

# BrandMeister



## 2017 Security Features Explained v04

### Hotspot Personal Passwords & Air Security

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## Hotspot Personal Passwords

This feature applies to hotspots using the HomeBrew/MMDVM technologies (such as DVmega, OpenSpot, etc.). This does not work with dv4mini hotspots.

In order to connect such a hotspot to the BrandMeister network; you need to select a BrandMeister Master Server (<https://brandmeister.network/?page=masters>) and enter the HomeBrew or MMDVM password for this server, which most of the time you find on the wiki page (<https://wiki.brandmeister.network>) :

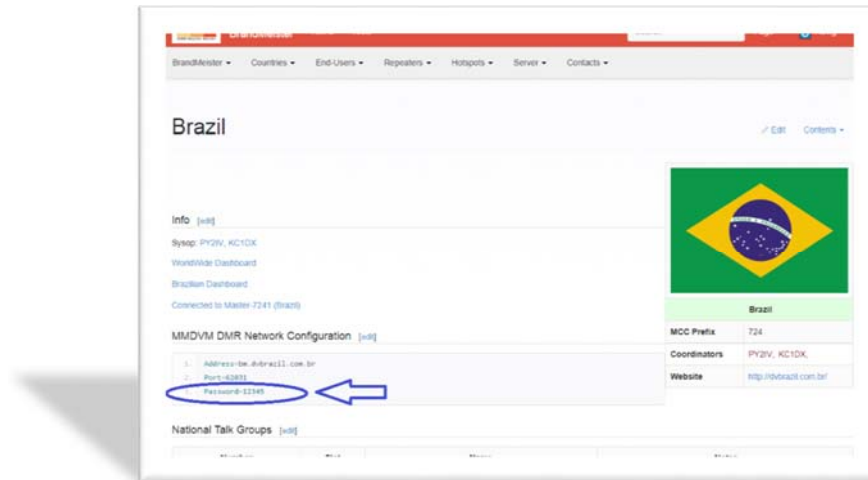


Figure 1 - Example of a wiki page providing the password to be used by HomeBrew/MMDVM hotspots

Once a hotspot has been purchased, someone can use any valid DMR CCS7 ID (<http://www.dmr-marc.net/cgi-bin/trbo-database>), specify any BrandMeister master server, enter the master server password; and can operate on the BrandMeister network.

### Who needs this feature ?

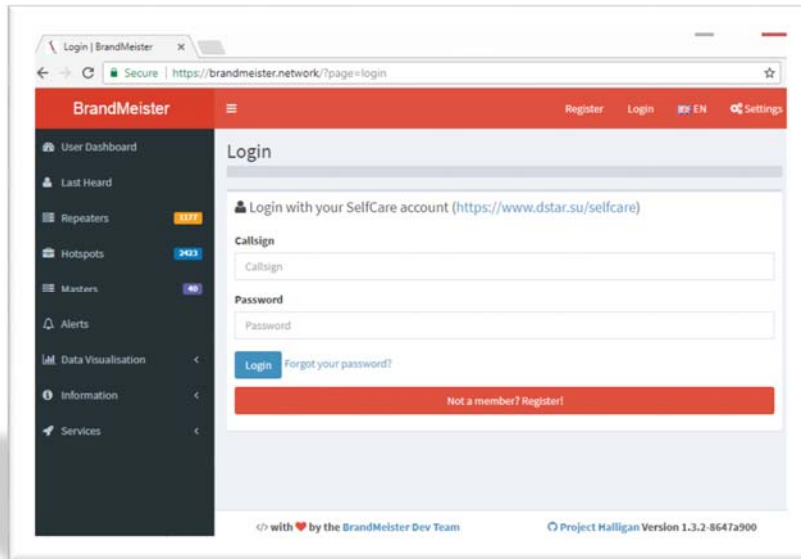
With the ever increasing popularity of BrandMeister, this has caused problems when some people have been using (accidentally or not) a CCS7 DMR ID for their hotspot that was not theirs.

### What does it do ?

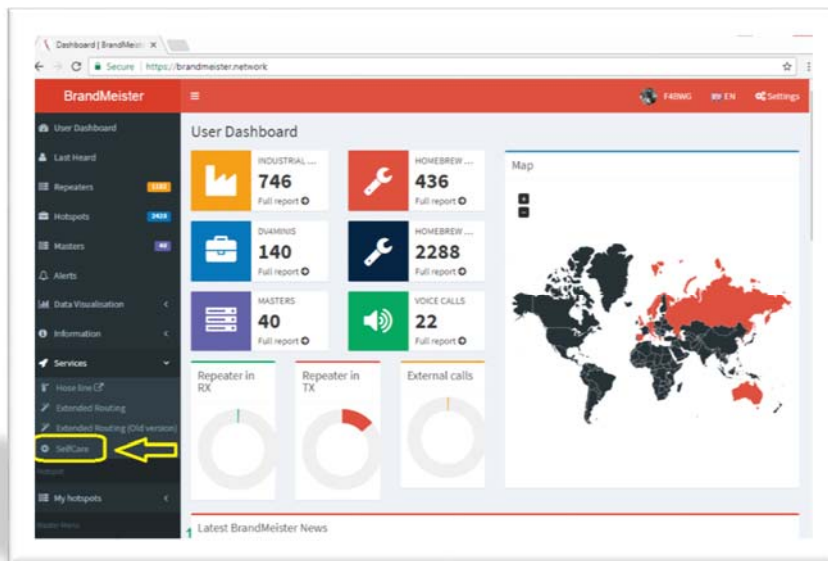
In order to prevent this, BrandMeister has implemented a “personal hotspot password” which allows BrandMeister DMR users that have registered a Self-Care account (<https://brandmeister.network/index.php?page=register>) to configure a specific password for their DMR ID to be used with a hotspot. This means that the default password of the master server will no longer work when connecting a hotspot with this DMR ID.

### How to use it ?

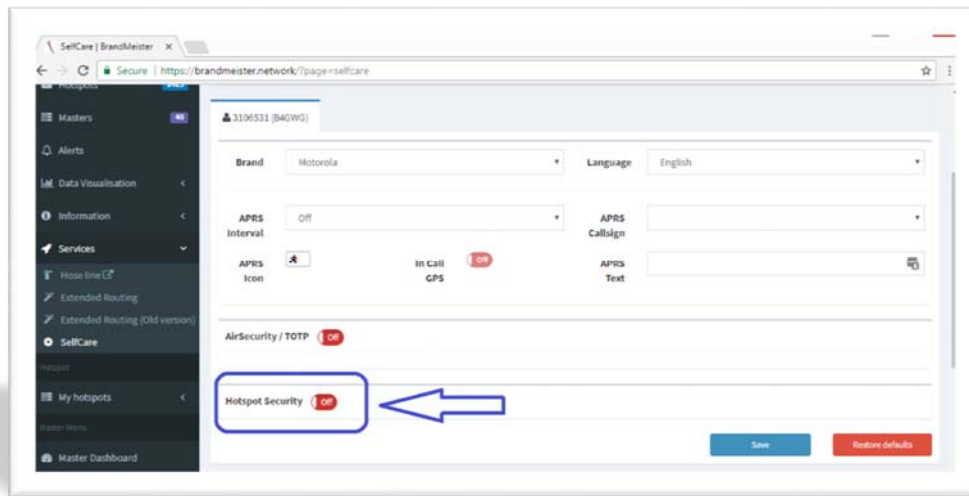
Login to your BrandMeister Selfcare account (<https://brandmeister.network/?page=login>).



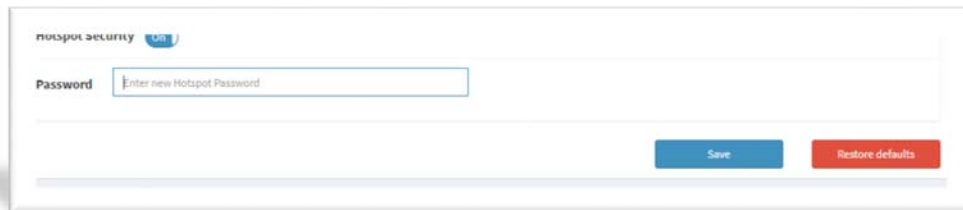
Once logged in, on the left-handside click on “Services” and then “SelfCare”.



If you have more than one DMR ID, select the appropriate tab. Then at the bottom of the page, click on the “On/Off” toggle next to the “Hotspot Security” section:



Enter a password in the field and click “Save”. This password will now override the “default password” of the server, and is the one that is required to connect a hotspot with your DMR ID.



### Note about MMDVM, HomeBrew, and Motorola Repeaters

In the same fashion, these 3 types of repeaters can have a personalized password to connect to a BrandMeister master server. There is currently no web front-end to configure this password; repeater sysops who are interested in setting up a specific password for their repeater should contact the administration team of the master server their repeater is connecting to.

## Air Security

Since its inception in 2014, the number of BrandMeister users has been growing at a rapid pace. In order for someone to use a DMR radio on the BrandMeister network, a valid DMR SS7 ID needs to be programmed in the radio (<http://www.dmr-marc.net/cgi-bin/trbo-database>).

### Who needs this feature ?

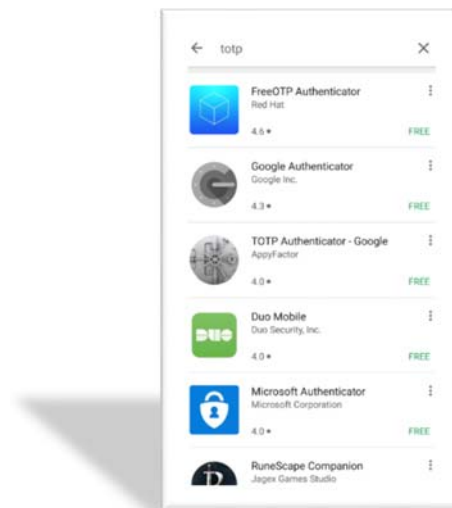
Some people have been (accidentally or not) using a DMR SS7 ID in their radio that is not their own. This results in transmissions being made on the BrandMeister network from an amateur radio callsign that is not the actual user transmitting. In order to limit this situation, the Air Security feature has been implemented.

### What does it do ?

The concept is the following: a network user can instruct Brandmeister to refuse the utilization of his DMR SS7 ID on the network. When the user wants to be able to transmit using his DMR ID, he will instruct the BrandMeister network to allow usage of his DMR ID only **on a specific BrandMeister Master Server**, and only for a **specific period of time**.

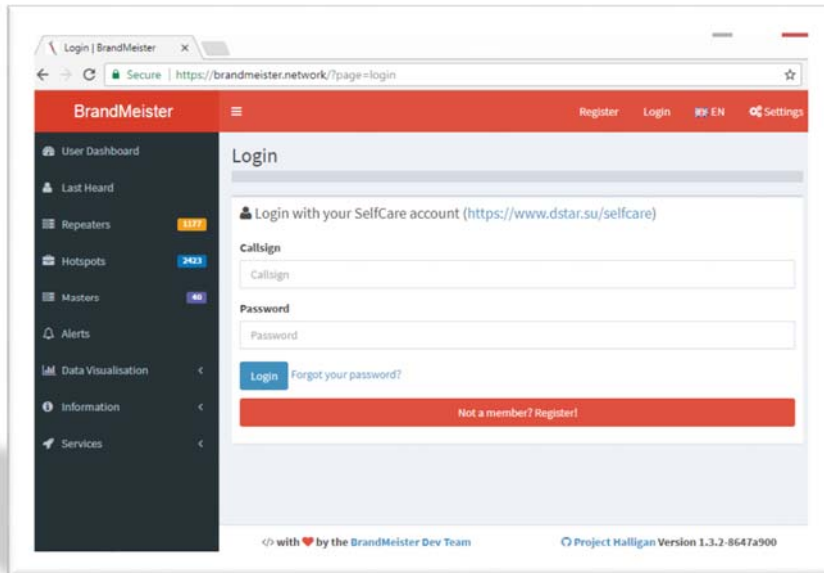
### How to use it ?

On your mobile device, go to your application store and find a TOTP-compatible application. You can use the search keyword TOTP, and get the most popular free application. Here is an example of such search on an Android device:

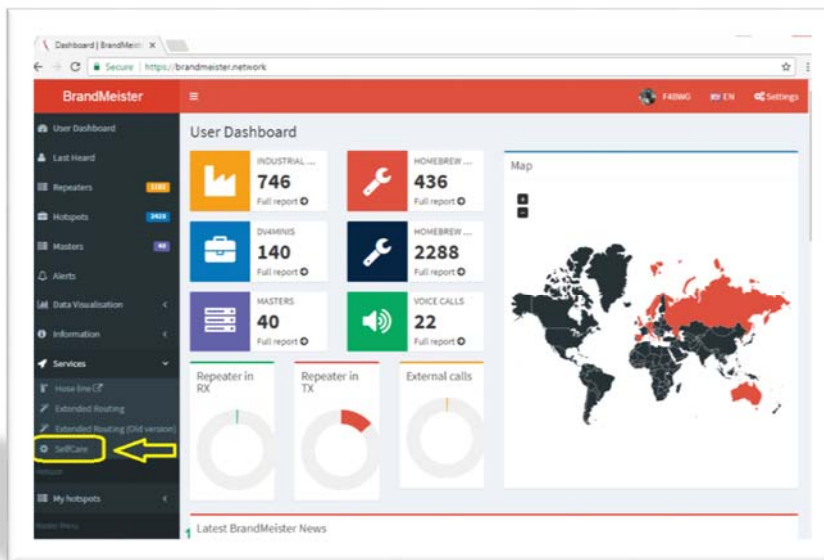


For the purpose of this documentation, we are going to use the first result “ FreeOTP Authenticator” from Red Hat.

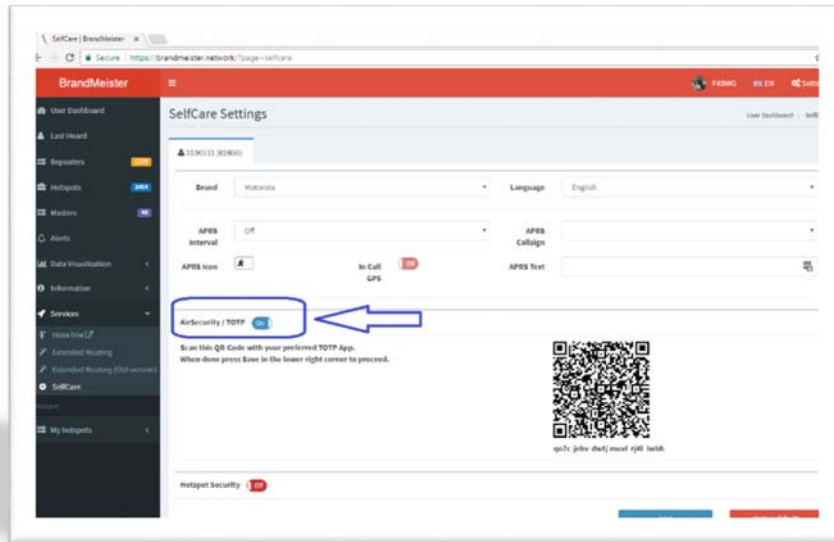
Login to your BrandMeister SelfCare account (<https://brandmeister.network/?page=login>).



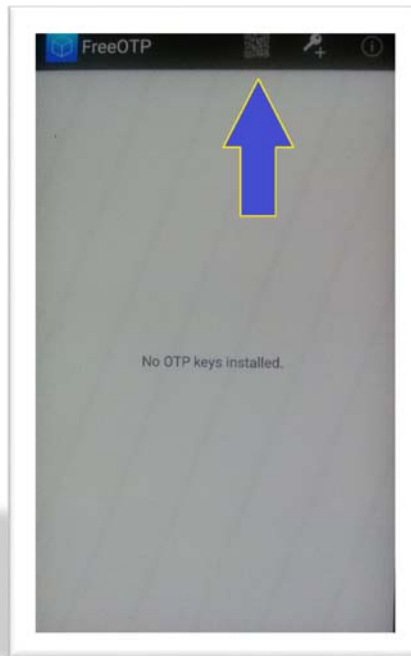
Once logged in, on the left-hand side click on “Services” and then “Selfcare”.



If you have more than one DMR ID, select the appropriate tab. Then at the bottom of the page, click on the “On/Off” toggle next to the “AirSecurity / TOTP ” menu. A 2D barcode will appear.



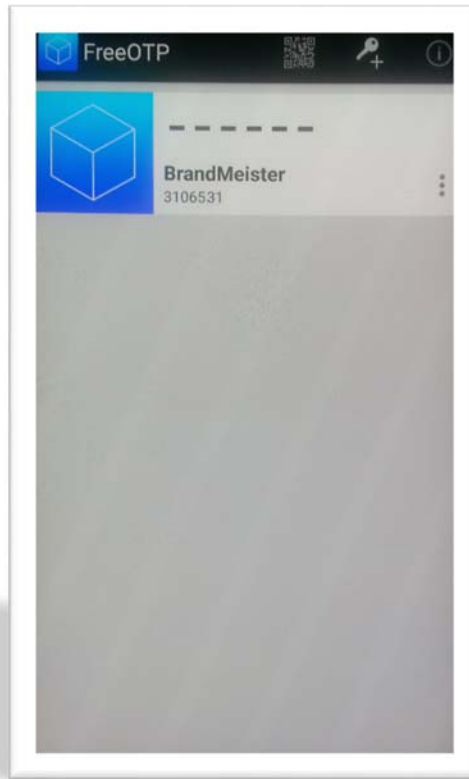
Open the OTP application on your mobile device. If this is the first time you use the program, the list of applications will be empty. Tap on the barcode icon to initiate a barcode scan:



Set your mobile device in front of your computer monitor for the application to scan the 2D barcode:



Once the barcode is being recognized, the following entry will appear in your application:



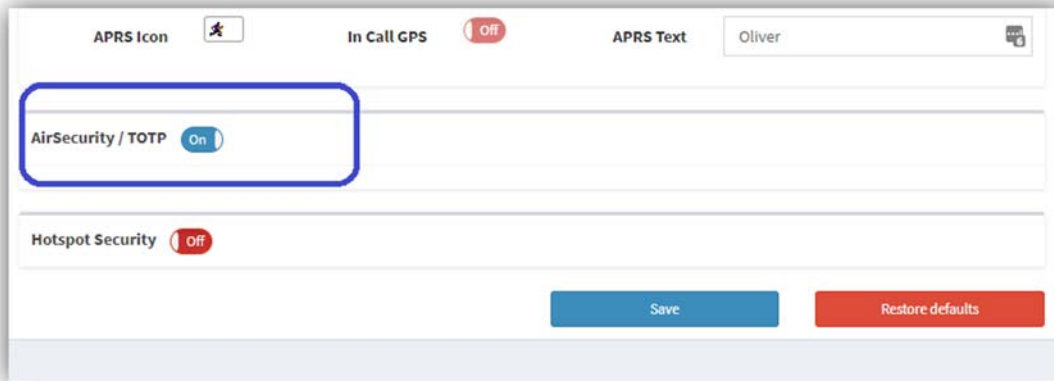
*The number below the word BrandMeister is your DMR ID.*

**Important: CLICK ON “SAVE” at the bottom of the SelfCare page:**

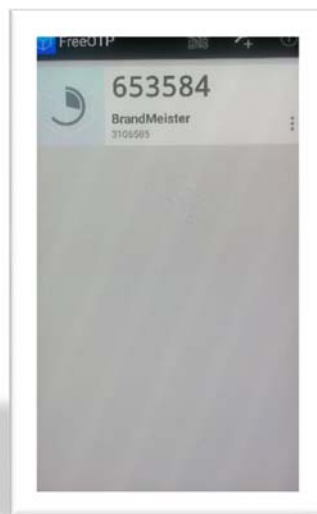




Your DMR ID is now protected:



Using your mobile application, now tap on the BrandMeister entry, and a one-time activation code will be displayed. Only your mobile application and the BrandMeister network are aware of this code.



In this example, the temporary code is 653584.

Now using your radio, you can now PTT to the Private ID: 9 + code. So in this case you would PTT to Private ID 9653584. This will instruct Brandmeister to allow the use of your DMR SS7 ID for 30 minutes

**FROM ANY REPEATER OR HOTSPOT CONNECTED TO THE SAME MASTER AS THE REPEATER OR HOTSPOT YOU ARE USING TO PTT TO THE PRIVATE ID.**

For example, if you PTT on the Private-ID code on repeater KI6KQU (<https://brandmeister.network/?page=repeater&id=310669>) because this repeater is connected to the BrandMeister master server 3103, you are authorizing the use of your DMR ID on any repeater or hotspot connected to the master 3103.

**Warning:** Do not wait too long to send the unlocking PTT, as the code is only valid for 30 seconds!

If someone tries to PTT with an ID that is currently protected by AirSecurity (either that is not currently active, or from a master different than the one currently authorized) the transmission attempt will show up on the dashboard's Last Heard (<https://brandmeister.network/?page=lh>) but it will not be heard on the network, and the person transmitting will receive an audio private call back from the master saying "Access Denied".

You can disable that feature by going to your SelfCare portal and clicking on the "On/Off" toggle next to the " AirSecurity / TOTP" toggle, and clicking the [Save] button at the bottom of the page.

**Warning:** After enabling AirSecurity, if you decide to disable this feature, and then re-enable it, a new 2D-barcode and OTP Secret will be generated.