Proximity Encryption Suite

User Guide

By Harry Clewlow

Contents

1.0 Overview

This user guide will explain and demonstrate how to use the application's features such as logging into the applications using your account or device, encryption and decryption, file, folder, device and account management features, how to use the companion application, troubleshooting any problems that might occur.

2.0 Using the Application (PC)

The following section will guide you through pairing your device, launching the application and how to login to the application with your account credentials or an Android device with the companion application installed on it.

2.1 Launching Application

To launch the PC application you will need to have the latest version of Java installed on the system this can be downloaded from https://java.com/download. If you wish to view the source code, then you will need to have the latest version of Netbeans installed, which can be downloaded from https://netbeans.org/downloads/. You will also need to install MySQL due to this build having a local database this can be downloaded from http://dev.mysql.com/downloads/.

Once you have downloaded the required programs, you will need to insert the CD that came attached to the report containing the software package locate in the folder "Final-Year-Project-C012952A" shown below on the left, then navigate to the "Proximity_Suite_Project" folder for the PC application shown below on the right.

<p style="text-align:center">Figure 1 Folder navigation</p>
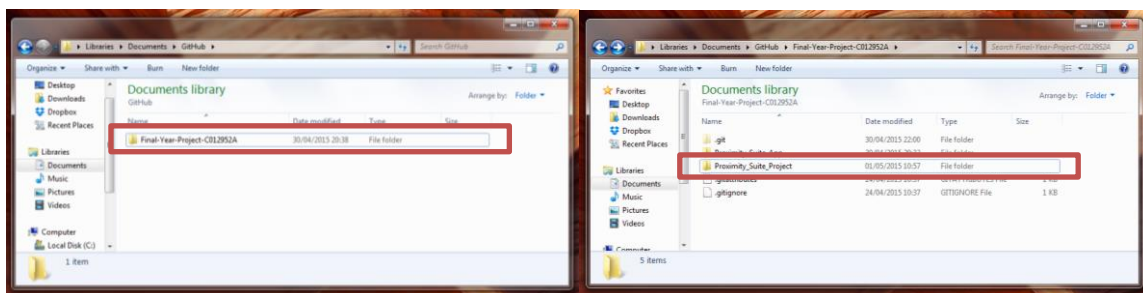
You will then need to navigate to the "Proximity" folder shown below on the left, then to the "Dist" folder this will open the final folder where the launch application is held. To launch the application you will need to click the file called "Proximity" as shown below on the right.

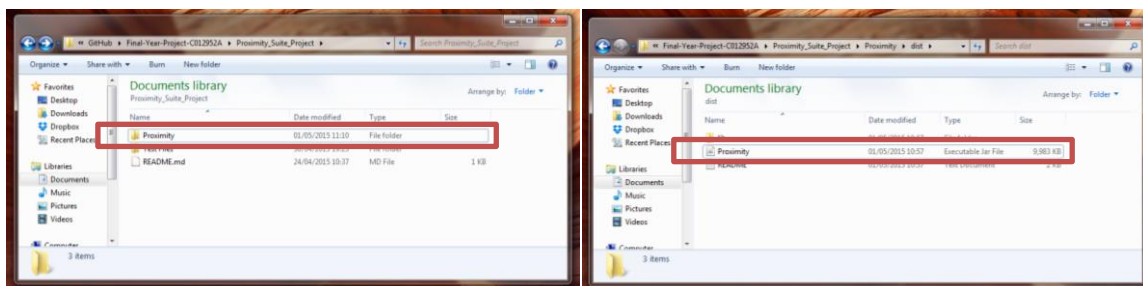<p style="text-align:center">Figure 2 Folder navigation</p>

2.2 Account Login

If you wish to login to the application using your account credentials, when you load the application you will be greeted with the account login window as shown below. All you need to do is enter your account username and password and press the login button, be aware if you enter your username or password wrong several times then you will be locked out the application for 15 minutes.

Figure 3 The account login window

2.3 Device Login

If you wish to login to the application using your registered Android device when you load the application you will be greeted with the account login window and will have to change it to the device login window to do this, press the "Click Here To Login Using A Bluetooth Device" text as shown below on the left. When the window shown on the right appears you have to click the scan button, wait for your device to be found and then enter your password and press the login button, be aware if you select the wrong device or enter your password wrong several times, then you will be locked out the application for 15 minutes, also when you login with your device it will automatically decrypt your files.

Figure 4 The device login window

2.4 Troubleshooting

If you experience issues logging in using your account credentials, then you can use the "Recover Account" button to change your credentials and login to the application. if you are having issues using the device login then please make sure your device is paired with your PC and that the PC's

Bluetooth is enabled, due to the API's used in the software the scanning and connecting to mobile devices can be slow so please wait for the application to finish searching it may take up to 40 seconds for the device login to finish, also if you have more than 1000 files attached to an account it will take some time to load theses when you login, if the issues persist please contact the support team using social media in section **9.3**.

Example login windows are shown below, some features are disabled when you login using a device because it was designed to be used when you are one the go out in public and just want to view the files that are connected to your account.
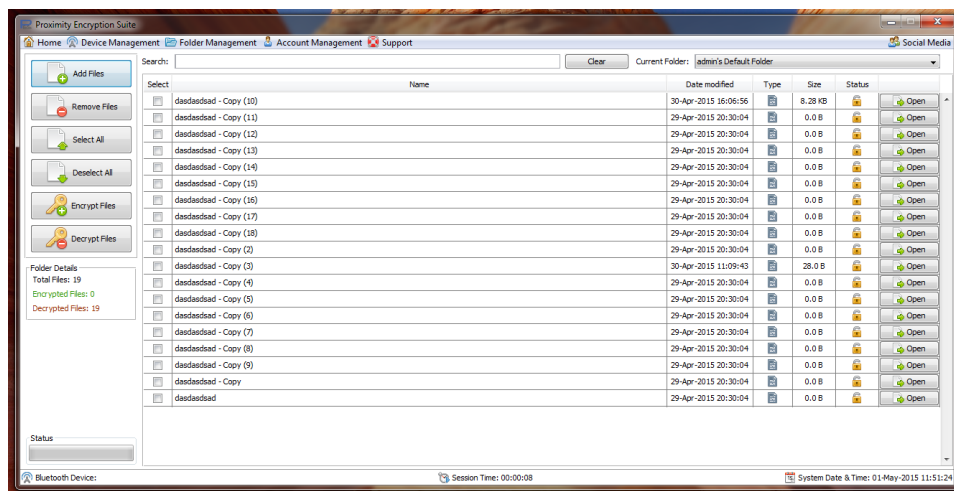
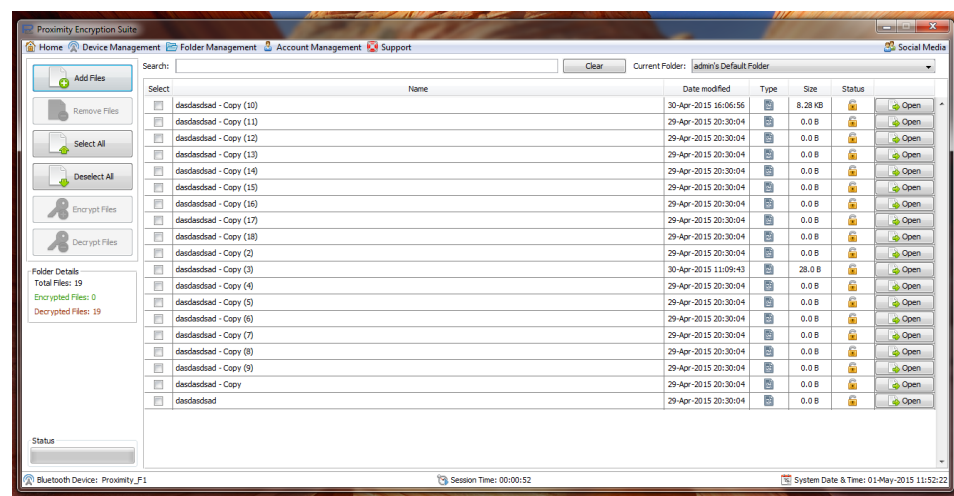

Figure 5 The main window when logging in with account

Figure 6 The main window when logging in with a device

3.0 Using the Application (Android)

The following section will guide you through pairing your device, launching the application and how to enable and disable the detection of your device.

3.1 Launching Application

After you have downloaded the application from the Google Play Store you will have to navigate to the Apps section on your Android device as shown below on the right. Once you have navigated to the Apps section look for an application as shown below on the left, it should read Proximity Suite as the application name.
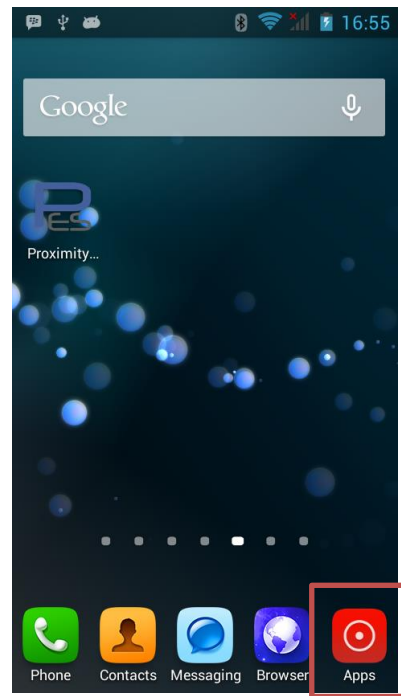
Figure 7 (Left) Proximity Suite Application Icon (Right) Navigate To Apps

3.2 Enabling & Disabling Detection

Once you have launched the application you will be greeted with the screen shown below on the left, to allow you to login into the PC application you will need to press the button called "Enable Proximity Detection", this will enable the Bluetooth on your device and make your device visible to the PC application. When you are finished using the application and want to disconnect your device using the Android application you will need to press the button called "Disable Proximity Detection" shown on the right below, this will disable the Bluetooth on your device and close the application.

Figure 8 (Left) Enable Proximity Detection Button (Right) Disable Proximity Detection Button

If you experience any issues using the application such as black screens or freezes then please restart your device, reinstall the application and switch the devices, Bluetooth on or off, if the problem continues please contact the support team using social media in section 9.3.

3.3 Troubleshooting

In order to use the application you will first need to pair your Android device with your PC before you can login to the PC application using your device, to do this you will need to enable the devices Bluetooth, this can be done by navigating to the setting section shown below on the left, when you have done this locate the Bluetooth menu shown below on the right.
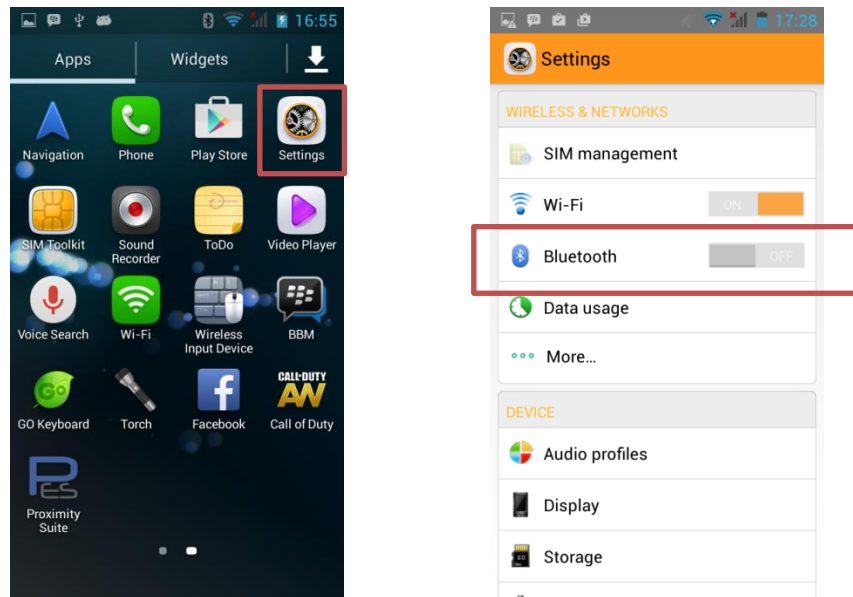

Figure 9(Left) Settings section location (Right) Bluetooth menu location

Once in the Bluetooth menu, you will need to turn the devices, Bluetooth on if it isn't already, this can be done by swiping the toggle button as shown below on the left, when the Bluetooth has been enabled, you will need to press the location that says your device's name shown below on the right, this will start searching for nearby devices that your phone can pair with, once your PC appears in the list press its its as shown below on the right.
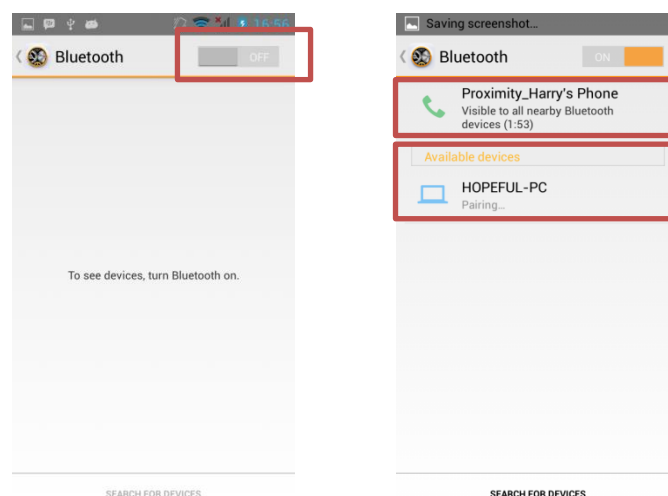

Figure 10 (Left) Enable devices Bluetooth (Right) Search for nearby devices and selecting a device

When you have pressed the device you want to pair the window shown below on the left will appear, you will now need to access your PC, the following screen should have appeared as shown below on the right, once you have checked the identification numbers on both devices and they match you can then press "Pair" on the Android device, then press "Next" on the PC and follow the instruction given, depending which operating system you have installed.
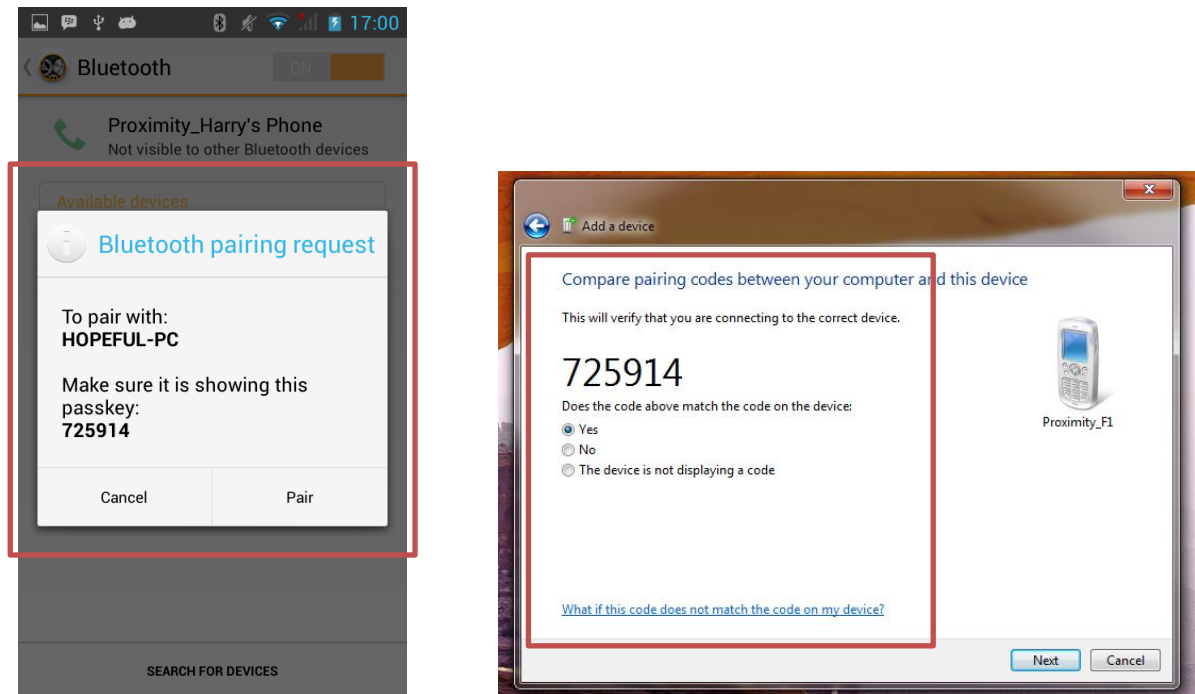

Figure 11 (Left) Pairing screen Android (Right) Pairing Screen PC

Once you have paired the devices the screen shown below will appear on the Android device, now you are ready to login to the application using the device and companion application.
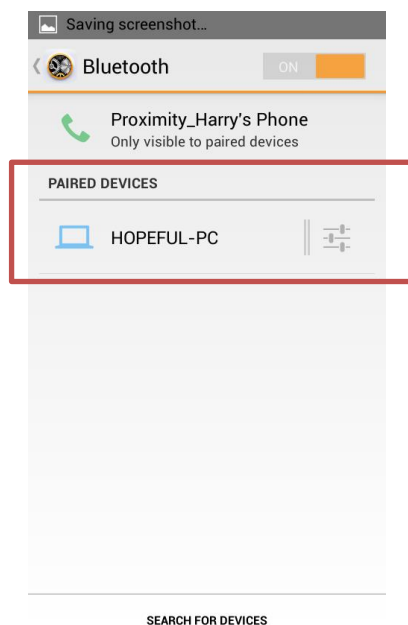

Figure 12 Bluetooth screen after pairing

4.0 File Management

The following section will guide you through adding files, remove files, selecting files, deselecting files, encrypting and decrypting files using the Proximity Encryption Suite.

        4.1 Adding Files

If you want to add files to your account you first need to login to the application, once you have logged in you when need to press the "Add Files" button shown below on the left. It will open the window shown below on the right, where you can select which folder you wish to add the files into or create a new one, you can also select if you want to add a file, folder, drive or an external device's files, you can remove any or all the files that you have added to the list of files to add by using the "Remove" or "Clear" buttons.
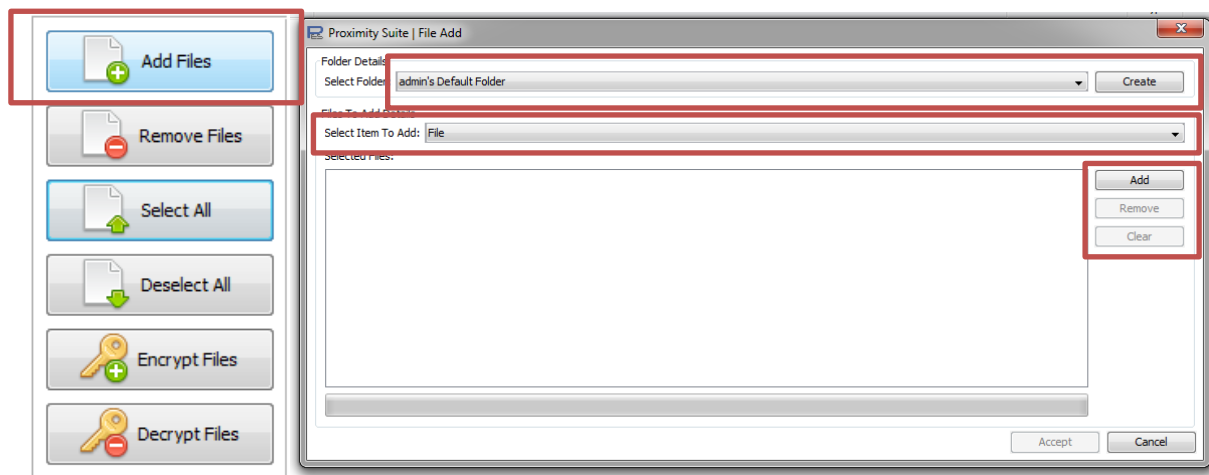

Figure 13 (Left) Add files button (Right) Add files window

Once you have decided what folder you want to add the files to and what method you are using to add the files you need to click the add button that will open a window which will allow you to select the files you wish to add as shown below on the left, once you have selected the files, press the "Add" button and they will be added the a previous window as shown below on the right.
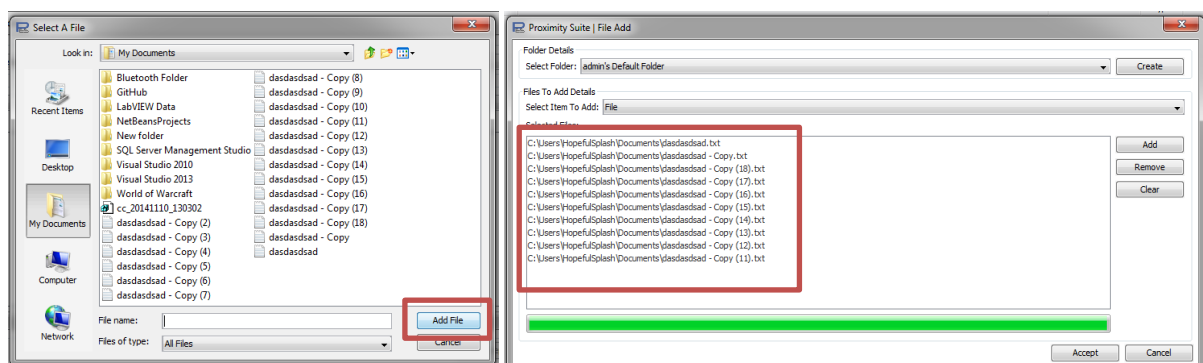

Figure 14 (Left) Select files window (Right) Updated add files window

You can then add more files by repeating the previous steps, if you are finished, then press the "Accept" button and the files will be added to the folder, if there are any duplicate files that were already present in the folder the window shown below on the left will appear. Once you have completed adding files the main window will be updated as shown below on the right.
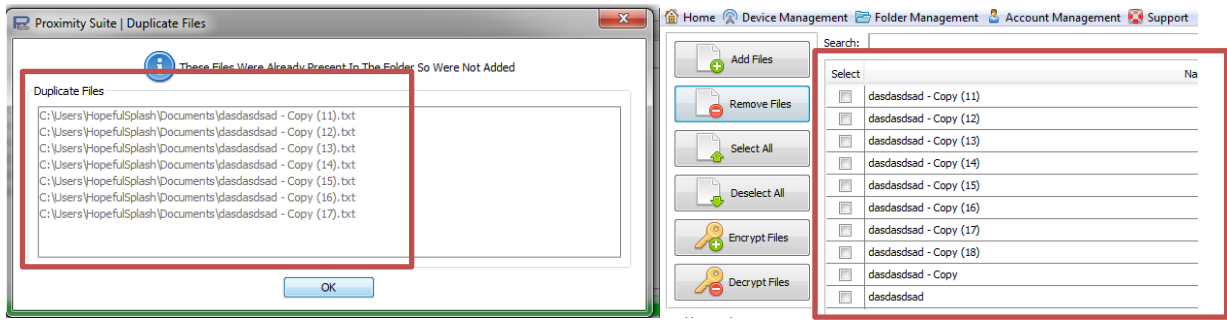
Figure 15 (Left) Duplicate files window (Right) Updated main window

4.2 Removing Files

If you want to remove files from your account you first need to login to the application, once you have logged in you when need to press the "Remove Files" button shown below on the left. If you have not selected any files it will show you a dialog notifying you, but if you have the window shown below on the right will appear, where you can select if you want to remove the files from the current folder or from the whole account, also if the files being removed should be decrypted.
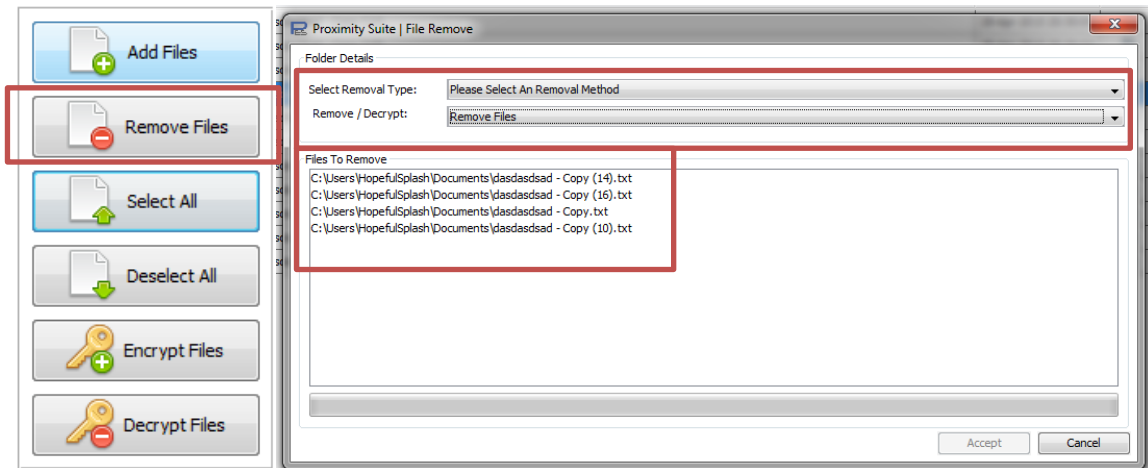

Figure 16 (Left) Remove files button (Right) Remove files window

Once you have selected if you want to remove the files from the account or the current folder and if you want to decrypt them before they are removed from the application you will then be able to press the "Accept" button and the files will be removed from the Application, this will update the main window as shown below.
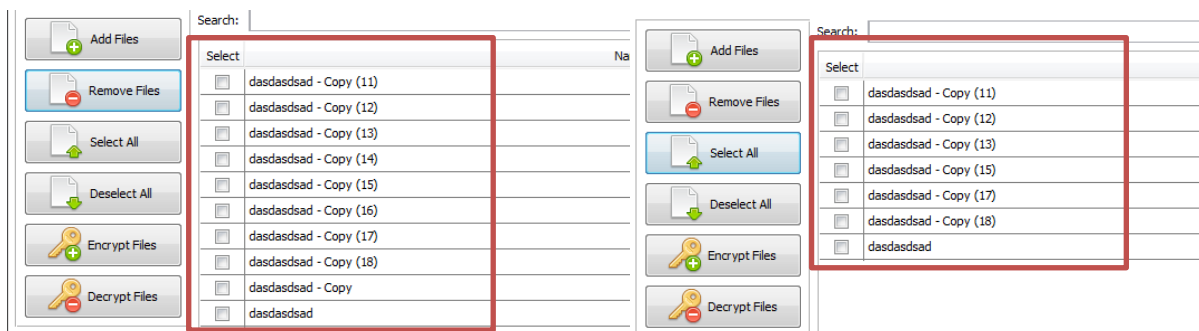

Figure 17(Left) Before removal (Right) After removal

4.3 Encrypting & Decrypting Files

If you want to encrypt your files you will have to select the files you wish to encrypt and press the "Encrypt Files" button as shown below on the left, make sure that they are not encrypted already if they are, you will be notified and ask if you want to continue, this will ignore the already encrypted files and open the window shown below on the right.
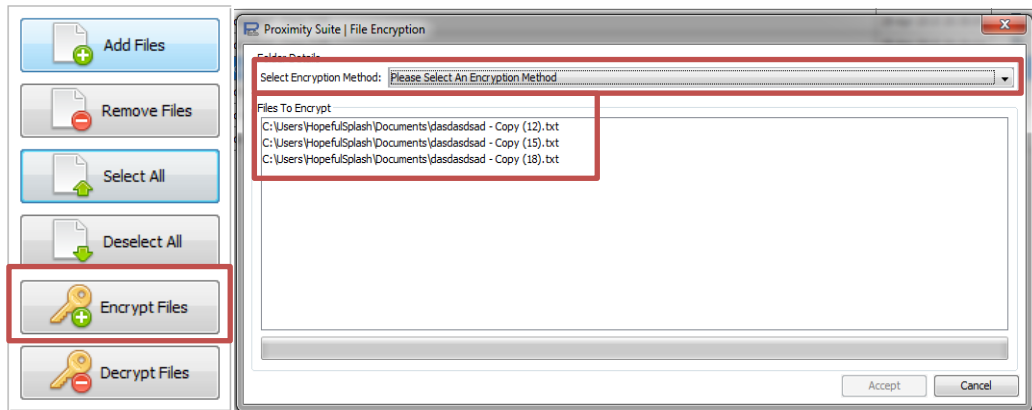

Figure 18 (Left) Encrypt files button (Right) Encrypt files window

Once the window has appear you can see which files you have selected to encrypt and select between the different encryption standards AES, DES, Triple DES, if you are unfamiliar with encryption standard we recommend that you use AES or Triple DES encryption. Once you have selected encryption type you will be able to press the "Accept" button and the files will be encrypted, after this the main window will be updated and the files that have been encrypted will have the "Status" column icon changed from an unlocked padlock to a locked padlock and if you hover over it you can see it has the tool tips to encrypt as shown below.

Figure 19 Encrypted files example

If you want to decrypt your files you will have to select the files you wish to decrypt and press the "Decrypt Files" button shown below on the left, make sure that they are not decrypted already if they are, you will be notified and ask if you want to continue, this will ignore the already decrypted files and open the window shown below on the right.
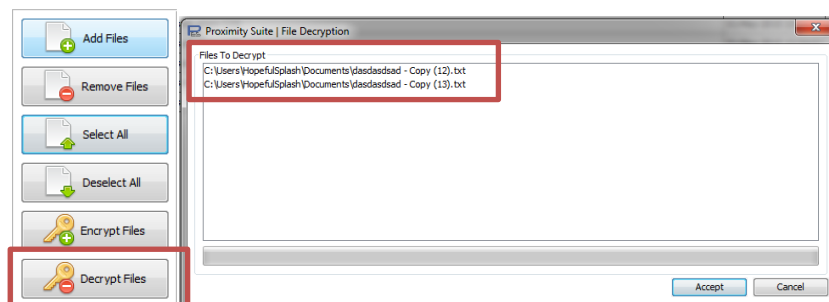

Figure 20 (Left) Decrypt button (Right) Decrypt window

Once you have checked the files selected to be decrypted you can press the "Accept" button and it will decrypt the files and update the main window by changing the decrypted files "Status" column icon from a locked padlock to an unlocked padlock and if you hover over it you can see the tool tips have changed to not encrypted as shown below, you will now be able to open your files and used them with the relevant software.

Figure 21 Decrypted files example

4.4 Selecting & Deselecting Files

In order to remove, encrypt and decrypt files you will have to select them from the table on the main window to do this you can use several methods, the first is you can use the "Select All" button that will select all the files in that current folder as shown below on, you can also use the "Deselect All" button which will deselect all the files in the current folder.
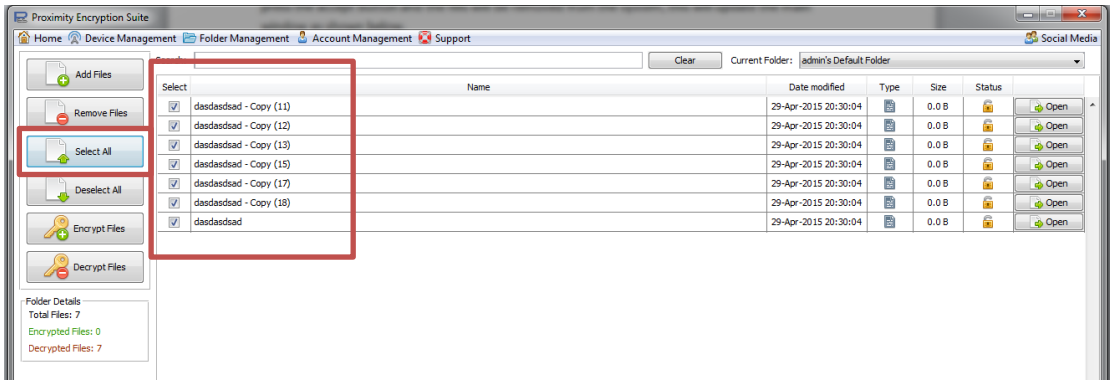

Figure 22 Using the "Select All" button

You can also select files individually by click the box in the table's column called "Select" if the box has a tick in it, then you have selected that file, you can click the box again to remove the tick meaning it has been deselected but be careful because when you are clicking to select the file you could open the file if you click rapidly. An example of selecting individual files is shown below.
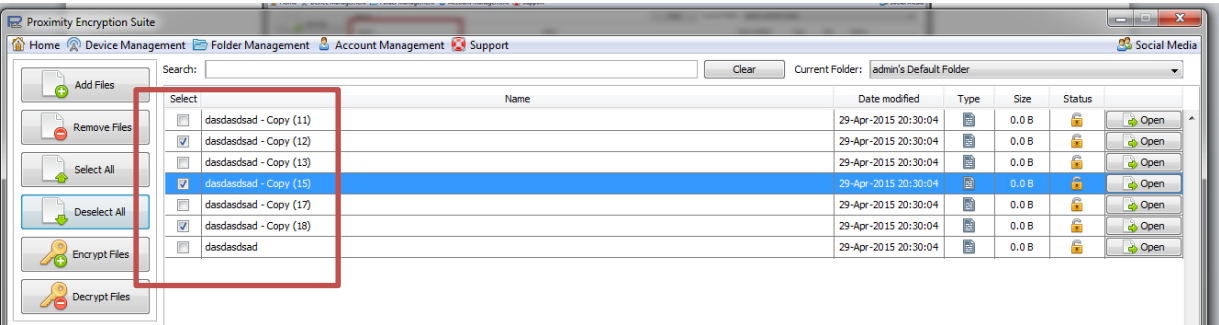

Figure 23 Individual file selection example

Also, if you want to open a file you can either use the "Open" button on the far right of the table or you can double click the file name which will open the file, be aware that you cannot open encrypted files they will be seen as unreadable by the programs that usually open them, the "Open" button location is shown below.

Figure 24 Open file button from main table

5.0 Folder Management

The following section will guide you through viewing the current folder details, creating a new folder, deleting a folder and modifying folder information.

5.1 Current Folder

If you want to check which folder you are currently in you can navigate to the "Folder Management" menu and you will see the name of the folder you are currently in as shown below on the left if you click this item you will open the current folder window which will show you all the details about the folder such as its name, type, description and when it was created as shown below on the right.
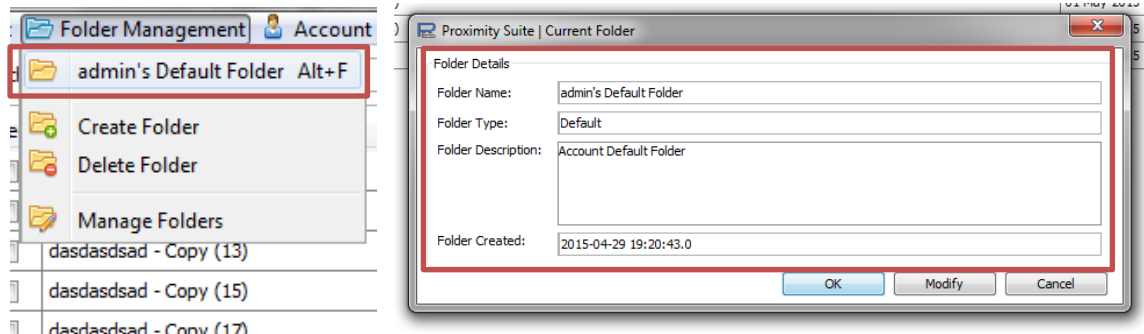

Figure 25 (Left) Current folder menu (Right) Current folder window

5.2 Creating Folder

If you want to create a new folder the you will have to navigate to the "Folder Management" menu and select the "Create Folder" item as shown below on the left, this will open a window to enter your folder details in as shown below on the right.
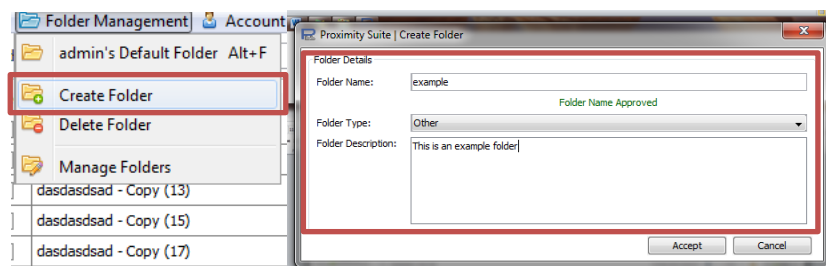

Figure 26 (Left) Create folder menu (Right) Create folder window

Once you have entered all the information and the folder name is not already taken you can click the "Accept" button and your folder will be created, a message will appear confirming that it have been created as shown below, you can now select the folder in the main window.
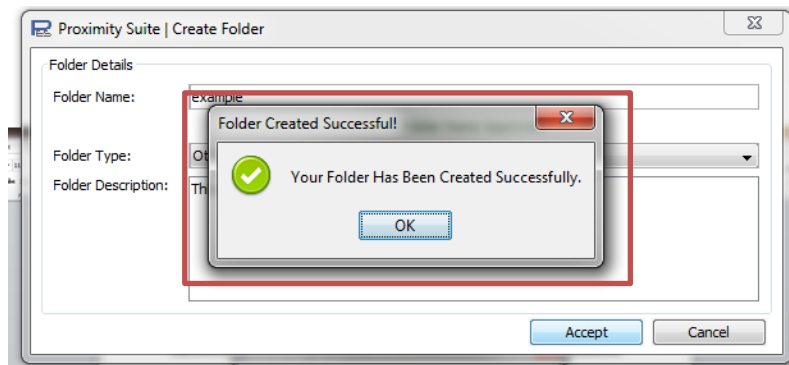

Figure 27 Confirmation of folder creation

5.3 Deleting Folder

If you want to delete a folder you will have to navigate to the "Folder Management" menu and then select the "Delete Folder" item as shown below on the left, this will open a window to select a folder you wish to delete as shown below on the right, you cannot delete your default folder from the account so if you want to remove all the files from the default folder please do this manually.
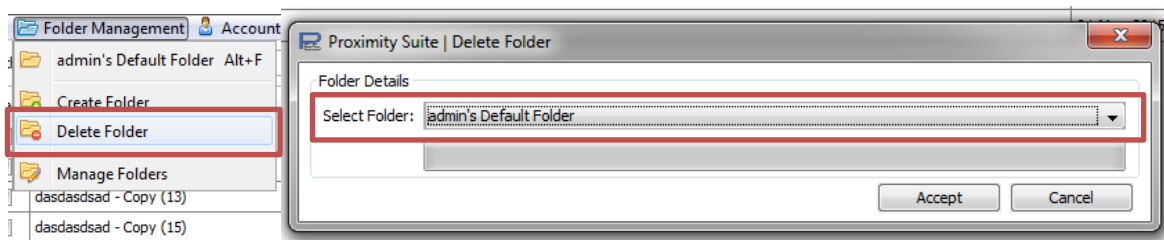

Figure 28 (Left) Delete folder menu (Right) Delete folder window

Once you have selected a folder to delete and press the "Accept" button your folder will be deleted and a confirmation message will appear as shown below, the main window will be updated and your folder will not appear in the drop down list.
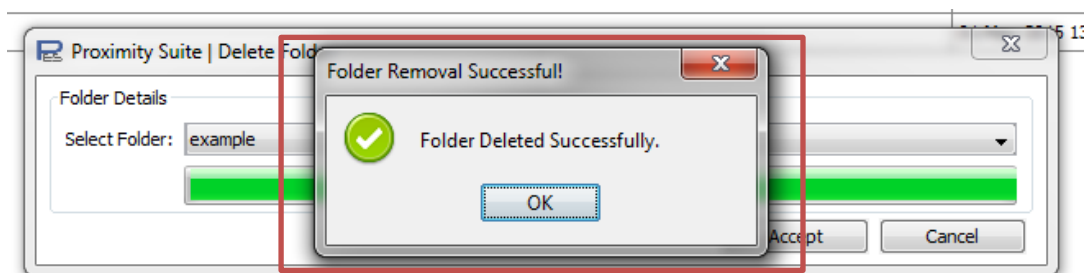

Figure 29 Confirmation of folder deletion

5.4 Modifying Folder

If you want to change a folder's information as such, as its name, type or description you will need to navigate to the "Folder Management" menu and select the "Manage Folder" item as shown below on the left, this will open a window that will allow you to change the folders information as shown below on the right.
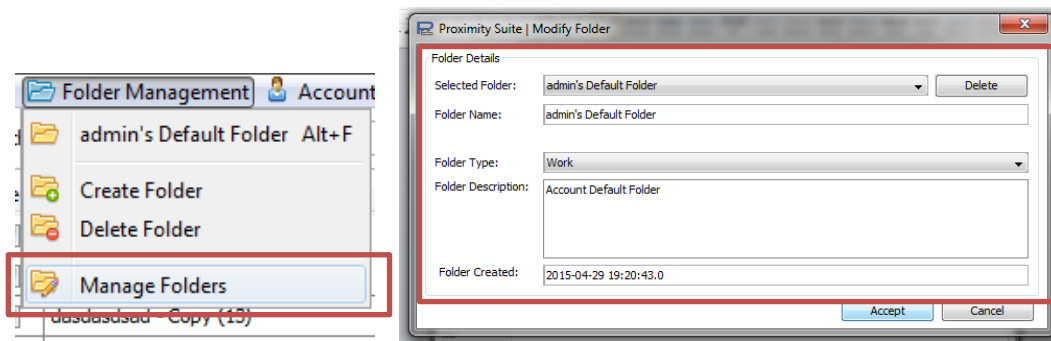
Figure 30 (Left) Manage folder menu (Right) Manage folder window

Once you have altered the folder information and pressed the "Accept" button a message will appear confirming that the information has been saved as shown below, this will update the main window.
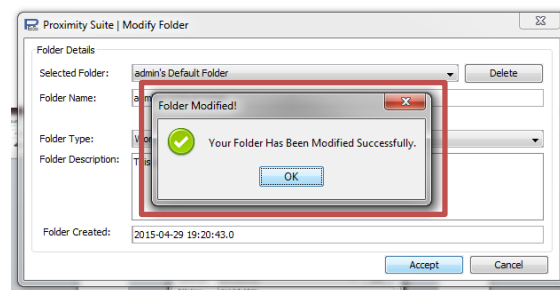

Figure 31 Confirmation of folder modification

6.0 Device Management

The following section will guide you through viewing the current device connected to the system, adding a new device, deleting a device from the system and modifying device information.

6.1 Current Device

If you want to view the current device's information after you have logged in with the device you will need to navigate to the "Device Management" menu where you will see the device name as shown below on the left, once you have clicked the item a window will appear showing the device information as shown below on the right.
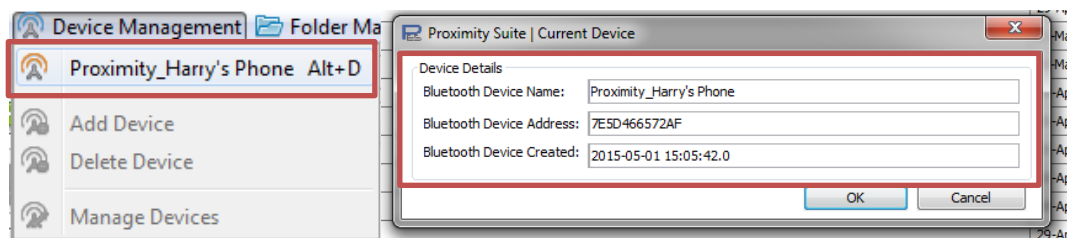

Figure 32 (Left) Current device menu (Right) Current device window

6.2 Adding Device

If you want to add a device to your account so you can use it to login, you will have to navigate to the "Device Management" menu as shown on the left, and click the "Add Device" item which will open a window that will allow you to add a device to your account, to do this you will need to press the scan button located at the bottom left of the window, when the scanning has finished you can

select a device from the list, and the details will be displayed, then you must enter a device password as shown below on the right, the password will be used to verify that you are the owner of the device and help secure your account, you will then be able to click the "Accept" button and the device will be added to your account and you will not be able to use it to login to the application.
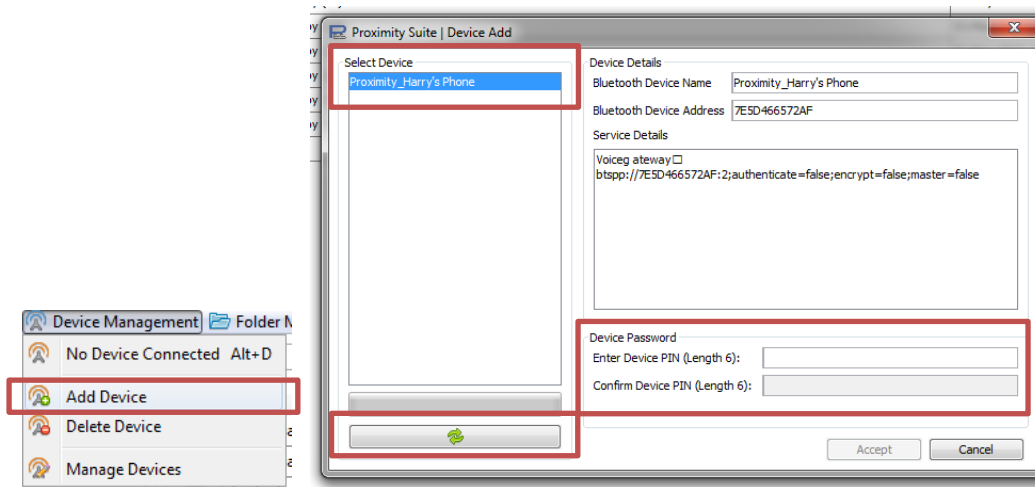

Figure 33 (Left) Add device menu (Right) Add device window

Once the device has been linked to your account a message will appear to confirm that you will be able to use it to login into the application in the future as shown below.
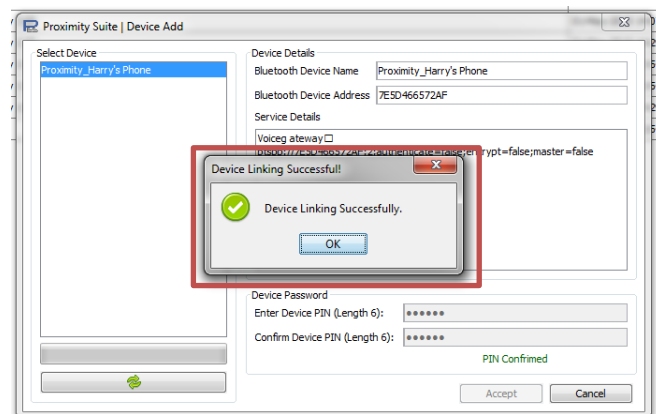

Figure 34 Confirmation of device linking

6.3 Deleting Device

If you want to delete a device from your account, then you have to navigate to the "Device Management" menu and select the "Delete Device" item as shown below on the left, this will open a window that will allow you to select a device to delete as shown below on the right.
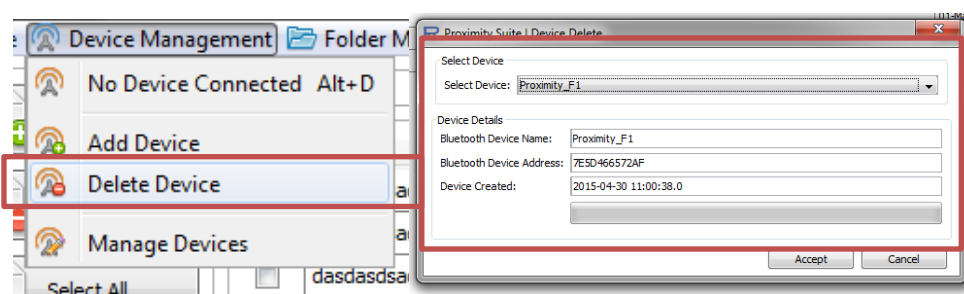

Figure 35 (Left) Delete device menu (Right) Delete device window

Once you have selected the device you want to delete and have pressed the "Accept" button a confirmation message will appear confirming that the device has been removed and you will no longer be able to use the device to login into your account as shown below.
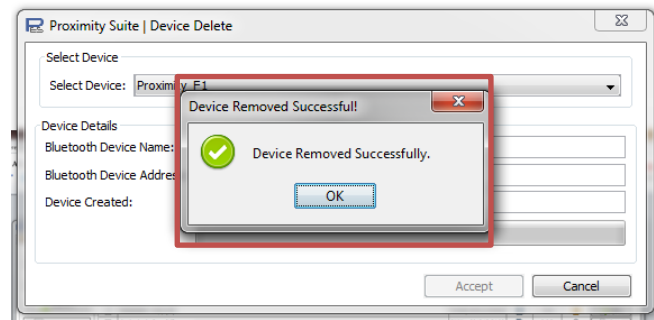

Figure 36 Confirmation of device removal

6.4 Modifying Device

If you want to modify the devices you have connected to your account, you will need to navigate to the "Device Management" menu and select the "Manage Device" item as shown below on the left, this will open a window where you can add, delete or change a device's information as shown below on the right.
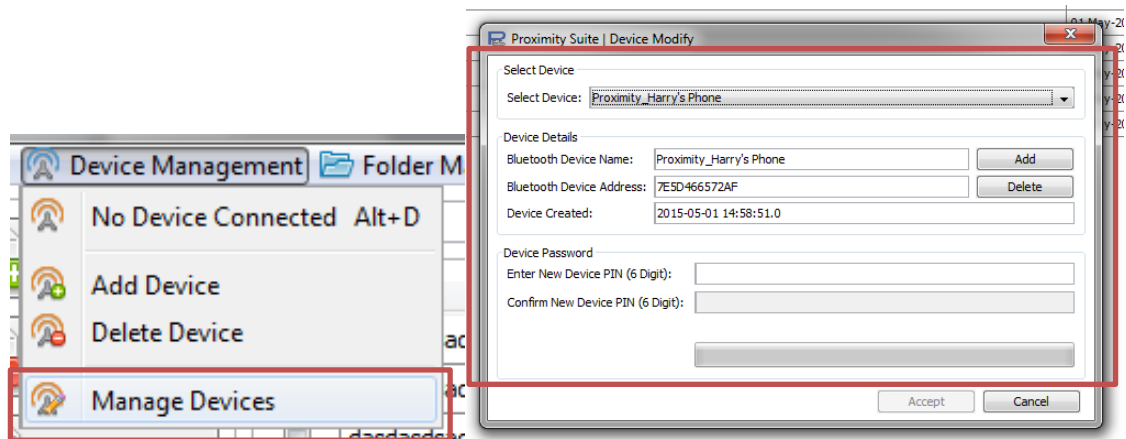

Figure 37 (Left) Device modify menu (Right) Device modify window

Once you have selected the device you want to modify, altered its information and have pressed the "Accept" button a confirmation message will appear confirming that the device has been modified and you can use the device to login into your account as shown below.
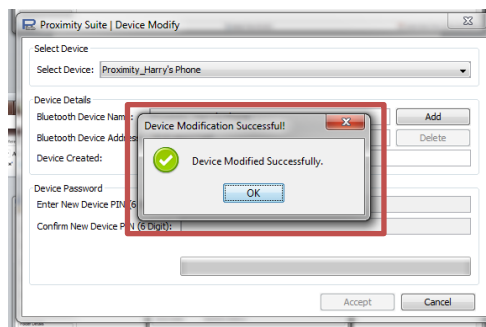

Figure 38 Confirmation of device modification

7.0 Account Management

The following section will guide you through viewing account details, creating a new account, deleting an account and modifying account information.

7.1 Current Account

If you want to view the current account details you will have to navigate to the "Account Management" menu where you will see the name of your account as shown below on the left, when you click this item you will open a window that will display all the account information as shown below on the right.
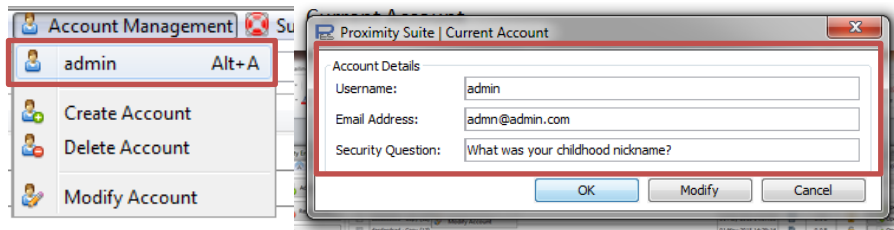

Figure 39 (Left) Current account menu (Right) Current account window

7.2 Creating Account

If you want to create an account, you will need to start the application, if you do not know how to do this, please visit section 2.1 of this user guide, once you have started the application, you will need to click the "Create Account" button as shown below on the left, this will open a window that will allow you to enter details to create an account as shown below on the right.
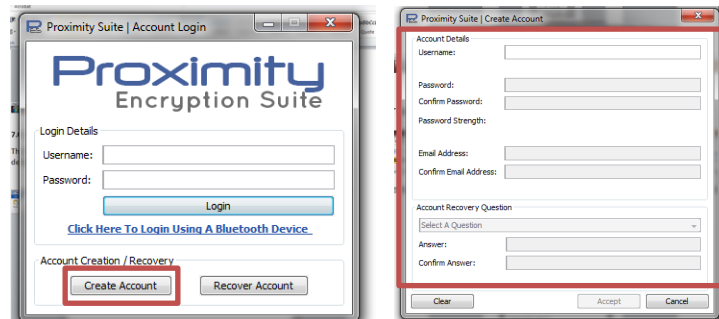

Figure 40 (Left) Create account button (Right) Create account window

Once you have entered all the information required by the registration form you will be able to click the "Accept" button which will create your account and show you a confirmation message, you can now use the details to login to the system.
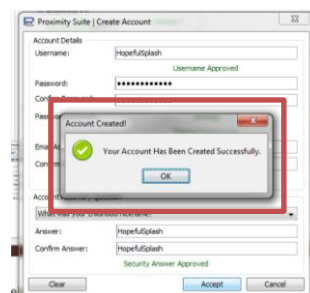

Figure 41 Confirmation of account creation

7.3 Deleting Account

If you want to delete your entire account from the application you will need to navigate to the "Account Management" menu and select the "Modify Account" item as shown below on the left, when you click this item you will open a message box asking if you are sure you want to delete your account as shown below on the right, if you select "Confirm" then your account will be delete, this will also decrypt all the files that were encrypted so you will still be able to access them even if you delete your account.
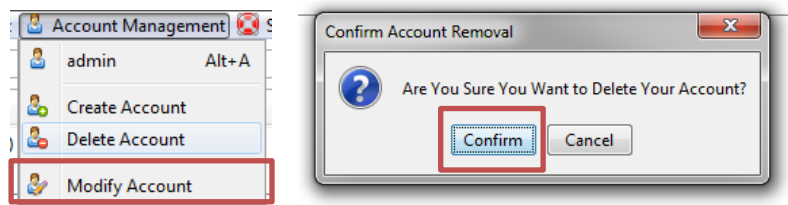

Figure 42 (Left) Delete account menu (Right) Delete account window

7.4 Modifying Account

If you want to alter your account information such as the username, password, email address, security question and answer you will need to navigate to the "Account Management" menu and select the "Modify Account" item as shown below on the left, this will open the window shown below on the right which allows you to change the information of your account.
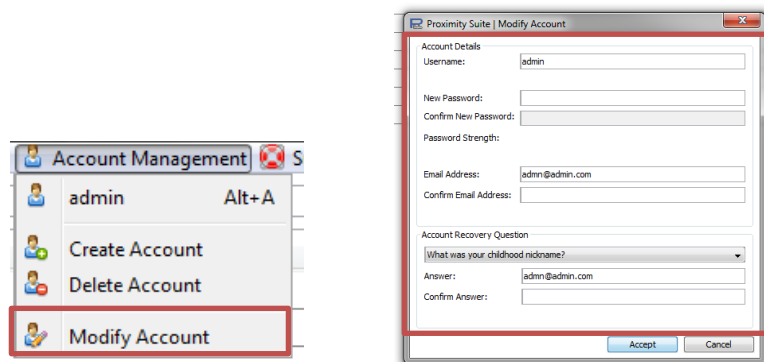

Figure 43 (Left) Modify account menu (Right) Modify account window

Once you have altered the account information you will be able to click the "Accept" button which will modify your account and show you a confirmation message, you can now use the details to login to the application.
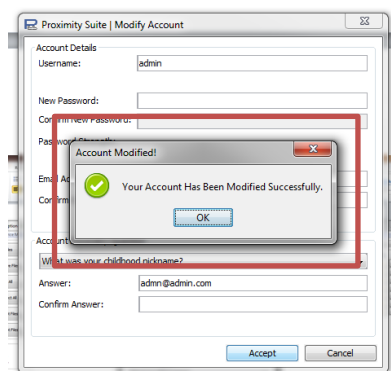

Figure 44 Confirmation of account modification

8.0 Account Recovery

The following section will guide you through resetting your account password and recovering an account user if you have forgotten them.

8.1 Reset Password

If you have forgotten your password you can reset it if you still know the answer to your security question which you setup when you created the account, when you reset your password it will also change the key used to encrypt your files so no need to worry about loss of data because of the password change. To reset your password launch the application and click the "Recover Account" button as shown below on the left, this should open window as shown below on the right.
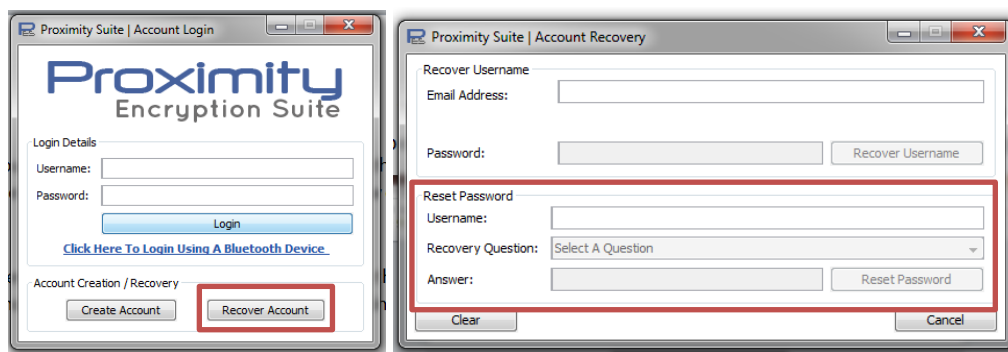

Figure 45 (Left) Recover account button (Right) Recover account window

Once the screen has opened enter your username, security question and answer in the correct fields, if they are correct the window shown below on the left should appear asking you to enter your new password when you have done this a message will appear confirming that your account password has been changed as shown below on the right, you will now be able to login to the application with your new password.
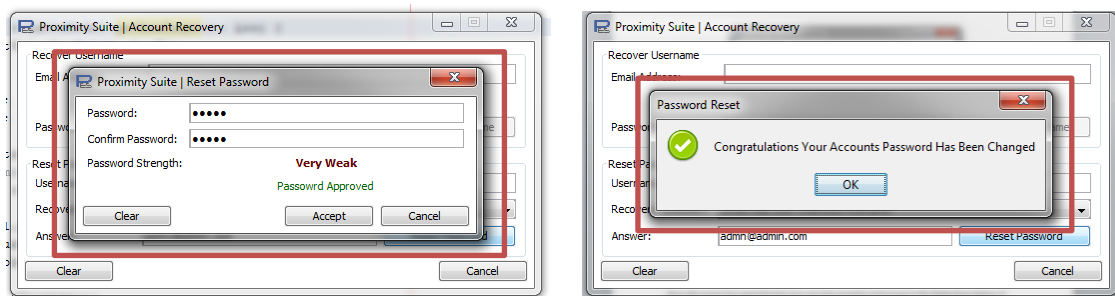

Figure 46 (Left) Reset password window (Right) Confirmation of password reset

8.2 Recover Username

If you have forgotten your username you can retrieve it if you still know the email address and password associated with your account. To retrieve your username launch the application and click the "Recover Account" button as shown below on the left, this should open a window shown below on the right.
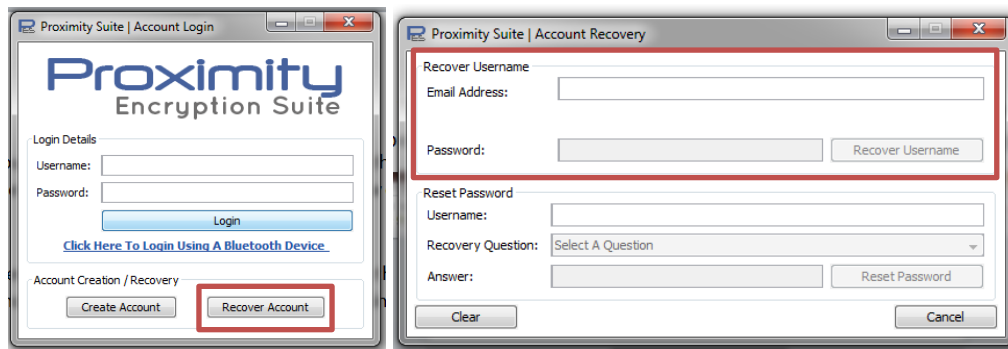
Figure 47 (Left) Recover account button (Right) Recover account window

Once the screen has opened enter your email address and password in the correct fields, if they are correct the window as shown below on the left should appear showing your account username, after you have made a note of your username you can clear the message and login to the application.
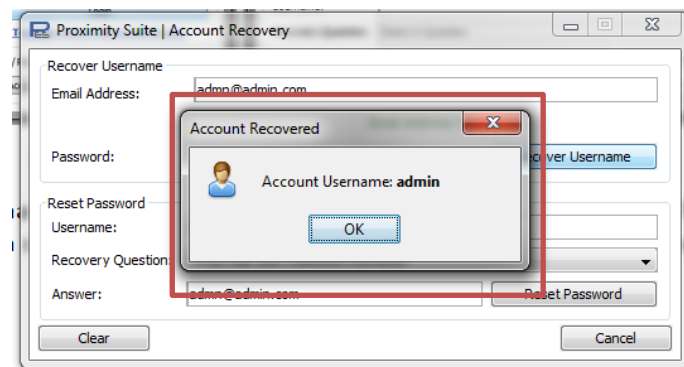

Figure 48 Username retrieval window example

9.0 Support

The following section will guide you through locating the user guide; how to contact the support team via social media if your problems cannot be fixed by the troubleshooting methods in this guide.

        9.1 User Guide

You can access the user guide from inside the application by navigating to the "Support" menu and then clicking the "User Guide" item, this will open a PDF version of the user guide as shown below, if you do not have any software that will open a PDF file you can download a reader from https://get.adobe.com/reader/.
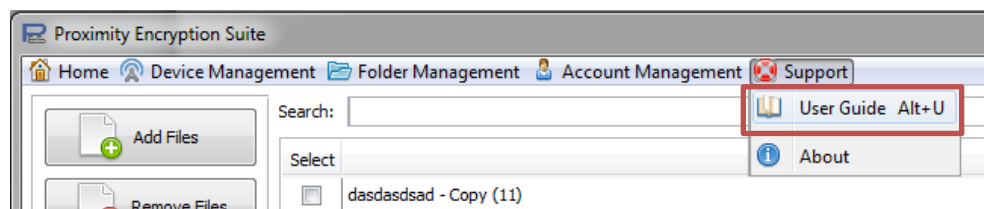

Figure 49 User guide location inside the program

If you wish to open the user guide without having to login, when you can find it in the following directory located on the CD attached to the report.

\Final-Year-Project-C012952A\Proximity_Suite_Project\Proximity\src\Proximity\user_Guide
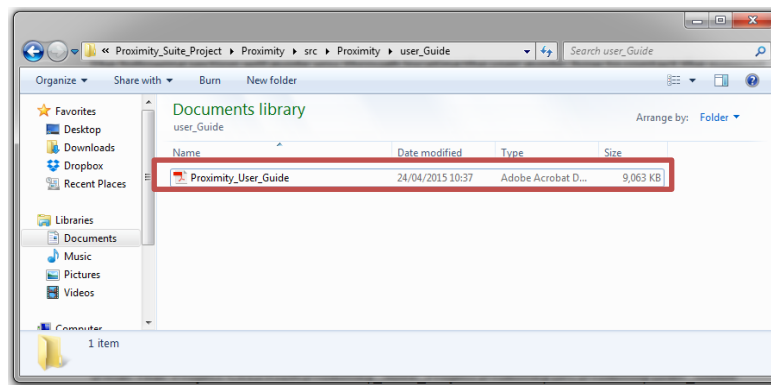

Figure 50 User guide location

9.2 Social Media

If you have any problems that this user guide does not address, please contact us on our range of social media you can access the social media by navigating to the "Social Media" menu and then select your desired option as shown below.
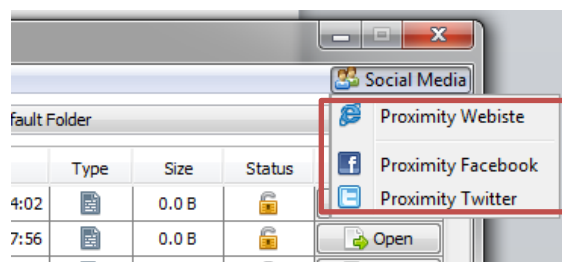

Figure 51 Social media location inside the program

If you cannot access the program you can use the following links to contact us.

Facebook: https://www.facebook.com/ProximityEncryptionSuite

Twitter: https://twitter.com/ProximitySuite

Website: http://www.proximitysuite.wix.com/proximitysuite