

**Comdasys FAQ: MHLGs and  
Pick-up Groups with versions  
4676.x and 6719.x**

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## 1. What are MHLGs and Pick-up Groups?

A **Multi-Line Hunt Group** or simply hunt group is a standard feature implemented by most PBXs. It is a telephony concept in which phone calls to a single destination number are forwarded to a group of several phone lines. If a line is e.g. busy, an incoming call is forwarded to the next available line. It is hence a complex form of call forwarding, and most commonly used for hotlines and the like.

A pick-up group on the other hand is a group of people who are “allowed” to pick up calls for other people. Most times a pick-up group is used for employees who share an office. This can either be configured on a line key of your telephone – it is then a phone-driven feature – or it can be configured as a PBX access, i.e. a combination of keys that prompts this behavior. In the latter case, it is a PBX driven action in the SIP protocol.

## 2. MHLGs and Pick-up Groups in Survivability

As already mentioned above MHLGs are always PBX-driven features, whereas pick-up groups can be PBX driven. In *Survivability*, when there is no access to the central PBX and consequently no access to its features, MHLGs are always taken out of business and, depending on how they are configured, pick-up groups might not function either.

With the Comdasys Convergence 6719.x these two features are implemented in the VOICE Section of the graphical user interface (GUI) and a detailed description can be found in the Convergence Series Administrator Manual. The older version 4675.x, however, does not provide these services, but a workaround, which will be described in the following, is possible.

## 3. Version 4675.x

A lot more new features have been implemented in the new Version 6719.x compared to its predecessor 4675.x. If you are interested in upgrading to the latest version available, please contact us at [support@comdasys.com](mailto:support@comdasys.com).

For an emulation of MHLGs as well as of pick-up groups has to be done via the Command Line Interface. Therefore an SSH-session with the Convergence has to be established (for example with PuTTY).

Once this session is running and you have logged in with the username “root” and the configured password (“sesam” would be the default), select “s” and confirm your choice to open a shell. The configuration of both MHLGs and Pick-up Groups is quite similar, we will therefore describe the process in detail under **MHLGs** and simply point out differences and valuable information under **Pick-up Groups**.

### 3.1. MHLGs

Let's say you have a group of support engineers who are all available for clients' questions via the extension 1400. The PBX will make sure that a call to the extension 1400 will ring all extensions that belong to the group 1400 after another until the call has been picked up or until it has tried all available lines for 1400 (for example 1401, 1402 and 1403).

If the central PBX is not reachable and your system goes to *Survivability Mode*, a call to the virtual extension 1400 will end nowhere. But you can assign the alias “1400” to a couple of

phones by using the script “**openserctl**”.

When the shell is open run the following command:

```
openserctl ul add 4920590001400 'sip:4920590001402@192.168.140.50:5060;transport=udp'
```

This is the command to add a phone to the user list

Then add in apostrophes the SIP ID of the actual user:

```
'sip:actual phone #@valid IP address:port;transport=udp'
```

The command is followed by our virtual number with the extension 1400

After confirmation the user known by the extension 1402 will also be called if an incoming call is directed to 1400. Then continue with the same command with the SIP details of the other users, and you will end up with a fallback system for your hunt groups. The only difference between this workaround and a PBX MHLG is that all phones configured for 1400, will be rung simultaneously and not after one another.

Since the Convergence should only execute this in *Survivability Mode*, interferences with your PBX are avoided. In order to ensure this, the above command should be undone in normal mode to remove this virtual association. That would be done by the following command:

```
openserctl ul rm 4920590001400 'sip:4920590001402@192.168.140.50:5060;transport=udp'
```



These changes are not permanent and will be lost if a database reset is executed! Refer to 3.3 to make your changes **permanent**.

### 3.2. Pick-up Groups

As we mentioned earlier on pick-up groups configured on a line key depend solely on the phone. In this case even if the central PBX is not accessible or has failed, the feature still works, because this functionality of your phone is not affected by your PBXs functionality. The line key lamp will still blink and the call can still be fetched, not by clicking on the line key, but by actually picking up.

However, if a call pick-up is implemented through an access code configured on your PBX (for example “\*9”), this will not work in *Survivability Mode*. But you can make use of the same workaround described above for the MHLGs. It is not exactly the same behavior, but it prevents calls from being lost, and again the Convergence only executes this scripts in *Survivability Mode*.

### 3.3. Making your changes permanent

Open the directory `/etc/customscripts` in the shell. In this directory you may add your own custom scripts, which you would like to save permanently. There are two special custom scripts that will be executed when entering and when leaving *survivability mode*.

The file has to start with `#!/bin/bash` with which all shell files have to start, and it has to contain the `openserctl` scripts just as described above.

The file names should be `survivability-enter` and `survivability-exit` respectively. Make sure those scripts are executable by doing `chmod +x survivability-enter` and for the second script

\* Only static or fixed DHCP IP addresses should be used here. Dynamic IPs lead to unreliable behavior.

accordingly.