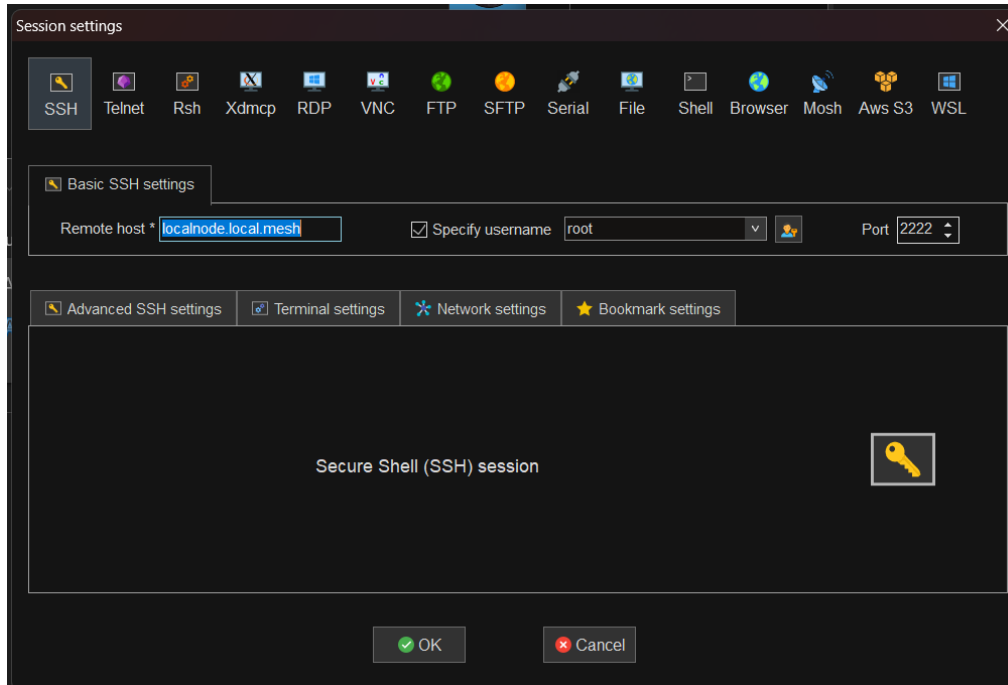


# AREDN Phonebook Installation

## (short version)

### Installation on the hap Router

First, you have to ssh into your router (address: localnode.local.mesh) using mobaXterm or PUTTY, or any other terminal program. Keep in mind to use port 2222.



Example: MobaXterm (<https://mobaxterm.mobatek.net/download.html>)

For the next steps, your hap Router needs to be connected to AREDN (SwissDigitalNet or other), where your organization's phonebook is hosted.

First, we run phonebook\_installer.sh (call is valid for Switzerland):

```
curl http://hb9edi-apu-1.local.mesh:8080/filerepo/Phonebook/phonebook_installer.sh  
| sh -s http://hb9edi-apu-1.local.mesh:8080/filerepo/Phonebook/
```

(Please replace “http://hb9edi-apu-1.local.mesh:8080/filerepo/Phonebook “ with the address of your organization’s web server)

Now you should have the settings.txt file on your router

```
root@HB9BLA-HAP3-1:/arednstack/phonebook# ls -l  
-rw-r--r--  1 root    root      186 Aug  8 17:45 settings.txt  
root@HB9BLA-HAP3-1:/arednstack/phonebook#
```

The initial settings.txt looks like that:

```
#Direct calling or PBX operation
download_directory_direct=YES
download_directory_pbx=YES

#Which Brands of phones are used on your router
create_yealink=YES
create_cisco=NO
create_noname=NO
```

And in the /www directory, you should find all the requested xml phonebooks:

```
root@HB9BLA-HAP3-1:/www# ls *.xml -l
-rw-r--r-- 1 root root 11578 Jul 27 07:55 phonebook_yealink_direct.xml
-rw-r--r-- 1 root root 10123 Jul 27 07:55 phonebook_yealink_pbx.xml
```

(I only selected Yealink phones, but I want to have direct and PBX calling phone books. You may have more or fewer files according to the definition of your settings.txt).

**Currently, only Yealink phones are supported.**

And in /etc/cron.daily/, you should see the “download\_phonebook” file:

```
root@HB9BLA-HAP3-1:/etc/cron.daily# ls -l
-rwxr-xr-x 1 root root 91 Aug 9 09:53 download_phonebook
-rwxr-xr-x 1 root root 2129 Apr 27 22:28 update-clock
root@HB9BLA-HAP3-1:/etc/cron.daily#
```

This job downloads the phonebook every day once. Because our routers do not support crontab, we had to use this trick.

Now we can go on with the phones.

## Parameters in Yealink Phones

Name your telephone with your number (your number is PLZ+double digit number, starting at 30).

In Switzerland, three administrators are defined: HB9FND, HB9JAT, and HB9BLA. If not sure: HB9BLA

A common Swiss telephone book is maintained. **Without entering your number there, you will not get the advantages of this phonebook.**

## Forward&amp;DND

General  
Information

## Audio

## Intercom

## Transfer

## Pick up &amp; Park

## Remote Control

## Phone Lock

## ACD

## SMS

## Action URL

## Bluetooth

## Power LED

## Notification Device

## General Information

Call Waiting	Enabled	?
Call Waiting On Code		?
Call Waiting Off Code		?
Auto Redial	Disabled	?
Auto Redial Interval (1~300s)	10	?
Auto Redial Times (1~300)	10	?
Key As Send	#	?
Reserve # in User Name	Enabled	?
Hotline Number		?
Hotline Delay(0~10s)	4	?
Busy Tone Delay (Seconds)	0	?
Return Code When Refuse	486 (Busy Here)	?
Return Code When DND	480 (Temporarily Unavail	?
Call Completion	Disabled	?
Time Out for Dial Now Rule	1	?
RFC 2543 Hold	Disabled	?
Use Outbound Proxy In Dialog	Disabled	?

Power LED Mode	0	?
Auto Logout Time(1~1000min)	999	?
Call Number Filter	, -()	?
Accept SIP Trust Server Only	Disabled	?
Allow IP Call	Enabled	?
IP Direct Auto Answer	Disabled	?
Call List Show Number	Name	?
Missed Call Tone	Enabled	?
DHCP Hostname	441530	?
Reboot In Talking	Disabled	?
Hide Feature Access Codes	Disabled	?
Display Method on Dialing	User Name	?
Auto Linekeys	Disabled	?

Confirm

Cancel

## Directory

Index	Remote URL	Display Name
1	<a href="http://localnode.local.mesh/phonebook_yealink_direct.xml">http://localnode.local.mesh/phonebook_yealink_direct.xml</a>	Direct
2	<a href="http://localnode.local.mesh/phonebook_yealink_pbx.xml">http://localnode.local.mesh/phonebook_yealink_pbx.xml</a>	via PBX
3		
4		
5		

Incoming/Outgoing Call Lookup:  ?

Update Time Interval(Seconds):  ?

**NOTE**  
**Remote Phone Book**  
It is a centrally maintained phone book, stored in the remote server.  
Users only need the access URL of the remote phone book. The IP phone can establish a connection with the remote server and download the phone book, and then display the remote phone book entries on the phone user interface.  
[Click here to get more product documents.](#)

Add one or two files into the “remote phonebook” of your telephone. Make sure you do this only when the telephone is connected to a router where you installed the appropriate phonebooks

Here are the entries for copy-paste (you can use these addresses to test if your router installation is ok)

[http://localnode.local.mesh/phonebook\\_yealink\\_direct.xml](http://localnode.local.mesh/phonebook_yealink_direct.xml)

[http://localnode.local.mesh/phonebook\\_yealink\\_pbx.xml](http://localnode.local.mesh/phonebook_yealink_pbx.xml)

**Directory** ?

Disabled: Local Directory, History, Blacklist

Enabled: Remote Phone Book

Search Source List In Dialing ?

Disabled: Local Directory

Enabled: Remote Phonebook, History

Recent Call In Dialing:  ?

## Install SIPproxd on your hap router (only hap lite for the moment)

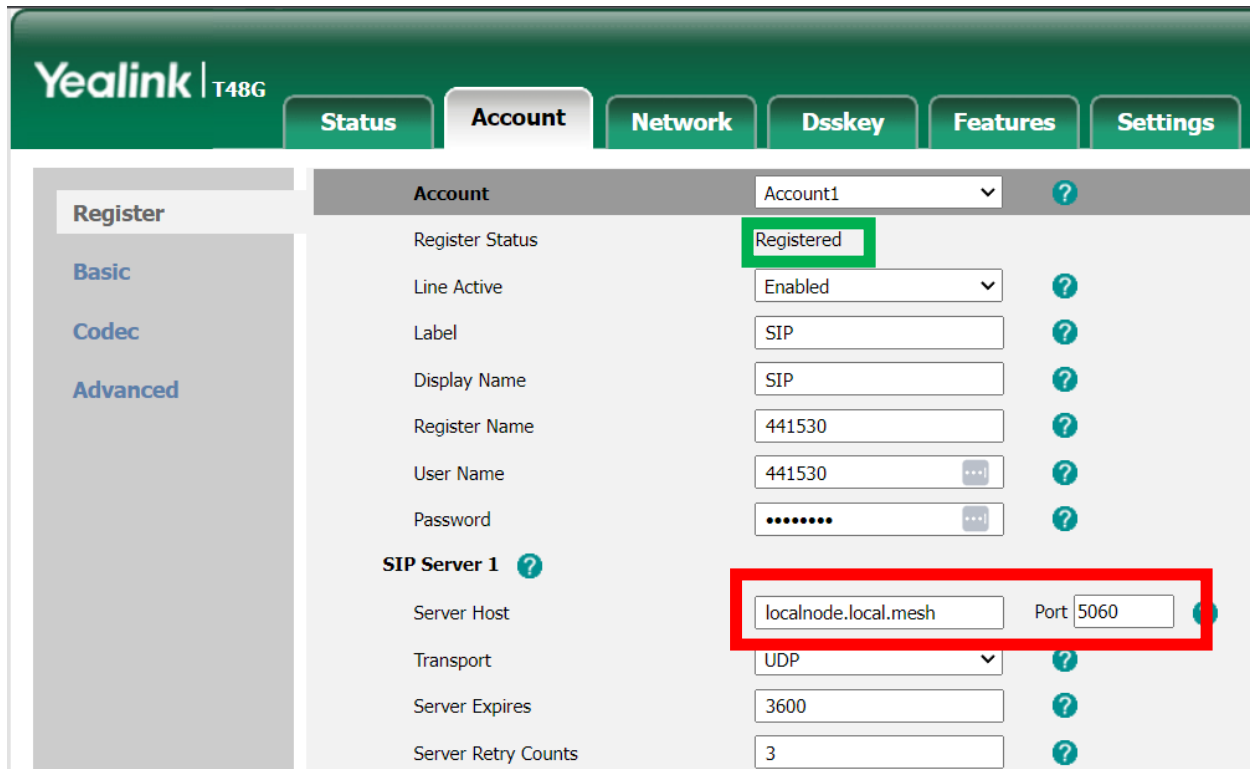
Yealink phones need to be registered to a SIP server to work properly with the phone books. If you have no PBX available, you can install SIPproxd on your hap router and connect your Yealinks to this server. If

you use a PBX, configure the account as usual. Then, you have the single point of failure (if the connection to the PBX is lost, your phone will no more properly work also for direct calls). Maybe you consider a fallback scenario with SIProxd as a second account?

```
curl http://hb9edi-apu-1.local.mesh:8080/filerepo/Siproxd/SIProxd_installer.sh | sh
```

(Also here, replace “http://hb9edi-apu-1.local.mesh:8080/filerepo/Phonebook “ with the address of your hoster’s web server)

Add “localnode.local.mesh” as a server host in your phones:



The screenshot shows the Yealink T48G web interface. The top navigation bar includes tabs for Status, Account, Network, Dsskey, Features, and Settings. The 'Account' tab is selected. On the left, there is a sidebar with 'Register', 'Basic', 'Codec', and 'Advanced' options. The main content area shows the 'Account' configuration for 'Account1'. The 'Register Status' is 'Registered'. The 'SIP Server 1' section is highlighted with a red box, showing the 'Server Host' as 'localnode.local.mesh' and the 'Port' as '5060'. Other fields include 'Line Active' (Enabled), 'Label' (SIP), 'Display Name' (SIP), 'Register Name' (441530), 'User Name' (441530), and 'Password' (masked).

Check if your phone is registered.

Now your telephones attached to this particular router should see the requested phone books, and names should be shown when you get calls. Chose the direct phone book for direct calls.