

10. Paging

Paging enable to broadcast voice message to ephones. We can look at paging as one-way intercom. Difference between intercom and broadcast is that paging broadcast message to multiple or all phones.

A phone can be assigned only one paging ephone-dn but you can assign paging groups to include multiple ephone-DNs.

Paging can be configured as:

1) **Unicast** – is limited to *max 10 receiving devices (high traffic volume)* – all streams contain same information that waste resources.

2) **Multicast** – scale well, need to configure UDP port number for multicast stream (default is 2000 UDP).

Our training lab will use extension 6000 for paging ephone-dn and for multicast use 239.1.1.1 port 2000 (224.0.0.0 – 239.255.255.255 except 224.x.x.x MoH).

Example of CLI config:

```
configure terminal
```

```
ephone-dn 5
```

```
number 6000
```

```
paging ip 239.1.1.1 port 2000
```

```
exit
```

```
ephone 1
```

```
paging-dn 5 multicast
```

```
ephone 2
```

paging-dn 5 multicast

ephone 3

paging-dn 5 multicast

end

Great command that can be used for examination only ephone part of running-cofigu is

```
Router(config-telephony)#do show runn | section ephone
max-ephones 10
ephone-dn 1 dual-line
number 1000
name Ciljak
ephone-dn 2 dual-line
number 1010
name Office
ephone-dn 3 dual-line
number 1020
name Worker
ephone-dn 5
number 6000
paging ip 239.1.1.1 port 2000
ephone 1
device-security-mode none
mac-address 001E.8C02.BD12
paging-dn 5
button 1:1
ephone 2
device-security-mode none
mac-address 000C.2906.E749
paging-dn 5
button 1:2
ephone 3
device-security-mode none
mac-address 000C.296C.D695
paging-dn 5
button 1:3
Router(config-telephony)#
```

Now we are able call to paging extension 6000 and make a call



Now you can feel one-way intercom – when we are „through“ voice is broadcasted from subscribed devices speaker as it is indicated with green light on speaker.



When more granular control over paging members is expected there can **paging group** help. *How to do it follow next:*

1) Make appropriate paging ephone-dn one per member of paging subgroup

ephone-dn 5

number 6000

paging ip 239.1.1.1 port 2000

ephone-dn 6

number 7000

paging ip 239.1.1.2 port 2000

2) **Group appropriate paging-dn to wished paging groups** – we use only one group associated with number 7777 that will broadcast voice to all of our ephones

ephone-dn 7

number 7777

paging group 5 6

3) **Assign paging-dn for appropriate ephones**

ephone 1

paging-dn 5 multicast

ephone 2

paging-dn 5 multicast

ephone 3

paging-dn 6 multicast

(Ephone 1 and 2 are paged from ephone-dn 5 number 6000 and ephone 3 belong to another paging group with ephone-dn 6 and call extension 7000. But all phones can be paged in same time when we make call to extension 7777 that is paging group binding ephone-dn 5 and 6 together.)