MemType Getting Started Guide

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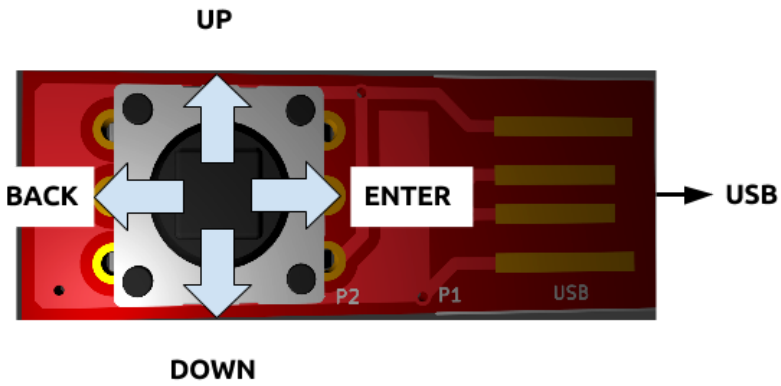
1.- Memtype Overview

The memtype is a simple device that can store a set of encrypted username and passwords using a credential structure. It can also type them for you so you don't have to, type the tab to move from user to password fields or enter to submit and more.

The memtype can be used with any device with a USB host connector and it's seen as a keyboard HID, so no drivers are needed.

To manage device credentials there is a user command line tool called MemTypeTool that allows to read and write credentials to and from the computer, change the pin and load keyboard configuration files into the device.

1.1.- Joystick actions:

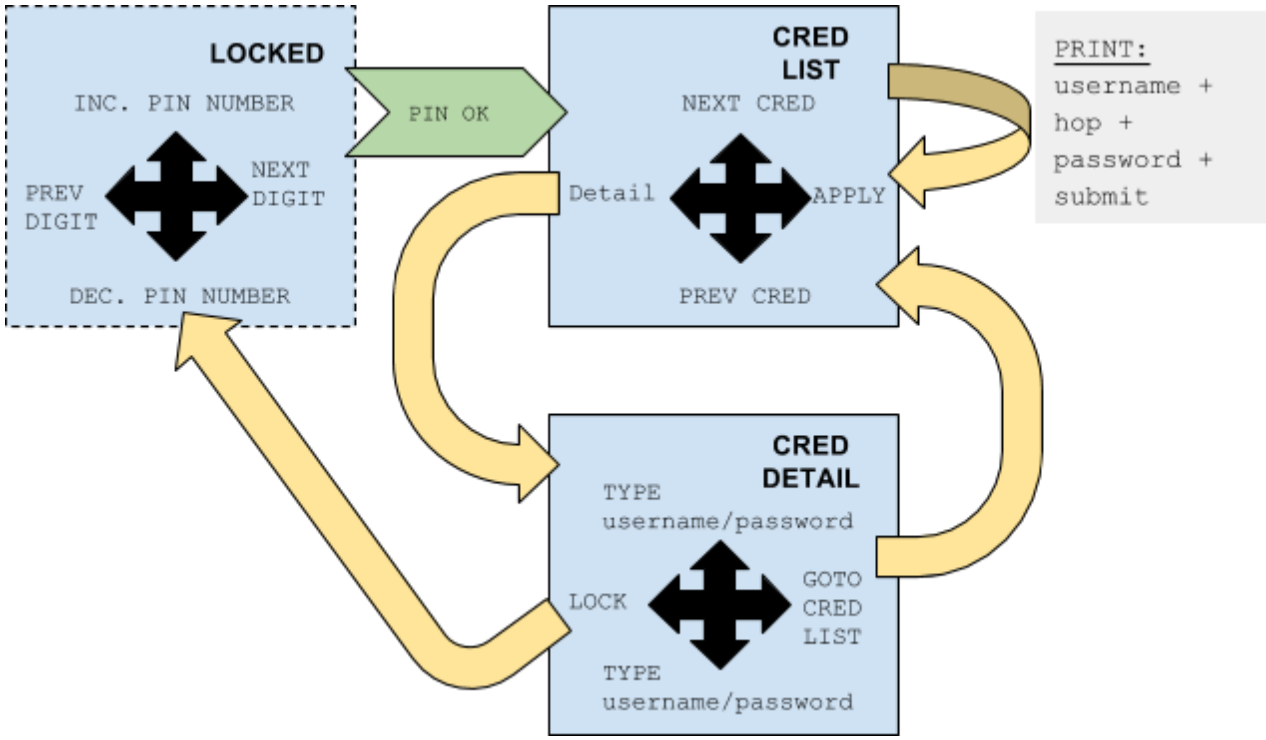


1.2.- Credential structure:

A memtype credential is a basic structure formed by 5 strings:

name: A name to identify the credential on the list.
username: The actual username of the service/web/application etc.
hop: A key combination to move from the user input to the password input (usually a tab).
password: The secret and secure password corresponding to the username.
submit: A key combination to apply the log-in (usually an enter).

1.3.- Memtype States:



2.- Connect your memtype

So open and focus on a terminal, text editor or the url bar of the browser, any place where you can type things will do. That will allow the memtype to type messages for you to read. The next thing you have to do is to plug in the memtype to a usb port on your computer. It'll print a message similar to this one:

“MemType 3.0.0”

3.- Unlock the memtype

The default state of the memtype is locked. To unlock it you have to enter the PIN. The default PIN is “0000” but you can change it using the command line tool.

In order to enter the PIN numbers you have to move the joystick. Joysticks actions are shown on image 1.

Moving it up will increase the number, moving it down will decrease it and moving it towards the usb port will enter the number.

So doing an enter will print “PIN: 0” do it 3 more times and when it prints “PIN: 0000” enter it with the same joystick movement again.

When it’s unlocked It’ll enter to the credential list printing the first one.

4.- Credential list

The main state of the memtype device is the credential list and it’s a simple list of credential names. Moving up or down will change the name of the credential to the preceding or following respectively.

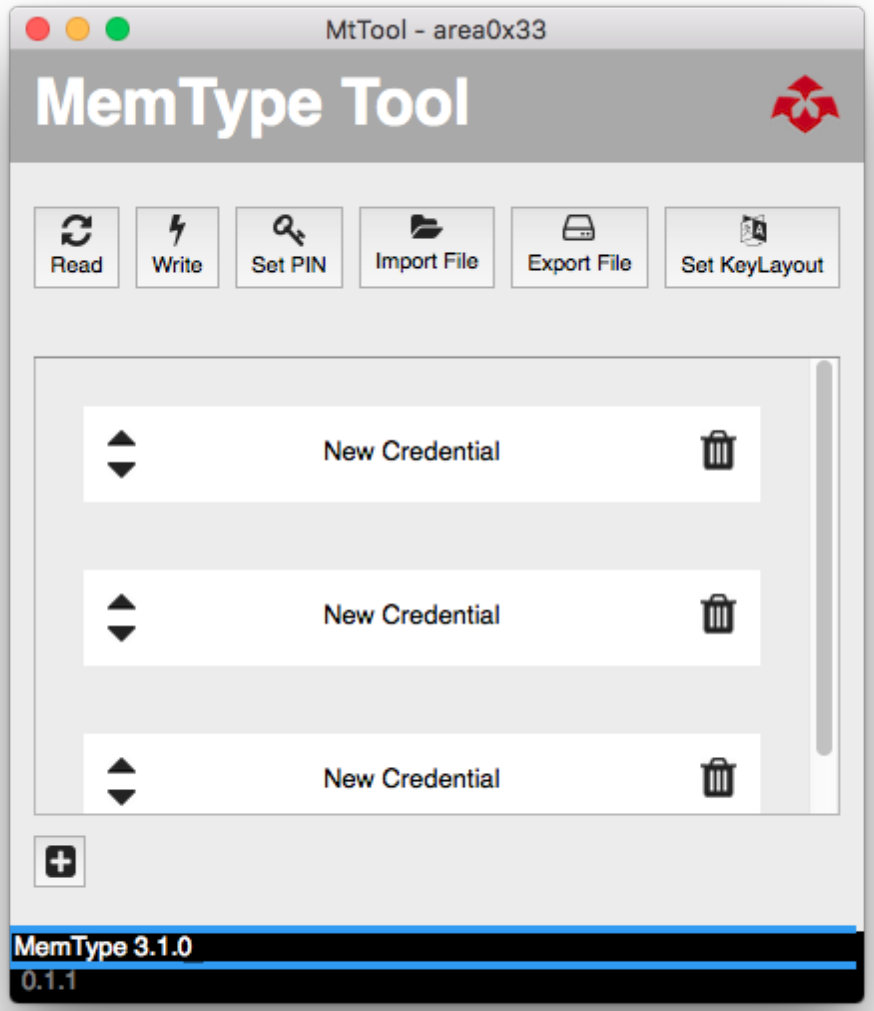
Two actions can be done the the shown credential, the first and more useful is to enter it. When an enter action is performed to a credential the memtype will erase the credential name from the focus and proceed to type the username, then the hop, the password and the submit strings of that credential.

If we prefer to see the username or password of that credential instead, we can perform a back movement on the joystick and it’ll enter the detail mode of that credential, printing “[DETAIL]”.

5.- Credential Detail

When entered to a given credential detail indicated by the “[DETAIL]” message, the username and password can be typed alternatively by the memtype when pressing up or down.
To return to the credential list, the apply joystick movement can be done.
During the detail state if a back joystick movement is done, the memtype becomes locked again just like when it was first connected into the USB.

6.- Managing the memtype with MemtypeTool GUI



To set up and run the MemTypeTool GUI follow the instructions on the github readme.md file:

https://github.com/oyzzo/MemTypeTool