CHIRP\_En\_Mac\_20201218 Release Notes

# CHIRP Overview

After outlining the history of the product releases, this document provides instructions on how to install, configure, and run the full release on the Mac.

# CHIRP (English-only) History

## Release 20201218

This is a full release of the “English-only” version of CHIRP for the Mac. It contains an English-only version of CHMITE. (Future versions may support other languages.) This release contains fixes for crashes in previous versions of CHMIT-E. It also changes the preferred path to $/CHIRP\_mac.

# Pre-requisites

## matlab compiler runtime

The CHIRP software is implemented in matlab. However, you do not need to have matlab installed to run CHIRP. Instead, you need to install the correct version of the matlab compiler runtime (mcr). (Even if you do have matlab, you still need to install the correct version of mcr.)

To download the correct version of mcr, follow these steps:

1. Go to:
   1. <https://ssd.mathworks.com/supportfiles/downloads/R2014b/deployment_files/R2014b/installers/maci64/MCR_R2014b_maci64_installer.zip>
   2. Or <http://www.mathworks.com/products/compiler/mcr/index.html>
      1. Click on the 64-bit version of R2014b for Mac. (ver. 8.4)
2. After the download completes, install the mcr. The default installation path is /Applications/MATLAB/MATLAB\_Compiler\_Runtime. If you do not accept the default, you’ll need to edit the application’s command scripts. (See “Running CHIRP” below.)

Note that the installation tells you to set one or more environment variables. This is not necessary, as the CHIRP software does this.

# CHIRP Installation

## Full

To install the full release of CHIRP (English-only) 20181018 on the Mac, just download the zip file CHIRP\_En\_Mac\_20181018.zip onto your Mac and extract it into your home directory, as follows:

* Start by moving the zip file into your home directory (e.g., /Users/YourNameHere/). If more than one user on your Mac will be using this product, this should be a folder that you are willing to share.
* Double-click on the zip file to extract its files. It will create a new CHIRP\_mac folder. In this document, we will refer to this CHIRP\_mac folder as the “CHIRP Root”. Do not change the folder name, unless you wish to change default filepaths in the command scripts as found below.
* Again, if more than one user on your Mac will be using this product, share the “CHIRP Root” folder with that user. Users will need read/write permission to this shared folder. Sharing can be enabled using System Preferences.

# CHIRP Configuration

## CHMITE Listener List

Before running CHMITE, edit the text file CHMITE\_ListenerUIDs.txt to add one or more listener userids—one per line. You cannot assign sessions to a listener until that listener’s userid has been added to this list. This text file is in the product’s Config folder i.e. in CHIRP\_mac/CHMITE/Config.

## Editing Command Files

On the Mac, the standalone applications are initiated by command scripts. Inside each of the command scripts, you will need to set the CHIRP\_PATH to be your “CHIRP Root”. Using Text Editor, edit each of the command scripts. Under “CHIRP Root”, there are 4 command scripts in the CHMITE Folder. You will need to edit all 4 of these scripts, setting CHIRP\_PATH to be your “CHIRP Root”.

Also, inside the command scripts, certain paths are set, assuming the mcr was installed in /Applications/MATLAB/MATLAB\_Compiler\_Runtime. If not, you’ll need to edit these scripts accordingly. Specifically, there is an environment variable MCRROOT which is set to /Applications/MATLAB/MATLAB\_Compiler\_Runtime/v84, where the highlighted text is the default installation directory for mcr. If you installed mcr in a ***non-default*** directory, you’ll need to change MCRROOT accordingly. Otherwise, do not change it.

# Running CHIRP

## Run CHMITE

All the CHMITE command scripts are in the CHMITE folder (listed below). After the first time you run each script, you can just double-click the file. **However, note that the first time you run each script, you will have to give permissions to run a program from an unknown developer.** To do this, you can press control and click on Open, then click Open on the dialog box that comes up to allow it to run. Instead of control-click, you can also right-click on the file, click Open, and then click Open again.

CHMIT-E command scripts are as follow:

* run\_CHMITE\_Record. command to record a subject’s session. A session is identified by a timestamp.
* run\_CHMITE\_Assign. command to assign a session’s wav file(s) to one or more listeners.
* run\_CHMITE\_Eval. command enables the listener to enter text of what he or she heard per assigned wav file. The listener can stop at any point and pick up where s/he left off.
* run\_CHMITE\_Report. command generates a csv report, including scores from all listeners. This csv file is stored in the CHMITE/Reports folder with a unique filename. Possible scores are ‘Correct’, ‘Incorrect’, or ‘NR’. A ‘Correct’ score means that the listener’s text matched either the intended text or one of its homonyms.

## How to Define Listeners

Before a listener can complete transcriptions for a recorded speaker, they must be assigned a unique username. This is done manually by editing a list of user IDs, located in the file at ./CHIRP\_mac/CHMITE\_Config/CHMITE\_ListenerUIDs.txt.

## How to Assign Listeners

To assign recordings from one or more speakers to a listener, open the run\_CHMITE\_Assign.Command script. The program will identify recordings that are available for rating on the computer (in the Recordings directory). Find the SubjectID that you wish to assign in the leftmost column, then click on the “Assign to” dropdown box for that row, and click on the desired listener’s username (as defined above). Click the SUBMIT button in the bottom right corner to confirm the assignment. When assignments have been made, click QUIT button in the bottom right corner to exit the program.

## How to Eval

When listeners are ready to complete their transcriptions, they should open the run\_CHMITE\_Eval.Command file and enter their username. Listeners should be ready to begin transcribing, as they may listen to each sample only once.

When entering the text per recorded wav file, there are some tricks you should know. First, after entering the text (using the appropriate keyboard), just hit the ENTER key. (Wait until the end of the recording to do so; see issues below.) Second, if you want to override the dictionary check, add a period to the end of the word. (This period will be stripped off. It just allows you to override the dictionary.) Finally, if the text fails the dictionary check, make sure to close the warning dialog box before revising the text. (See issues below.)

## Files

CHIRP stores information in files. For example, when a subject’s session is assigned to a user, a “message” file is written to the CHMITE/Tasks/AssignedTasks folder. When a listener finishes evaluating all of the wav files in that session, CHMITE moves the message file to the CHMITE/Tasks/CompletedTasks folder. So, one should not open or move or delete any CHIRP files outside the CHIRP program; otherwise, results may be inconsistent.

## Logs

When running a matlab program, if there is an unhandled exception, an error message appears on the matlab command line. For a program running in the mcr, the command line is in the output of the command script. In addition, the matlab diary is used to capture errors and information that may be useful for debugging. The Logs folder stores the diary file per user. If you wish, you can clean up by removing the diary files (if the program is not running).

# Issues

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| ***Short Description*** | ***Long Description*** | ***Fix*** |
| Response ENTERed too soon | When running the CHMITE\_Eval program, the listener must wait until the recording has finished before entering the response (i.e. before pressing ENTER); otherwise, the playback for the next trial may be missed. At this time, there is no replay. | In this release, the listener must make sure to wait until the reording has ended before ENTERing the response. |
| Eval pop-up gets hidden | When running the CHMITE\_Eval program, the listener may enter a response that is not in the dictionary. A warning dialog box will pop up. Make sure to click OK to close that warning dialog box before revising the text; otherwise, the pop-up will be hidden behind the main screen yet still waiting for a response. | In this release, the listener must make sure to close the warning dialog box before revising the text. If the listener did not hear the word, s/he may enter NR. |
| Slow startup | Each CHMITE executable is slow to startup. This is because it uses the matlab runtime environment. So, startup is slow. |  |
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