Mooltipass Mini BLE User Manual

I. Introduction **3**
II. Important Concepts **3**
III. Getting Started **3**
IV. Bluetooth Operation **5**
a) Connecting to a New Device *5*
b) Deleting Pairings *6*
c) Disabling Bluetooth *6*
d) Switching Between Bluetooth Devices *6*
V. Password Storage and Recall **7**
VI. Manual Login **8**
VII. Manual Login – Favorites Menu **9**
VIII. Operations Menu **10**
a) Enabling Advanced Mode / Enabling Simple Mode *10*
b) Changing the Card PIN *10*
c) Cloning your Card *11*
d) Deleting Your User Data from the Mooltipass *12*
IX. Settings Menu (Advanced Mode Enabled) **13**
a) Keyboard Layout Change *13*
b) Login Notification / Prompt *13*
c) Knock Detection *13*
d) PIN Input for Management Mode Entry *13*
e) Storage Confirmation in Management Mode *13*
f) Language Change *14*
X. Active Category Selection (Advanced Mode Enabled) **14**
Mooltipass Browser Extension **15**
I. Extension Menu **15**
II. Device Status **15**
III. Password Generator and Credential Storage **16**
IV. Selecting Custom Credential Fields **16**
V. Extension Settings **17**
VI. Reporting Incompatibilities **18**
Mooltcute Application **19**
I. General Information **19**
II. Launching the Mooltcute app **19**
III. Device Settings **19**
IV. Credentials **22**
V. Files **24**
VI. Synchronization **25**
VII. App Settings and Advanced features **25**
Synchronizing New Mooltipass Devices **26**
Native Integration without Browsers **26**
Best Security Practices **27**
Contact, Support **27**
Mooltipass Mini BLE Specifications **27**
Regulatory Mentions **28**

Mooltipass Mini BLE Device

I. Introduction

The Mooltipass Team would like to thank you for purchasing the Mooltipass Mini BLE, the third device in the Mooltipass family. We've worked hard to make it the most usable and secure authenticator in the market and we hope you'll feel this way too.

This manual presents the different features offered by the Mooltipass Mini BLE, and will be updated as new ones are added. The latest version is always available at https://www.themooltipass.com/setup.

II. Important Concepts

When using the Mooltipass, it is useful to keep the following points in mind in order to use all features that the Mooltipass Mini BLE offers:

1) Each user is identified to the Mooltipass by a personal card or one of its clones
2) Multiple users can share one Mooltipass device
3) User password databases are stored on the device and can be exported to other devices
4) As a consequence, users can use multiple devices

III. Getting Started

The Mooltipass Mini BLE is battery powered. To switch it on, click on the wheel or connect a USB-C cable to it.
When first powered on, you'll be invited to select the device default language. Simply scroll to the desired language and click to approve.

A device tutorial will be shown next.
Scroll or click to see each screen.

To get started, you need to set up a new Mooltipass user.
Simply insert one of the cards that came with the device into the Mooltipass Mini BLE.

The Mooltipass Mini BLE will prompt you to create a new user.
Click the wheel to accept the request. Scrolling to the cross icon and clicking, or holding the wheel button (a “long click”) will deny the request.

Next, setup your Personal Identification Number (PIN). Each of the four PIN characters can be one of the digits 0-9 or one of the letters A-F.
Scroll the wheel to select the desired character and click to move to the next position. A long click will go back one position to let you change the previous character.

Re-enter the same PIN you selected in the previous step to confirm it.

If you’re a novice user and prefer your device to be as automatic as possible, by, for example, automatically approving credential requests for you, approve the “Simple Mode” prompt.
You can still change your choice later.

Congratulations, your Mooltipass Mini BLE and the smart card are set up and ready for use!
The Mooltipass Mini BLE now displays the main menu.

IV. Bluetooth Operation

To access the Mooltipass Mini BLE Bluetooth features navigate and then select the 'Bluetooth' item in the main menu.

You'll be prompted to enable the Bluetooth interface if it isn't active.

When Bluetooth is active, the Bluetooth icon will appear in the device tray in the lower right corner of the screen.

a) Connecting to a New Device

To connect to a new device such as a phone or a computer, select the menu item shown here and use that device to pair with the Mooltipass Mini BLE.

During the pairing process, the Mooltipass Mini BLE will prompt you to enter the pairing PIN. Once you've entered the PIN, the Mooltipass Mini BLE will connect to your device.

When wirelessly connected to your device, the Bluetooth logo will display arrows around it.

b) Deleting Pairings

The ‘Delete Pairings’ menu item erases the pairing information of all devices the Mooltipass Mini BLE has been paired with.

c) Disabling Bluetooth

The ‘Disable Bluetooth’ menu item allows you to disable the Bluetooth interface.

d) Switching Between Bluetooth Devices

If your Mooltipass Mini BLE is paired with several devices, you can switch which device it is connected to by using the 'Disconnect Device' menu item.

V. Password Storage and Recall

While the Mooltipass works with any device right out of the box, our app and extension make things even easier when using your favorite web browser.

For installation instructions, visit http://www.themooltipass.com/setup

After installing, simply visit any website login page and enter your login and password. The Mooltipass Mini BLE will then ask if you want to store the website, login and password.

Click the wheel to approve storing your user ID.

Credentials can also be added directly using the "Credentials" tab in the Moolticute App (see section IV. of the Moolticute app User's Guide)

Notification Mode:

Once the website and credentials have been stored, every time you need to login to that website, the Mooltipass Mini BLE will either notify or ask your permission to enter your credentials for you.

Prompt Mode :

Choosing between notification and prompt mode can be done through the Settings menu as described in section VIII a).

VI. Manual Login

If you're not using a web browser and need to log in, you can use Manual Login.
In the main menu, scroll to 'Login' and click on the wheel.

Use the wheel interface to scroll to the service you want to log into and click the wheel to select it.

To scroll more quickly through the list, push and hold the wheel while scrolling. This scrolls by the first letter of the names of the services.

If more than one credential set is stored for a given website, you will be prompted to select which login to use.

If the Mooltipass Mini BLE is connected to different devices, one over Bluetooth and the other over USB, you'll be prompted to select the output interface.

The Mooltipass Mini BLE then prompts you for permission to send your username to the device.

If the typed username doesn't appear correctly, make sure your keyboard layout is selected appropriately in the '*Device Settings*' tab of the Moolticute app (See section III.a. of the Moolticute User's Guide)

Next the Mooltipass prompts for permission to enter your password.

VII. Manual Login – Favorites Menu

The Mini provides a '*Favorites*' menu for quick access to your most commonly used credentials. To select which credentials are 'favorites' use the '*Credentials*' tab of the Moolticute app (see section IV. of the Moolticute app User's Guide)

In the main menu, select the 'favorites' item to show your favorite credentials.

Select the desired credential set using the wheel interface.

As before, approve or deny the username entry request.

And then approve or deny the password entry requests.

If you deny both username and password prompts, the Mooltipass Mini BLE will ask if you'd like to display your credential on its screen.

VIII. Operations Menu

The Mini has an 'Operations' menu that provides access to some important features.
From the main menu, select the '*Operations*' item.

You will be presented with the available options, which are outlined below.

a) Enabling Advanced Mode / Enabling Simple Mode

You can switch between the advanced and simple mode using this dedicated menu item.

b) Changing the Card PIN

In the Operations menu, select the 'Change pin' item.

Enter your old PIN.

Enter your new PIN.

Confirm your new PIN.

c) Cloning your Card

Your credentials are stored inside the device, not in your card. We recommend you make a clone of your card and keep it in a safe place so that you can use it to access your credentials if your regular card is lost or damaged. In the operations menu, select the 'Clone Card' item.

Enter your PIN.

Enter the desired PIN for the new card. It can be the same as your main card, but this is not required.

Confirm the PIN for the new card.

Remove your old card.

Insert a new (empty) smart card. The Mini BLE then initializes it with the contents (encryption key) of your old card, and the new PIN you just selected.

d) Deleting Your User Data from the Mooltipass

In the Operations menu, select the 'Erase Profile' item.

The Mooltipass prompts you for confirmation that you really do want to delete all of your user data.

Please note that this operation deletes all the credentials stored for this user on this Mooltipass Mini BLE. It doesn't delete credentials stored for this user on other Minis nor credentials stored on this Mini BLE for other users/cards.

Enter your PIN.

If you are really sure you want to delete your user data from the Mooltipass Mini BLE, confirm again.

If you are using your current smart card on other Mooltipass devices, it is important that you **deny** the request to erase the card – if you do erase the card, it can no longer be used to access credentials on any device.
Otherwise, accept it. This resets the card to its original unused state.

If you erase your original card and have clones of it that you no longer need, you should erase them, too. Approve this request and repeat the previous process to erase the cloned cards as well.

IX. Settings Menu (Advanced Mode Enabled)

When the advanced mode has been enabled through the operations menu, the settings menu can be accessed.

a) Keyboard Layout Change

This menu item allows you to change on the device the keyboard layout used for manual login "typing".

b) Login Notification / Prompt

This menu item allows you to select if the Mooltipass Mini BLE should notify, or prompt you whenever you need to login to a website

c) Knock Detection

When "login prompt" is enabled, this menu item allows you to enable the knock detection feature: when you're prompted to login into a website, simply knock on the same surface on which the Mooltipass Mini BLE is placed.

d) PIN Input for Management Mode Entry

This menu item allows you to specify if you'd like to be prompted for your PIN when management mode is requested by Moolticute.

e) Storage Confirmation in Management Mode

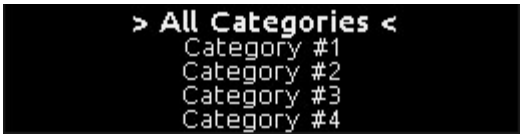
This menu item allows you to specify if you'd like to be prompted to save credentials entered during management mode.

f) Language Change

This menu item allows you to change your device's main language.

X. Active Category Selection (Advanced Mode Enabled)

When the device's advanced mode is enabled, users can select an active category.
The selected category acts as a folder, storing new credentials inside it, and limiting credential viewing and recall to the selected category.

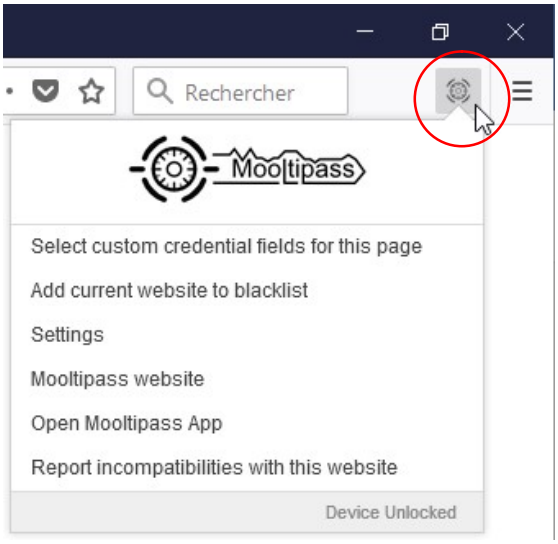


4 categories are available and can be renamed using Moolticute.

Mooltipass Browser Extension

n.b. : for installation instructions please visit http://www.themooltipass.com/setup .

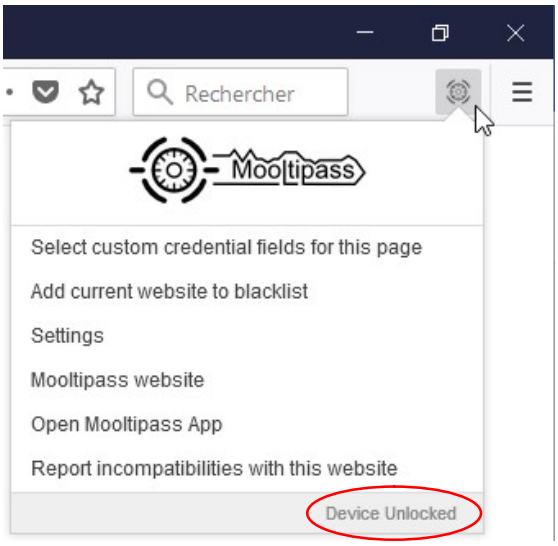
I. Extension Menu



In Chrome, Firefox or Opera, the Mooltipass icon is located next to your address bar.

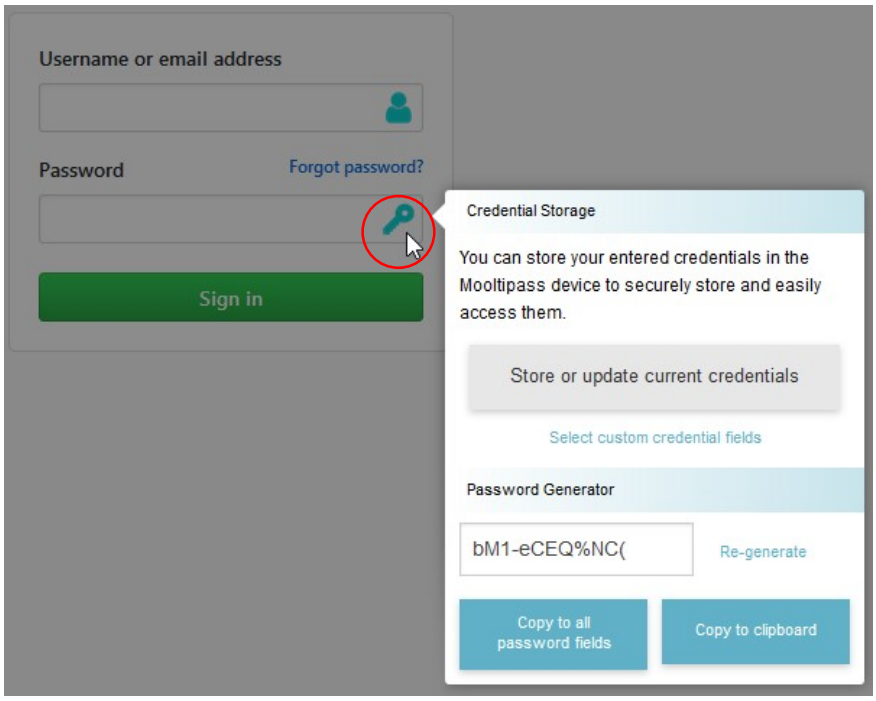
Clicking on it displays a menu.

II. Device Status



The device status is displayed on the extension menu's bottom right corner.

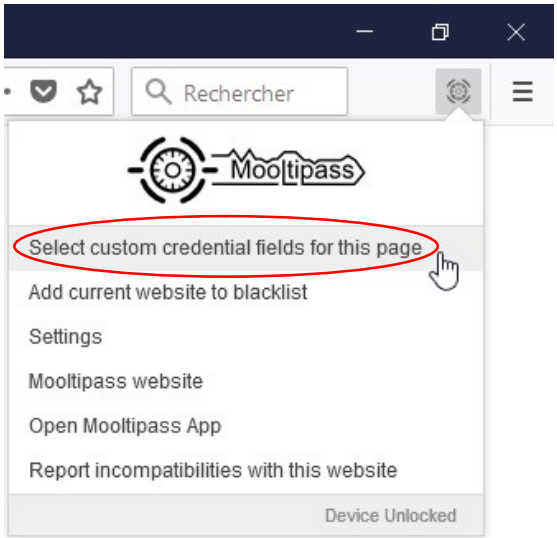
III. Password Generator and Credential Storage



Whenever the extension sees a password field, it offers you an opportunity to bring up the Mooltipass password generator. Simply click on the key icon.

In the rare cases where the extension doesn't pick up a credential submit event, you may also use this menu to manually trigger a credential storage procedure.

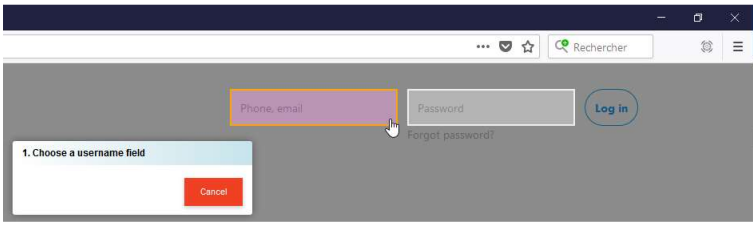
IV. Selecting Custom Credential Fields



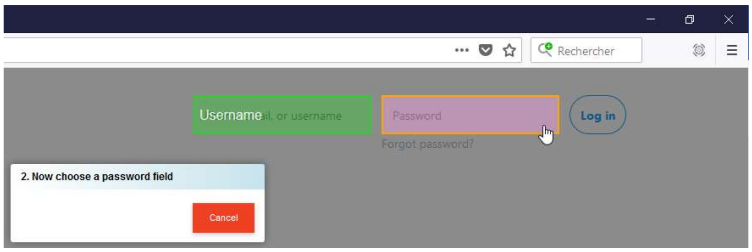
The Mooltipass extension searches for credential fields in the web pages you visit. When it finds them, it displays a key icon in the password field, as shown above.

In the rare case the credential fields aren't picked up, you may tell the app about them by clicking this item in the extension menu.

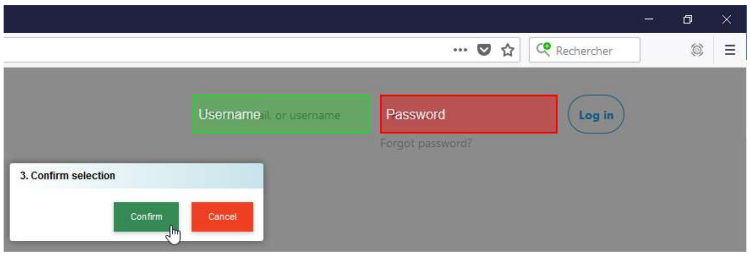
Follow the on-screen instructions to select the username field



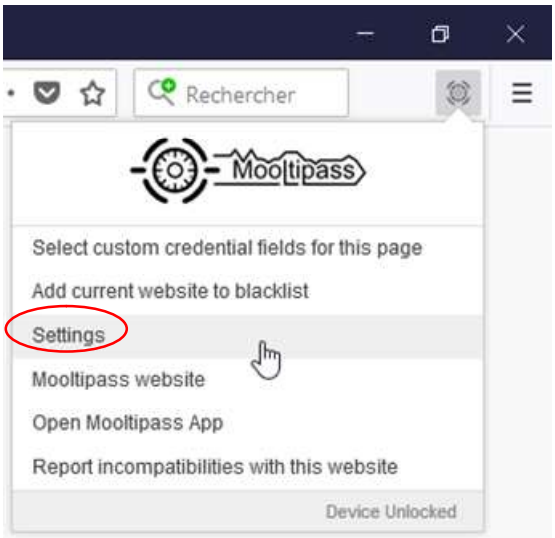
then the password field,



and confirm.



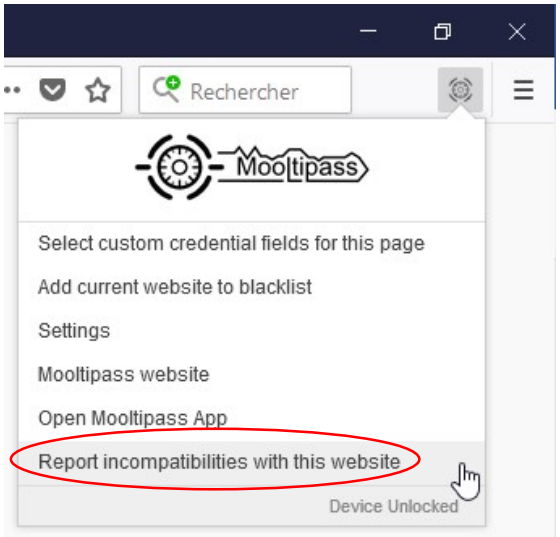
V. Extension Settings



You may bring up the Mooltipass extension settings page by clicking on this item in the extension menu.

Among other things, the settings page allows you to manage the list of websites you wish the extension to ignore and the ones for which you have stored custom credential fields.

VI. Reporting Incompatibilities



The Mooltipass team actively works to ensure the extension works with all the websites you visit.
If you find a website that does not work, we'd like to know about it.

To report an incompatibility, click on this link in the extension menu.

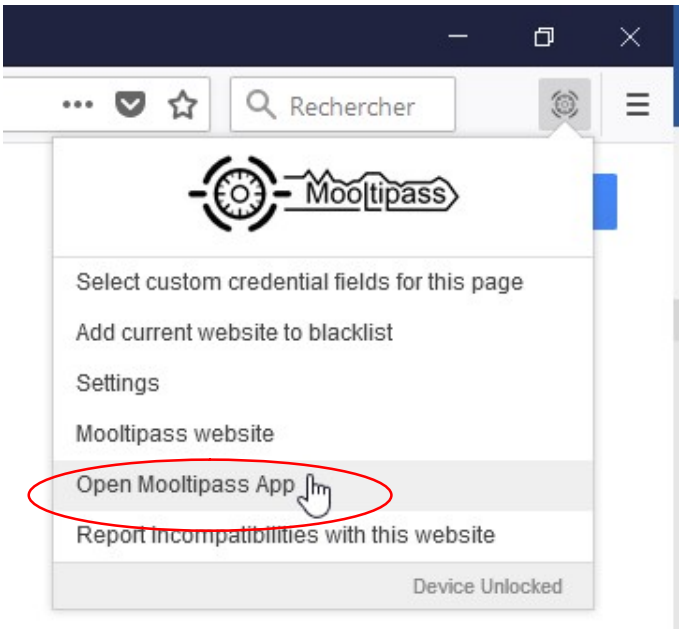
Moolticute Application

I. General Information

Moolticute is the official app for the Mooltipass. It works as an intermediary between the device and the browser extension. This allows a simpler, more intuitive use of your Mooltipass and gives you access to more functionality when you need it.

For Moolticute and Mooltipass extension installation instructions, please visit http://www.themooltipass.com/setup .

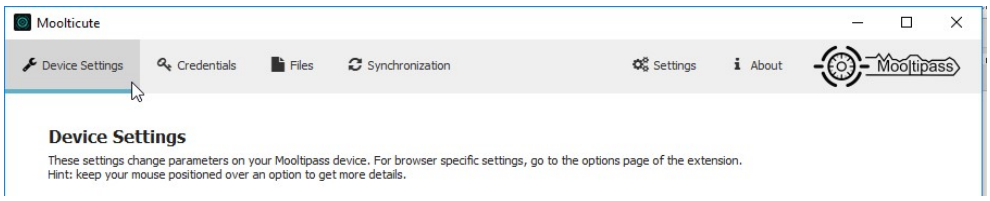
II. Launching the Moolticute app



You can launch the Moolticute app from the Mooltipass Extension menu by clicking on the corresponding item.

The app features are divided into five main tabs. Each of them is described in a section below.

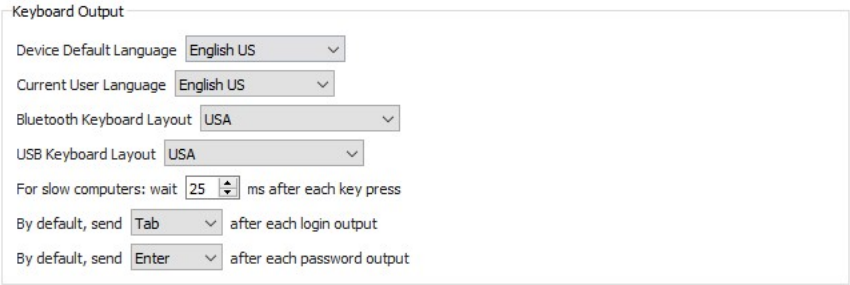
III. Device Settings



You can use the '*Device Settings*' tab to change parameters on your Mooltipass device.

Hovering the mouse pointer over an option will gives a short description of what the corresponding feature does.

a) Keyboard Output



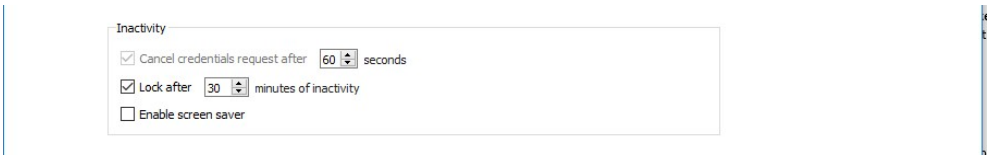
▪ For the Mooltipass to operate properly, it is important that you use the Device Settings tab to select the **keyboard layout** you are using.

▪ If characters are missing when using manual credential recall, the Mooltipass may be typing too quickly for your computer. To solve the problem, enable the second feature of this subsection to insert **intervals between simulated key presses**.

▪ The last two features of this subsection also apply to manual credential recalls.

They enable the Mooltipass to automatically send a ***Tab* or *Enter* simulated key press** after the login and password. Not having to do this yourself can help speed up the login process.

b) Inactivity



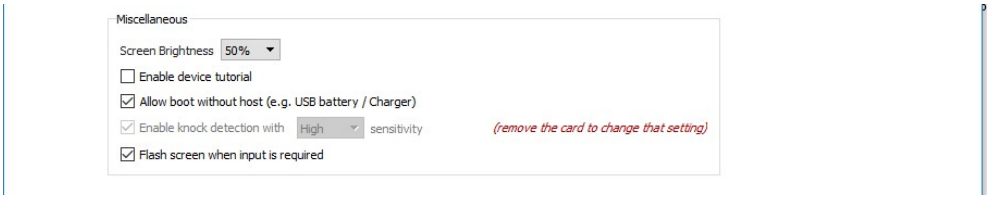
This subsection allows you to

▪ Alter the number of seconds after which the **credential requests** disappear;

▪ Automatically **lock your Mooltipass** device when you've been inactive for a specified amount of time;

▪ Enable the Mooltipass **screen saver**.

c) Miscellaneous



In this subsection you can:

▪ Adjust the **screen brightness** of your Mooltipass;

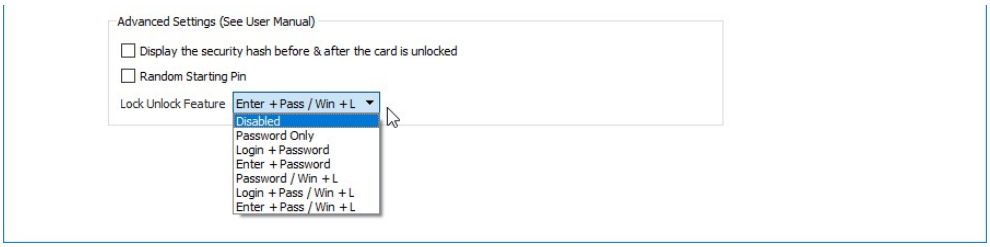
▪ Make the Mooltipass display its **tutorial** the next time you plug it in;

▪ allow the Mooltipass to **display credentials** on its screen, when it is disconnected (e.g. on USB battery or charger);

▪ enable **knock detection** and adjust its sensitivity. You need to remove your smartcard from the Mooltipass to change these two settings. When this feature is enabled, knocking twice approves a credentials sending request;

▪ make the screen of the Mooltipass **flash** when user action or input is required.

d) Advanced Settings



The last three features of the '*Device Settings*' tab are advanced settings.

▪ When enabled, the **Hash Display Feature** will display one hash string before and after unlocking your smartcard. By checking that these hashes do not change over the life of your device, you can make sure no one has tampered with your Mooltipass. You may read more on the topic in this document.

▪ When you enter your PIN to unlock your smartcard, the default starting value of the digits is 0-0-0-0. You can choose to **randomize this starting PIN** for security reasons.

▪ You can make your Mooltipass:
- unlock your computer when it is unlocked; and
- lock your computer when your smartcard is removed from the Mooltipass.

The different options in the **Lock/Unlock Feature** list lets you customize this for your environment.

Simply specify if a login and/or password should be sent after unlocking your smartcard. The Mooltipass Mini will then send a credential stored inside an '_unlock_' service in your database. For help setting an '_unlock_' service, please refer to section III.a) .

Password Only	Sends the password stored inside your '_unlock_' service, after unlocking your smartcard.
Login + Password	Sends the login and password stored inside your '_unlock_' service, after unlocking your smartcard.
Enter + Password	Simulates an *Enter* key press then sends the password stored inside the '_unlock_' service, after unlocking your smartcard.

Please note that if the Mooltipass is set to prompt you for confirmation before sending credentials , it will do that here, too: the simulated key presses are sent when you accept the credential send request.

You can also simulate a *Win + L* key press, locking your computer, every time the smartcard is removed from the Mooltipass.

Password / Win + L	Sends the password stored inside the '_unlock_' service, after unlocking your smartcard **and** Simulates a *Win + L* key press when removing your smartcard from the Mooltipass.
Login + Pass / Win + L	Sends the login and password stored inside the '_unlock_' service, after unlocking your smartcard **and** Simulates a *Win + L* key press when removing your smartcard from the Mooltipass.
Enter + Pass / Win + L	Simulates an *Enter* key press then sends the password stored inside the '_unlock_' service, after unlocking your smartcard **and** Simulate a *Win + L* key press when removing your smartcard from the Mooltipass.

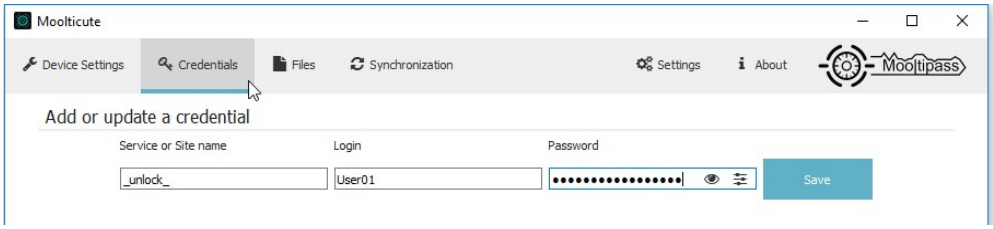
Finally, choose the *Disabled* option if you want to deactivate the Lock/Unlock Feature.

IV. Credentials

This tab allows you to add or manage credentials stored inside your Mooltipass.

a) Adding or updating a credential

The first subsection allows you to add a credential to your database.

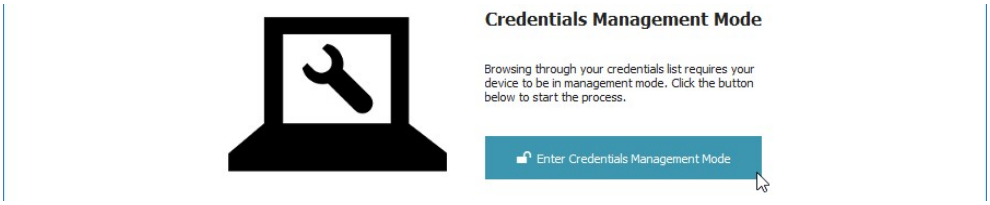


You can, for instance, add the '_unlock_' service of the Lock/Unlock feature (II.d)).

Fill in the dedicated fields with the website URL or service name, in this instance '_unlock_', your login and your password. Click on the 'Save' button, and approve the request on your Mooltipass device.

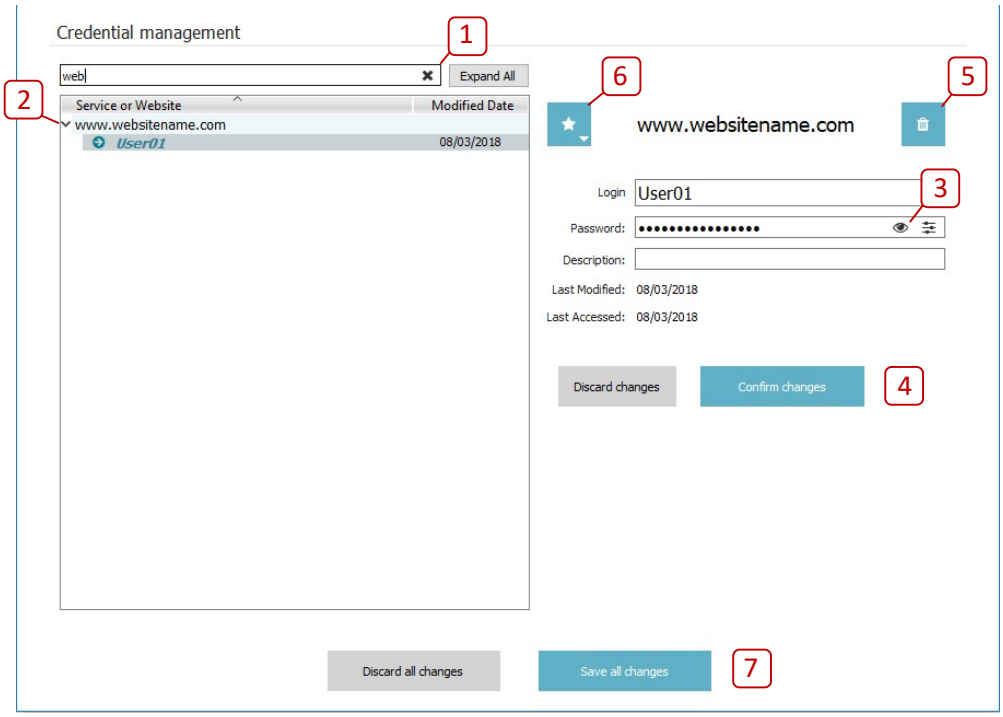
If the service/site and login are already stored in the Mooltipass, it will simply update the credential with the new password.

b) Credential management



Click on the '*Enter Credentials Management Mode*' button to manage the credentials stored inside your Mooltipass. You will need to confirm the request on the Mooltipass device and re-enter your PIN.

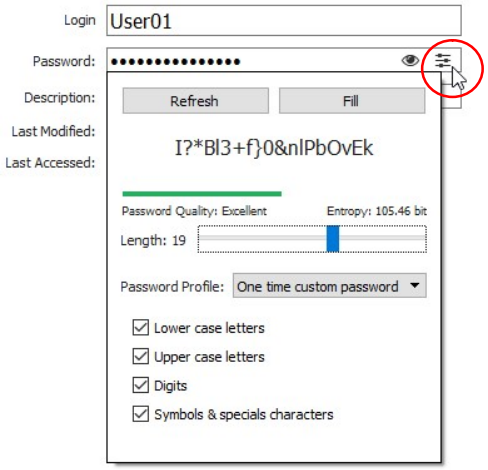
The '*Filter credentials…*' search bar (1) can help you navigate through your credentials more easily.



Single clicking on a credential line (2) shows its details. To display the password, click on the eye icon (3) and use the wheel on the Mooltipass Mini to confirm the request. You may then **edit** your credentials. To save changes: click on the '*Confirm changes*' button. To cancel the credential modification: simply hold the '*Discard changes*' button (4).

You may **delete** a credential by clicking on the bin icon (5).

You may set a credential as **favorite** by clicking on the star icon (6) and choosing an option in the list.

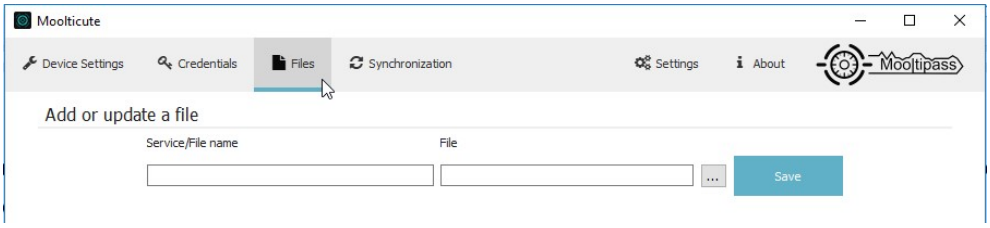


The second icon in the password bar gives you access to a password generator. This feature can help you set random, more secure passwords.

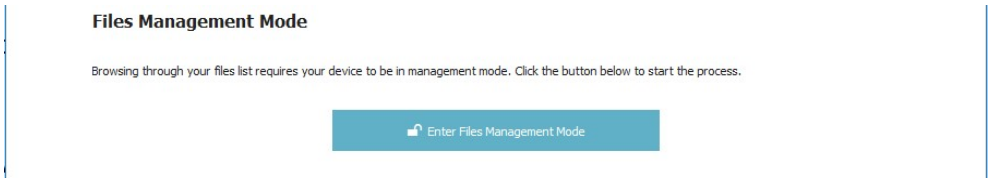
When you are done editing your credentials, click on the '*Save all changes*' button and approve the modification requests on the Mooltipass. Otherwise, hold the '*Discard all changes*' button to cancel (7).

V. Files

The Mooltipass device can operate as a flash drive. The 'Files' tab allows you to add, store and access files on your Mooltipass.



The first subsection of the 'Files' tab allows you to **add a file**. Click on the 'Save' button and confirm the request on the Mooltipass device. If the file's name matches a file already stored in the Mooltipass, the device will ask you if you want to update it. If you confirm the request, the file already stored will be deleted and replaced by the one you are adding.



Click on the '*Enter Files Management Mode*' button to manage the files stored inside your Mooltipass. You will need to confirm the request on the Mooltipass device and reenter your PIN. You can then **access or delete files** stored on your device.

When you are done, click on the '*Save & Quit*' button and approve the modification requests on the Mooltipass – or hold the '*Discard deletions*' button, if you need to cancel.

VI. Synchronization

▪ The different buttons in the synchronization tab will allow you to **backup and restore the credentials** you have stored inside the memory of your Mooltipass. For these operations, you may choose to either use local files or a cloud storage.

▪ You can also select a **backup monitoring file** to make sure your Mooltipass database is always in sync with it. You will then be prompted for import or export operations if any changes to your Mooltipass database or monitored file are detected. It can be especially helpful to monitor a file in cloud storage (for instance, using the Dropbox™ service) that you can access on any computer.

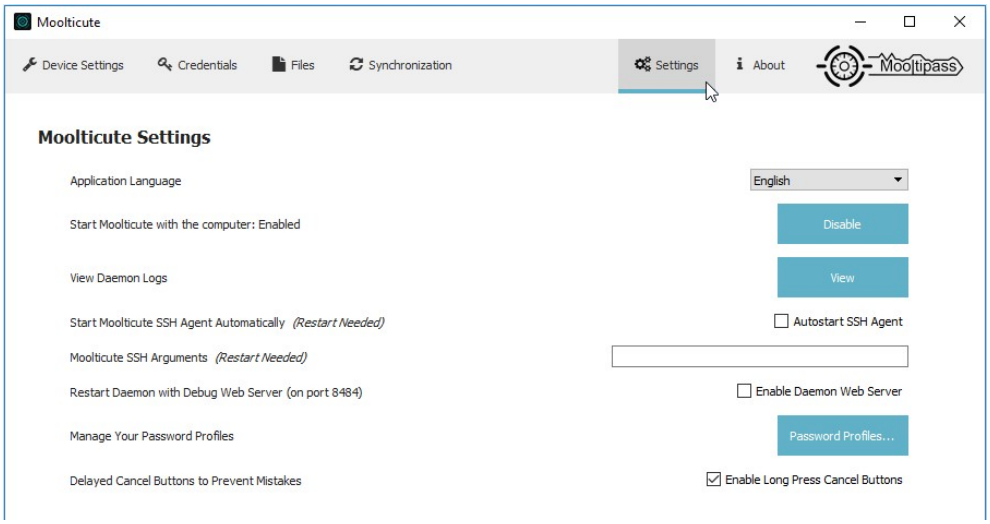
When you use more than one Mooltipass device, these features allow you to keep your Mooltipass units synchronized. Please refer to the section covering this feature in the Mooltipass User Manual for more information on this topic.

▪ Finally, do not click on the '**Perform integrity check**' button unless instructed to do so by the Mooltipass support team.

VII. App Settings and Advanced features

a) Settings

The top-right '*Settings*' tab changes parameters on the Moolticute app.



It allows you to:
▪ change the **application language**;

▪ enable **automatic start** of the Moolticute app at boot;

▪ access **Secure Shell Daemon** information and parameters;

▪ define the **password profiles** that you can choose from in the password generator. A password profile determines the types of characters (i.e. digits, symbols, lowercases…) that password includes;

▪ enable **long press cancel buttons** to prevent you from accidentally cancelling changes that you have made.

b) About

Finally, the '*About*' tab provides you with general information about your device and app. It allows you to check if you are running the **latest version** of Moolticute.

In this tab, you can also fetch the UID of your device. The **UID Check functionality** allows you to make sure your device wasn't tampered with during shipping. By sending us an email with your serial number, you may request a password allowing you to check a unique identifier stored inside your Mooltipass Mini.

Synchronizing New Mooltipass Devices

To store your credentials on one or more additional Mooltipass devices, begin by making a backup of the data stored on your original device using the '*Synchronization*' tab inside the Moolticute App. Simply select one of the two options displayed to you and approve the requests on your Mooltipass. To import this backup on other devices, insert your Mooltipass card in them and use the Moolticute App again.

When you use more than one Mooltipass device, you can use the different options in the '*Synchronization*' tab to keep your Mooltipass units synchronized. See section VII. of the Moolticute User's Guide for more information on backup monitoring files.

Native Integration without Browsers

The Mooltipass team is working to support other browsers and applications besides Google Chrome, Firefox or Opera. As this project is mostly built by volunteer contributors, you are welcome to contact us on #mooltipass on freenode.net if you are interested in giving us a hand.

In the meantime, you can use manual login as explained in the previous sections of this user manual. With manual login you can use the Mooltipass as a keyboard to type your credentials for you, without needing to install any additional applications.

Best Security Practices

To avoid any loss of data, these practices are highly recommended:

- Make at least one clone of your Mooltipass card
- Make multiple backups of your credentials database and store them in multiple places
- Enter your PIN discreetly so that no one can see it by looking over your shoulder
- Change your card's PIN and the passwords you use for important websites on a regular basis

Contact, Support

Have a look at the Frequently Asked Questions on http://www.themooltipass.com/setup. If you don't find the answer to your question there, contact us at support[at]themooltipass[dot]com.

Mooltipass Mini BLE Specifications

- Device size: 90 x 35.5 x 12.5mm
- Working voltage: 4.75V to 5.25V
- Current consumption: up to 0.5A
- Communications: USB 2.0 full speed and Bluetooth Low Energy
- Internal Memory: 8Mb
- USB connector: USB-C
- Case material: Anodized Aluminum
- Smart card support: AT88SC102
- Interface type: clickable scroll wheel
- Display: 256x64 pixels 4bpp 2.08" blue OLED screen

Regulatory Mentions

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.