12. Hunt groups how to

Hunt groups enable set one phone number (this number is refered as pilot number) as distributor of call to extensions defined in number list. Hunt group selection algorithm defines who receive next call in list. Our lab will show you how to configure simple hunt group on Cisco Unified CME.

Basic terms bounded with hunting number in list from pilot number are:

- **pilot number** – ephone-DN that is dialed to reach a hunt group. (optionally keyword secondary)
- **algorithm type** – method used to select which phone in hunt list should ring next,
- **list of member** – group of ephone-DN that belong to the hunt „pool“,
- **hops** – number of extensions that algorithm will try to ring before going to the final number,
- **timeout** – in seconds – how long will ring a extension in hunt list before moving to the next extension selected by algorithm,
- **final number** – number that is tried last after the number of hops has been exceeded

For hunt group creation is used ephone-hunt <Tag> configuration command. Tag can be number from 1 to 100.

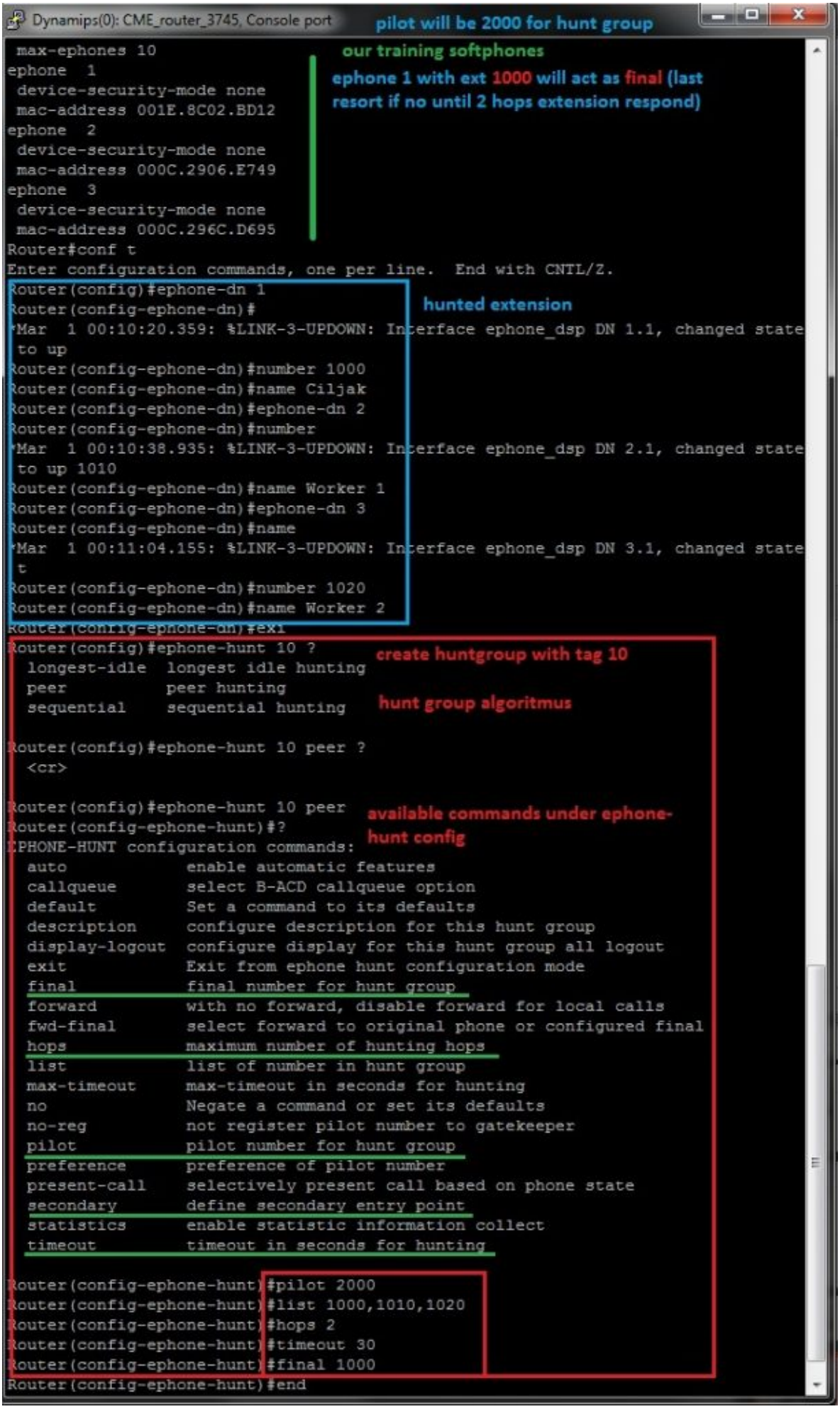
For selection of next ringing phone in hunt group in Cisco Unified CME can be selected these algorithm:

1. **Longest idle** – ring phone that was longest idle
2. **Sequential** – rings extensions in exact order as was configured in list
3. **Peer** – *circular fashion* – next ringed extension is in right position in list against previews ringed.

Our scenario consist of three ephone with unique extensions

1000, 1010 and 1020. All numbers are in hunt list. For ephone-hunt <Tag> algorithm we select nr. 10. As a pilot number had been selected 2000. Final destination after ringing number in list after hop 2 is first extension 1000.

Next picture show configuration commands and appropriate options for select


Dynamips(0): CME_router_3745, Console port
pilot will be 2000 for hunt group
our training softphones
ephone 1 with ext 1000 will act as final (last resort if no until 2 hops extension respond)
hunted extension
create huntgroup with tag 10
hunt group algoritmus
available commands under ephone-hunt config
max-ephones 10
ephone 1
device-security-mode none
mac-address 001E.8C02.BD12
ephone 2
device-security-mode none
mac-address 000C.2906.E749
ephone 3
device-security-mode none
mac-address 000C.296C.D695
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ephone-dn 1
Router(config-ephone-dn)#
*Mar 1 00:10:20.359: %LINK-3-UPDOWN: Interface ephone_dsp DN 1.1, changed state to up
Router(config-ephone-dn)#number 1000
Router(config-ephone-dn)#name Ciljak
Router(config-ephone-dn)#ephone-dn 2
Router(config-ephone-dn)#number
*Mar 1 00:10:38.935: %LINK-3-UPDOWN: Interface ephone_dsp DN 2.1, changed state to up 1010
Router(config-ephone-dn)#name Worker 1
Router(config-ephone-dn)#ephone-dn 3
Router(config-ephone-dn)#name
*Mar 1 00:11:04.155: %LINK-3-UPDOWN: Interface ephone_dsp DN 3.1, changed state to
t
Router(config-ephone-dn)#number 1020
Router(config-ephone-dn)#name Worker 2
Router(config-ephone-dn)#exi
Router(config)#ephone-hunt 10 ?
longest-idle longest idle hunting
peer peer hunting
sequential sequential hunting
Router(config)#ephone-hunt 10 peer ?
<cr>
Router(config)#ephone-hunt 10 peer
Router(config-ephone-hunt)#?
EPHONE-HUNT configuration commands:
auto enable automatic features
callqueue select B-ACD callqueue option
default Set a command to its defaults
description configure description for this hunt group
display-logout configure display for this hunt group all logout
exit Exit from ephone hunt configuration mode
final final number for hunt group
forward with no forward, disable forward for local calls
fwd-final select forward to original phone or configured final
hops maximum number of hunting hops
list list of number in hunt group
max-timeout max-timeout in seconds for hunting
no Negate a command or set its defaults
no-reg not register pilot number to gatekeeper
pilot pilot number for hunt group
preference preference of pilot number
present-call selectively present call based on phone state
secondary define secondary entry point
statistics enable statistic information collect
timeout timeout in seconds for hunting
Router(config-ephone-hunt)#pilot 2000
Router(config-ephone-hunt)#list 1000,1010,1020
Router(config-ephone-hunt)#hops 2
Router(config-ephone-hunt)#timeout 30
Router(config-ephone-hunt)#final 1000
Router(config-ephone-hunt)#end

Closer look at call to hunt pilot and mechanism of selection ringing phone by hunt algorithm describe next two pictures:

First number in hunt list is extension 1000 next hunted

number is right from 1000 (it is 1010) because peer (circular) algorithm was configured using ephone-hunt 10 peer command. When hops reach 2 (two ringed extensions) final number 1000 take ringing line.