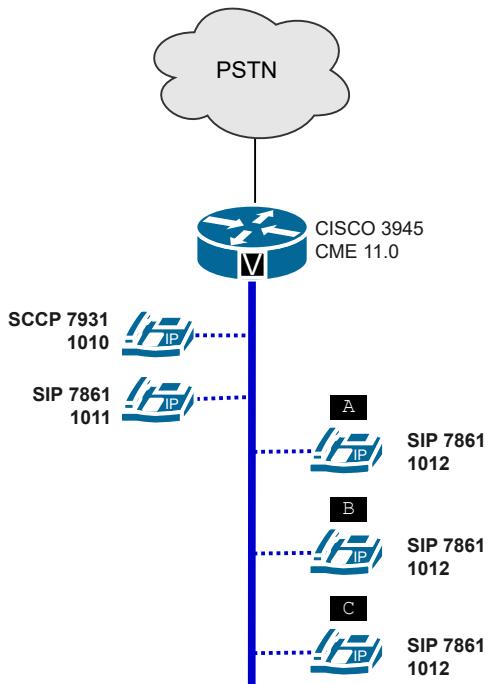


Problem with call waiting in CME SIP phones

1. Scenario and configuration

```
ephone-dn 1
  number 1010
!
ephone 1
  device-security-mode none
  mac-address D824.BDBB.0000
  codec g729r8
  type 7931
  button 1:1
!
voice register dn 1
  number 1011
  allow watch
  shared-line
  mwi
!
voice register dn 2
  number 1012
  allow watch
  shared-line
  mwi
!
voice register pool 1
  busy-trigger-per-button 2
  id mac 7035.0000.1011
  type 7861
  number 1 dn 1
  dtmf-relay rtp-nte
  username 1011 password 123456
  codec g711ulaw
!
voice register pool 2
  busy-trigger-per-button 2
  id mac 7035.0001.1011
  type 7861
  number 1 dn 2
  dtmf-relay rtp-nte
  username A002 password 123456
  codec g711ulaw
!
voice register pool 3
  busy-trigger-per-button 2
  id mac 7035.0002.1012
  type 7861
  number 1 dn 2
  dtmf-relay rtp-nte
  username B003 password 123456
  codec g711ulaw
!
voice register pool 4
  busy-trigger-per-button 2
  id mac 7035.0003.1012
  type 7861
  number 1 dn 2
  dtmf-relay rtp-nte
  username C004 password 123456
  codec g711ulaw
```



```
voice register global
mode cme
source-address ... port 5060
timeouts interdigit 2
authenticate register
authenticate realm all
tftp-path flash:
file text
!
voice service voip
no ip address trusted authenticate
callmonitor
no callmonitor trace
rtp-port range 20000 30000
dtmf-interworking rtp-nte
allow-connections h323 to h323
allow-connections h323 to sip
allow-connections sip to h323
allow-connections sip to sip
supplementary-service h450.12 advertise-only
no supplementary-service sip moved-temporarily
no supplementary-service sip refer
no supplementary-service sip handle-replaces
redirect ip2ip
fax protocol t38 version 0 ls-redundancy 0
hs-redundancy 0 fallback none
modem passthrough nse payload-type 101
codec g711ulaw redundancy maximum-sessions 1
h323
sip
  bind control source-interface ...
  bind media source-interface ...
  registrar server
  sip-profiles 1
  no call service stop
!
telephony-service
no auto-reg-ephone
ip source-address ... port 2000
calling-number local
service phone paramEdibility 1
service directed-pickup gpickup
service dss
timeouts interdigit 2
cnf-file location flash:
cnf-file perphone
load 7931 SCCP31.9-4-2SR2-2S
max-conferences 8 gain -6
call-park system application
call-forward pattern .T
dn-webedit
time-webedit
transfer-system full-consult
transfer-pattern .T
secondary-dialtone 0
!
```

Problem with call waiting in CME SIP phones (page 2)

2. Case 1: extension 1010 (SCCP) calls 1012 (SIP)

When 1010 calls to 1012:

- 2.1 - All devices (A, B and C) get ring.
- 2.2 - **A** answers.
- 2.3 - But the call is for **C**.
- 2.4 - So, **A** put the call on hold.
- 2.5 - In the all phones (A, B and C), the line led will blink.
- 2.6 - So, **C** pick up the call and talk to calling number (1010).
- 2.7 - That is, it works perfectly here.

Obs.: It's OK too if the call is originated from PSTN.

3. Case 2: extension 1011 (SIP) calls 1012 (SIP)

When 1011 calls to 1012:

- 2.1 - All devices (A, B and C) get ring.
- 2.2 - **A** answers.
- 2.3 - But the call is for **C**.
- 2.4 - So, **A** put the call on hold.
- 2.5 - In the all phones (A, B and C), the line led will blink.
- 2.6 - So, **C** (TRY) pick up the call and the confusion begins!
- 2.7 - When **C** presses the line button to pick up the call,
he makes a new call to the calling number (1011).
- 2.8 - Then the caller who is on hold receives a new call...
The mess is ready!