

MorphoAccess[®] SIGMA Series & MorphoWave[®] Compact

Application Notes: Videophone &
Audiophone configuration



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Osny, France

MorphoAccess® SIGMA Series & **MorphoWave® Compact** – Application Notes: Videophone & Audiophone
configuration July 2018
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Revision History

The table below contains the history of changes made to the present document.

Version	Date	Description
01	2016	First version
02	April 2017	Add the MorphoAccess® Sigma Extreme product
03	December 2017	Update the MMI of MorphoAccess® Sigma product Update company name (IDEMIA)
04	July 2018	Add the support of H264 codec
05	July 2018	Add MorphoWave® Compact support

Introduction

The purpose of this document is to provide an overview of available possibilities to configure videophone call on a MorphoAccess® terminal or Audiophone call on a MorphoWave® Compact terminal.

Important: Videophone feature is only available for MorphoAccess® SIGMA Series and SIGMA Extreme Series terminals. Audiophone feature is only available for MorphoWave® Compact terminals.

NOTE: This document is compatible with the audiophone feature of MorphoWave® Compact terminals.

Some preconditions are required before being able to configure and use videophone feature:

- Videophone software using SIP protocol installed on PC:
 - Jitsi (2.8.5426 version or below) or,
 - Linphone (3.8.1 version or below)
- Microphone on PC side

After preconditions are fully met, videophone configuration can be configured by two ways:

1. Directly on terminal panel
2. Remotely with MBTB software (MorphoBioToolBox) version 3.4.1 or higher

Configurations for software used on PC are also described:

1. Jitsi
2. Linphone

Next chapters describe in details the steps to follow in each case.

Videophone configuration

In order to access Videophone, some parameters have to be set in terminal.

Parameters are:

- PC IP Address
- Port

Remark: Port used by default by Jitsi and Linphone is 5060

Videophone configuration via terminal menu

Below is the detail of the steps to follow in order to set parameters value via terminal interface.

1. Power up MorphoAccess® SIGMA Series and SIGMA Extreme Series terminal
2. Enter in Menu



Figure 1 : Enter in configuration menu

3. Enter Password and validate to access configuration menu on terminal

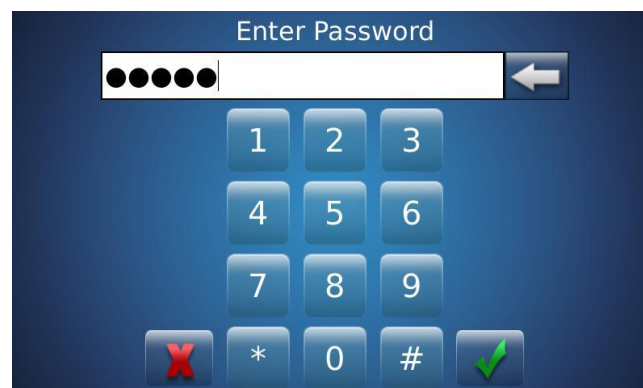
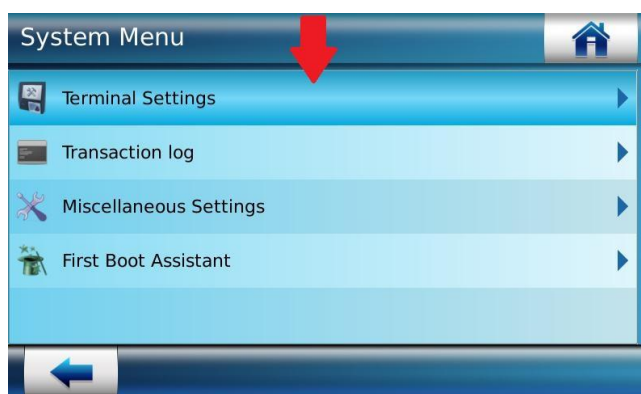
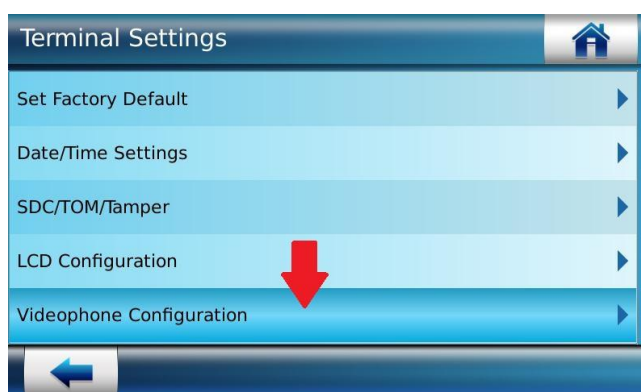


Figure 2 : Enter password

4. Enter in *System Menu**Figure 3 : Enter in System Menu*5. Choose *Terminal Settings**Figure 4 : Choose Terminal Settings*6. Choose *Videophone Configuration**Figure 5 : Choose Videophone Configuration*

7. Choose *Add*

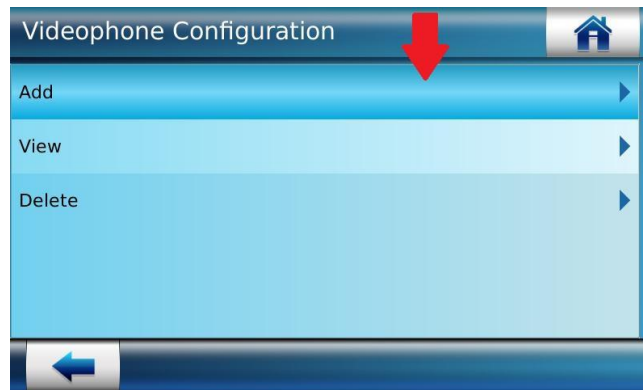


Figure 6 : Enter parameter's value

8. Enter a server name, this name is arbitrary and help you if you have added several videophone configurations



Figure 7 : Enter Server name

9. Enter Server IP address

Remark: Parameters in following steps are given as example

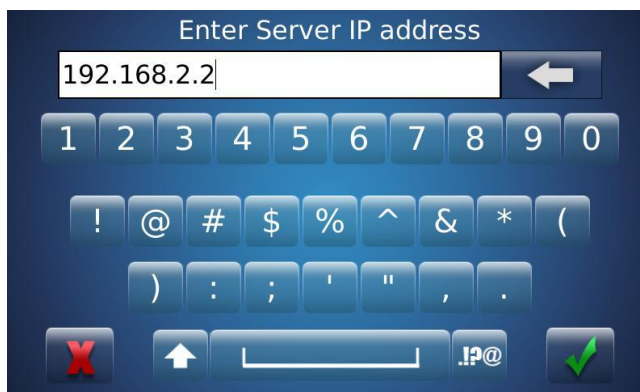


Figure 8 : Enter Server IP address

10. Enter Server Port



Figure 9 : Enter Server port

Videophone configuration via MorphoBioToolBox (MBTB)

Below is the detail of the steps to follow in order to set parameters value via MBTB (Administration Software).

Important:

MBTB has to be connected on the same network and subnetwork as the MorphoAccess® SIGMA Series or SIGMA Extreme Series terminals. Please check your computer network settings has an IP address on the same subnet as MorphoAccess® SIGMA Series and SIGMA Extreme Series terminals in order to establish the connection without problem.

1. Power up MorphoAccess® SIGMA Series and SIGMA Extreme Series terminals
2. Start MBTB and enter IP address of MorphoAccess® SIGMA Series and SIGMA Extreme Series terminals

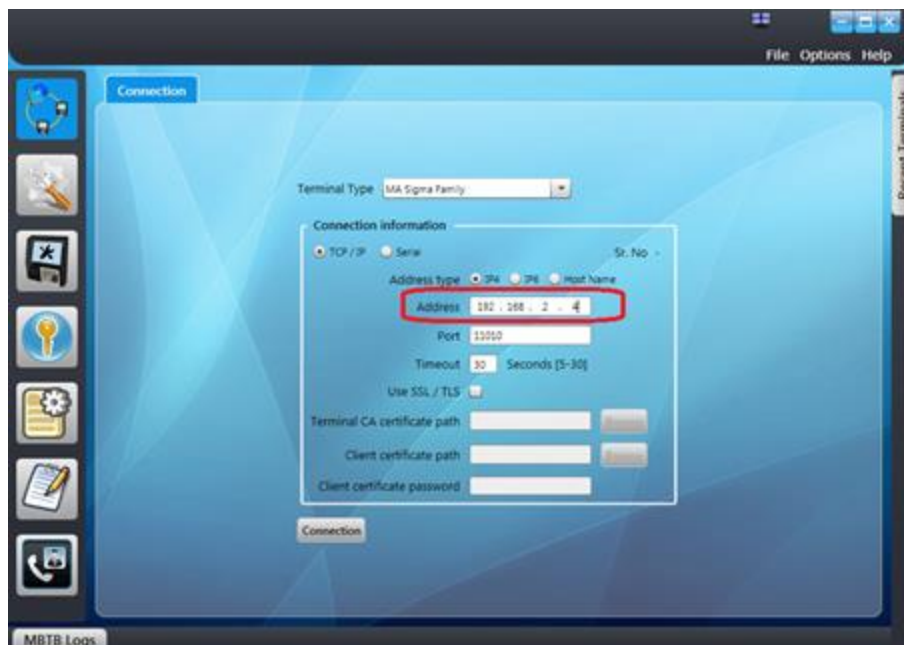


Figure 10 : MBTB Enter IP address of terminal

3. Click on *Connection*. Connection should succeed.

4. Enter in Settings Menu

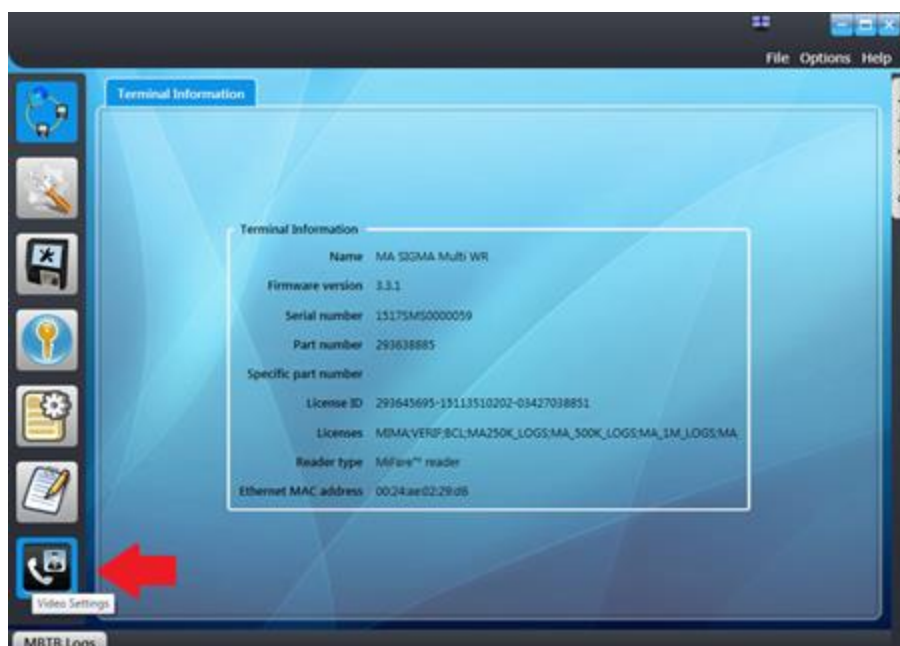


Figure 11 : MBTB Enter in Video Settings Menu

5. Click on New

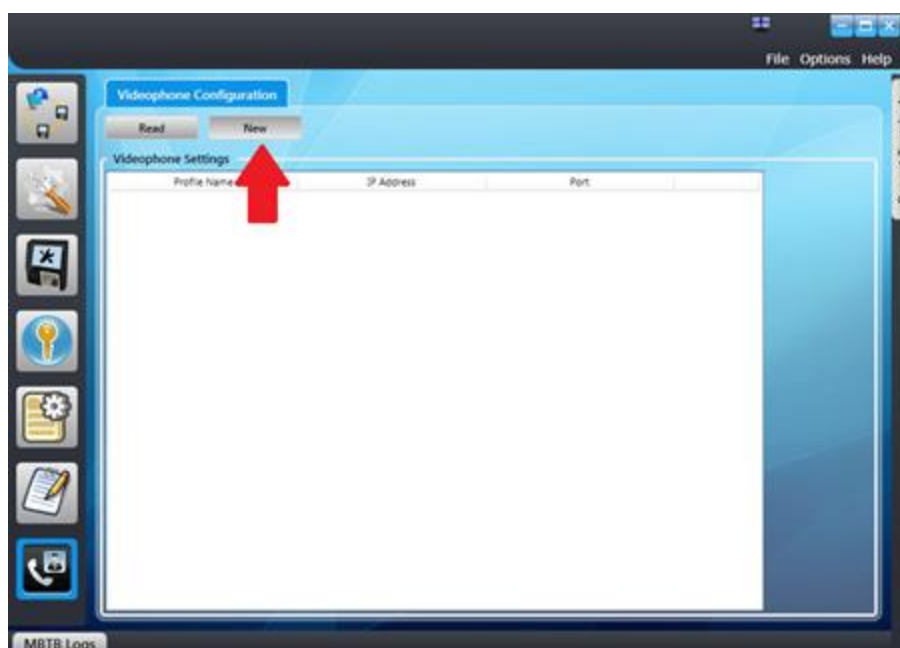


Figure 12 : MBTB Select New Videophone Configuration

6. Enter the Profile Name, IP address and port server

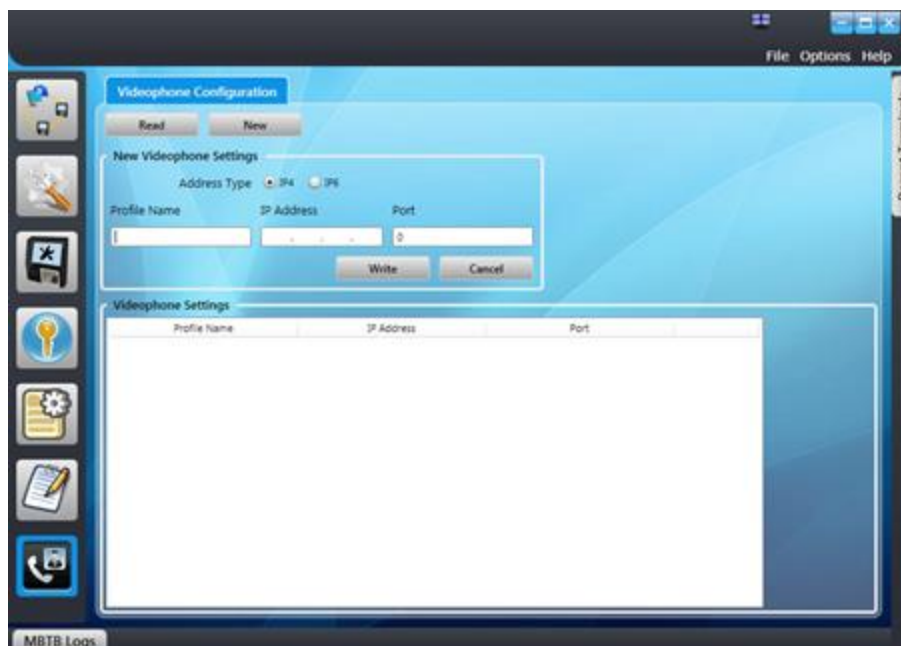


Figure 13 : MBTB Enter Videophone configuration parameters

7. Click on *Write* button to save changes
Remark: Parameters are given as example

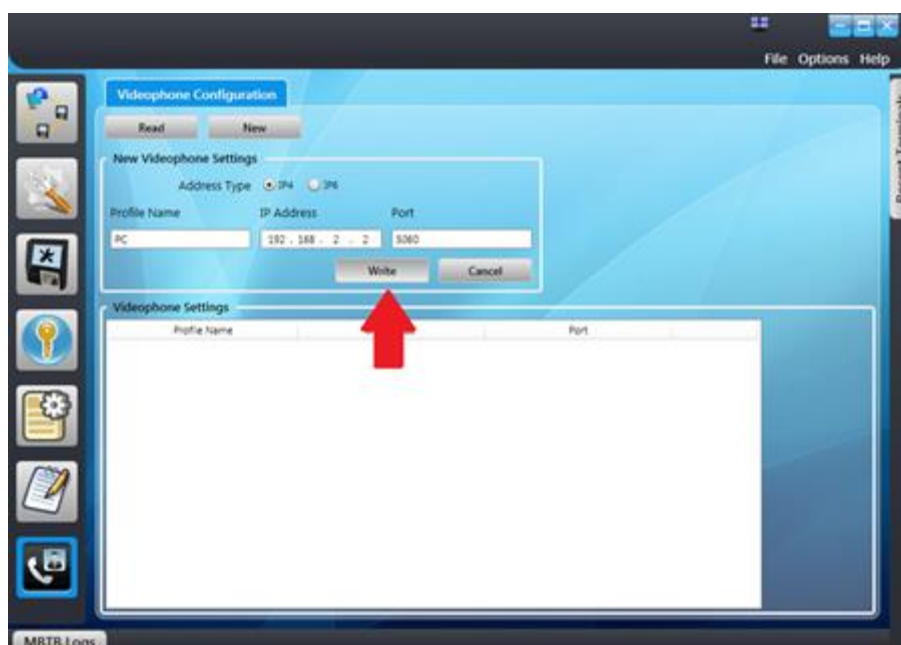


Figure 14 : MBTB Enter parameter's value

Software configuration

Below is the detail of the steps to follow in order to configure the videophone software on the Administrator PC.

Videophone call is compatible with the following software:

- Jitsi (version 2.8.5426 or below)
- Linphone (version 3.8.1 or below)

Note:

The configurations done in the following section are in the case that the Administrator PC network settings has an IP address on the same subnet as MorphoAccess® SIGMA Series and SIGMA Extreme Series terminals.

For other configuration, please contact your network administrator.

Jitsi

Account configuration

1. Select *Add new account...* from *File* menu
2. Select SIP network and enter the ID and password

Remark: ID is arbitrary

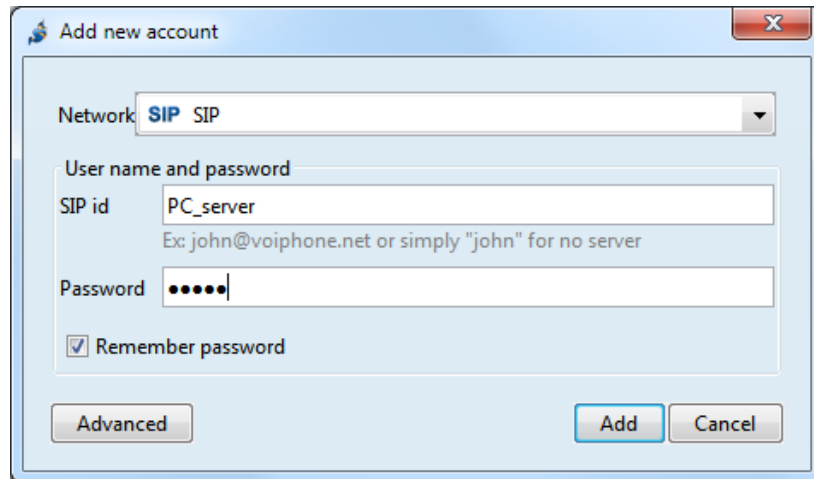


Figure 15 : Jitsi Enter account information

3. Click on *Add* button to save
4. By default, port 5060 is used by Jitsi, If you need to change it, navigate to *Tools > Options*
5. Select the SIP account to edit then click on the *Edit* button
6. Under the Connection tab, you can edit the port used by the software

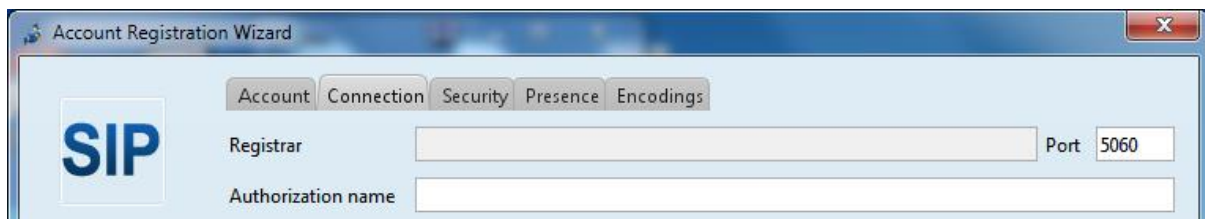


Figure 16 : Jitsi Change port used by Jitsi (optionnal)

7. Click on *Next* then *Sign in* buttons to save the change

Codecs configuration

1. Select *Options* from *Tools* menu
2. On Audio tab, only check the speex/16000 codec on the Encodings list

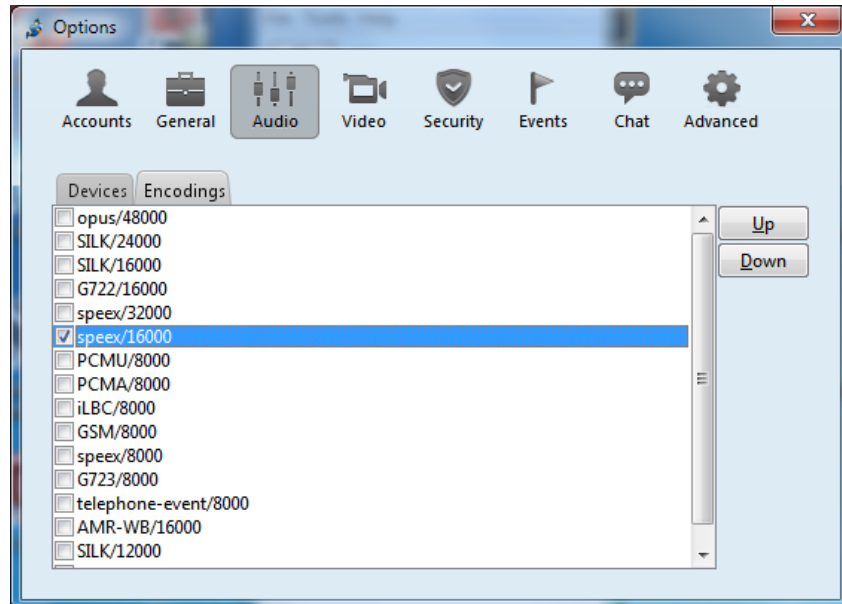


Figure 17: Jitsi Select audio codec

3. On Video tab, check the H263-1998 codec and H264 in the Encodings list

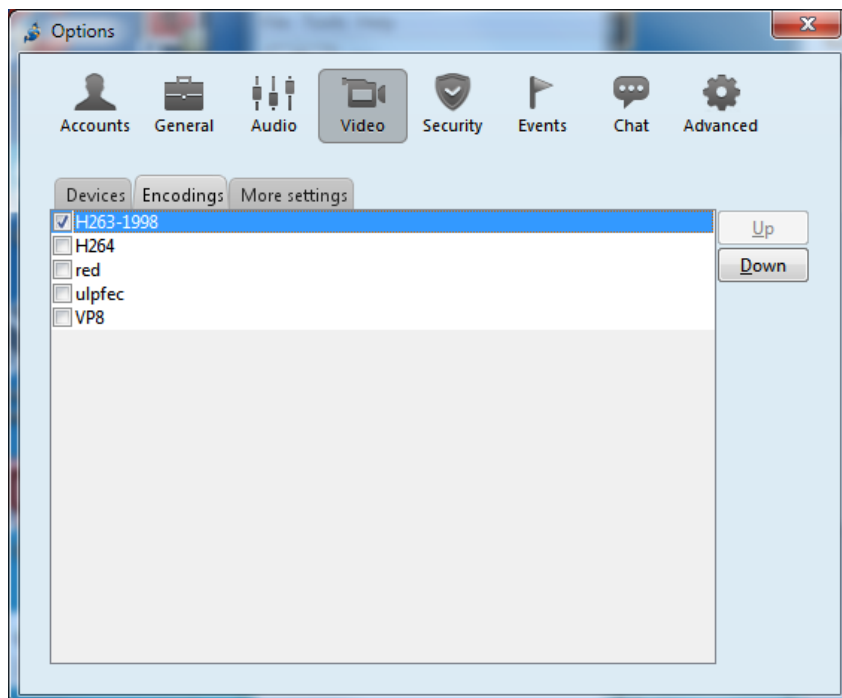


Figure 18 : Jitsi Select video codec

Remark : the figure 18 is not up-to-date with the H264 codec support

Linphone

Important:

Due to codec incompatibility, Linphone software can only be used with 3.8.1 version or below.

Account configuration

1. Select *Preferences* from *Options* menu
2. Select the *Manage SIP Accounts* tab
3. Click on *Add* button under the *Proxy accounts* section
4. Enter Administration information under *Your SIP identity*
sip:<ID>@<id address of the pc>:<port to use>

Remark: ID is arbitrary

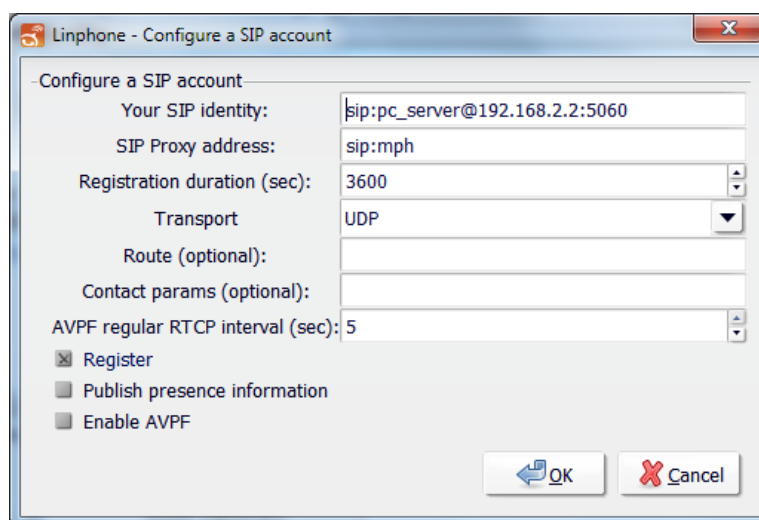


Figure 19 : Linphone Configure SIP account

5. Click on OK to save the changes

Codecs configuration

1. Select *Preferences* from *Options* menu
2. Select the *Codecs* tab
3. For audio codecs, enable only the speex (rate 16000 Hz) codec

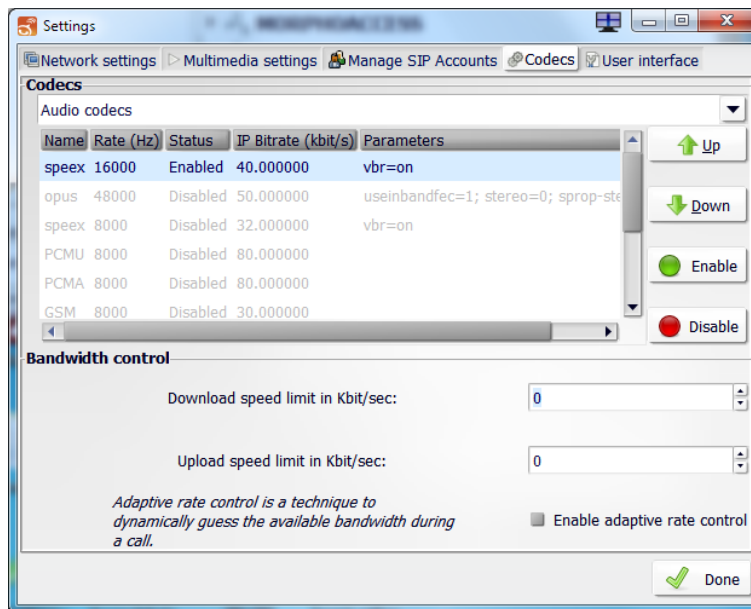


Figure 20 : Linphone Select audio codec

4. For video codecs, enable H263-1998, H263 and H264 codecs

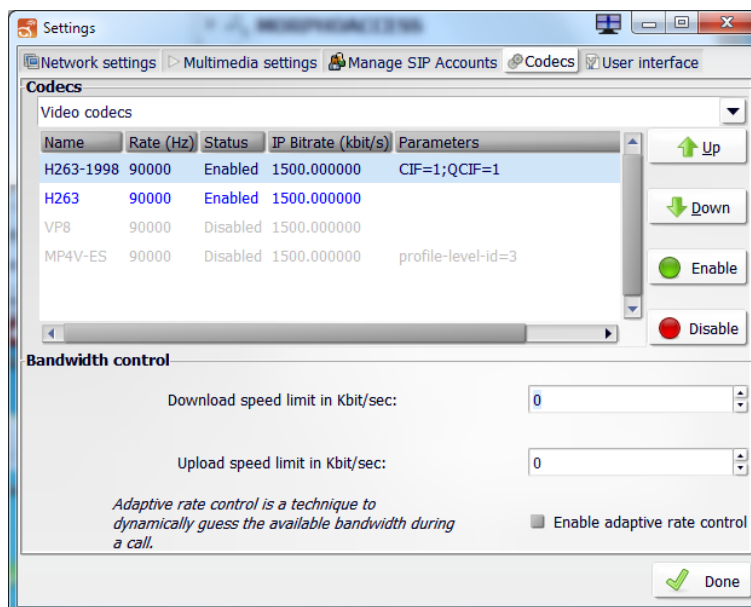


Figure 21 : Linphone Select Video codecs

Remark : the figure 21 is not up-to-date with the H244 codec support

5. Click on *Done* button to save changes

Videophone call

Once configuration on terminal and Administrator PC is done, a videophone call via the terminal panel can be performed.

Important:

Administrator PC where videophone software is installed has to be connected on the same network and subnetwork as the MorphoAccess® SIGMA Series and SIGMA Extreme Series terminals. Please check your computer network settings has an IP address on the same subnet as MorphoAccess® SIGMA Series and SIGMA Extreme Series terminals in order to establish the connection without problem.

Administrator should verify that ports used by software and terminal are authorised (for example port 5060 by default for Jitsi and Linphone).

Videophone software must be already launched on Administration PC.

1. On the terminal, click on the Videophone icon



Figure 22 : Select Videophone menu

2. Select the server to contact on the list

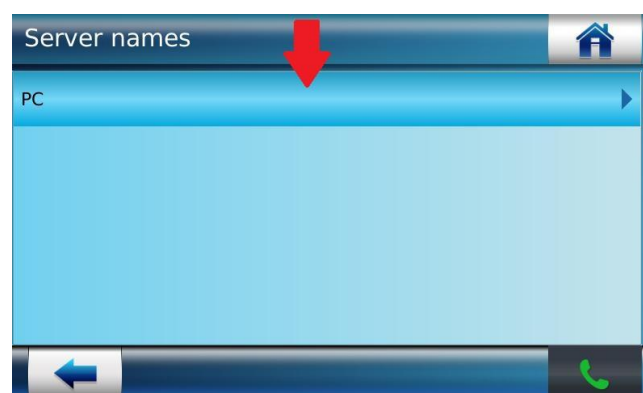


Figure 23 : Select PC to call

3. Click on the Call button

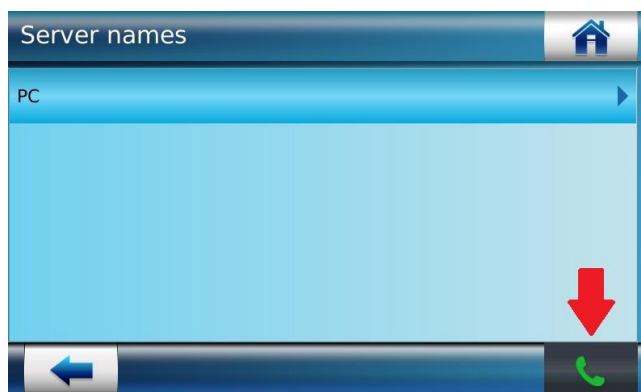


Figure 24 : Make a call

4. On Administrator PC side, click on *Answer* to accept the call coming from terminal

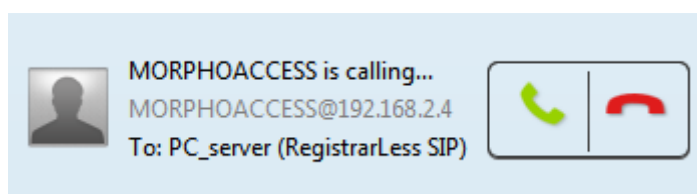


Figure 25 : Jitsi Accept a call

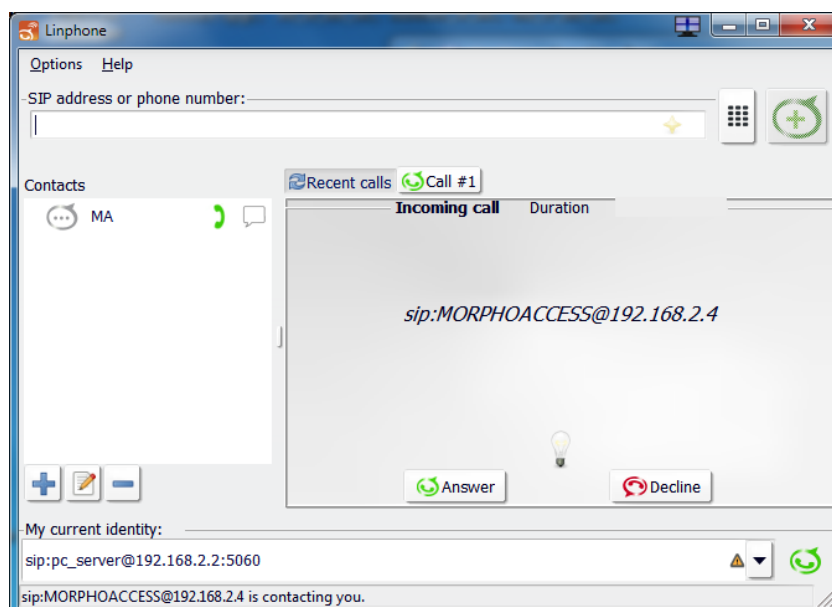


Figure 26 : Linphone Accept a call

5. On terminal, you should see the feedback of the terminal's camera and hear from the Administrator PC.

Note:

You can adjust the volume with the slider on the right side of the LCD panel.

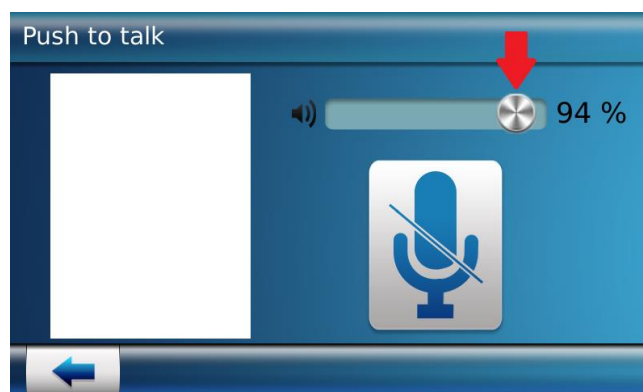


Figure 27 : MorphoAccess® SIGMA Series terminals Videophone interface

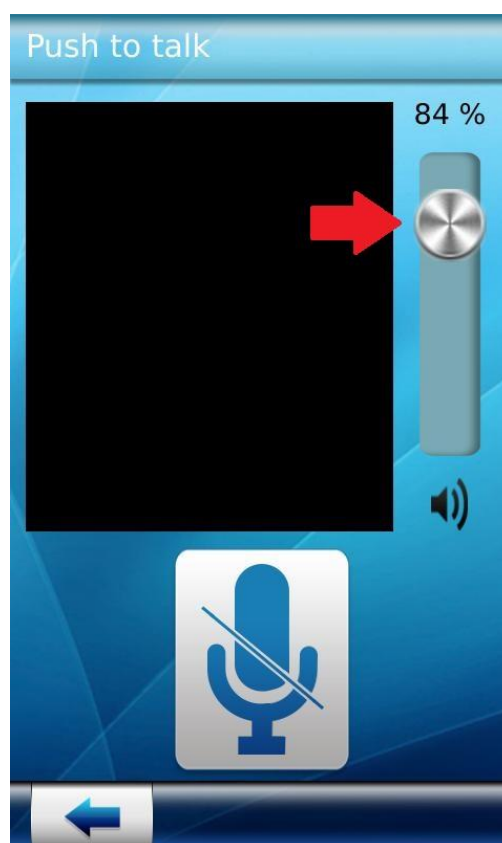


Figure 28bis : MorphoAccess® SIGMA Extreme Series terminals Videophone interface

6. On Administrator PC side, you should see the feedback of the terminal camera and micro.

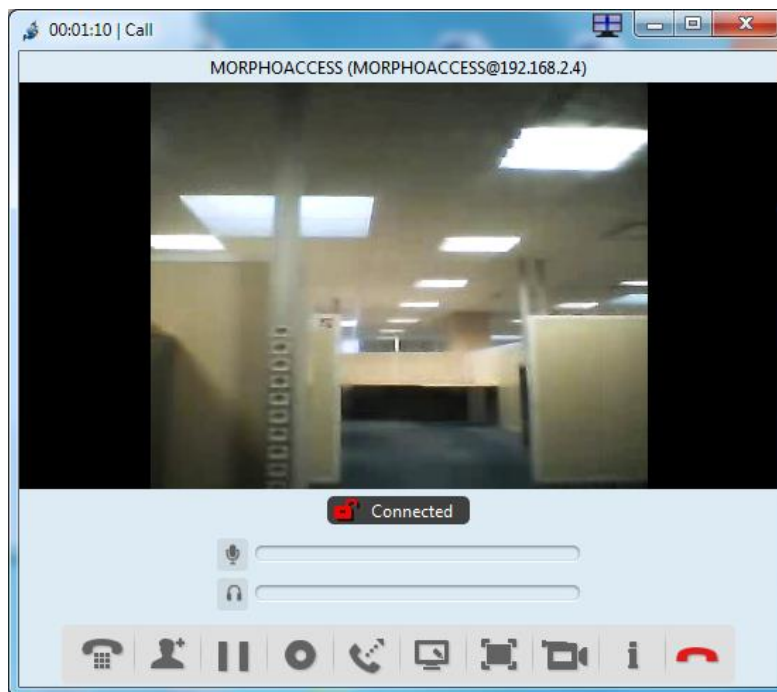


Figure 29 : Jitsi Videophone interface

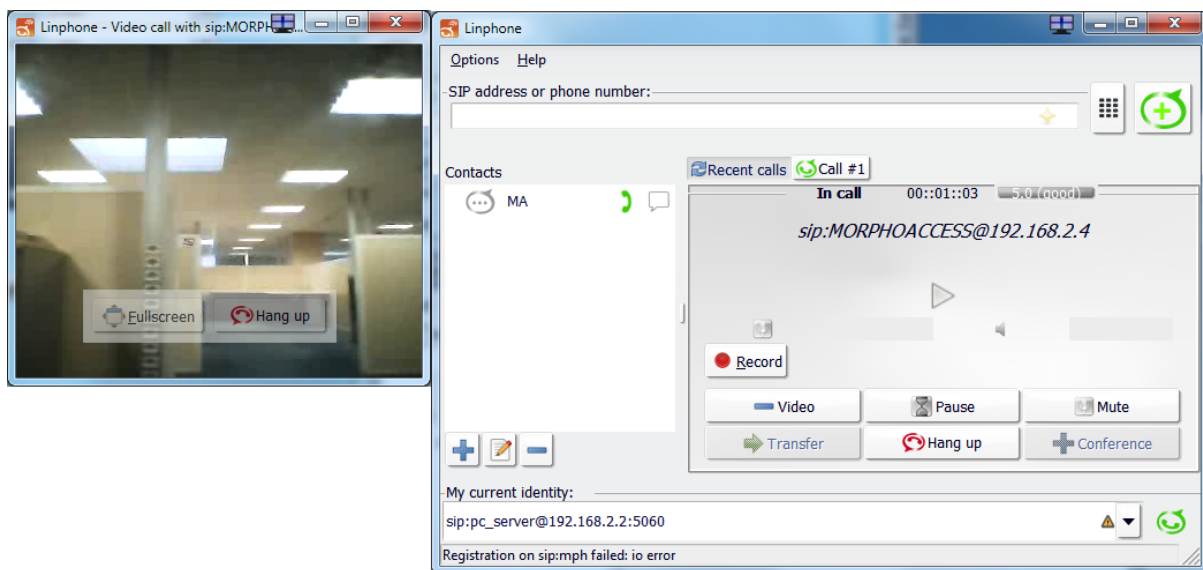


Figure 30 : Linphone Videophone interface

7. On terminal, hold the microphone button to speak
Once button is pressed :
 - Administrator side will be able to hear sound from MASigma series or MAExtreme series terminals

- Terminal speaker will remain silent as long as button is pressed :
Administrator side won't be audible



Figure 31 : MorphoAccess® SIGMA Series terminals Hold button to speak

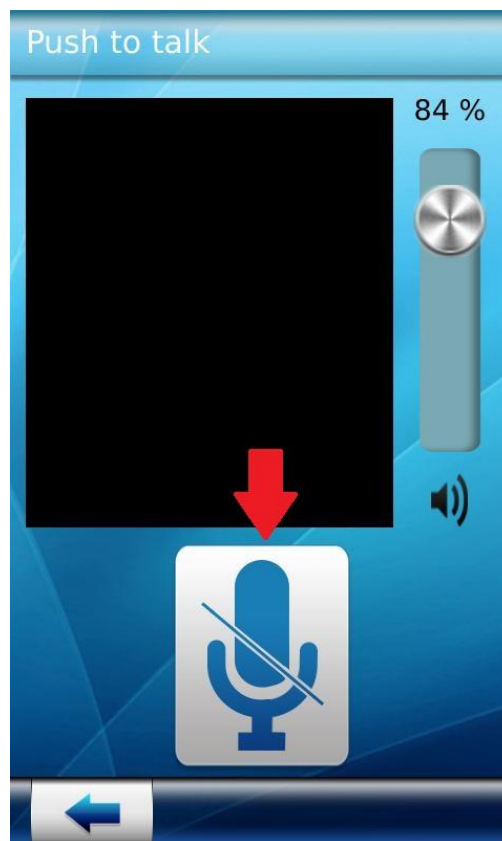


Figure 32bis : MorphoAccess® SIGMA Extreme Series terminals Hold button to speak

8. Release the microphone button to hear from the Administrator side

As long as button is not pressed :

- Administrator side won't be able to hear sound from MASigma or MAExtreme terminal
- Administrator side will be audible

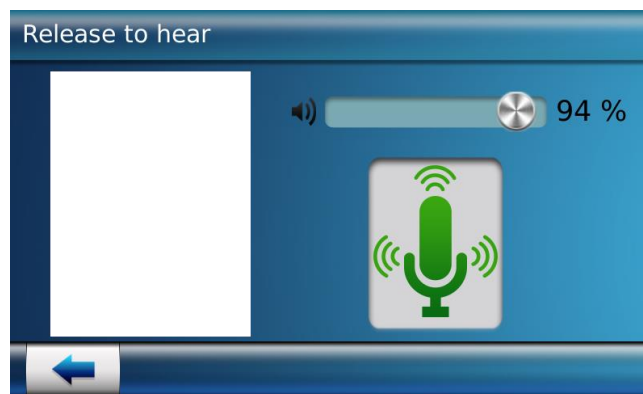


Figure 33 : MorphoAccess® SIGMA Series terminals Release to hear

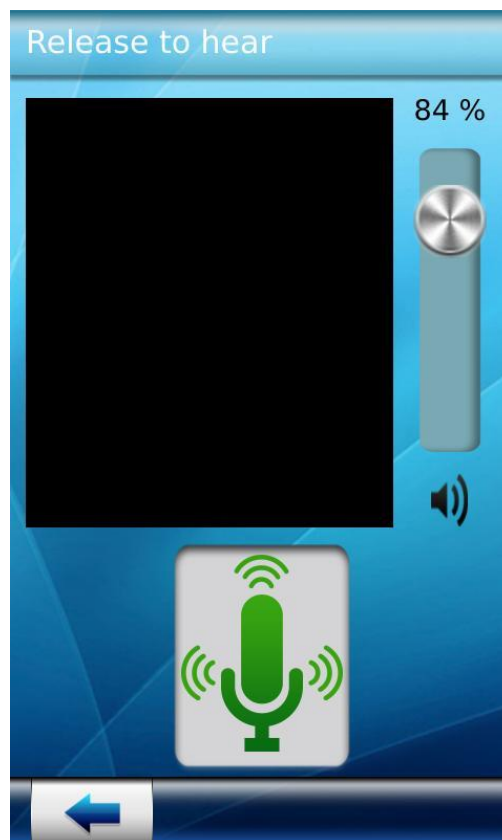


Figure 34bis : MorphoAccess® SIGMA Extreme Series terminals Release to hear

9. Click on the *Return* button to end the call



Figure 35 : MorphoAccess® SIGMA Series terminals Stop Videophone

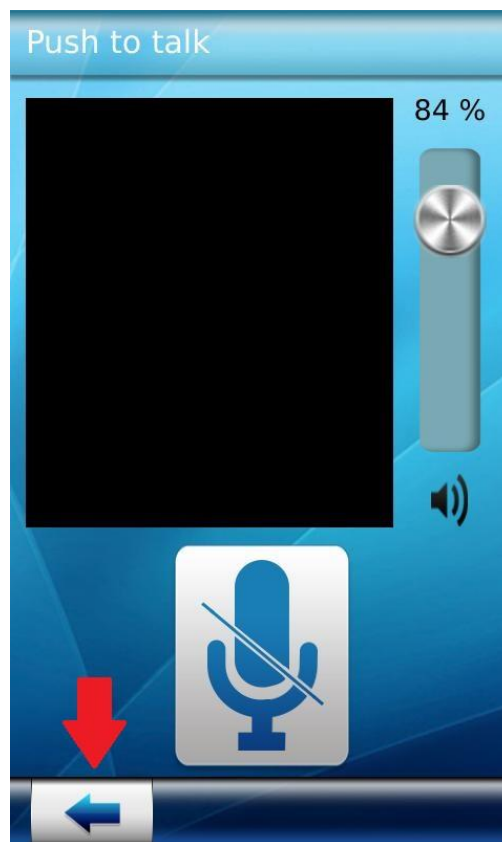


Figure 36bis : MorphoAccess® SIGMA Extreme Series terminals Stop Videophone



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