



Personal
Emergency
Transmitter



PET Firebase Web Portal and Text Service User's Guide

Version 1.0

April, 2020

www.SelectEngineering.net

Table of Contents

- 1 Introduction..... 3
 - 1.1 PET Firebase and Message Service Overview..... 3
- 2 Firebase Web Portal..... 4
 - 2.1 Firebase Set-up..... 4
 - 2.2 Twilio SMS Message Service 6
 - 2.3 iPhone App Instructions..... 7
 - 2.4 Android App Instructions..... 8

1 Introduction

1.1 PET Firebase and Text Service Overview

The Personal Emergency Transmitter (PET) can send an emergency alert through an Android smartphone or Apple iPhone using the PET smartphone apps.

The PET app can be used stand-alone but instead of having each user enter a list of SMS recipients into the PET app, a department (agency/company/etc) administrator(s) can manage the recipient list and users through the Firebase web portal.

Firebase is accessed through a web page and offers several benefits for the department:

- Easily manage the list of SMS recipients for users
- Minimizes the amount of set-up for each user
- Manage and view the list of users with a PET device
- View the battery level, status and connectivity update for every PET device
- Use an SMS message service (e.g. Twilio) for sending emergency alerts

For departments with multiple iPhone users, the Firebase web portal *and* an SMS message service is required. This is because the iPhone does not allow automated text messages. That limitation is overcome by an SMS message service – the PET app sends the emergency data to a message service so that text messages can be sent to the recipients. The SMS message service is not necessary but optional for Android smartphone users.

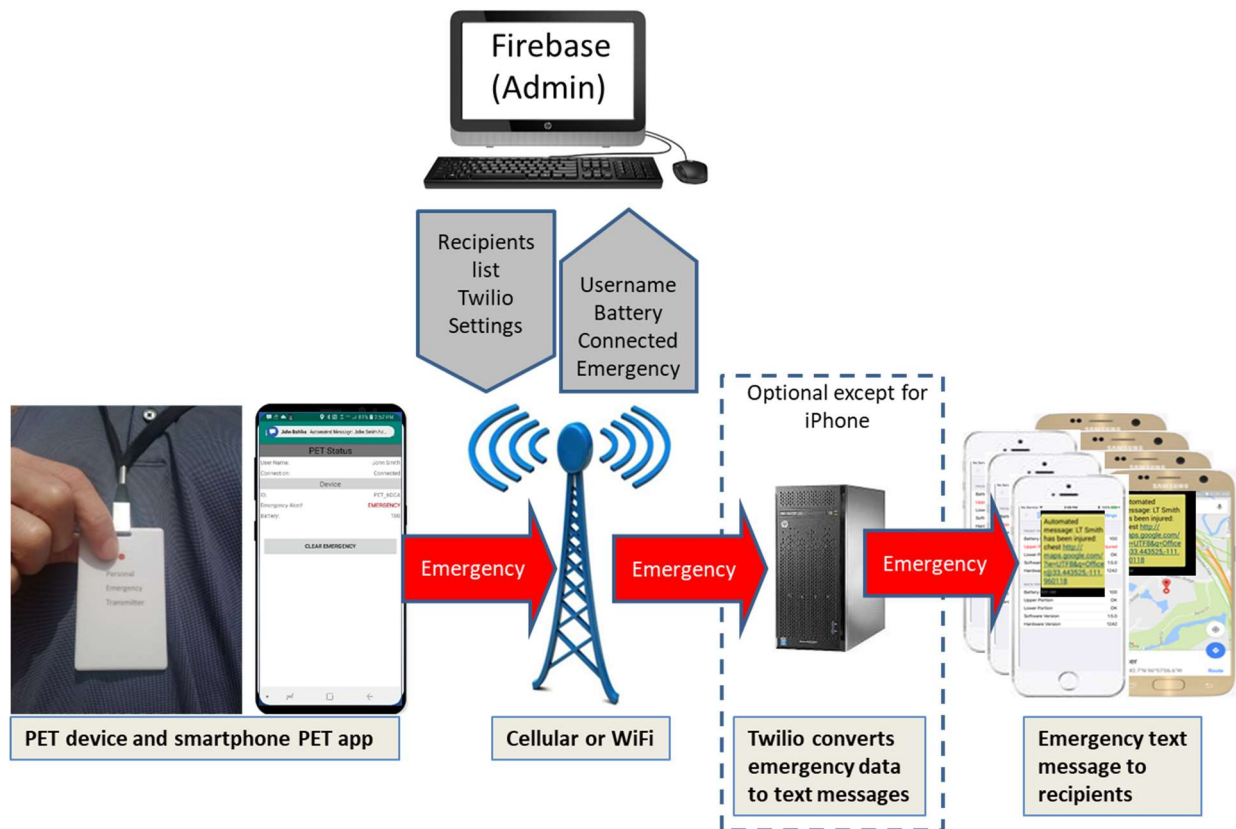


Figure 1: PET Firebase and Text Service System Diagram

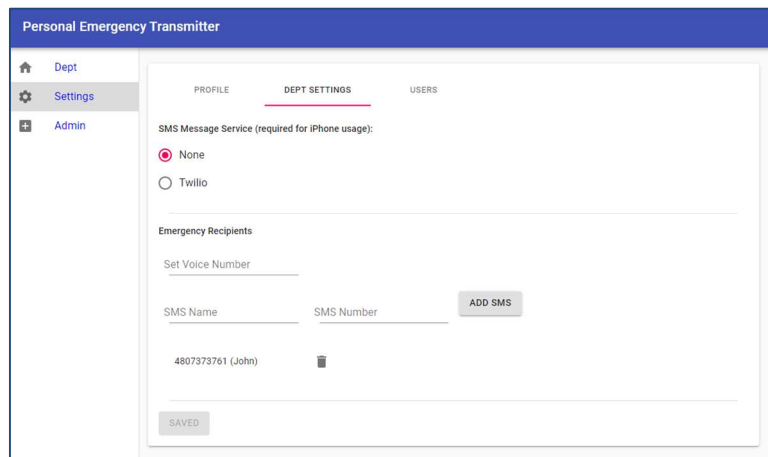
2 Firebase Web Portal

This no cost web-based application allows the administrator to create and manage their department PET users. For iPhone users, Firebase helps ensure that the PET app continues to be active as the iPhone does not automatically restart the PET app when the app is closed or the phone reboots. For that reason the Firebase account will check each phone every 15 minutes to make sure the PET app is active and notify the user if it has been deactivated. That function isn't necessary for the Android app as it is a service on the phone that automatically restarts if the app is closed.

2.1 Firebase Set-up

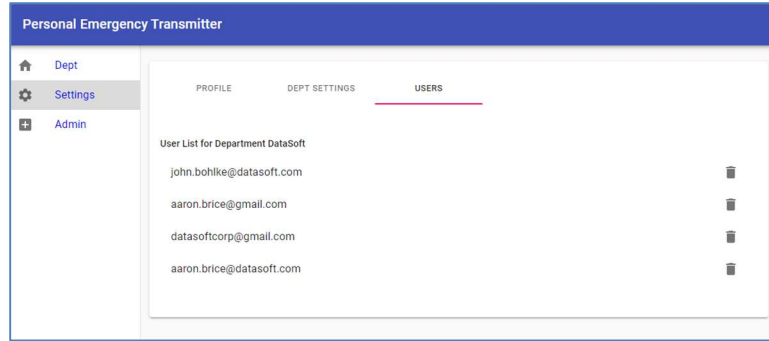
An administrator for the department must first request Select Engineering Service (selectengineering.net) to establish a Firebase account with the desired department name and administrator email address. Then, they can follow these steps to complete the set-up:

1. From a web browser, go to <https://personal-emergency-transmitter.firebaseio.com/> and select 'CREATE ACCOUNT'. Fill out the new account form.
2. Once the account has been created, a confirmation email will be sent automatically to the administrator. From that email, select the 'confirm' URL to verify the account.
3. Return to <https://personal-emergency-transmitter.firebaseio.com/> and refresh the webpage.
4. Select 'Settings' from the side menu bar then...
 - a. Select 'DEPT SETTINGS' at the top to add a voice number (for Android users only) and SMS recipient phone numbers and names. The list of SMS recipients is pushed to each users' PET app. The user will not be able to add to or modify the list through the app.

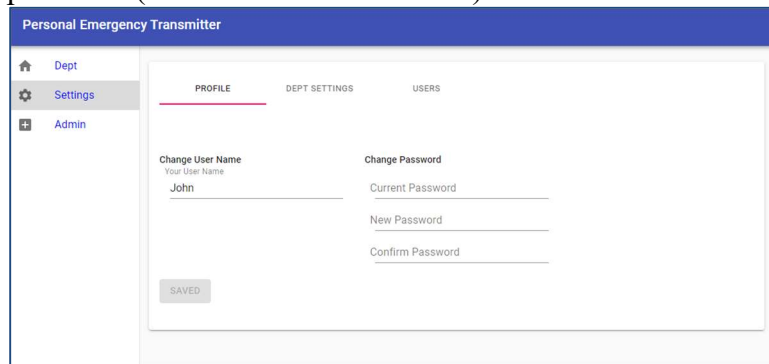


The screenshot shows the 'Personal Emergency Transmitter' web portal. The left sidebar contains a menu with 'Dept', 'Settings', and 'Admin'. The main content area is titled 'DEPT SETTINGS' and has three tabs: 'PROFILE', 'DEPT SETTINGS', and 'USERS'. Under 'DEPT SETTINGS', there are three sections: 1. 'SMS Message Service (required for iPhone usage):' with radio buttons for 'None' (selected) and 'Twilio'. 2. 'Emergency Recipients' with a 'Set Voice Number' input field. 3. A table for adding SMS recipients with columns for 'SMS Name' and 'SMS Number', an 'ADD SMS' button, and a list of existing recipients (e.g., '4807373761 (John)'). A 'SAVED' button is at the bottom left.

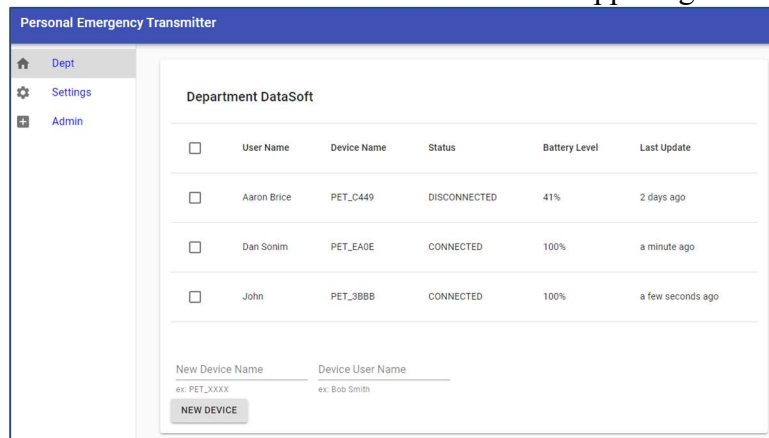
- b. If using an SMS Message Service (required for iPhone users), select the Twilio option and enter the Twilio credentials (see section 2.2 for Twilio account set-up). The message service information is pushed to each users' PET app.
- c. Select 'SAVE CHANGES' when finished.
- d. To review the list of authorized PET users within the department, select 'USERS' at the top. To remove a user, select the trash can icon next to the corresponding email address of the user.



- e. Select 'PROFILE' at the top if you want to change your user name and/or password (then 'SAVE CHANGES').



- 5. Select 'Dept' from the side menu bar to view the users, device names, connected status, battery level of their PET device and the last time the information was updated.
 - a. To eliminate a device from the list, select the check box next to the corresponding user and then select the trash can icon in the upper right.



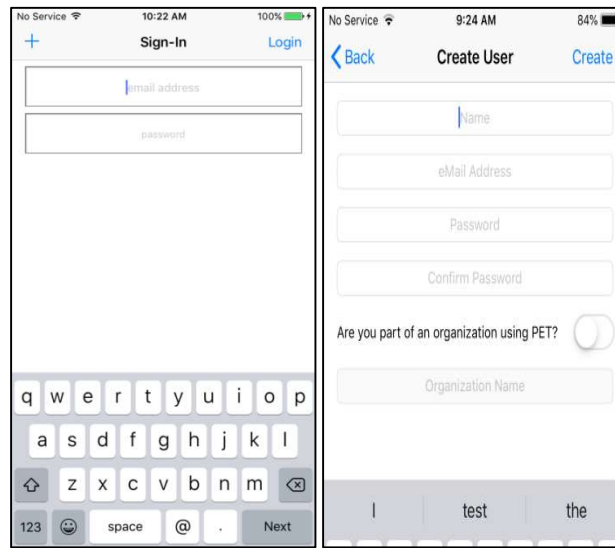
2.2 Twilio SMS Message Service

A Twilio account is required for iPhone users and optional for Android users. Twilio will enable the department to automatically send PET app emergency text messages to desired recipients. Follow these steps to set up the account:

1. From a web browser, go to www.twilio.com
2. Select the 'Sign up' option and enter the administrator name, department name, email, and password.
3. After verifying your (trial) account set-up via email and mobile text from Twilio, choose to 'Get a Number'. Twilio will assign a unique phone number for your department.
4. Verify the account set-up by entering your mobile number. Twilio will send a verification code for completing the account set-up. You can now test the service through Twilio or through the PET app but the message will only be sent to the administrator's mobile phone.
5. You need to upgrade the account in order to send text messages to multiple mobile numbers. From the Twilio 'Dashboard', select the 'Upgrade' option and enter funds into the account to support the full functionality. The service is approximately \$1 per month and each text message will cost a fraction of a penny. So, you can fund the account with \$20 and Twilio will notify you when the balance gets low.
6. Make note of your Twilio account credentials as they will have to be entered into the Firebase account:
 - a. Twilio Account ID (found at www.twilio.com/console as the 'account SID')
 - b. Twilio Phone Number (found at www.twilio.com/console/phone-numbers/incoming)
 - c. Twilio Token (found at www.twilio.com/console as the 'auth token')

All messages sent using Twilio will come from your unique Twilio phone number. Each PET recipient should enter that number as a contact on their phone with the title of 'PET Emergency Alert' or something similar. They will see that contact name appear when they receive an emergency text alert via PET. The content of the text message will show the actual name/personal information that triggered the PET emergency.

2.3 iPhone App Instructions

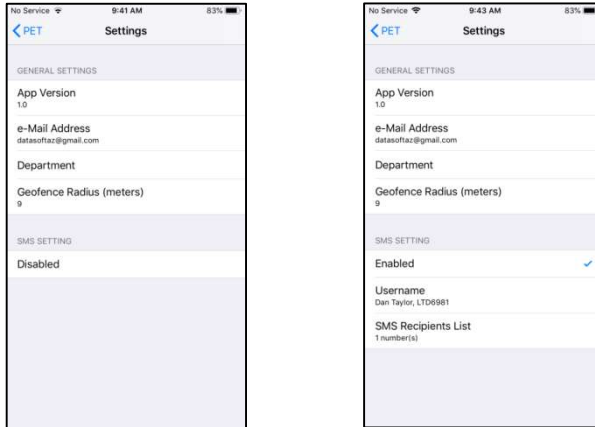


The first step with the PET app is to create a user account that connects with the Firebase account for your agency. Each PET user, initially selects + on the opening login screen to create a new user.

1. Enter user **Name**, **eMail Address**, **Password** and slide the button indicating that you are part of an organization using PET.
2. Select and enter the **Organization Name**. The name must match exactly the Firebase web portal department name.
3. The Admin receives an email to confirm/deny that the user should be added to the department
4. Upon confirmation, the SMS Recipients List and text services information entered within Firebase will be pushed to the users' app.

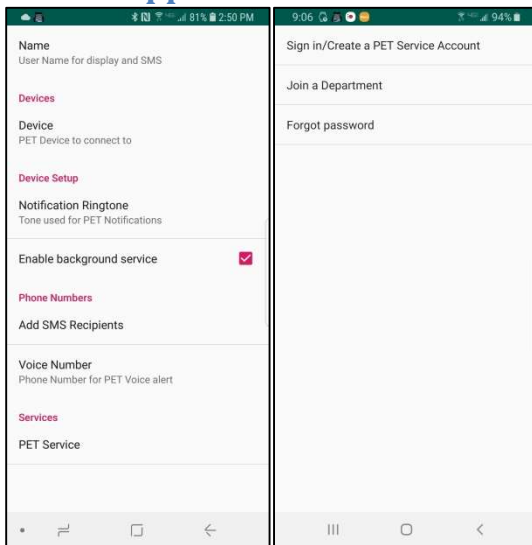
Within the PET app Settings, select the field labeled 'Disabled' under SMS Setting to change it to 'Enabled'. This allows the app to send the PET emergency alert to SMS message recipients through Twilio. Once enabled, the user can enter the:

- User name that will be sent with the emergency alert. The 'Username' field may contain any useful information about the user including their name, badge number, allergies, blood type, etc. This field is limited so that the emergency alert does not exceed the 160 character SMS text message limit.



Note that the user will not be able to enter a list of SMS recipients as this is managed through the Firebase account. The number of SMS recipients the administrator has entered into Firebase will be displayed under the SMS Recipients List field.

2.4 Android App Instructions



Each PET user, selects the three dot icon in the upper right for the Settings menu then...

1. Select **PET Service** within the app to connect to the web portal
2. **Sign in** by creating a user name and password
3. Choose to **Join a Department** (Department name must match Firebase Web Portal name)
4. The Admin receives an email to confirm/deny that the user should be added to the department
5. Upon confirmation, the SMS Recipient List and Voice Number will be pushed to the users app (those options become greyed out/inaccessible within app)