ppp authentication chap
!
interface Serial1/0:16:23
ip address 10.1.15.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
ppp authentication chap
!
interface Group-Async0
ip address 192.168.253.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
async default routing
async mode interactive
peer default ip address pool one
no fair-queue
ppp authentication chap
group-range 2/00 7/107
!
router eigrp 100
network 192.168.6.0
network 192.168.7.0
!
ip local pool one 192.168.253.2 192.168.253.254
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 10.2.1.0 255.255.255.0 172.22.123.1
ip route 10.55.55.55 255.255.255.255 172.22.123.1
ip route 10.1.0.0 255.255.0.0 192.168.6.10
ip route 10.2.0.0 255.255.0.0 192.168.6.10
ip route 10.3.0.0 255.255.0.0 192.168.6.10
ip route 10.66.66.66 255.255.255.255 172.22.124.1
ip route 171.0.0.0 255.0.0.0 172.22.36.1
ip route 172.0.0.0 255.0.0.0 172.22.36.1
ip route 192.168.173.0 255.255.255.0 172.22.36.1
ip route 192.168.243.0 255.255.255.0 172.22.36.1
no ip http server
!
logging facility local5
logging 192.168.1.137
```

```
dialer-list 1 protocol ip permit
!
snmp-server engineID local 00000009020000E01E6B2FBE
snmp-server view public-view internet included
snmp-server community public RO
snmp-server community Public RO
snmp-server community junk RW
snmp-server community v2c view vldefault RO
snmp-server community liang view vldefault RO
snmp-server contact Test123456
snmp-server chassis-id 'router for AS5400 ct3'
!
radius-server host 192.168.1.137 auth-port 1645 acct-port 1646
radius-server host 192.168.1.138 auth-port 1645 acct-port 1646
radius-server retransmit 2
radius-server timeout 9
radius-server deadtime 30
radius-server key lab
!
line con 0
  exec-timeout 0 0
  logging synchronous
  transport input none
line aux 0
  exec-timeout 0 0
  password password
  logging synchronous
line vty 0 4
  no exec
  no logging synchronous
line 2/00 7/107
  autoselect ppp
  autoselect timeout 10
  logging synchronous
  modem InOut
  transport input all
!
ntp clock-period 17179742
ntp server 192.168.6.1
scheduler allocate 10000 400
end
```

CT3 CAS/ISDN Without RADIUS

```
AS5400# show config

Building configuration ...

Current configuration:
!
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
service internal
!
hostname CT3-Mixed-UUT
!
no boot startup-test
logging buffered 32000 debugging
!
enable password password
!
username cisco password password
!
!
resource-pool disable
!
!
!
!
dial-tdm-clock priority 1 1/0:1
!
!
!
!
ip subnet-zero
no ip domain-lookup
ip host tftpboot 172.22.254.253
!
mgcp package-capability trunk-package
mgcp default-package trunk-package
isdn switch-type primary-5ess
isdn voice-call-failure 0
modemcap entry factory:MSC=&f
modemcap entry test:MSC=s30=28800
cns event-service server
mta receive maximum-recipients 0
!
!
controller T3 1/0
 framing m23
 clock source line
 t1 1 controller
 t1 2 controller
 t1 3 controller
 t1 4 controller
 t1 5 controller
 t1 6 controller
 t1 7 controller
 t1 8 controller
 t1 9 controller
 t1 10 controller
 t1 11 controller
```

```
t1 12 controller
t1 13 controller
t1 14 controller
t1 15 controller
t1 16 controller
t1 17 controller
t1 18 controller
t1 19 controller
t1 20 controller
t1 21 controller
t1 22 controller
t1 23 controller
t1 24 controller
t1 25 controller
t1 26 controller
t1 27 controller
t1 28 controller
!
controller T1 1/0:1
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:2
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:3
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:4
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:5
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:6
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:7
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:8
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:9
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:10
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:11
    framing esf
    pri-group timeslots 1-24
!
controller T1 1/0:12
    framing esf
```

```
    pri-group timeslots 1-24
    !
controller T1 1/0:13
    framing esf
    pri-group timeslots 1-24
    !
controller T1 1/0:14
    framing esf
    pri-group timeslots 1-24
    !
controller T1 1/0:15
    framing esf
    pri-group timeslots 1-24
    !
controller T1 1/0:16
    framing esf
    pri-group timeslots 1-24
    !
controller T1 1/0:17
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:18
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:19
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:20
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:21
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:22
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:23
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:24
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:25
    framing esf
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
    !
controller T1 1/0:26
```

```

framing esf
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 1/0:27
framing esf
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 1/0:28
framing esf
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
!
!
!
!
interface FastEthernet0/0
description VLAN 6
ip address 192.168.6.100 255.255.255.0
no ip directed-broadcast
no ip mroute-cache
duplex auto
speed auto
!
interface FastEthernet0/1
description VLAN 7
ip address 172.22.36.36 255.255.254.0
no ip directed-broadcast
no ip mroute-cache
duplex auto
speed auto
!
interface Serial0/0
ip address 172.22.123.2 255.255.255.0
no ip directed-broadcast
clockrate 8000000
!
interface Serial0/1
ip address 172.22.124.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ppp authorization no-author
!
interface Serial1/0:1:23
ip address 10.1.0.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:2:23
ip address 10.1.1.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp

```

```
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
isdn T203 10000
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial11/0:3:23
ip address 10.1.2.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial11/0:4:23
ip address 10.1.3.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial11/0:5:23
ip address 10.1.4.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial11/0:6:23
ip address 10.1.5.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
```

```
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:7:23
ip address 10.1.6.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:8:23
ip address 10.1.7.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:9:23
ip address 10.1.8.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:10:23
ip address 10.1.9.2 255.255.255.0
no ip directed-broadcast
encapsulation ppp
ip mroute-cache
logging event link-status
no keepalive
dialer idle-timeout 72000 either
dialer-group 1
isdn switch-type primary-5ess
isdn incoming-voice data
```

```
no fair-queue
no cdp enable
ppp authentication chap
!
interface Serial1/0:11:23
 ip address 10.1.10.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:12:23
 ip address 10.1.11.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:13:23
 ip address 10.1.12.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 no fair-queue
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:14:23
 ip address 10.1.13.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 fair-queue 64 256 0
 no cdp enable
 ppp authentication chap
!
```

```

interface Serial1/0:15:23
 ip address 10.1.14.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 fair-queue 64 256 0
 no cdp enable
 ppp authentication chap
!
interface Serial1/0:16:23
 ip address 10.1.15.2 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 ip mroute-cache
 logging event link-status
 no keepalive
 dialer idle-timeout 72000 either
 dialer-group 1
 isdn switch-type primary-5ess
 isdn incoming-voice modem
 fair-queue 64 256 0
 no cdp enable
 ppp authentication chap
!
interface Group-Async0
 ip address 192.168.253.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 async default routing
 async mode interactive
 peer default ip address pool one
 no fair-queue
 ppp authentication chap
 group-range 2/00 7/107
!
router eigrp 100
 network 192.168.6.0
 network 192.168.7.0
!
ip local pool one 192.168.253.2 192.168.253.254
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 10.2.1.0 255.255.255.0 123.123.123.1
ip route 10.55.55.55 255.255.255.255 123.123.123.1
ip route 10.1.0.0 255.255.0.0 192.168.6.10
ip route 10.2.0.0 255.255.0.0 192.168.6.10
ip route 10.3.0.0 255.255.0.0 192.168.6.10
ip route 10.66.66.66 255.255.255.255 124.124.124.1
ip route 171.0.0.0 255.0.0.0 172.22.36.1
ip route 172.0.0.0 255.0.0.0 172.22.36.1
ip route 192.168.173.0 255.255.255.0 172.22.36.1
ip route 192.168.243.0 255.255.255.0 172.22.36.1

```

```
no ip http server
!
logging facility local5
logging 192.168.1.137
dialer-list 1 protocol ip permit
!
snmp-server engineID local 00000009020000E01E6B2FBE
snmp-server view public-view internet included
snmp-server community public RO
snmp-server community Public RO
snmp-server community junk RW
snmp-server community v2c view v1default RO
snmp-server community liang view v1default RO
snmp-server contact Test123456
snmp-server chassis-id 'router for AS5400 ct3'
!
line con 0
  exec-timeout 0 0
  logging synchronous
  transport input none
line aux 0
  exec-timeout 0 0
  password lab
  logging synchronous
line vty 0 4
  no exec
  no logging synchronous
line 2/00 7/107
  autoselect ppp
  autoselect timeout 10
  logging synchronous
  modem InOut
  transport input all
!
ntp clock-period 17179742
ntp server 192.168.6.1
scheduler allocate 10000 400
end
```

CT3 Without Resource Pooling

```

AS5400# show config

Building configuration ...

Current configuration:
!!
version 12.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CT3-CAS-UUT
!
no boot startup-test
no logging console
!
<text omitted>
!
resource-pool enable
resource-pool call treatment resource busy
resource-pool call treatment profile no-answer
!
resource-pool group resource 4700
  range port 1/0 1/107
  range port 2/0 2/1
!
resource-pool group resource 5300
  range port 2/2 2/107
  range port 3/0 3/107
  range port 4/0 4/107
  range port 5/0 5/107
  range port 6/0 6/107
!
resource-pool profile customer 4700
  limit base-size 110
  limit overflow-size 18
  resource 4700 speech
  dn timer default
!
resource-pool profile customer 5300
  limit base-size 538
  limit overflow-size 18
  resource 5300 speech
  dn timer elnino
!
resource-pool profile service gold
  modem min-speed 33200 max-speed 56000
resource-pool aaa protocol local
!
!
!
!
dial-tdm-clock priority 1 7/0:1
!
!
!
!
ip subnet-zero
no ip domain-lookup
ip host jurai 172.23.254.253
!

```

```
mgcp package-capability trunk-package
mgcp default-package trunk-package
isdn voice-call-failure 0
cns event-service server
mta receive maximum-recipients 0
!
!
controller T3 7/0
  clock source line
  t1 1 controller
  t1 2 controller
  t1 3 controller
  t1 4 controller
  t1 5 controller
  t1 6 controller
  t1 7 controller
  t1 8 controller
  t1 9 controller
  t1 10 controller
  t1 11 controller
  t1 12 controller
  t1 13 controller
  t1 14 controller
  t1 15 controller
  t1 16 controller
  t1 17 controller
  t1 18 controller
  t1 19 controller
  t1 20 controller
  t1 21 controller
  t1 22 controller
  t1 23 controller
  t1 24 controller
  t1 25 controller
  t1 26 controller
  t1 27 controller
  t1 28 controller
!
controller T1 7/0:1
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:2
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:3
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:4
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:5
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:6
```

```

framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:7
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:8
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:9
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:10
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:11
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:12
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:13
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:14
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:15
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:16
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:17
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:18
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!

```

```
controller T1 7/0:19
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:20
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:21
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:22
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:23
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:24
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:25
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:26
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:27
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
controller T1 7/0:28
  framing esf
  ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
  cas-custom 1
!
!
!
!
interface FastEthernet0/0
  ip address 192.168.18.100 255.255.255.0
  no ip directed-broadcast
  no ip mroute-cache
  no keepalive
  duplex auto
  speed auto
!
interface FastEthernet0/1
  ip address 192.168.19.100 255.255.255.0
  no ip directed-broadcast
```

```

no ip mroute-cache
duplex auto
speed auto
!
interface Serial0/0
no ip address
no ip directed-broadcast
clockrate 2000000
!
interface Serial0/1
no ip address
no ip directed-broadcast
shutdown
clockrate 2000000
!
interface Group-Async0
no ip address
no ip directed-broadcast
no group-range
!
interface Group-Async1
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
async default routing
async mode interactive
no peer default ip address
no fair-queue
ppp authentication chap
group-range 1/00 6/107
!
router eigrp 100
network 192.168.18.0
network 192.168.19.0
!
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 60.1.14.0 255.255.255.0 192.168.21.10
ip route 70.1.14.0 255.255.255.0 192.168.21.10
ip route 80.1.14.0 255.255.255.0 192.168.21.10
ip route 100.1.1.0 255.255.255.0 192.168.21.10
ip route 110.1.1.0 255.255.255.0 192.168.21.10
ip route 120.1.1.0 255.255.255.0 192.168.21.10
ip route 130.1.1.0 255.255.255.0 192.168.21.10
ip route 172.22.254.253 255.255.255.255 FastEthernet0/0
no ip http server
!
snmp-server engineID local 000000090200003096F80084
!
line con 0
exec-timeout 0 0
logging synchronous
transport input none
line aux 0
exec-timeout 0 0
logging synchronous
transport input all
line vty 0 4

```

```
password password
no logging synchronous
line 1/00 6/107
autoselect ppp
autoselect timeout 10
logging synchronous
modem InOut
transport input all
!
ntp clock-period 17179843
ntp server 192.168.18.1
scheduler allocate 40000 200
end
```

CT3 CAS with Resource Pooling

```

AS5400# show config

Building configuration ...

Current configuration:
!
version 12.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CT3-CAS-UUT
!
no boot startup-test
no logging console
aaa new-model
aaa group server radius aaa.router
  server 192.168.1.137 auth-port 1645 acct-port 1646
  server 192.168.1.138 auth-port 1645 acct-port 1646
!
aaa authentication ppp default group aaa.router local
aaa authorization network default group aaa.router local
aaa accounting update newinfo periodic 30
aaa accounting network default start-stop group aaa.router
enable password password
!
<text omitted>
!
resource-pool enable
resource-pool call treatment resource busy
resource-pool call treatment profile no-answer
!
resource-pool group resource 4700
  range port 1/0 1/107
  range port 2/0 2/1
!
resource-pool group resource 5300
  range port 2/2 2/107
  range port 3/0 3/107
  range port 4/0 4/107
  range port 5/0 5/107
  range port 6/0 6/107
!
resource-pool profile customer 4700
  limit base-size 110
  limit overflow-size 18
  resource 4700 speech
  dnis group default
!
resource-pool profile customer 5300
  limit base-size 538
  limit overflow-size 18
  resource 5300 speech
  dnis group elnino
!
resource-pool profile service gold
  modem min-speed 33200 max-speed 56000
resource-pool aaa protocol local
!
!
!

```

```
!  
dial-tdm-clock priority 1 7/0:1  
!  
!  
!  
!  
ip subnet-zero  
no ip domain-lookup  
ip host jurai 172.23.254.253  
!  
mgcp package-capability trunk-package  
mgcp default-package trunk-package  
isdn voice-call-failure 0  
cns event-service server  
mta receive maximum-recipients 0  
!  
!  
controller T3 7/0  
clock source line  
t1 1 controller  
t1 2 controller  
t1 3 controller  
t1 4 controller  
t1 5 controller  
t1 6 controller  
t1 7 controller  
t1 8 controller  
t1 9 controller  
t1 10 controller  
t1 11 controller  
t1 12 controller  
t1 13 controller  
t1 14 controller  
t1 15 controller  
t1 16 controller  
t1 17 controller  
t1 18 controller  
t1 19 controller  
t1 20 controller  
t1 21 controller  
t1 22 controller  
t1 23 controller  
t1 24 controller  
t1 25 controller  
t1 26 controller  
t1 27 controller  
t1 28 controller  
!  
controller T1 7/0:1  
framing esf  
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis  
cas-custom 1  
!  
controller T1 7/0:2  
framing esf  
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis  
cas-custom 1  
!  
controller T1 7/0:3  
framing esf  
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis  
cas-custom 1  
!  
controller T1 7/0:4
```

```

framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:5
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:6
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:7
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:8
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:9
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:10
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:11
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:12
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:13
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:14
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:15
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis cas-custom 1
!
controller T1 7/0:16
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:17

```

```
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:18
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:19
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:20
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:21
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:22
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:23
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:24
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:25
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:26
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:27
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:28
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
!
!
!
interface FastEthernet0/0
ip address 192.168.18.100 255.255.255.0
```

```

no ip directed-broadcast
no ip mroute-cache
no keepalive
duplex auto
speed auto
!
interface FastEthernet0/1
ip address 192.168.19.100 255.255.255.0
no ip directed-broadcast
no ip mroute-cache
duplex auto
speed auto
!
interface Serial0/0
no ip address
no ip directed-broadcast
clockrate 2000000
!
interface Serial0/1
no ip address
no ip directed-broadcast
shutdown
clockrate 2000000
!
interface Group-Async0
no ip address
no ip directed-broadcast
no group-range
!
interface Group-Async1
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
async default routing
async mode interactive
no peer default ip address
no fair-queue
ppp authentication chap
group-range 1/00 6/107
!
router eigrp 100
network 192.168.18.0
network 192.168.19.0
!
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 60.1.14.0 255.255.255.0 192.168.21.10
ip route 70.1.14.0 255.255.255.0 192.168.21.10
ip route 80.1.14.0 255.255.255.0 192.168.21.10
ip route 100.1.1.0 255.255.255.0 192.168.21.10
ip route 110.1.1.0 255.255.255.0 192.168.21.10
ip route 120.1.1.0 255.255.255.0 192.168.21.10
ip route 130.1.1.0 255.255.255.0 192.168.21.10
ip route 172.22.254.253 255.255.255.255 FastEthernet0/0
no ip http server
!
!
dialer dnis group callblock

```

```
number 5555
!
dialer dnis group v90
number 815.....
!
dialer dnis group elnino
number 915.....
!
snmp-server engineID local 000000090200003096F80084
!
radius-server host 192.168.1.137 auth-port 1645 acct-port 1646
radius-server host 192.168.1.138 auth-port 1645 acct-port 1646
radius-server retransmit 2
radius-server timeout 9
radius-server deadtime 30
radius-server key lab
!
line con 0
exec-timeout 0 0
logging synchronous
transport input none
line aux 0
exec-timeout 0 0
logging synchronous
transport input all
line vty 0 4
password password
no logging synchronous
line 1/00 6/107
autoselect ppp
autoselect timeout 10
logging synchronous
modem InOut
transport input all
!
ntp clock-period 17179843
ntp server 192.168.18.1
scheduler allocate 40000 200
end
```

Two 8 T1/PRI ISDN with Modems

```

AS5400# show config

Building configuration ...

Current configuration:
!
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
service password-encryption
!
hostname AS5400-T1-PRI-UUT
!
no boot startup-test
logging rate-limit 5
no logging console
enable password password
!
resource-pool disable
!
!dial-tdm-clock priority 1 2/4
!
!ip subnet-zero
ip ftp source-interface FastEthernet0/0
ip ftp username hanif
ip ftp password 7 060F022C4D1D0
no ip domain-lookup
ip host greenbug 172.22.43.28
ip host jurai 172.23.254.253
!
mgcp package-capability trunk-package
mgcp default-package trunk-package
isdn switch-type primary-5ess
isdn voice-call-failure 0
cns event-service server
mta receive maximum-recipients 0
!
!
controller T1 2/0
 framing esf
 linecode b8zs
 cablelength short 133
 pri-group timeslots 1-24
!
controller T1 2/1
 framing esf
 linecode b8zs
 cablelength short 133
 pri-group timeslots 1-24
!
controller T1 2/2
 framing esf
 linecode b8zs
 cablelength short 133
 pri-group timeslots 1-24
!
controller T1 2/3
 framing esf
 linecode b8zs
 cablelength short 133

```

```
    pri-group timeslots 1-24
!
controller T1 2/4
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/5
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/6
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/7
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/0
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/1
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/2
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/3
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/4
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/5
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/6
    framing esf
```

```

linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/7
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
!
!
!
!
interface FastEthernet0/0
ip address 192.168.10.102 255.255.255.0
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
no keepalive
duplex auto
speed auto
!
interface FastEthernet0/1
no ip address
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
shutdown
duplex auto
speed auto
!
interface Serial0/0
no ip address
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
shutdown
fair-queue 64 256 0
clockrate 2000000
!
interface Serial0/1
no ip address
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
shutdown
clockrate 2000000
!
interface Serial2/0:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial2/1:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable

```

```
!  
interface Serial2/2:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Serial2/3:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Serial2/4:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Serial2/5:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Serial2/6:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Serial2/7:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Serial5/0:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Serial5/1:23  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-5ess  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable
```

```

!
interface Serial5/2:23
  no ip address
  no ip directed-broadcast
  isdn switch-type primary-5ess
  isdn incoming-voice modem
  fair-queue 64 256 0
  no cdp enable
!
interface Serial5/3:23
  no ip address
  no ip directed-broadcast
  isdn switch-type primary-5ess
  isdn incoming-voice modem
  fair-queue 64 256 0
  no cdp enable
!
interface Serial5/4:23
  no ip address
  no ip directed-broadcast
  isdn switch-type primary-5ess
  isdn incoming-voice modem
  fair-queue 64 256 0
  no cdp enable
!
interface Serial5/5:23
  no ip address
  no ip directed-broadcast
  isdn switch-type primary-5ess
  isdn incoming-voice modem
  fair-queue 64 256 0
  no cdp enable
!
interface Serial5/6:23
  no ip address
  no ip directed-broadcast
  isdn switch-type primary-5ess
  isdn incoming-voice modem
  fair-queue 64 256 0
  no cdp enable
!
interface Serial5/7:23
  no ip address
  no ip directed-broadcast
  isdn switch-type primary-5ess
  isdn incoming-voice modem
  fair-queue 64 256 0
  no cdp enable
!
interface Async1/00
  ip address 10.5.97.1 255.255.255.0
  no ip directed-broadcast
  encapsulation ppp
  no ip route-cache
  no ip mroute-cache
  dialer in-band
  dialer idle-timeout 2000000
  dialer string 6151300001
  dialer-group 1
  async default routing
  async mode interactive
  no peer default ip address
  no fair-queue
  ppp authentication chap

```

```
hold-queue 1000 in
hold-queue 1000 out
!
interface Async1/01
 ip address 10.5.98.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout 2000000
 dialer string 7150100001
 dialer-group 1
 async default routing
 async mode interactive
 no peer default ip address
 no fair-queue
 ppp authentication chap
 hold-queue 1000 in
 hold-queue 1000 out
!
interface Async1/02
 ip address 10.5.99.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout 2000000
 dialer string 7150100002
 dialer-group 1
 async default routing
 async mode interactive
 no peer default ip address
 no fair-queue
 ppp authentication chap
 hold-queue 1000 in
 hold-queue 1000 out
!
interface Async1/03
 ip address 10.5.100.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout 2000000
 dialer string 7150100003
 dialer-group 1
 async default routing
 async mode interactive
 no peer default ip address
 no fair-queue
 ppp authentication chap
 hold-queue 1000 in
 hold-queue 1000 out
!
interface Async1/04
 ip address 10.5.101.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
```

```
dialer idle-timeout 2000000
dialer string 7150100004
dialer-group 1
async default routing
async mode interactive
no peer default ip address
no fair-queue
ppp authentication chap
hold-queue 1000 in
hold-queue 1000 out
!
interface Async1/05
ip address 10.5.102.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout 2000000
dialer string 7150100005
dialer-group 1
async default routing
async mode interactive
no peer default ip address
no fair-queue
ppp authentication chap
hold-queue 1000 in
hold-queue 1000 out
!
interface Async1/06
ip address 10.5.103.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100006
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/07
ip address 10.5.104.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100007
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/08
ip address 10.5.105.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100008
```

```
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/09
ip address 10.5.106.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100009
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/10
ip address 10.5.107.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100010
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/11
ip address 10.5.108.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100011
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/12
ip address 10.5.109.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100012
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/13
ip address 10.5.110.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
```

```
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100013
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/14
ip address 10.5.111.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100014
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/15
ip address 10.5.112.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100015
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/16
ip address 10.5.113.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100016
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/17
ip address 10.5.114.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
```

```
dialer string 7150100017
dialer-group 1
async mode interactive
no peer default ip address
ppp authentication chap
!
interface Async1/18
ip address 10.5.115.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100018
dialer-group 1
async mode interactive
no peer default ip address
ppp authentication chap
!
interface Async1/19
ip address 10.5.116.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100019
dialer-group 1
async mode interactive
no peer default ip address
ppp authentication chap
!
interface Async1/20
ip address 10.5.117.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100020
dialer-group 1
async mode interactive
no peer default ip address
ppp authentication chap
!
interface Group-Async0
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
async mode interactive
no peer default ip address
ppp authentication chap
group-range 1/21 7/107
!
router eigrp 100
network 192.168.10.0
!
ip local pool ip-pool 10.4.1.1 10.4.1.250
ip default-gateway 192.168.10.1
```

```

ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 10.5.1.97 255.255.255.255 Async1/00
ip route 10.5.1.98 255.255.255.255 Async1/01
ip route 10.5.1.99 255.255.255.255 Async1/02
ip route 10.5.1.100 255.255.255.255 Async1/03
ip route 10.5.1.101 255.255.255.255 Async1/04
ip route 10.5.1.102 255.255.255.255 Async1/05
ip route 10.5.1.103 255.255.255.255 Async1/06
ip route 10.5.1.104 255.255.255.255 Async1/07
ip route 10.5.1.105 255.255.255.255 Async1/08
ip route 10.5.1.106 255.255.255.255 Async1/09
ip route 10.5.1.107 255.255.255.255 Async1/10
ip route 10.5.1.108 255.255.255.255 Async1/11
ip route 10.5.1.109 255.255.255.255 Async1/12
ip route 10.5.1.110 255.255.255.255 Async1/13
ip route 10.5.1.111 255.255.255.255 Async1/14
ip route 10.5.1.112 255.255.255.255 Async1/15
ip route 10.5.1.113 255.255.255.255 Async1/16
ip route 10.5.1.114 255.255.255.255 Async1/17
ip route 10.5.1.115 255.255.255.255 Async1/18
ip route 10.5.1.116 255.255.255.255 Async1/19
ip route 10.5.1.117 255.255.255.255 Async1/20
no ip http server
!
dialer-list 1 protocol ip permit
!
!
!
line con 0
  exec-timeout 0 0
  logging synchronous
  transport input none
line aux 0
  logging synchronous
line vty 0 4
  password 7 1042081B
  no logging synchronous
  login
line 1/00 1/107
  autoselect ppp
  script dialer dial
  logging synchronous
  modem InOut
  transport input all
line 3/00 4/107
  autoselect ppp
  script dialer dial
  logging synchronous
  modem InOut
  transport input all
line 6/00 7/107
  autoselect ppp
  script dialer dial
  logging synchronous
  modem InOut
  transport input all
!

```

```
exception core-file coredump
exception protocol ftp
exception dump 172.23.254.253
ntp clock-period 17179873
ntp server 192.168.10.1
scheduler allocate 4000 200
end
```

Two 8 E1/PRI ISDN with Modems

```

AS5400# show config

Building configuration ...

Current configuration:
!
version 12.1
no service pad
service timestamps debug datetime msec
service timestamps log uptime
no service password-encryption
service internal
!
hostname AS5400-E1-PRI-UUT
!
enable password password
!
<test omitted>
!
!
resource-pool disable
!
!
spe country united-kingdom
!
!
ntp server 192.168.10.1
!
!
!
ip subnet-zero
no ip domain-lookup
ip host jurai 172.23.254.253
!
isdn switch-type primary-net5
isdn voice-call-failure 0
cns event-service server
mta receive maximum-recipients 0
!
xgcp snmp sgcp
!
controller E1 6/0
pri-group timeslots 1-31
!
controller E1 6/1
pri-group timeslots 1-31
!
controller E1 6/2
pri-group timeslots 1-31
!
controller E1 6/3
pri-group timeslots 1-31
!
controller E1 6/4
pri-group timeslots 1-31
!
controller E1 6/5
pri-group timeslots 1-31
!
controller E1 6/6
pri-group timeslots 1-31

```

```
!  
controller E1 6/7  
pri-group timeslots 1-31  
!  
controller E1 7/0  
pri-group timeslots 1-31  
!  
controller E1 7/1  
pri-group timeslots 1-31  
!  
controller E1 7/2  
pri-group timeslots 1-31  
!  
controller E1 7/3  
pri-group timeslots 1-31  
!  
controller E1 7/4  
pri-group timeslots 1-31  
!  
controller E1 7/5  
pri-group timeslots 1-31  
!  
controller E1 7/6  
pri-group timeslots 1-31  
!  
controller E1 7/7  
pri-group timeslots 1-31  
!  
!  
!  
!  
interface FastEthernet0/0  
 ip address 192.168.10.103 255.255.255.0  
 no ip directed-broadcast  
 no ip route-cache  
 no ip mroute-cache  
!  
interface FastEthernet0/1  
 no ip address  
 no ip directed-broadcast  
 no ip route-cache  
 no ip mroute-cache  
 shutdown  
!  
interface Serial0/0  
 no ip address  
 no ip directed-broadcast  
 no ip route-cache  
 no ip mroute-cache  
 shutdown  
 fair-queue 64 256 0  
 clockrate 2000000  
!  
interface Serial0/1  
 no ip address  
 no ip directed-broadcast  
 no ip route-cache  
 no ip mroute-cache  
 shutdown  
 clockrate 2000000  
!  
interface Serial6/0:15  
 no ip address  
 no ip directed-broadcast
```

```
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial6/1:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial6/2:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial6/3:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial6/4:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial6/5:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial6/6:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial6/7:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/0:15
no ip address
no ip directed-broadcast
```

```
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/1:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/2:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/3:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/4:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/5:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/6:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial7/7:15
no ip address
no ip directed-broadcast
isdn switch-type primary-net5
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Async1/00
ip unnumbered FastEthernet0/0
no ip directed-broadcast
```

```

encapsulation ppp
async mode interactive
ppp authentication chap
!
interface Async1/01
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
async mode interactive
ppp authentication chap
!
interface Async1/02
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
async mode interactive
ppp authentication chap
!
.
.
<information deleted>
.
.
!

interface Async5/106
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
async mode interactive
ppp authentication chap
!
interface Async5/107
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
async mode interactive
ppp authentication chap
!
interface Group-Async0
no ip address
no ip directed-broadcast
no group-range
!
router eigrp 100
network 192.168.13.0
!
ip default-gateway 192.168.13.1
ip classless
no ip http server
!
!
!
line con 0
exec-timeout 0 0

```

Two 8 T1/PRI CAS with Modems

```
AS5400# show config

Building configuration ...

Current configuration:
!
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
service password-encryption
!
hostname AS5400-T1-CAS-UUT
!
no boot startup-test
enable password password
!
<text omitted>
!
!
resource-pool disable
!
!
dial-tdm-clock priority 1 2/0
!
!
ip subnet-zero
ip ftp source-interface FastEthernet0/0
ip ftp username hanif
ip ftp password 7 000D1E0B0508
no ip domain-lookup
ip host jurai 172.23.254.253
!
mgcp package-capability trunk-package
mgcp default-package trunk-package
isdn voice-call-failure 0
chat-script dial ABORT ERROR ABORT BUSY ABORT "NO CARRIER" TIMEOUT 120 "" at OK
"\datd,,\T" CONNECT
cns event-service server
mta receive maximum-recipients 0
!
!
controller T1 2/0
 framing esf
 linecode b8zs
 cablelength short 133
 ds0-group 0 timeslots 1-24 type e&m-fgb
 cas-custom 0
!
controller T1 2/1
 framing esf
 linecode b8zs
 cablelength short 133
 ds0-group 0 timeslots 1-24 type e&m-fgb
 cas-custom 0
!
controller T1 2/2
 framing esf
 linecode b8zs
 cablelength short 133
 ds0-group 0 timeslots 1-24 type e&m-fgb
```

```

cas-custom 0
!
controller T1 2/3
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 2/4
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 2/5
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 2/6
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 2/7
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 3/0
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 3/1
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 3/2
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0
!
controller T1 3/3
framing esf
linecode b8zs
cablelength short 133
ds0-group 0 timeslots 1-24 type e&m-fgb
cas-custom 0

```

```
!  
controller T1 3/4  
    framing esf  
    linecode b8zs  
    cablelength short 133  
    ds0-group 0 timeslots 1-24 type e&m-fgb  
    cas-custom 0  
!  
controller T1 3/5  
    framing esf  
    linecode b8zs  
    cablelength short 133  
    ds0-group 0 timeslots 1-24 type e&m-fgb  
    cas-custom 0  
!  
controller T1 3/6  
    framing esf  
    linecode b8zs  
    cablelength short 133  
    ds0-group 0 timeslots 1-24 type e&m-fgb  
    cas-custom 0  
!  
controller T1 3/7  
    framing esf  
    linecode b8zs  
    cablelength short 133  
    ds0-group 0 timeslots 1-24 type e&m-fgb  
    cas-custom 0  
!  
!  
interface FastEthernet0/0  
    mac-address 000b.7264.9173  
    ip address 192.168.10.100 255.255.255.0  
    no ip directed-broadcast  
    duplex auto  
    speed auto  
!  
interface FastEthernet0/1  
    no ip address  
    no ip directed-broadcast  
    no ip route-cache  
    no ip mroute-cache  
    shutdown  
    duplex auto  
    speed auto  
!  
interface Serial0/0  
    no ip address  
    no ip directed-broadcast  
    no ip route-cache  
    no ip mroute-cache  
    shutdown  
    fair-queue  
    clockrate 2000000  
!  
interface Serial0/1  
    no ip address  
    no ip directed-broadcast  
    no ip route-cache  
    no ip mroute-cache  
    shutdown  
    clockrate 2000000  
!  
interface Async1/00
```

```

ip address 10.1.1.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
dialer in-band
dialer idle-timeout 30 either
dialer string 10000
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Group-Async0
ip unnumbered FastEthernet0/0
no ip directed-broadcast
encapsulation ppp
async mode interactive
ppp authentication chap
group-range 1/01 7/107
!
router eigrp 100
network 192.168.10.0
!
ip default-gateway 192.168.10.1
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 10.1.1.1 255.255.255.255 Async1/00
ip route 60.1.1.0 255.255.255.255 192.168.10.10
ip route 60.2.1.0 255.255.255.255 192.168.10.10
ip route 60.3.1.0 255.255.255.255 192.168.10.10
ip route 70.11.1.0 255.255.255.255 192.168.10.10
no ip http server
!
dialer-list 1 protocol ip permit
!
!
line con 0
exec-timeout 0 0
logging synchronous
transport input none
line aux 0
logging synchronous
line vty 0 4
password 7 13091610
no logging synchronous
login
line 1/00 1/107
exec-timeout 0 0
autoselect ppp
script dialer dial
logging synchronous
modem InOut
transport input all
line 4/00 7/107
exec-timeout 0 0
autoselect ppp
script dialer dial
logging synchronous
modem InOut
transport input all

```

```
!  
exception core-file coredump  
exception protocol ftp  
exception dump 223.255.254.253  
ntp clock-period 17179726  
ntp server 192.168.10.1  
scheduler allocate 40000 400  
end
```

Two 8 T1/PRI CAS with RADIUS (AAA) and Resource Pooling

```

AS5400# show config

Building configuration ...

Current configuration:
!
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
service password-encryption
!
hostname AS5400-T1-CAS-UUT
!
no boot startup-test
enable password password
!
<text omitted>
!
!
resource-pool enable
resource-pool call treatment resource channel-not-available
resource-pool call treatment profile no-answer
!
resource-pool group resource group1
  range port 1/0 1/107
!
resource-pool group resource group2
  range port 4/0 4/107
  range port 5/0 5/107
!
resource-pool group resource group3
  range port 6/0 6/107
  range port 7/0 7/107
!
resource-pool profile customer bell_atlantic
  limit base-size all
  limit overflow-size 0
  resource group2 speech
  dnis group group2
!
resource-pool profile customer us_west
  limit base-size 60
  limit overflow-size 100
  resource group1 speech
  dnis group group1
!
resource-pool profile customer all
  limit base-size all
  limit overflow-size 0
  resource group3 speech
  dnis group default
!
resource-pool profile discriminator not_allowed
  call-type speech
  dnis group not_allowed
!
!
!dial-tdm-clock priority 1 2/0
!
!ip subnet-zero

```

```
ip ftp source-interface FastEthernet0/0
ip ftp username hanif
ip ftp password 7 000D1E0B0508
no ip domain-lookup
ip host jurai 172.23.254.253
!
mgcp package-capability trunk-package
mgcp default-package trunk-package
isdn voice-call-failure 0
chat-script dial ABORT ERROR ABORT BUSY ABORT "NO CARRIER" TIMEOUT 120 "" at OK
"\datd,,\T" CONNECT
cns event-service server
mta receive maximum-recipients 0
!
!
controller T1 2/0
    framing esf
    linecode b8zs
    cablelength short 133
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
!
controller T1 2/1
    framing esf
    linecode b8zs
    cablelength short 133
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
!
controller T1 2/2
    framing esf
    linecode b8zs
    cablelength short 133
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
!
controller T1 2/3
    framing esf
    linecode b8zs
    cablelength short 133
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
!
controller T1 2/4
    framing esf
    linecode b8zs
    cablelength short 133
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
!
controller T1 2/5
    framing esf
    linecode b8zs
    cablelength short 133
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
!
controller T1 2/6
    framing esf
    linecode b8zs
    cablelength short 133
    ds0-group 0 timeslots 1-24 type e&m-fgb
    cas-custom 0
!
```

```

controller T1 2/7
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/0
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/1
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/2
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/3
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/4
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/5
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/6
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
controller T1 3/7
  framing esf
  linecode b8zs
  cablelength short 133
  ds0-group 0 timeslots 1-24 type e&m-fgb
  cas-custom 0
!
!

```

```
interface FastEthernet0/0
  mac-address 000b.7264.9173
  ip address 192.168.10.100 255.255.255.0
  no ip directed-broadcast
  duplex auto
  speed auto
!
interface FastEthernet0/1
  no ip address
  no ip directed-broadcast
  no ip route-cache
  no ip mroute-cache
  shutdown
  duplex auto
  speed auto
!
interface Serial0/0
  no ip address
  no ip directed-broadcast
  no ip route-cache
  no ip mroute-cache
  shutdown
  fair-queue
  clockrate 2000000
!
interface Serial0/1
  no ip address
  no ip directed-broadcast
  no ip route-cache
  no ip mroute-cache
  shutdown
  clockrate 2000000
!
interface Async1/00
  ip address 10.1.1.1 255.255.255.0
  no ip directed-broadcast
  encapsulation ppp
  dialer in-band
  dialer idle-timeout 30 either
  dialer string 10000
  dialer-group 1
  async mode interactive
  ppp authentication chap
!
interface Group-Async0
  ip unnumbered FastEthernet0/0
  no ip directed-broadcast
  encapsulation ppp
  async mode interactive
  ppp authentication chap
  group-range 1/01 7/107
!
router eigrp 100
  network 192.168.10.0
!
ip default-gateway 192.168.10.1
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
```

```

ip route 10.1.1.1 255.255.255.255 Async1/00
ip route 60.1.1.0 255.255.255.255 192.168.10.10
ip route 60.2.1.0 255.255.255.255 192.168.10.10
ip route 60.3.1.0 255.255.255.255 192.168.10.10
ip route 70.11.1.0 255.255.255.255 192.168.10.10
no ip http server
!
dialer dnis group group1
  number 10000
  call-type cas speech
!
dialer dnis group group2
  number 10001
  call-type cas speech
!
dialer dnis group not_allowed
  number 66666
dialer-list 1 protocol ip permit
!
!
!
line con 0
  exec-timeout 0 0
  logging synchronous
  transport input none
line aux 0
  logging synchronous
line vty 0 4
  password 7 13091610
  no logging synchronous
  login
line 1/00 1/107
  exec-timeout 0 0
  autoselect ppp
  script dialer dial
  logging synchronous
  modem InOut
  transport input all
line 4/00 7/107
  exec-timeout 0 0
  autoselect ppp
  script dialer dial
  logging synchronous
  modem InOut
  transport input all
!
exception core-file coredump
exception protocol ftp
exception dump 172.23.254.253
ntp clock-period 17179726
ntp server 192.168.10.1
scheduler allocate 40000 400
end

```

Two 8 T1/PRI ISDN with RADIUS (AAA) and Resource Pooling

```
AS5400# show config
```

```
Building configuration ...
```

```
Current configuration:
```

```
!  
version 12.1  
no service pad  
service timestamps debug uptime  
service timestamps log uptime  
service password-encryption  
!  
hostname AS5400-T1-PRI-UUT  
!  
no boot startup-test  
logging rate-limit 5  
no logging console  
enable password password  
!  
<text omitted>  
!  
resource-pool enable  
resource-pool call treatment resource channel-not-available  
resource-pool call treatment profile no-answer  
!  
resource-pool group resource group1  
  range port 1/0 1/107  
!  
resource-pool group resource group2  
  range port 4/0 4/107  
  range port 5/0 5/107  
!  
resource-pool group resource group3  
  range port 6/0 6/107  
  range port 7/0 7/107  
!  
resource-pool profile customer bell_atlantic  
  limit base-size all  
  limit overflow-size 0  
  resource group2 speech  
  dnis group group2  
!  
resource-pool profile customer us_west  
  limit base-size 60  
  limit overflow-size 100  
  resource group1 speech  
  dnis group group1  
!  
resource-pool profile customer all  
  limit base-size all  
  limit overflow-size 0  
  resource group3 speech  
  dnis group default  
!  
resource-pool profile discriminator not_allowed  
  call-type speech  
  dnis group not_allowed  
!  
! dial-tdm-clock priority 1 2/4  
!  
! ip subnet-zero
```

```

ip ftp source-interface FastEthernet0/0
ip ftp username hanif
ip ftp password password
no ip domain-lookup
ip host greenbug 172.22.43.28
ip host jurai 172.23.254.253
!
mgcp package-capability trunk-package
mgcp default-package trunk-package
isdn switch-type primary-5ess
isdn voice-call-failure 0
cns event-service server
mta receive maximum-recipients 0
!
!
controller T1 2/0
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/1
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/2
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/3
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/4
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/5
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/6
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 2/7
    framing esf
    linecode b8zs
    cablelength short 133
    pri-group timeslots 1-24
!
controller T1 5/0

```

```
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/1
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/2
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/3
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/4
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/5
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/6
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
controller T1 5/7
framing esf
linecode b8zs
cablelength short 133
pri-group timeslots 1-24
!
!
interface FastEthernet0/0
ip address 192.168.10.102 255.255.255.0
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
no keepalive
duplex auto
speed auto
!
interface FastEthernet0/1
no ip address
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
shutdown
duplex auto
```

```
speed auto
!
interface Serial0/0
no ip address
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
shutdown
fair-queue 64 256 0
clockrate 2000000
!
interface Serial0/1
no ip address
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
shutdown
clockrate 2000000
!
interface Serial2/0:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial2/1:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial2/2:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial2/3:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial2/4:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial2/5:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
```

```
    fair-queue 64 256 0
    no cdp enable
!
interface Serial2/6:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
    fair-queue 64 256 0
    no cdp enable
!
interface Serial2/7:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
    fair-queue 64 256 0
    no cdp enable
!
interface Serial5/0:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
    fair-queue 64 256 0
    no cdp enable
!
interface Serial5/1:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
    fair-queue 64 256 0
    no cdp enable
!
interface Serial5/2:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
    fair-queue 64 256 0
    no cdp enable
!
interface Serial5/3:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
    fair-queue 64 256 0
    no cdp enable
!
interface Serial5/4:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
    fair-queue 64 256 0
    no cdp enable
!
interface Serial5/5:23
    no ip address
    no ip directed-broadcast
    isdn switch-type primary-5ess
    isdn incoming-voice modem
```

```

fair-queue 64 256 0
no cdp enable
!
interface Serial5/6:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Serial5/7:23
no ip address
no ip directed-broadcast
isdn switch-type primary-5ess
isdn incoming-voice modem
fair-queue 64 256 0
no cdp enable
!
interface Async1/00
ip address 10.5.97.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout 2000000
dialer string 6151300001
dialer-group 1
async default routing
async mode interactive
no peer default ip address
no fair-queue
ppp authentication chap
hold-queue 1000 in
hold-queue 1000 out
!
interface Async1/01
ip address 10.5.98.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout 2000000
dialer string 7150100001
dialer-group 1
async default routing
async mode interactive
no peer default ip address
no fair-queue
ppp authentication chap
hold-queue 1000 in
hold-queue 1000 out
!
interface Async1/02
ip address 10.5.99.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout 2000000
dialer string 7150100002

```

```
dialer-group 1
async default routing
async mode interactive
no peer default ip address
no fair-queue
ppp authentication chap
hold-queue 1000 in
hold-queue 1000 out
!
interface Async1/03
 ip address 10.5.100.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout 2000000
 dialer string 7150100003
 dialer-group 1
 async default routing
 async mode interactive
 no peer default ip address
 no fair-queue
 ppp authentication chap
 hold-queue 1000 in
 hold-queue 1000 out
!
interface Async1/04
 ip address 10.5.101.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout 2000000
 dialer string 7150100004
 dialer-group 1
 async default routing
 async mode interactive
 no peer default ip address
 no fair-queue
 ppp authentication chap
 hold-queue 1000 in
 hold-queue 1000 out
!
interface Async1/05
 ip address 10.5.102.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout 2000000
 dialer string 7150100005
 dialer-group 1
 async default routing
 async mode interactive
 no peer default ip address
 no fair-queue
 ppp authentication chap
 hold-queue 1000 in
 hold-queue 1000 out
!
interface Async1/06
```

```
ip address 10.5.103.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100006
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/07
ip address 10.5.104.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100007
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/08
ip address 10.5.105.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100008
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/09
ip address 10.5.106.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100009
dialer-group 1
async mode interactive
ppp authentication chap
!
interface Async1/10
ip address 10.5.107.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100010
dialer-group 1
async mode interactive
ppp authentication chap
!
```

```
interface Async1/11
 ip address 10.5.108.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout AS5400
 dialer string 7150100011
 dialer-group 1
 async mode interactive
 no peer default ip address
 no cdp enable
 ppp authentication chap
!
interface Async1/12
 ip address 10.5.109.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout AS5400
 dialer string 7150100012
 dialer-group 1
 async mode interactive
 no peer default ip address
 no cdp enable
 ppp authentication chap
!
interface Async1/13
 ip address 10.5.110.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout AS5400
 dialer string 7150100013
 dialer-group 1
 async mode interactive
 no peer default ip address
 no cdp enable
 ppp authentication chap
!
interface Async1/14
 ip address 10.5.111.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout AS5400
 dialer string 7150100014
 dialer-group 1
 async mode interactive
 no peer default ip address
 no cdp enable
 ppp authentication chap
!
interface Async1/15
 ip address 10.5.112.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
```

```
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100015
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/16
ip address 10.5.113.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100016
dialer-group 1
async mode interactive
no peer default ip address
no cdp enable
ppp authentication chap
!
interface Async1/17
ip address 10.5.114.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100017
dialer-group 1
async mode interactive
no peer default ip address
ppp authentication chap
!
interface Async1/18
ip address 10.5.115.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100018
dialer-group 1
async mode interactive
no peer default ip address
ppp authentication chap
!
interface Async1/19
ip address 10.5.116.1 255.255.255.0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
dialer idle-timeout AS5400
dialer string 7150100019
dialer-group 1
```

```
async mode interactive
no peer default ip address
ppp authentication chap
!
interface Async1/20
 ip address 10.5.117.1 255.255.255.0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 dialer in-band
 dialer idle-timeout AS5400
 dialer string 7150100020
 dialer-group 1
 async mode interactive
 no peer default ip address
 ppp authentication chap
!
interface Group-Async0
 ip unnumbered FastEthernet0/0
 no ip directed-broadcast
 encapsulation ppp
 no ip route-cache
 no ip mroute-cache
 async mode interactive
 no peer default ip address
 ppp authentication chap
 group-range 1/21 7/107
!
router eigrp 100
 network 192.168.10.0
!
ip local pool ip-pool 10.4.1.1 10.4.1.250
ip default-gateway 192.168.10.1
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 10.5.1.97 255.255.255.255 Async1/00
ip route 10.5.1.98 255.255.255.255 Async1/01
ip route 10.5.1.99 255.255.255.255 Async1/02
ip route 10.5.1.100 255.255.255.255 Async1/03
ip route 10.5.1.101 255.255.255.255 Async1/04
ip route 10.5.1.102 255.255.255.255 Async1/05
ip route 10.5.1.103 255.255.255.255 Async1/06
ip route 10.5.1.104 255.255.255.255 Async1/07
ip route 10.5.1.105 255.255.255.255 Async1/08
ip route 10.5.1.106 255.255.255.255 Async1/09
ip route 10.5.1.107 255.255.255.255 Async1/10
ip route 10.5.1.108 255.255.255.255 Async1/11
ip route 10.5.1.109 255.255.255.255 Async1/12
ip route 10.5.1.110 255.255.255.255 Async1/13
ip route 10.5.1.111 255.255.255.255 Async1/14
ip route 10.5.1.112 255.255.255.255 Async1/15
ip route 10.5.1.113 255.255.255.255 Async1/16
ip route 10.5.1.114 255.255.255.255 Async1/17
ip route 10.5.1.115 255.255.255.255 Async1/18
ip route 10.5.1.116 255.255.255.255 Async1/19
ip route 10.5.1.117 255.255.255.255 Async1/20
no ip http server
```

```
!  
dialer dnis group group1  
  number 10000  
  call-type cas speech  
!  
dialer dnis group group2  
  number 10001  
  call-type cas speech  
!  
dialer dnis group not_allowed  
  number 66666  
dialer-list 1 protocol ip permit  
!  
dialer-list 1 protocol ip permit  
!  
!  
line con 0  
  exec-timeout 0 0  
  logging synchronous  
  transport input none  
line aux 0  
  logging synchronous  
line vty 0 4  
  password password  
  no logging synchronous  
  login  
line 1/00 1/107  
  autoselect ppp  
  script dialer dial  
  logging synchronous  
  modem InOut  
  transport input all  
line 3/00 4/107  
  autoselect ppp  
  script dialer dial  
  logging synchronous  
  modem InOut  
  transport input all  
line 6/00 7/107  
  autoselect ppp  
  script dialer dial  
  logging synchronous  
  modem InOut  
  transport input all  
!  
exception core-file coredump  
exception protocol ftp  
exception dump 223.255.254.253  
ntp clock-period 17179873  
ntp server 192.168.10.1  
scheduler allocate 4000 200  
end
```

Two 8 E1/PRI ISDN with RADIUS (AAA) and Resource Pooling

```
AS5400# show config

Building configuration ...

Current configuration:
!
version 12.1
no service pad
service timestamps debug datetime msec
service timestamps log uptime
no service password-encryption
service internal
!
hostname AS5400-E1-PRI-UUT
!
enable password password
!

username AS5400-E1-PRI-UUT password password
!
<text omitted>
!
resource-pool enable
resource-pool call treatment resource channel-not-available
resource-pool call treatment profile no-answer
!
resource-pool group resource group1
  range port 1/0 1/107
!
resource-pool group resource group2
  range port 4/0 4/107
  range port 5/0 5/107
!
resource-pool group resource group3
  range port 2/0 2/107
  range port 3/0 3/107
!
resource-pool profile customer bell_atlantic
  limit base-size all
  limit overflow-size 0
  resource group2 speech
  dn timer group2
!
resource-pool profile customer us_west
  limit base-size 60
  limit overflow-size 100
  resource group1 speech
  dn timer group1
!
resource-pool profile customer all
  limit base-size all
  limit overflow-size 0
  resource group3 speech
  dn timer default
!
resource-pool profile discriminator not_allowed
  call-type speech
  dn timer not_allowed
!
!
spe country united-kingdom
```

```

!
!
ntp server 192.168.10.1
!
!
ip subnet-zero
no ip domain-lookup
ip host jurai 172.23.254.253
!
isdn switch-type primary-net5
isdn voice-call-failure 0
cns event-service server
mta receive maximum-recipients 0
!
xgcp snmp sgcp
!
controller E1 6/0
pri-group timeslots 1-31
!
controller E1 6/1
pri-group timeslots 1-31
!
controller E1 6/2
pri-group timeslots 1-31
!
controller E1 6/3
pri-group timeslots 1-31
!
controller E1 6/4
pri-group timeslots 1-31
!
controller E1 6/5
pri-group timeslots 1-31
!
controller E1 6/6
pri-group timeslots 1-31
!
controller E1 6/7
pri-group timeslots 1-31
!
controller E1 7/0
pri-group timeslots 1-31
!
controller E1 7/1
pri-group timeslots 1-31
!
controller E1 7/2
pri-group timeslots 1-31
!
controller E1 7/3
pri-group timeslots 1-31
!
controller E1 7/4
pri-group timeslots 1-31
!
controller E1 7/5
pri-group timeslots 1-31
!
controller E1 7/6
pri-group timeslots 1-31
!
controller E1 7/7
pri-group timeslots 1-31

```

```
!  
!  
!  
interface FastEthernet0/0  
  ip address 192.168.10.103 255.255.255.0  
  no ip directed-broadcast  
  no ip route-cache  
  no ip mroute-cache  
!  
interface FastEthernet0/1  
  no ip address  
  no ip directed-broadcast  
  no ip route-cache  
  no ip mroute-cache  
  shutdown  
!  
interface Serial0/0  
  no ip address  
  no ip directed-broadcast  
  no ip route-cache  
  no ip mroute-cache  
  shutdown  
  fair-queue 64 256 0  
  clockrate 2000000  
!  
interface Serial0/1  
  no ip address  
  no ip directed-broadcast  
  no ip route-cache  
  no ip mroute-cache  
  shutdown  
  clockrate 2000000  
!  
<text omitted>  
!  
interface Serial7/7:15  
  no ip address  
  no ip directed-broadcast  
  isdn switch-type primary-net5  
  isdn incoming-voice modem  
  fair-queue 64 256 0  
  no cdp enable  
!  
interface Async1/00  
  ip unnumbered FastEthernet0/0  
  no ip directed-broadcast  
  encapsulation ppp  
  async mode interactive  
  ppp authentication chap  
!  
interface Async1/01  
  ip unnumbered FastEthernet0/0  
  no ip directed-broadcast  
  encapsulation ppp  
  async mode interactive  
  ppp authentication chap  
!  
<text omitted>  
!  
interface Async5/106  
  ip unnumbered FastEthernet0/0  
  no ip directed-broadcast  
  encapsulation ppp  
  async mode interactive
```

```
    ppp authentication chap
    !
interface Async5/107
    ip unnumbered FastEthernet0/0
    no ip directed-broadcast
    encapsulation ppp
    async mode interactive
    ppp authentication chap
    !
interface Group-Async0
    no ip address
    no ip directed-broadcast
    no group-range
    !
router eigrp 100
    network 192.168.13.0
    !
ip default-gateway 192.168.13.1
ip classless
no ip http server
    !
dialer dn timer group group1
    number 10000
    call-type cas speech
    !
dialer dn timer group group2
    number 10001
    call-type cas speech
    !
dialer dn timer group not_allowed
    number 66666
dialer-list 1 protocol ip permit
    !
    !
line con 0
    exec-timeout 0 0
    transport input none
    speed 9600
line aux 0
line vty 0 4
    login
```

CT3 with Resource Pooling, AAA, and Modem

```
AS5400# show config

Building configuration . . .
Current configuration:
!
version 12.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname CT3-CAS-UUT
!
no boot startup-test
logging buffered 10000000 debugging
no logging console
aaa new-model
aaa group server radius aaa.router
server 192.168.1.137 auth-port 1645 acct-port 1646
server 192.168.1.138 auth-port 1645 acct-port 1646
!
aaa authentication ppp default group aaa.router local
aaa authorization network default group aaa.router local
aaa accounting update newinfo periodic 30
aaa accounting network default start-stop group aaa.router
enable password lab
!
username cisco password 0 lab
username 4700-F8 password 0 lab
username 4700-F13 password 0 lab
username 4700-I4 password 0 lab
username ELNINO-N3 password 0 lab
username ELNINO-N4 password 0 lab
username ELNINO-N5 password 0 lab
username NAS password 0 lab
username HGW password 0 lab
username all
!
!
resource-pool enable
resource-pool call treatment resource busy
!
resource-pool group resource 4700
range port 1/0 1/107
!
resource-pool group resource 5300
range port 2/0 2/107
range port 4/0 4/107
range port 5/0 5/107
range port 6/0 6/107
!
resource-pool profile customer 4700
limit base-size 110
limit overflow-size 18
resource 4700 speech
!
resource-pool profile customer 5300
limit base-size 538
limit overflow-size 18
resource 5300 speech
dnis group elnino
!
```

```

resource-pool profile service gold
modem min-speed 33200 max-speed 56000
!
!
!
!
dial-tdm-clock priority 1 freerun
calltracker enable
!
!
!
!
ip subnet-zero
ip ftp source-interface FastEthernet0/0
ip ftp username router
ip ftp password lab
no ip domain-lookup
ip host jurai 223.255.254.253
!
isdn voice-call-failure 0
cns event-service server
!
!
!
mta receive maximum-recipients 0
!
!
controller T3 7/0
clock source line
t1 1-28 controller
!
controller T1 7/0:1
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:2
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:3
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:4
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:5
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:6
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:7
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis

```

```
cas-custom 1
!
controller T1 7/0:8
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:9
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:10
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:11
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:12
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:13
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:14
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:15
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:16
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:17
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:18
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:19
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:20
framing esf
```

```

ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:21
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:22
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:23
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:24
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:25
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:26
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:27
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
controller T1 7/0:28
framing esf
ds0-group 1 timeslots 1-24 type e&m-fgb dtmf dnis
cas-custom 1
!
!
!
interface Loopback0
no ip address
!
interface FastEthernet0/0
ip address 192.168.18.100 255.255.255.0
no keepalive
duplex auto
speed auto
hold-queue 4000 out
!
interface FastEthernet0/1
ip address 172.22.35.71 255.255.0.0
shutdown
duplex auto
speed auto
!
interface Serial0/0
no ip address
shutdown

```

```
clockrate 2000000
!
interface Serial0/1
no ip address
shutdown
clockrate 2000000
!
interface Group-Async0
no ip address
no group-range
!
interface Group-Async1
ip unnumbered FastEthernet0/0
encapsulation ppp
async default routing
async mode interactive
no peer default ip address
fair-queue
ppp authentication chap
group-range 1/00 6/107
!
router eigrp 100
network 192.168.18.0
network 192.168.19.0
!
ip nat translation timeout never
ip nat translation tcp-timeout never
ip nat translation udp-timeout never
ip nat translation finrst-timeout never
ip nat translation syn-timeout never
ip nat translation dns-timeout never
ip nat translation icmp-timeout never
ip classless
ip route 60.1.14.0 255.255.255.0 192.168.18.10
ip route 70.1.14.0 255.255.255.0 192.168.18.10
ip route 80.1.14.0 255.255.255.0 192.168.18.10
ip route 100.1.1.0 255.255.255.0 192.168.18.10
ip route 110.1.1.0 255.255.255.0 192.168.18.10
ip route 120.1.1.0 255.255.255.0 192.168.18.10
ip route 130.1.1.0 255.255.255.0 192.168.18.10
ip route 192.0.0.0 255.0.0.0 FastEthernet0/1
ip route 192.122.173.18 255.255.255.255 FastEthernet0/1
ip route 223.255.254.253 255.255.255.255 FastEthernet0/0
no ip http server
!
logging facility local2
logging 192.168.1.131
!
dialer dn timer group callblock
number 5555
!
dialer dn timer group v90
number 815.....
!
dialer dn timer group elnino
number 915....
!
snmp-server engineID local 000000090200003096F80084
snmp-server community public RW
!
radius-server host 192.168.1.137 auth-port 1645 acct-port 1646
radius-server host 192.168.1.138 auth-port 1645 acct-port 1646
radius-server retransmit 2
radius-server timeout 9
```

```
radius-server deadtime 30
radius-server key lab
!
!
line con 0
exec-timeout 0 0
logging synchronous
transport input none
line aux 0
exec-timeout 0 0
logging synchronous
transport input all
line vty 0 4
password lab
no logging synchronous
line 1/00 6/107
autoselect ppp
autoselect timeout 10
logging synchronous
modem InOut
transport input all
!
```