

# How to pick up calls with full and/or short numbers

Applies to VoipNow 3.x.x!

Call pickup normally works only with short numbers. So when 0003\*001 calls 0003\*002, a member of the 0003 organization can only pick up the incoming call by dialing \*21002. In some situations, customers would rather pick up the call by dialing \*210003\*002; for example, when a BLF key is monitoring 0003\*002 and the phone has the option to pick up on BLF press, the phone will attempt to pick up the call with \*210003\*002, but it won't work. To make it work, you need to make a couple of dialplan changes that we have described below. Also, basic understanding of the Asterisk dialplan is required.

## Step-by-step guide

The following macro checks the \$EXT length (the extension to be picked up). If the extension has 8 characters (full number), it strips the first 5 characters (in this case, 0003\*) and then follows the original dialplan. This macro works for the classic XXXX\*YYY extension format. If you have a different extension format, you need to modify the macro accordingly.

To apply the change:

1. Paste this macro in /etc/asterisk/extensions\_custom.conf.

```
[app-pickup]
; handles call pickup
exten => *210,1,Gosub(macro-retry-pickup,s,1(${CALLERCHAN:0:-${EXTLEN}}},fifo,*21))

exten => *290,1,Gosub(macro-retry-pickup,s,1(${CALLERCHAN:0:-${EXTLEN}}},lifo,*29))

exten => *211,1,GotoIf(${LEN(${EXT})} = 8)?2:12)
exten => *211,2,Set(PICKUPPATTERN=${EXT:5})
exten => *211,3,Set(TOPICKUPEXTEN=${CALLERCHAN:0:-${EXTLEN}}${PICKUPPATTERN})
exten => *211,4,Gosub(macro-retry-pickup,s,1(${TOPICKUPEXTEN}},fifo,*21${PICKUPPATTERN}))

exten => *211,12,Set(PICKUPPATTERN=${EXT})
exten => *211,13,Set(TOPICKUPEXTEN=${CALLERCHAN:0:-${EXTLEN}}${PICKUPPATTERN})
exten => *211,14,Gosub(macro-retry-pickup,s,1(${TOPICKUPEXTEN}},fifo,*21${PICKUPPATTERN}))

exten => *291,1,Set(PICKUPPATTERN=${EXT})
exten => *291,2,Set(TOPICKUPEXTEN=${CALLERCHAN:0:-${EXTLEN}}${PICKUPPATTERN})
exten => *291,3,Gosub(macro-retry-pickup,s,1(${TOPICKUPEXTEN}},lifo,*29${PICKUPPATTERN}))

exten => *212,1,Gosub(macro-extisactive,s,1(${CALLERCHAN})) ;verify if extension is active
exten => *212,2,Gosub(macro-multiperm,s,1)
exten => *212,3,Gosub(macro-setextenv,s,1(${CALLERCHAN}))
exten => *212,4,GotoIf(["foo${TARGETVNODE}" != "foo"]?5:7)
exten => *212,5,PickupVNode(${TARGETVNODE})
exten => *212,6,Goto(9)
exten => *212,7,GotoIf(["foo${TOPICKUPCHANNEL}" != "foo"]?8:10)
exten => *212,8,PickupChan(${TOPICKUPCHANNEL})
exten => *212,9,GotoIf(["foo${PICKEDUP}" = "foo"]?10:11)
exten => *212,10,Playback(no-call-pickup)
exten => *212,11,Hangup
```

2. Reload the dialplan.

```
asterisk -rx "dialplan reload"
```

It's always a good idea to do this test after hours.

## Related articles

- [What is new about the Caller Behavior in Queue setup](#)
- [Understanding the Call Reports in VoipNow](#)
- [How to transfer incoming calls to another extension voicemail](#)
- [Understanding the differences between a free and a paid channel](#)
- [How to use the Conference features on a Phone terminal extension](#)