Appendix F – User Guide (Web Application)

Introduction

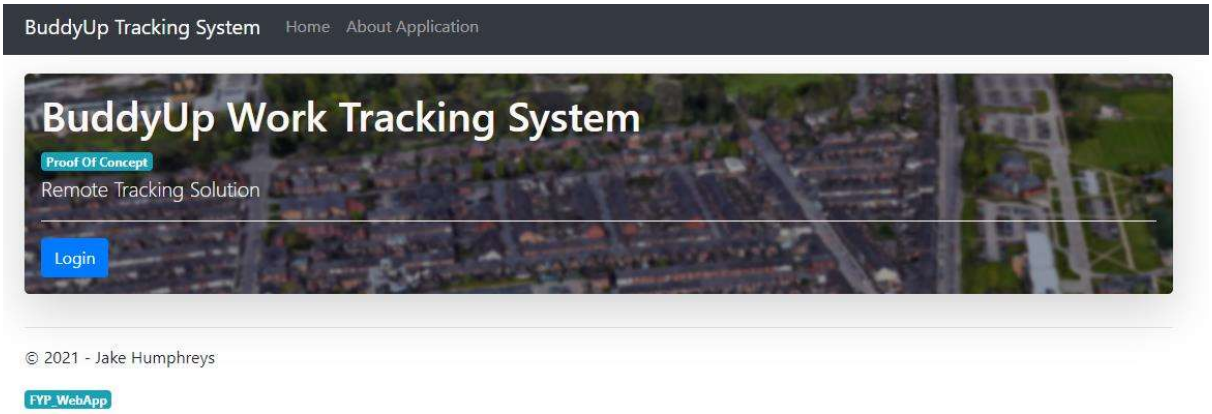
The Web Application component of the implementation serves as the 'Office bound' component of the two elements. Functionality that is not field mandatory is performed via the web application as well as any administrative elements of the system.

The Web Application is highly visual, following Human Centred Design principles to ensure buttons and menus are readable and recognisable by both text and graphic icons.

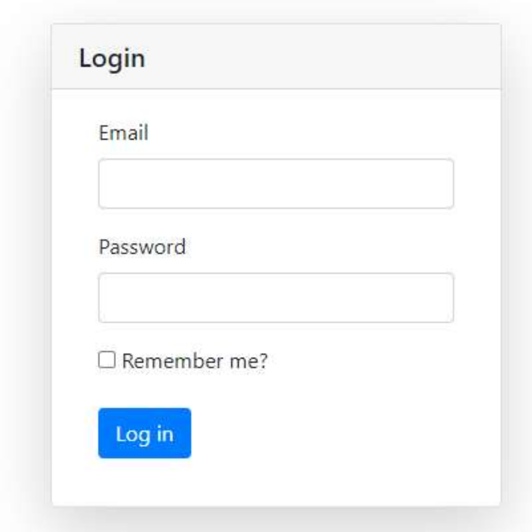
The purpose of this user guide is to detail how to use the system and perform the necessary administrative functions to operate the system correctly.

Logging In

There are no public functions of this application, therefore you will always be required to login. An account must already exist for you as created by an administrative user as no public registration function exists. To login simply press the 'Login' button presented on the application's homepage.



Next, enter your email and password to login. The Email you should use to login is **not** your secondary notification email.



Pressing the 'Log in' button will provide access to the system if your details are correct.

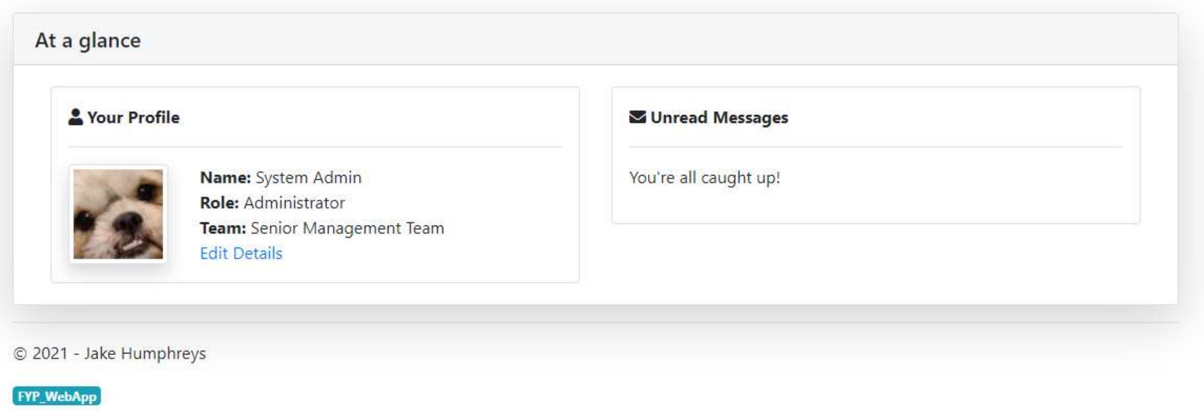
Note: All login attempts are logged and accessible to an administrative user.

The Homepage

After a successful login you are presented with the application Homepage. The options available to you on the top bar will be different depending on your access level. There are three levels of access for this application:

- Staff Member
- Manager
- Administrator

However, all users have the same homepage content regardless of role.

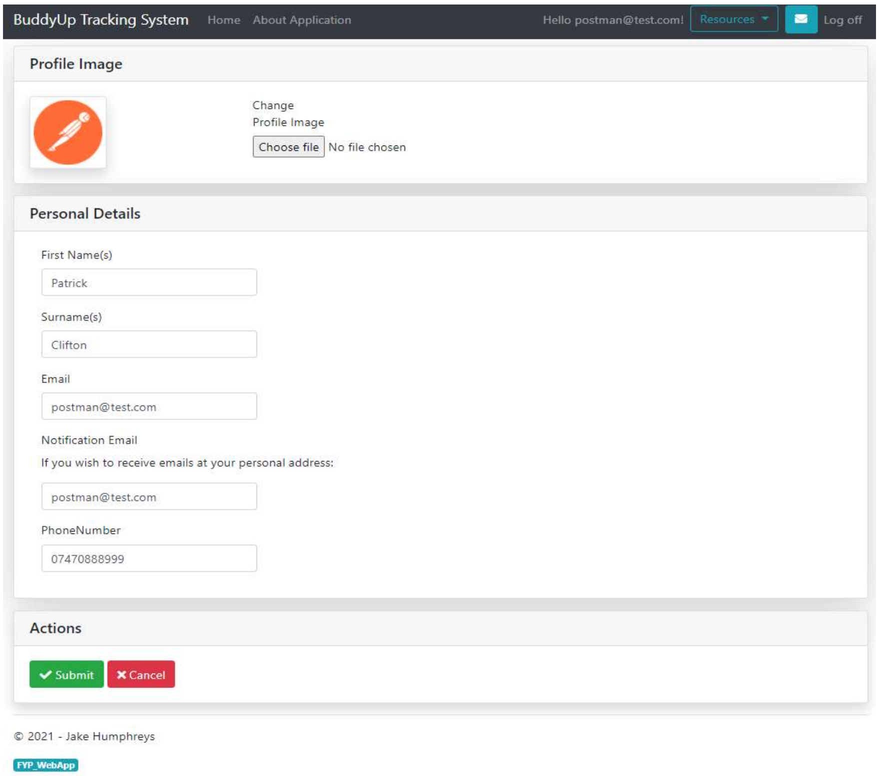


From this page you can view the number of unread messages you have and edit the details of your account.

Editing your details

The level of details on your account that you are permitted to change as a non-administrative user is restricted to Personal Details and User Image only. Your role and team information must be changed by an administrative user and will be covered later in this guide.

To edit your personal details, Click the ‘Edit Details’ link on the Homepage. Once clicked you will be presented with the ‘Edit Account’ page, restricted to the details you are permitted to change.



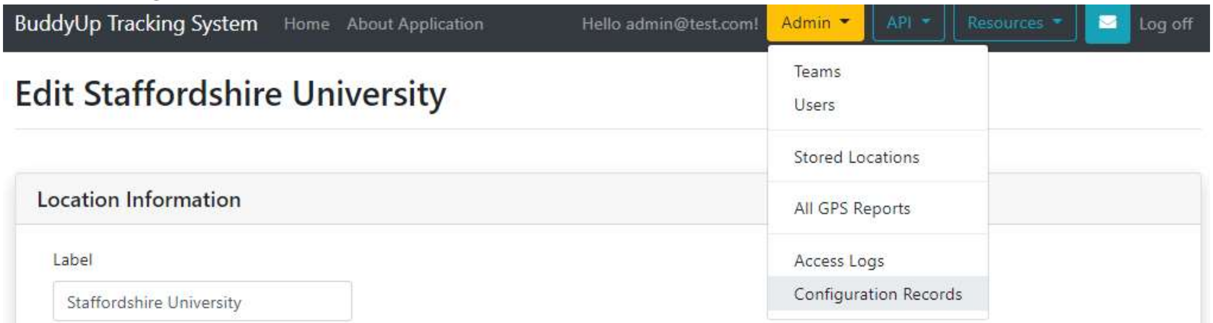
Using this page, you are free to enter any details that you wish to correct, when you are happy with the changes, press the 'Submit' button, which will return you to the Homepage.

System Configuration (Administrative User only)

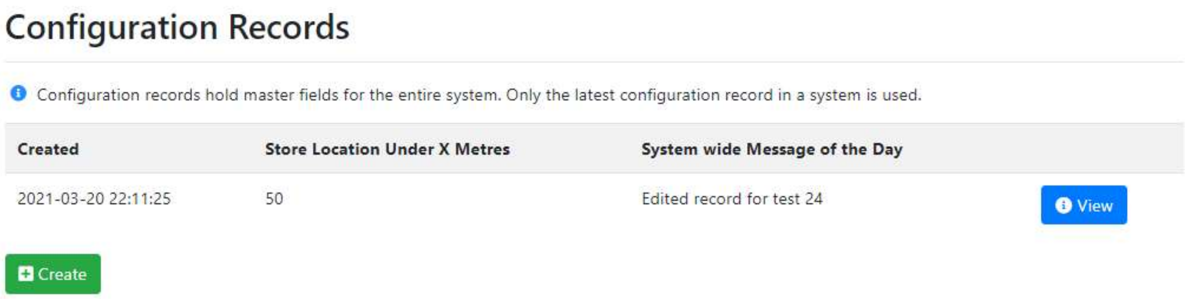
Prior to application usage it is recommended to setup a configuration record. This record contains important fields required to store data that may be changed or configured when appropriate.

Viewing Configuration Records

To view the system configuration records, Select the 'Admin' dropdown at the top of the screen and select 'Configuration Records'.



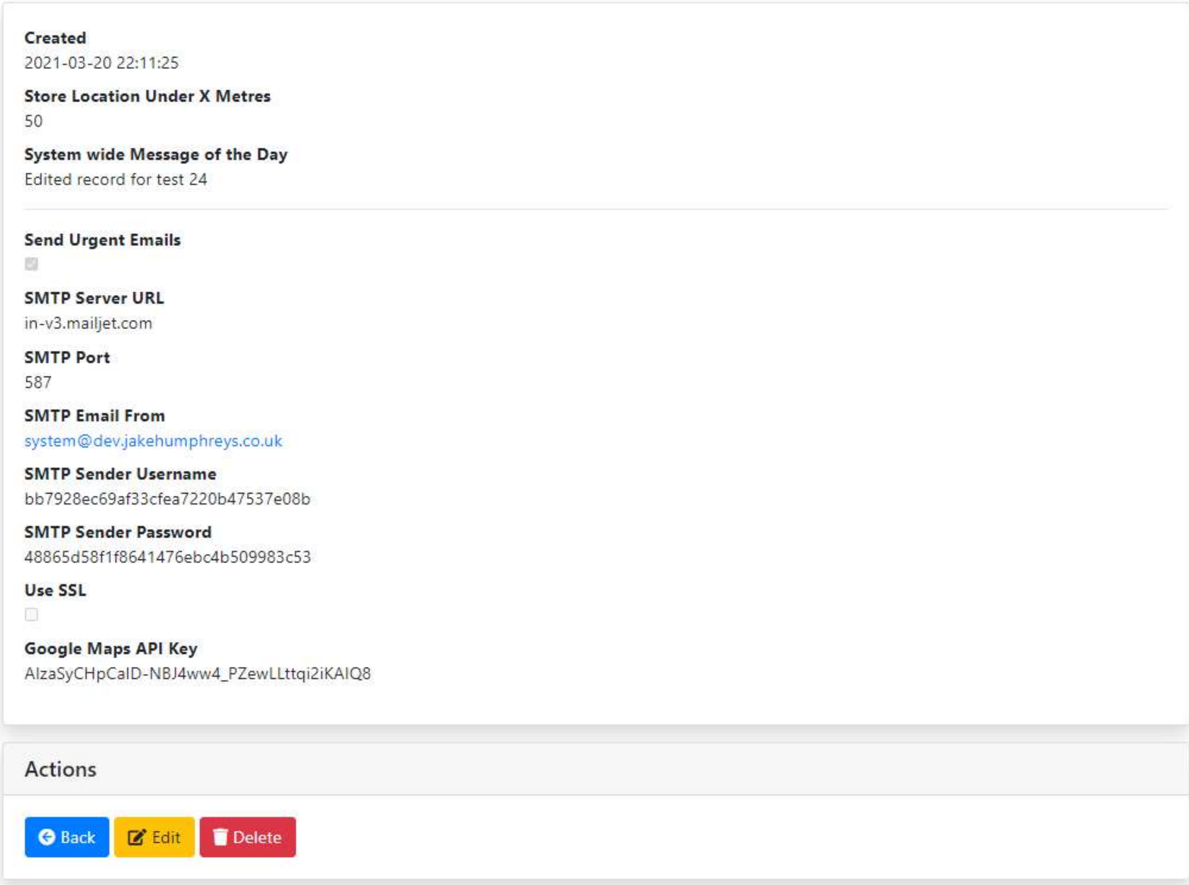
Clicking this option will display the Configuration Records page.



Note: Whilst multiple configuration records may be present, only the most recent is used. Editing a record will make it the most recent.

Viewing an existing record

To view an existing record, click the 'View' button for the specific record you wish to see. Doing so will present a page with all the record details.



Note: Sensitive details are visible, however the entire record can only be viewed by Administrators.

Editing an existing record

From this page you can edit the existing record, simply click the 'Edit' button, enter the new details and select 'Submit'.

Note: Editing a record will make it the most recent record, meaning this one will be used.

Deleting a Record

From this page you can delete an existing record, simply click the 'Delete' button. This will present a confirmation view, to delete the record select 'Delete' again.

Creating a new record

To create a new configuration record, select the 'Create' button on the configuration records list. Doing so will present the 'Create Record' page. Please see the following table for a description of each option available to you.

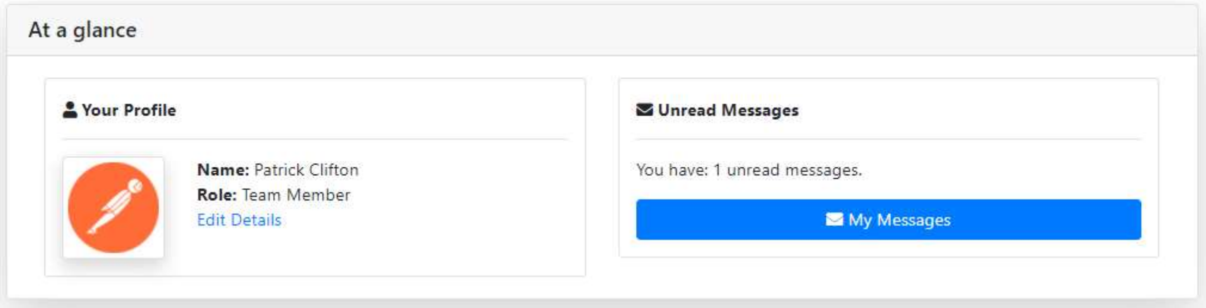
Value	**Purpose**
Store Location Under X Metres	This accepts a numerical value and represents the distance in metres that the system will check from a GPS report to determine if a pre-existing location exists to link to.
System MOTD	This value represents a text value that will be displayed as a dismissible notification on the homepage.
Send Urgent Emails	If this box is checked, recipients of urgent messages will receive an email too.
SMTP Server URL	The host URL of the SMTP server providing email services.
SMTP Server Port	Port required to access the SMTP server. E.g., 587.
SMTP Email From	This field determines the sender of any system emails.
SMTP Sender Username	Username to access the specified SMTP server.
SMTP Sender Password	Password to access the specified SMTP server.
Use SSL	Determined whether the SMTP connection should attempt an SSL connection. Turn this off for higher compatibility.
Google Maps API Key	The API Key used to access the google maps services.

After populating the required fields, you can save the record by clicking the 'Submit' button.

Messages

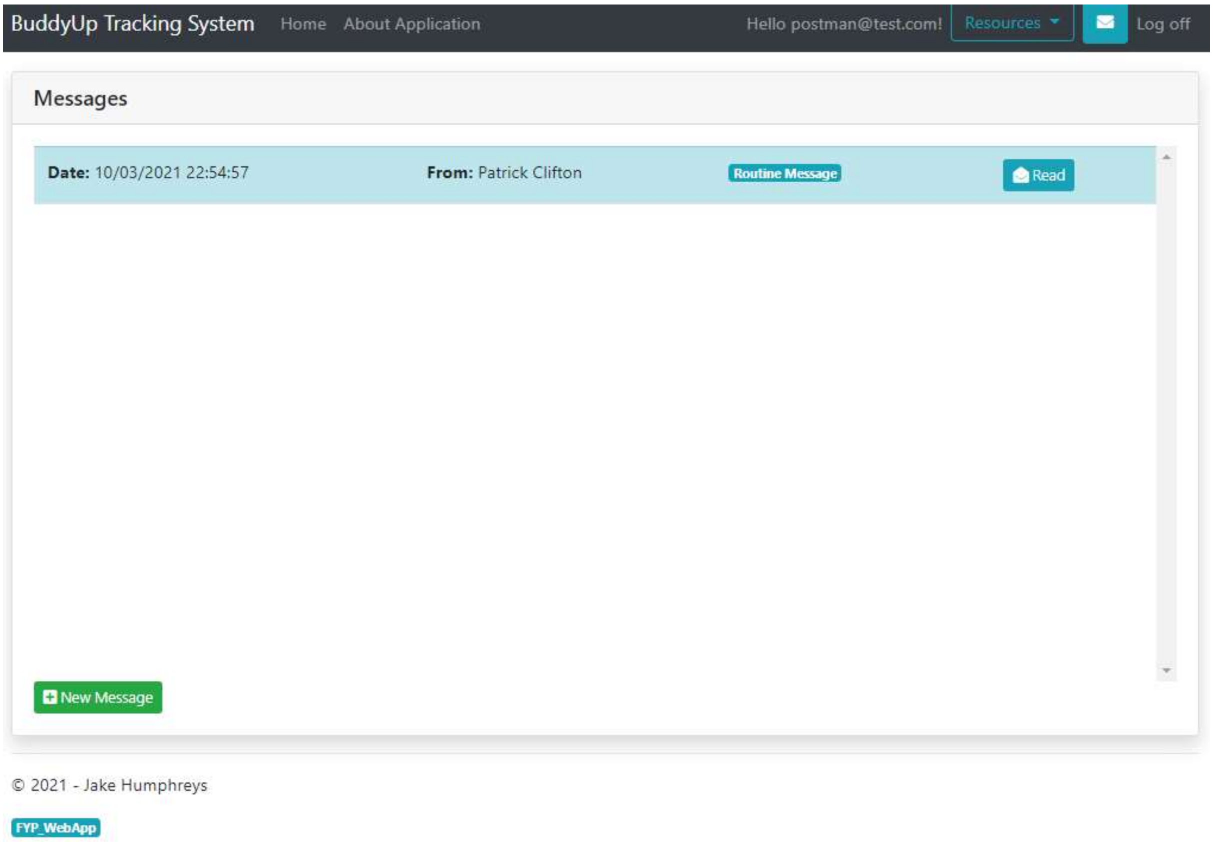
Viewing your messages

Each user can send, receive and view messages. This can be performed via the web application, or you can send them via the mobile application. To view your messages via the web application there are two routes to do so. First, if you have unread messages, a button and counter will appear on the homepage detailing how many unread messages you currently have, and a link to view them.



Secondly, all users will have a 'Messages' option on the top bar, represented by an envelope icon.

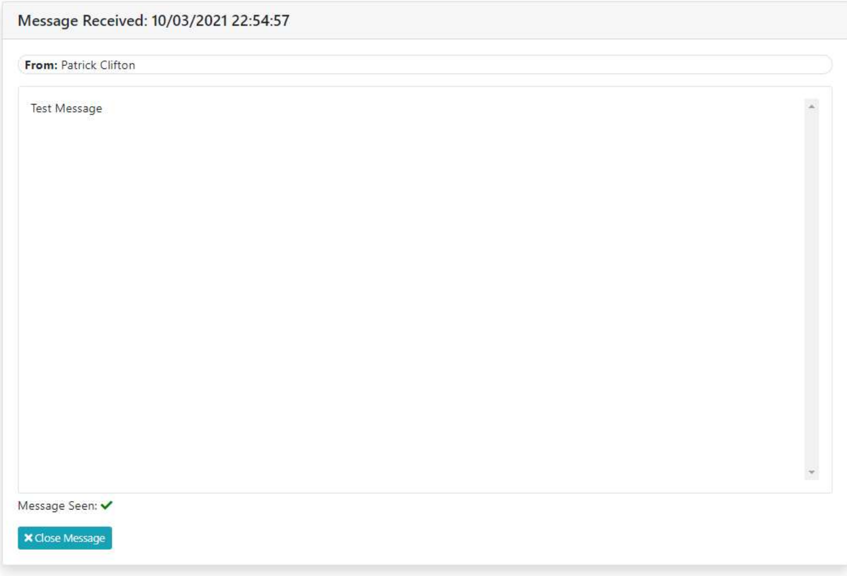
One either of these buttons are clicked, you will be presented with the messages page.



From this page you can view or send a message. Unread messages will be highlighted in blue, whereas read messages will no longer be highlighted.

Viewing a specific message

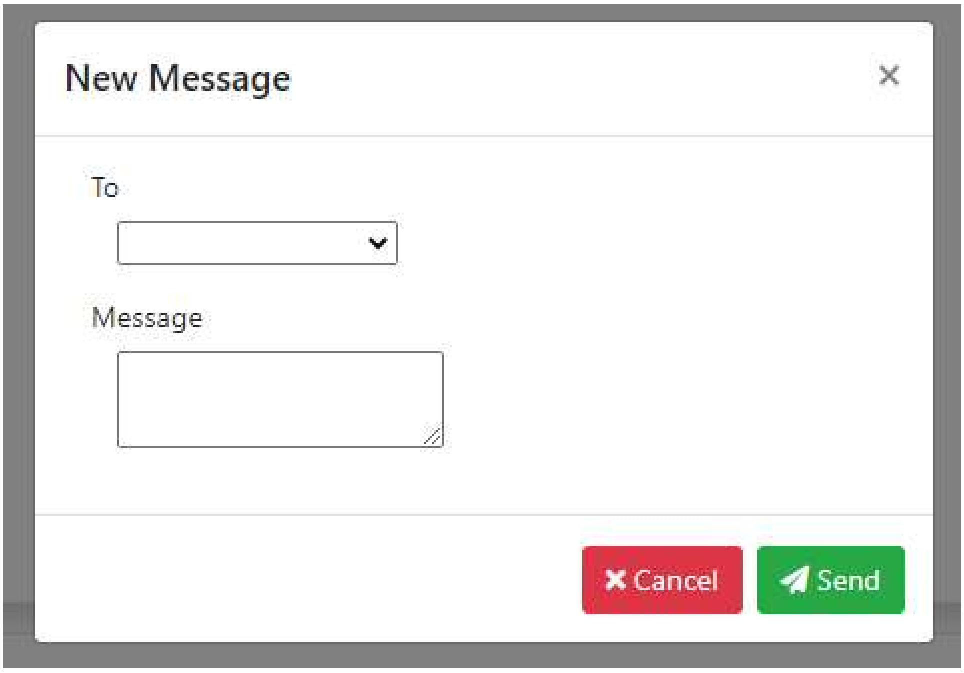
To view a specific message, select the message in the list on the messages screen. Selecting and reading the message will mark it as read automatically.



To return to the messages screen, click the ‘Close Message’ button.

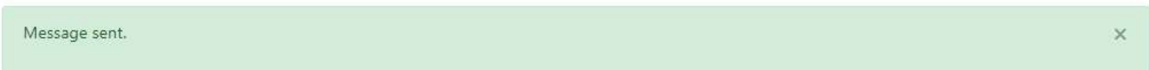
Sending a message

To send a message via the mobile application, click the ‘New Message’ button. This will open a small window, here you can select the user that you wish to send a message to and enter the message content.



Note: You can send a message to yourself if you need any information later.

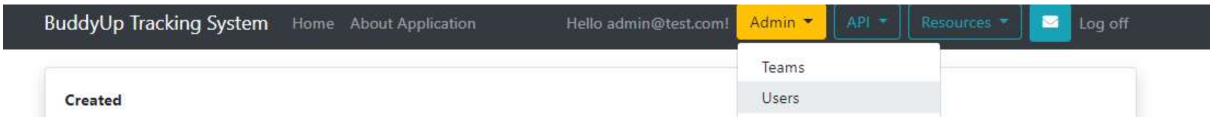
After sending a message a notification will appear at the top of the screen informing you that your message was sent.



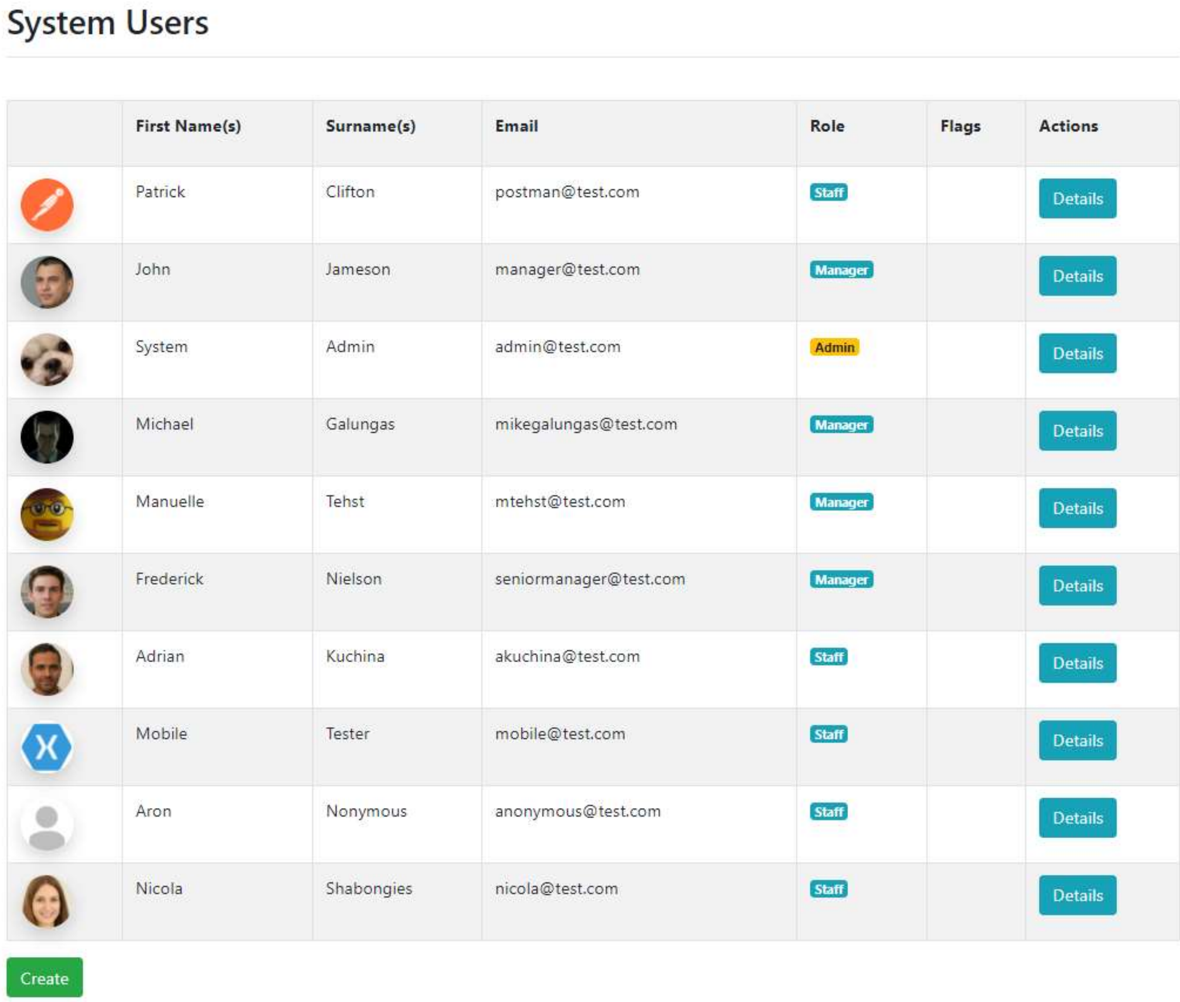
User Management (Administrative User only)

Viewing All Users

To view all users currently present within the system, Select the ‘Admin’ dropdown at the top of the page and select ‘Users’.



The user list contains a record of all users in the system, with brief information on each.



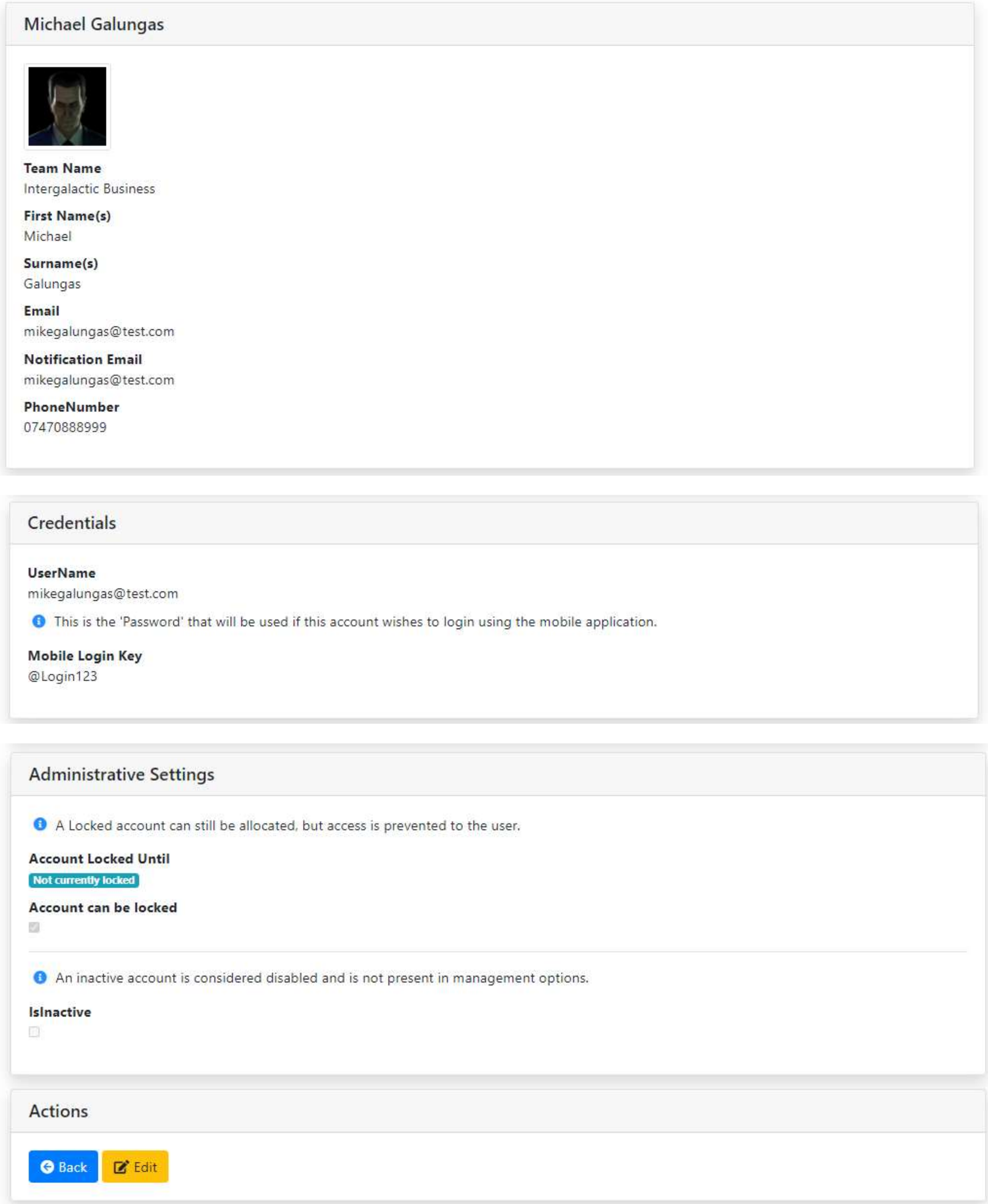
System Users

	First Name(s)	Surname(s)	Email	Role	Flags	Actions
	Patrick	Clifton	postman@test.com	Staff		Details
	John	Jameson	manager@test.com	Manager		Details
	System	Admin	admin@test.com	Admin		Details
	Michael	Galungas	mikegalungas@test.com	Manager		Details
	Manuelle	Tehst	mtehst@test.com	Manager		Details
	Frederick	Nielson	seniormanager@test.com	Manager		Details
	Adrian	Kuchina	akuchina@test.com	Staff		Details
	Mobile	Tester	mobile@test.com	Staff		Details
	Aron	Nonymous	anonymous@test.com	Staff		Details
	Nicola	Shabongies	nicola@test.com	Staff		Details

Create

Viewing a specific user’s details

To view the details of a specific user, select the ‘Details’ button in their entry on the user list. Doing so will provide all the information stored within the system for that user.



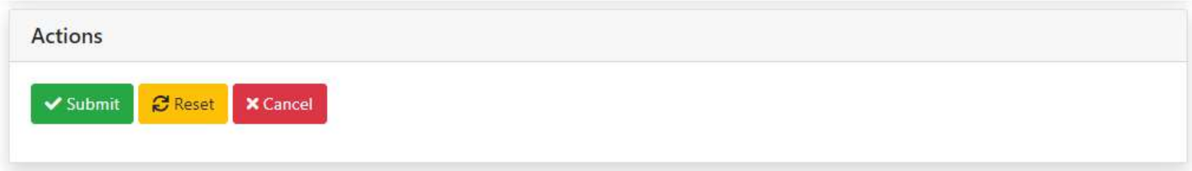
Note: As this option is only accessible to administrators, they will have access to details such as emails and mobile login keys.

Editing a User

From this page you can edit a user, including locking their account or marking them as inactive. To do so simply select the 'Edit' option, change any desired information then select the 'Submit' button.

Creating a new user

Staff members cannot access the system until an account has been created for them, to do this, from the list of users select the ‘Create’ button. From there you can enter all the required information. The same actions are present on all forms, when the information suits your desired needs, select the ‘Submit’ button to create the user.



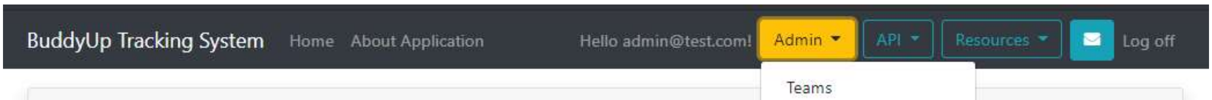
Note: A profile image is not essential at this stage and can be changed by the user later.

System Team Management (Administrative User only)

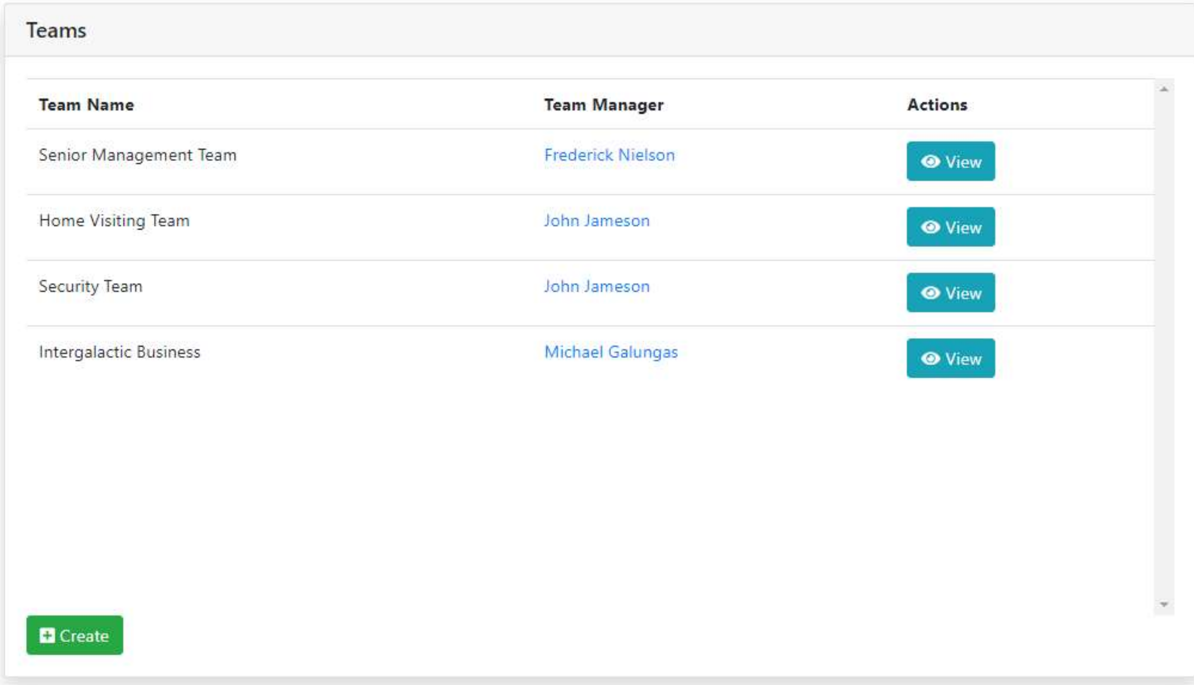
Users within this application exist within teams, this allows the team’s manager to manage them accordingly and only view information restricted to their teams.

Viewing All Teams

To view all teams, select the ‘Admin’ dropdown and select ‘Teams’.

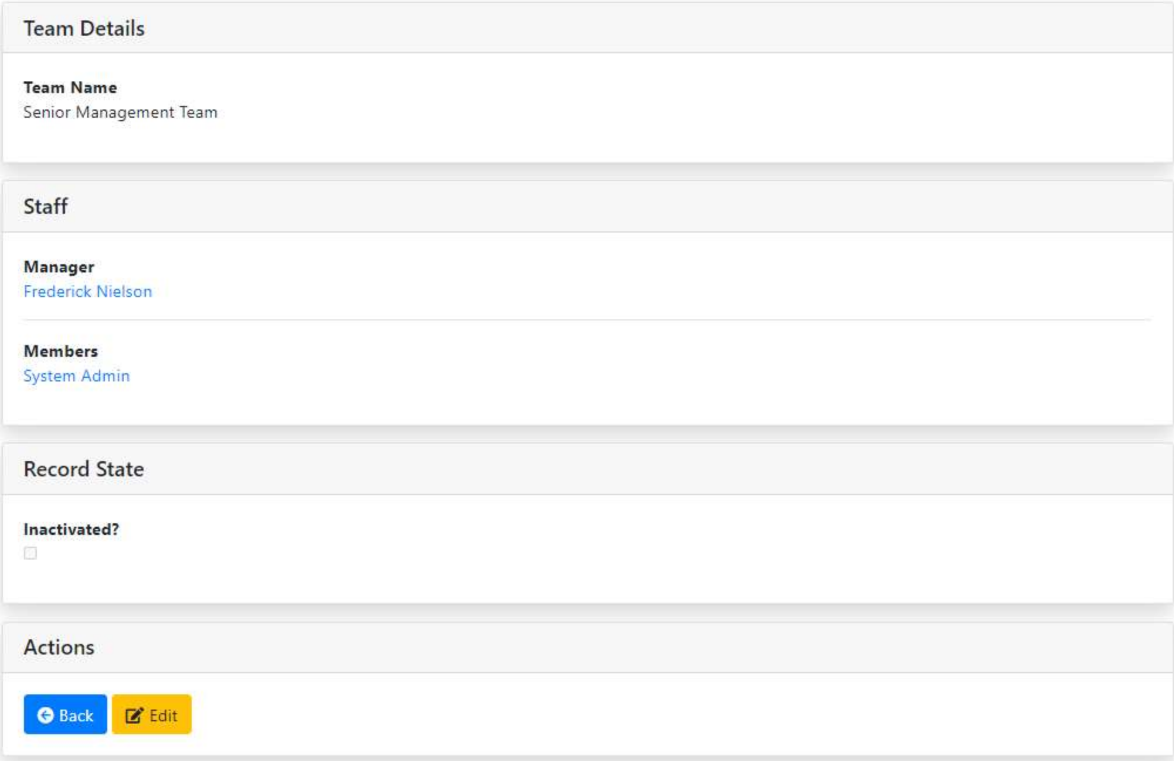


You can use this page to view all teams within a system, view a specific team, view a team’s manager directly or create a new team.



Viewing a specific team

To view a specific team, select the 'View' button next to its entry in the list. This will provide a view with details for that specific team.

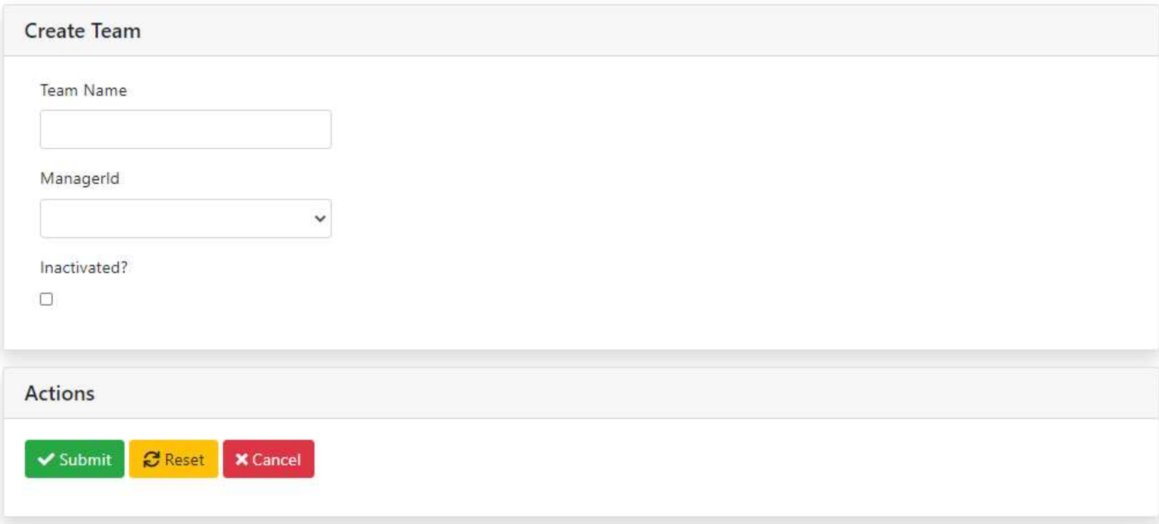


Editing a team

From the details page you can edit the selected team, simply select the 'Edit' button, enter the appropriate details then select 'submit'.

Creating a new Team

To create a new team, select the 'Create' button at the bottom of the teams list.



A team requires a manager, the manager list will only populate with users who have the manager role.

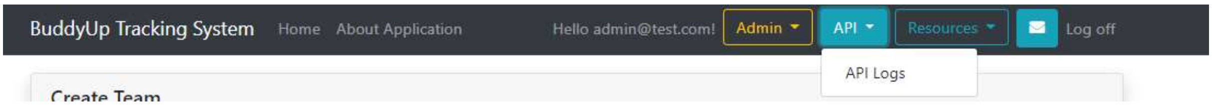
Press the 'Submit' button when you are happy with the information you have entered.

Logging

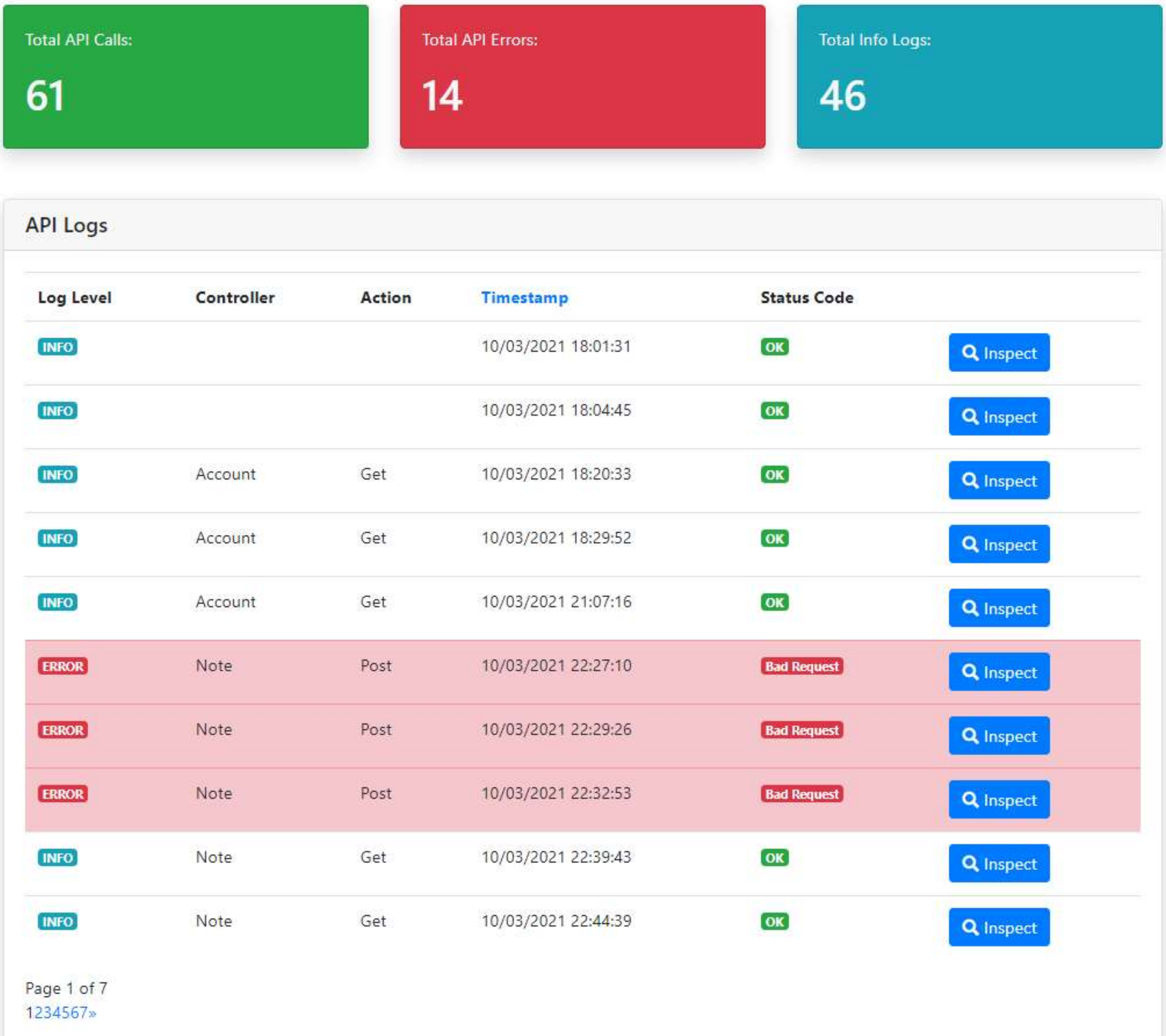
This application logs API requests and Access to provide debugging and security auditing.

Viewing API Logs (Administrative User only)

To view the system API Logs, select the ‘API’ dropdown and select ‘API Logs’.

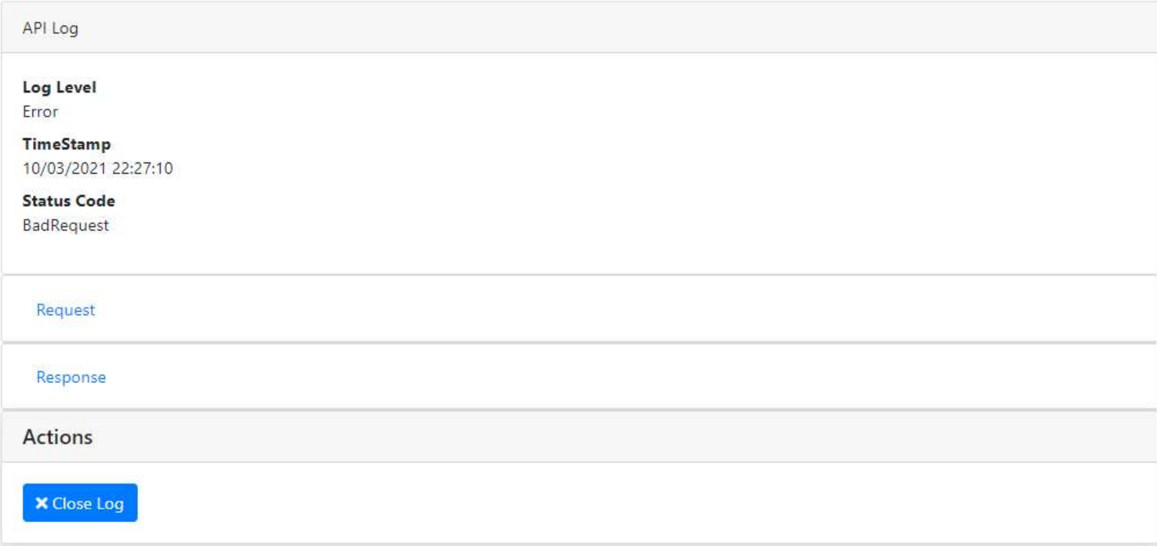


The API Logs dashboard displays all logs within the system, and can be filtered by date by clicking the ‘Timestamp’ heading.



Log Level	Controller	Action	Timestamp	Status Code	
INFO			10/03/2021 18:01:31	OK	Inspect
INFO			10/03/2021 18:04:45	OK	Inspect
INFO	Account	Get	10/03/2021 18:20:33	OK	Inspect
INFO	Account	Get	10/03/2021 18:29:52	OK	Inspect
INFO	Account	Get	10/03/2021 21:07:16	OK	Inspect
ERROR	Note	Post	10/03/2021 22:27:10	Bad Request	Inspect
ERROR	Note	Post	10/03/2021 22:29:26	Bad Request	Inspect
ERROR	Note	Post	10/03/2021 22:32:53	Bad Request	Inspect
INFO	Note	Get	10/03/2021 22:39:43	OK	Inspect
INFO	Note	Get	10/03/2021 22:44:39	OK	Inspect

You can view the details of a specific log, as well as any request or response objects by clicking the 'Inspect' button next to a log.



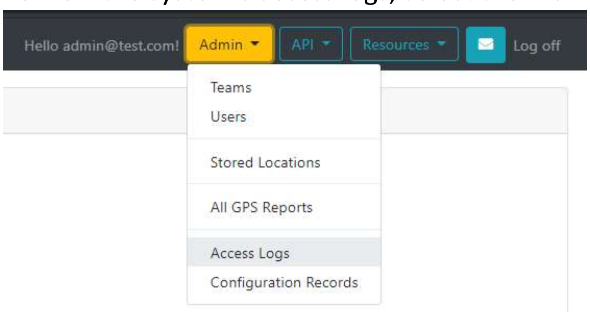
The request and response tabs may contain data if appropriate.

If nessecary, some logs (usually GPS Reports) will contain an 'Additional Fields' tab with extra data for debugging.

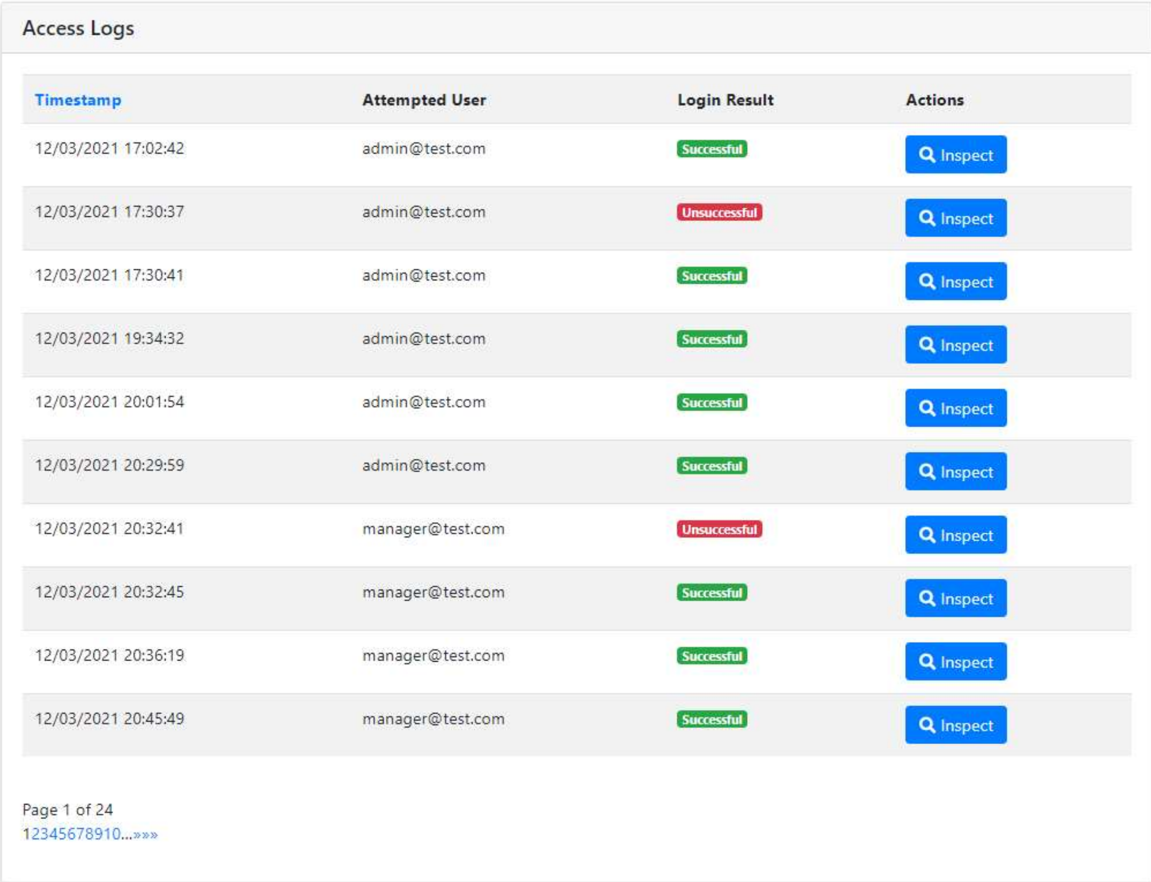
Note: This is usually to determine the distance of the nearest location for auto-linking.

Viewing Access Logs

To view the system's access logs, select the 'Admin' dropdown and click 'Access Logs'.



Similarly to API Logs, access logs are made everytime an individual attempts to access the system, and will record the status of that access.



Access Logs

Timestamp	Attempted User	Login Result	Actions
12/03/2021 17:02:42	admin@test.com	Successful	Inspect
12/03/2021 17:30:37	admin@test.com	Unsuccessful	Inspect
12/03/2021 17:30:41	admin@test.com	Successful	Inspect
12/03/2021 19:34:32	admin@test.com	Successful	Inspect
12/03/2021 20:01:54	admin@test.com	Successful	Inspect
12/03/2021 20:29:59	admin@test.com	Successful	Inspect
12/03/2021 20:32:41	manager@test.com	Unsuccessful	Inspect
12/03/2021 20:32:45	manager@test.com	Successful	Inspect
12/03/2021 20:36:19	manager@test.com	Successful	Inspect
12/03/2021 20:45:49	manager@test.com	Successful	Inspect

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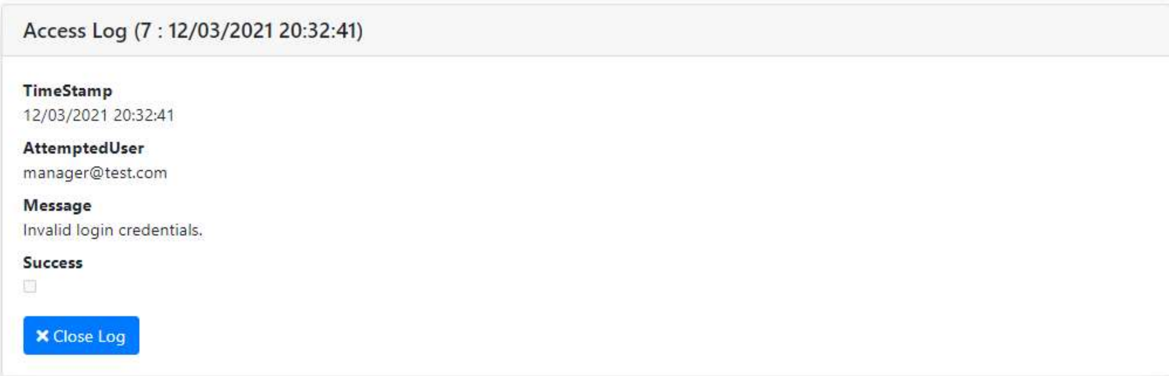
12345678910...»»»

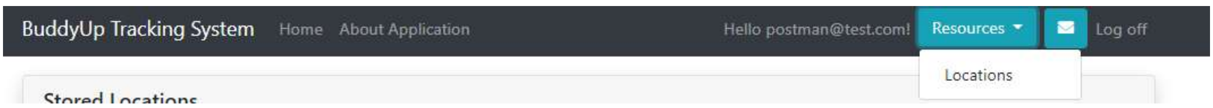
You can inspect a single log by pressing the 'Inspect' button. In the case of a failed attempt, it will display the failure reason.



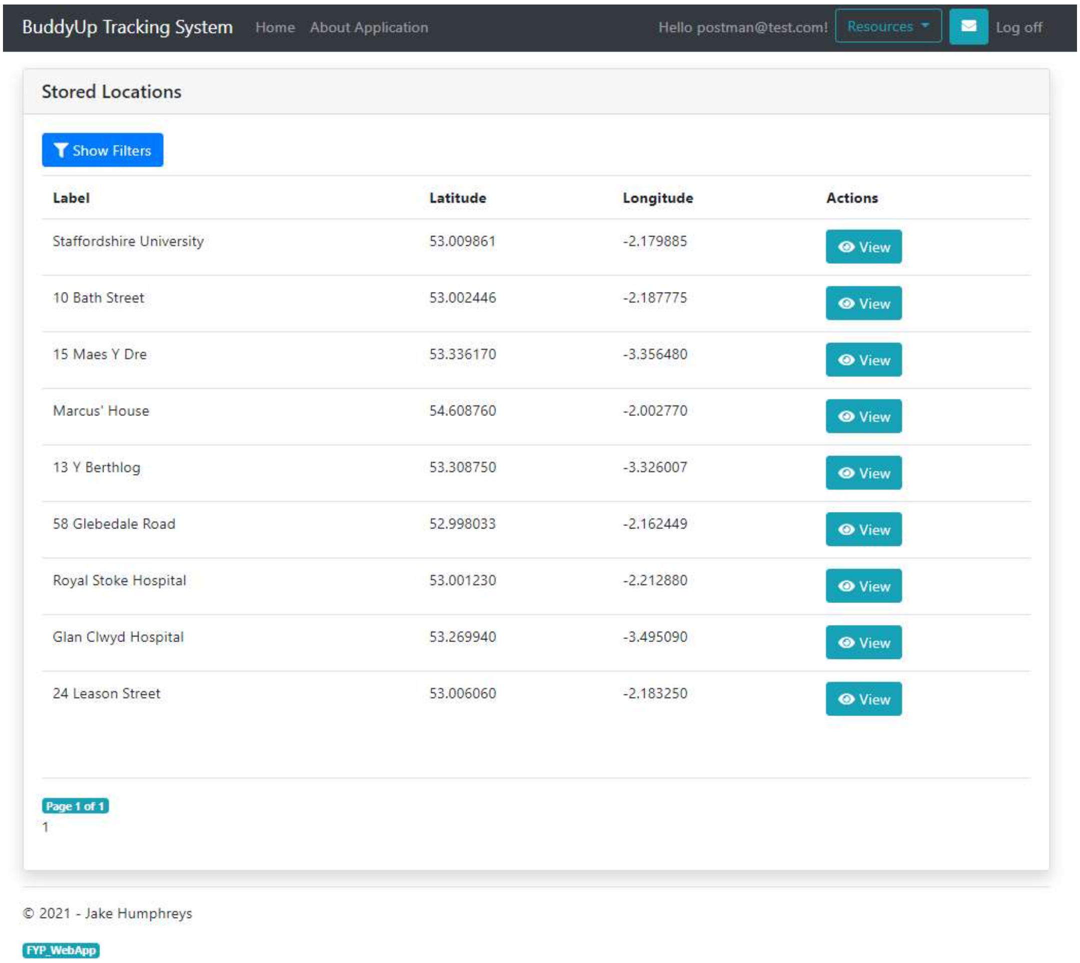
Locations

One of the primary features of this application is the ability to store locations for audit purposes, GPS linking and to collect notes based on a location that a user may submit.

To view all locations within the system, Select the 'Resources' dropdown at the top of the page and select 'Locations'

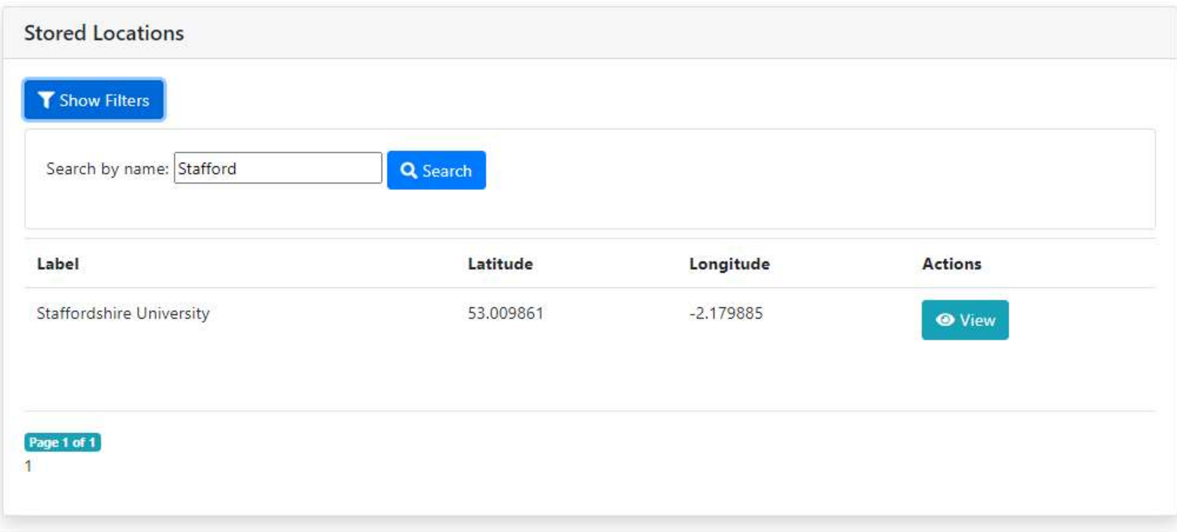


Once you have selected this option, you will be presented with the Stored Locations list.



Note: As this is a standard user facing list, it is paginated for convenience.

From this page you can select a specific location. You can also filter a location by an entire name or partial name. To do so, simply select the 'Show Filters' option. Enter your filter text and select 'Search'



Viewing a specific location

To view a specific location, Select the 'View' option next to its entry on the locations list. Upon doing so you will be presented with the details of that location, including Its location information, a visual map of the area, any notes present and if you are a manager or admin user, any location check-ins.

Location Details

Label
Staffordshire University

Latitude
53.009861

Longitude
-2.179885

Location Notes

1. this is a note for the university System Admin 02/10/1997 00:00:00
2. High traffic due to roadworks System Admin 25/03/2021 15:28:18

Add Note

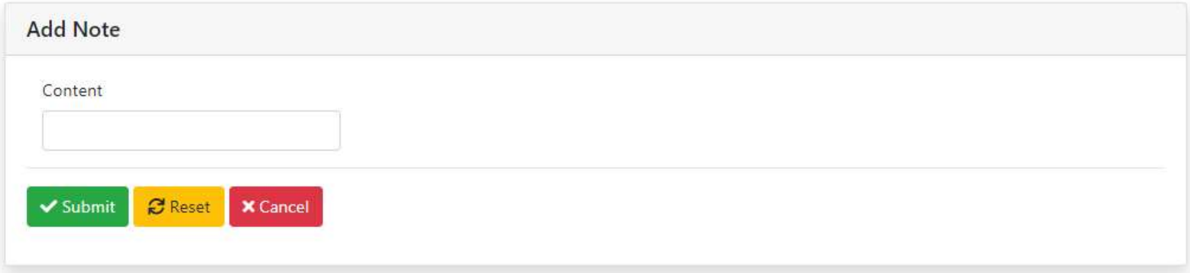
Actions

Back

Note: The only action available to a non-administrative user is 'Back'.

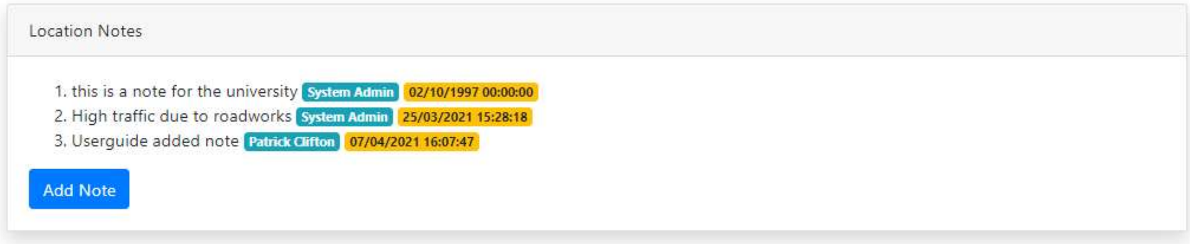
Adding a Note to a location

To add a note via the web application, simply click the 'Add Note' button on the Location details page. This will display the 'Add Note' page.



Enter the note content into the 'Content' field and select submit. To clear your entered text, press the 'Reset' button. And finally, if you wish to cancel and return to the location without submitting a note, press the 'Cancel' button.

After you press 'Submit', you will be returned to the appropriate location where you will find the note you have submitted and a label with your name and the date you did so.



Deleting a Note (Administrative User only)

To delete a note, simply select the red 'x' next to the note in the list on the Location details page.

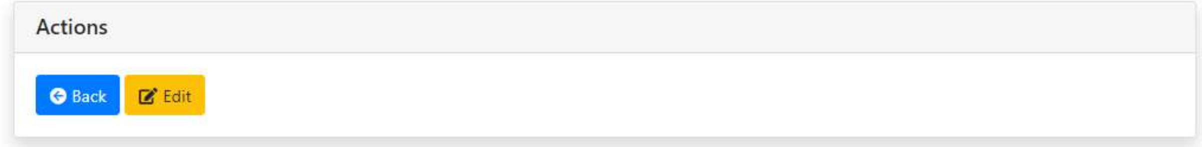
Note: This option is only visible to Administrative users.

Clicking this icon will display an important message and confirmation page prior to deleting the note.

Should you wish to proceed, press the 'Delete' button. Pressing the 'Cancel' button will return you to the Location details page without deleting the note.

Editing a Location (Administrative User only)

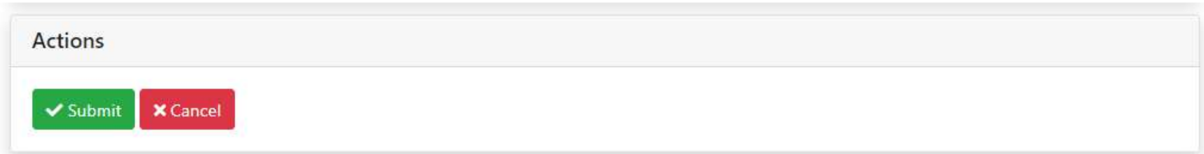
To edit a location, select the ‘Edit’ action available to Administrative Users within the ‘Actions’ section.



Selecting this option will present the ‘Edit’ Page. Wherein you can make changes to the location’s label, latitude and longitude.

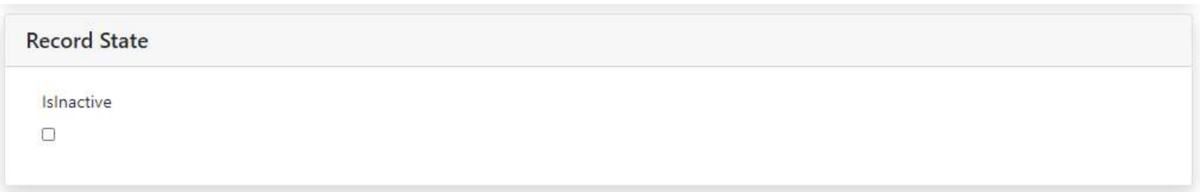
Note: Changing the latitude and longitude will create a mismatch between any linked locations, whilst this does not have any adverse effects, it is best practice to avoid large changes to the latitude and longitude.

You can save the record by pressing the ‘Submit’ button or cancel without making changes by pressing the ‘Cancel’ button.



Marking a Location as Inactive

Selecting the ‘IsInactive’ checkbox will mark the location as inactive and prevent it appearing in any lists throughout the application. This is to remove its use but preserve the records data.



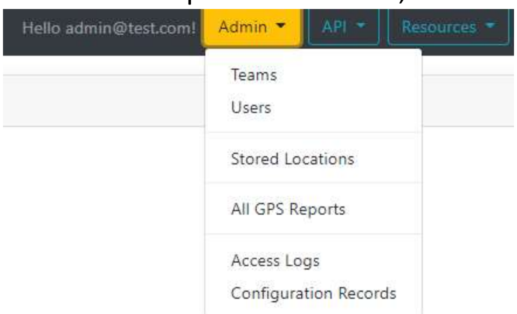
You can restore the record at any time by re-editing it and unchecking the field.

GPS Reports

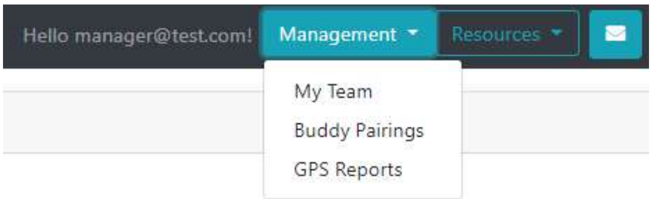
Whilst GPS Reports are not created via the web application, they can be viewed and linked to an existing or new location if required.

Note: Only an Admin can view all GPS Reports, managers can only view reports for their subordinates.

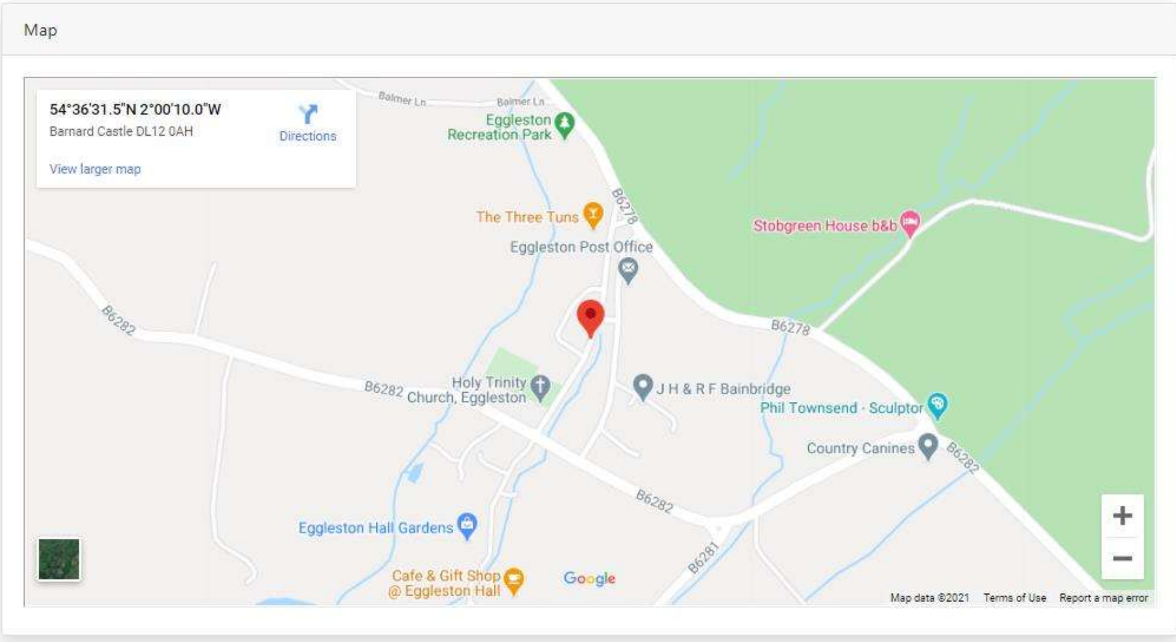
To view GPS Reports as an admin, select ‘Admin’ then ‘All GPS Reports’.



As a manager select 'Management' then 'GPS Reports'.

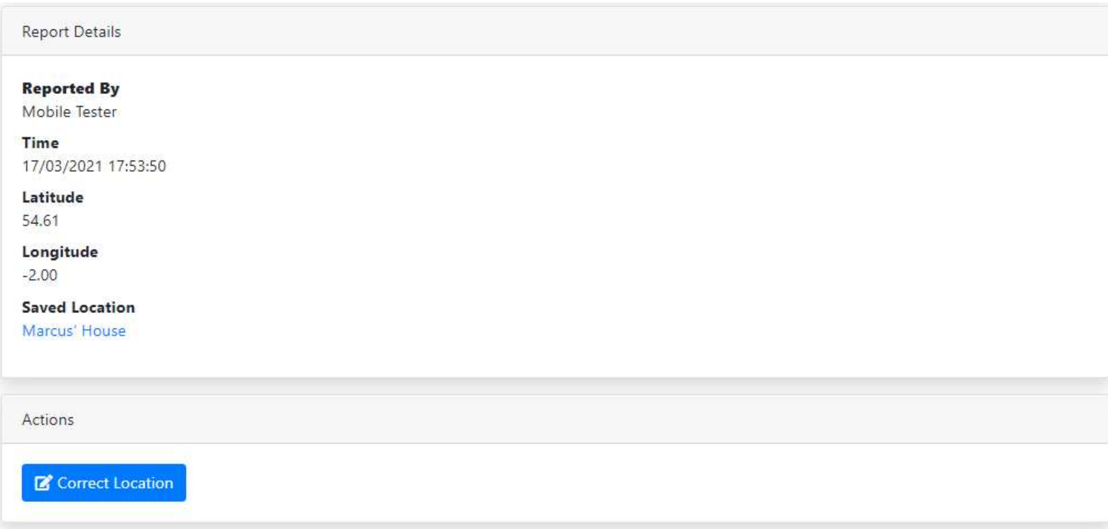


GPS Reports are the records created when a user has submitted their location via the mobile application. They contain the GPS position of their device. The web application utilises this information to draw their position on a map.

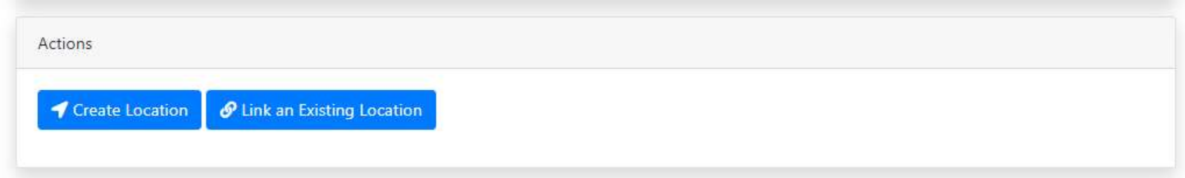


Report Linking

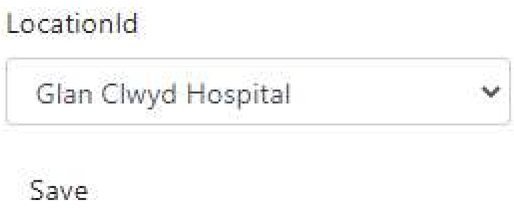
When a report is submitted, the system takes the configurable distance value from the **active configuration record** and checks within that radius to identify any locations to automatically link the report to, if none are found it remains unlinked and a manager will have to link it later. If a location was automatically linked, or linked in the past, the option to correct its location to another in the system will display.



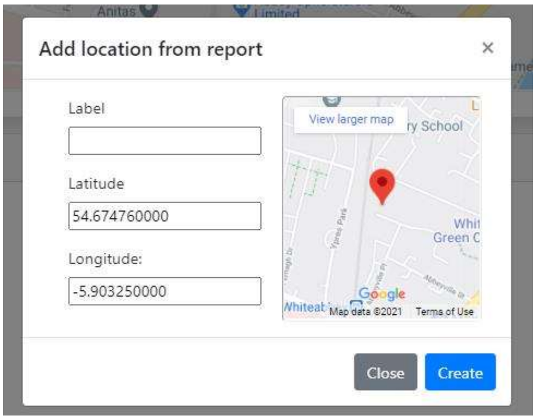
Else, an unlinked report will show a 'Link Location' button. Or a 'Create Location' button.



Linking a location will present a list of existing locations to link the report to.



Whereas creating a location will present the option to create an entirely new location from that report.



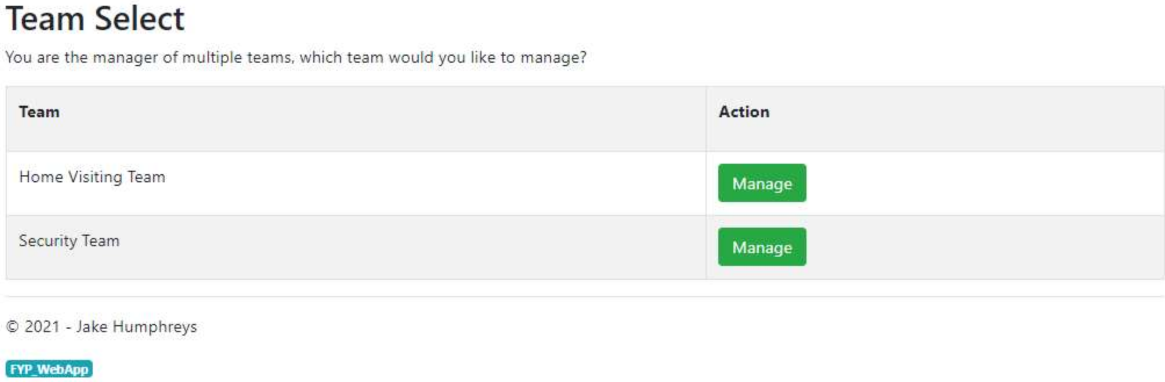
Note: This is beneficial when a location is not present after being reviewed by a manager by manually attending the property.

Important: It is important to establish that for security reasons, a location's ping cannot be edited in any way through the web interface. This is to ensure no location reports are tampered with.

Manager Dashboard

The manager dashboard provides an overview of a manager's team, this includes a map of any on-duty members locations, as well as any workflow elements they must perform such as linking locations or checking their team members have a buddy pairing when they are needed. To view the dashboard, Select 'Management' then 'My Team'.

It may be the case that a manager is responsible for multiple teams, in this instance a selection page will appear prompting the selection of a specific team to view.


Team Select

You are the manager of multiple teams, which team would you like to manage?

Team	Action
Home Visiting Team	Manage
Security Team	Manage

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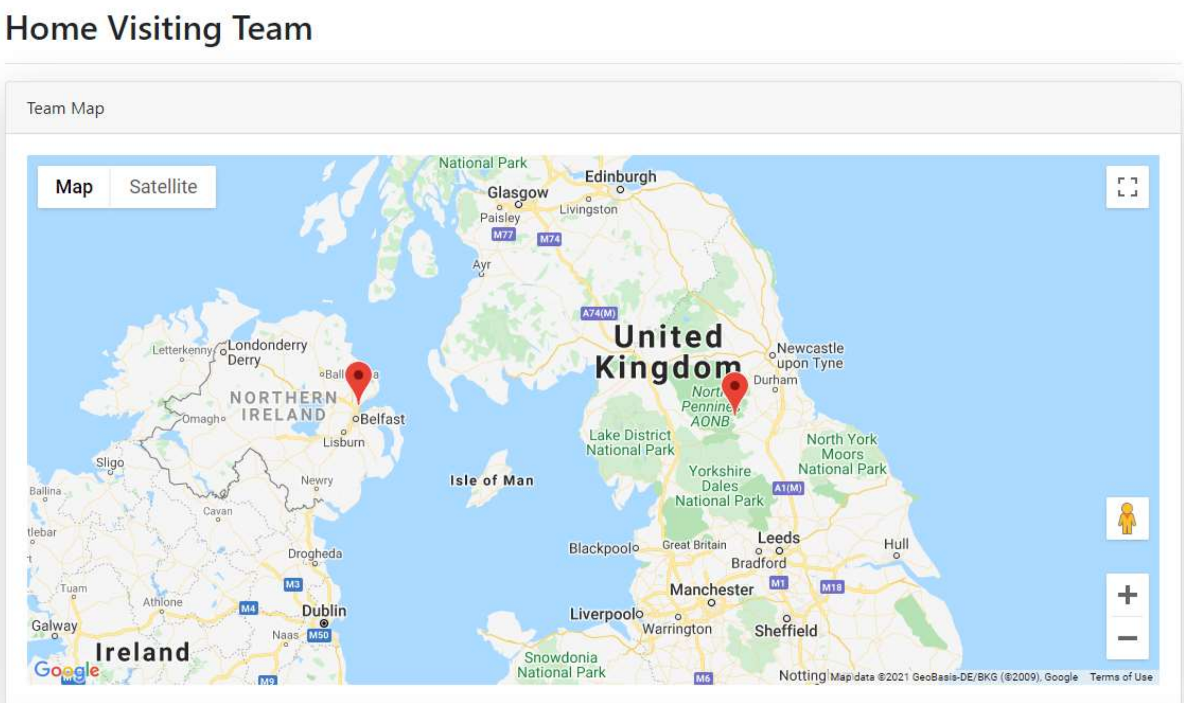
FYP_WebApp

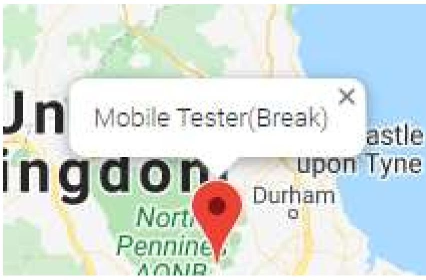
Selecting a team will bring you to the team dashboard.

Team Map

The Team Map will display when at least one of your subordinates are on duty. (This is to protect their privacy off duty).

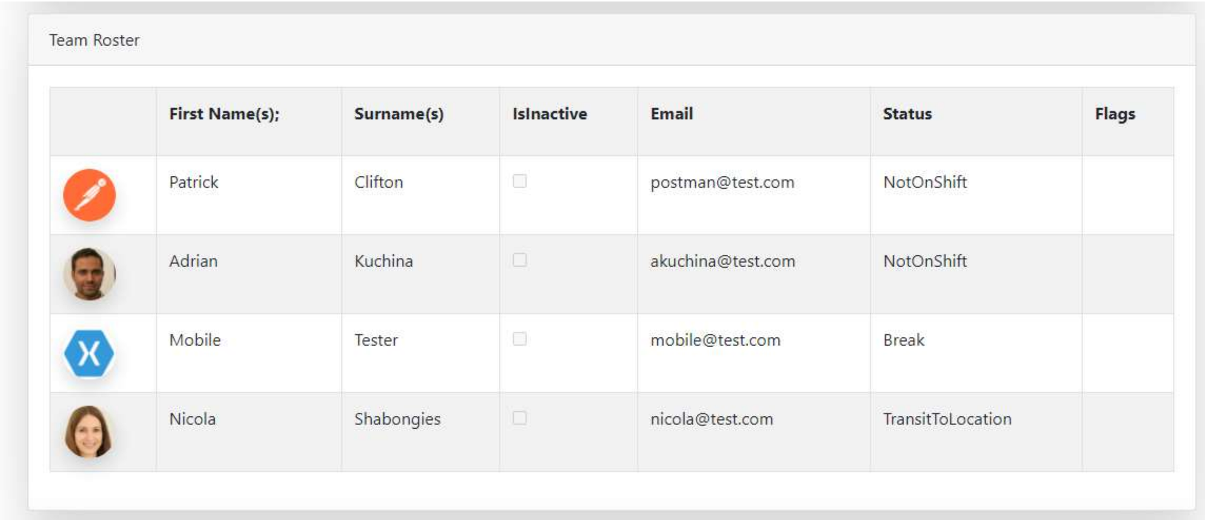


The Team Map shows the locations of all team members currently on duty, clicking a ping will show their name and status.



Team Roster

The Team roster represents all members within your team, as well as their status.

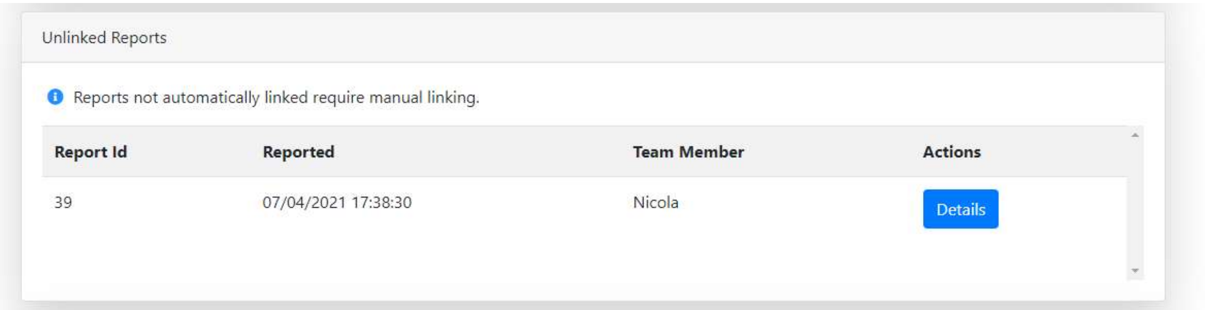


Team Roster

	First Name(s);	Surname(s)	IsInactive	Email	Status	Flags
	Patrick	Clifton	☐	postman@test.com	NotOnShift	
	Adrian	Kuchina	☐	akuchina@test.com	NotOnShift	
	Mobile	Tester	☐	mobile@test.com	Break	
	Nicola	Shabongies	☐	nicola@test.com	TransitToLocation	

Unlinked Reports

When a report is not automatically linked, it falls to that user's manager to manually link the report. All unlinked reports are displayed within the team dashboard.



Unlinked Reports

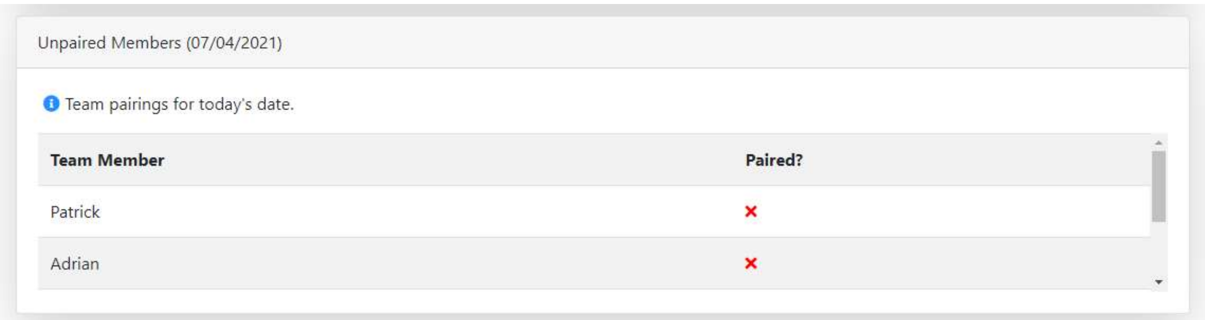
Reports not automatically linked require manual linking.

Report Id	Reported	Team Member	Actions
39	07/04/2021 17:38:30	Nicola	Details

Clicking the 'details' button will take you to that report where you can proceed to link it. (See GPS Reports section).

Unpaired Members

Members that do not have a pairing for the current day are displayed here.



Unpaired Members (07/04/2021)

Team pairings for today's date.

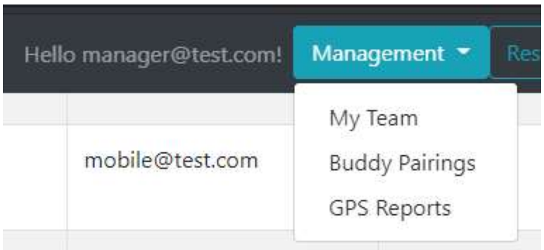
Team Member	Paired?
Patrick	✗
Adrian	✗

They will change to a green check when a pairing exists for that member.

Buddy Pairings

Buddy pairings allow users to check-in with their buddies using the mobile application. Your team dashboard will highlight members without a pairing for that day.

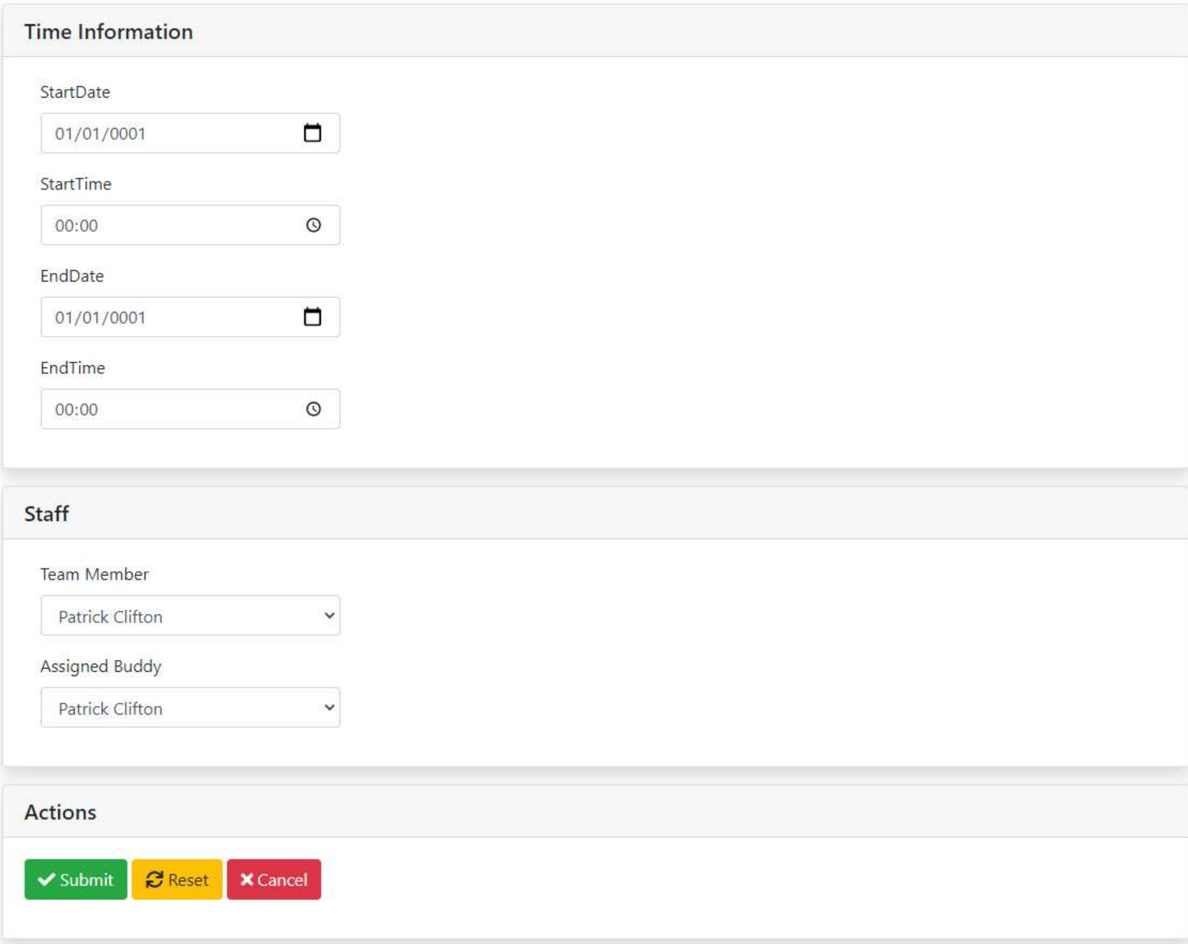
To view all buddy pairings for your subordinates, click 'Management' then 'Buddy Pairings'.



From this list you will be able to see the pairing of all members from all your teams. A Status indicator will determine the state of the pairing and has the following options:

- Expired
- Current
- Upcoming

To create a buddy pairing, select the 'Create' button, then fill out the appropriate information.



Note: You cannot pair a user to themselves.