Oracle® Hospitality Cruise Shipboard Property Management System

Mobile Mustering Installation & User Guide
Release 7.30.869

December 2015

ORACLE

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Preface

This document describes the setup and usage of Mobile Mustering module.

Mobile Mustering is an application designed for supported mobile devices, which assists the crew of the ship to conduct muster drill prior to ship embarking on a voyage.

Audience

This document is intended for application specialist and end-users of Oracle Hospitality Cruise Shipboard Property Management System.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL: https://support.oracle.com/

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Revision History

Date	Description of Change
June 11, 2015	• Initial publication.
December 29, 2015	• Added New Parameters PAR_GROUP_MUSTER. • Changed GUI in IFC Mobile Sync, Mobile Devices and WPFDash. • Changed Registration behavior in mobile device. • Added Issue tracking function in mobile device. • Removed Data Export function from mobile device. • Added Upgrade instructions.

1. Prerequisites, Supported Systems, and Compatibility

This section describes the minimum requirements for the Mobile Mustering module in Oracle Hospitality Cruise Shipboard Property Management System.

Prerequisites

- FCMobile Database
- FC WPFSecurity
- FC WPFDash
- IFC Mobile Sync
- FCMusteringGeneralASPWebServiceSetup_2008.msi
- FCMusteringSyncServiceSetup.msi
- Main Vertical Zone (MVZ) setup
- Cabin Station Setup

Supported Systems

- Windows 2003 R2 32-bit System
- Windows 2003 R2 64-bit System
- .NET Framework 3.5.1

Supported Hardwares

- Recommended hardware requirement for IFC Mobile Sync Interface PC
  - Operating System: Windows 2003 R2, 64-bit
  - RAM: 4GB
  - CPU: 2.4GHz, 2 or more cores
  - Storage: 80GB

- Recommended hardware requirement for Mobile Application Server
  - Operating System: Windows 2003 R2, 64-bit
  - RAM: 6GB
  - CPU: 2.4GHz, 2 or more cores
  - Storage: 250GB
  - IIS version: 6.0

Supported Peripherals

- Wireless Access Point
  - Cisco Aironet 1242AG
  - Cisco Aironet 2.4 GHz, 5.2 dBi Omnidirectional Antenna (AIR-ANT1728) (For Short/Medium Range Coverage)
  - Cisco Aironet Yagi Mast Mount Wireless Antenna (AIR-ANT1949) (For Medium/Long Range Coverage)

- Handheld Devices
  - Nordic Morphic ID
    - Setup with 700_Mustering_1.pak installation file.
  - Motorola MC55A
    - Setup with MusDeploy_2.7.0_2750.CAB.
  - Motorola PSION EP10
    - Setup with FCMobileMustering_2.7.0_2750.CAB

Compatibility

- Oracle® Hospitality Cruise Shipboard Property Management System version 7.30.8xx or later. For customers operating on version below 7.30.8xx, database upgrade to the recommended or latest version is required.

2. System Schematic

FC Mobile Mustering is consist of several components, and these components are responsible for transmitting information between the handheld devices and the SPMS database. Below diagram will further illustrate the schematic flow between these components.

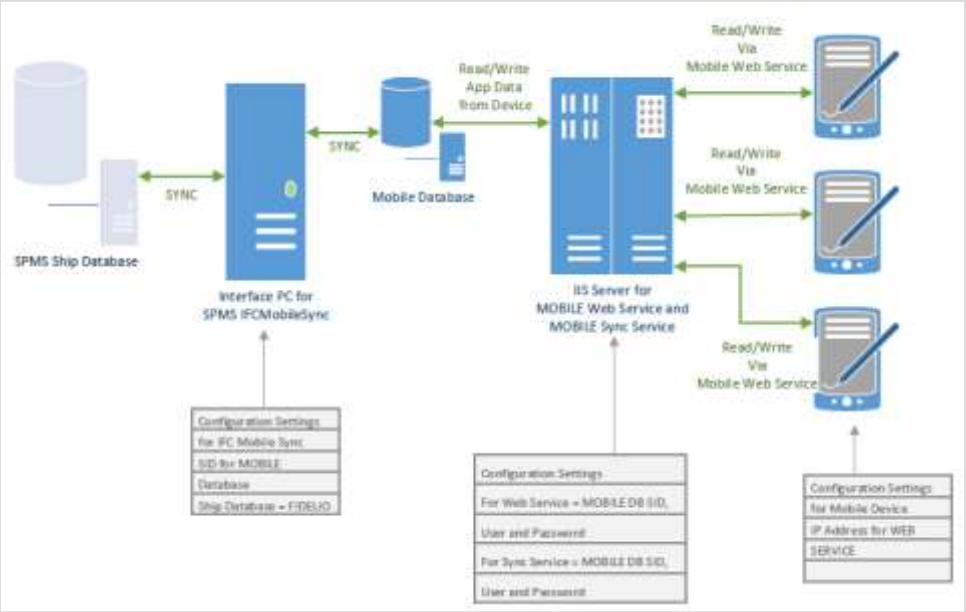

Figure 2-1 - Mobile Mustering System Schematic

3. System Configuration

This section describes the configuration required prior to using the Mobile Mustering module, and these include setting up Mustering App Server, Fidelio Cruise Software, FCMobile Sync Interface and Mobile Device.

3.1. FCMobile Database Preparation

Apart from the existing SPMS Database which holds current passengers, crews and visitors details for mobile devices at the Muster Station, a separate database is required for Mobile Mustering to store essential information for its mobile devices, and this database may reside in the same server as SPMS Database.

User ***must*** create the FCMobile Schema in the following order:

1. Create **fcmobile database user** using below script.

```
CREATE USER fcmobile
  IDENTIFIED BY super
  DEFAULT TABLESPACE USER_TABLES
  TEMPORARY TABLESPACE USER_TEMP ;

GRANT CONNECT TO fcmobile;
GRANT DBA TO fcmobile;
```

2. Launch **IFC Mobile Sync** program and go to the **Settings** tab.
3. Run **Verify Database** in IFC Mobile Sync to create the **FCMOBILE** schema. Refer *Configuring IFC Mobile Sync Interface* for more details on Interface setup and database synchronization.

3.2. Installing Mobile Mustering App Server

The installation of Mobile Mustering Application Server involves several functions, and installation must be done in the order as described in the following section.

3.2.1. Installing Oracle ODAC and Instant Client

Before you begin installation, download a copy of **ODTwithODAC112030.zip** from FTP site.

1. Unzip the **ODTwithODAC112030.zip** to a temporarily folder.
2. Run installation of **Oracle ODAC and Instant Client** compatible with *64-bit* machine.
3. In the Server Manager container, click **Roles**, then select **Add Roles**.

Figure 3-1 – Setting up Mobile Mustering Server Roles

4. In Before You Begin page, check that the listed criteria's are met, and then click **Next** to continue.

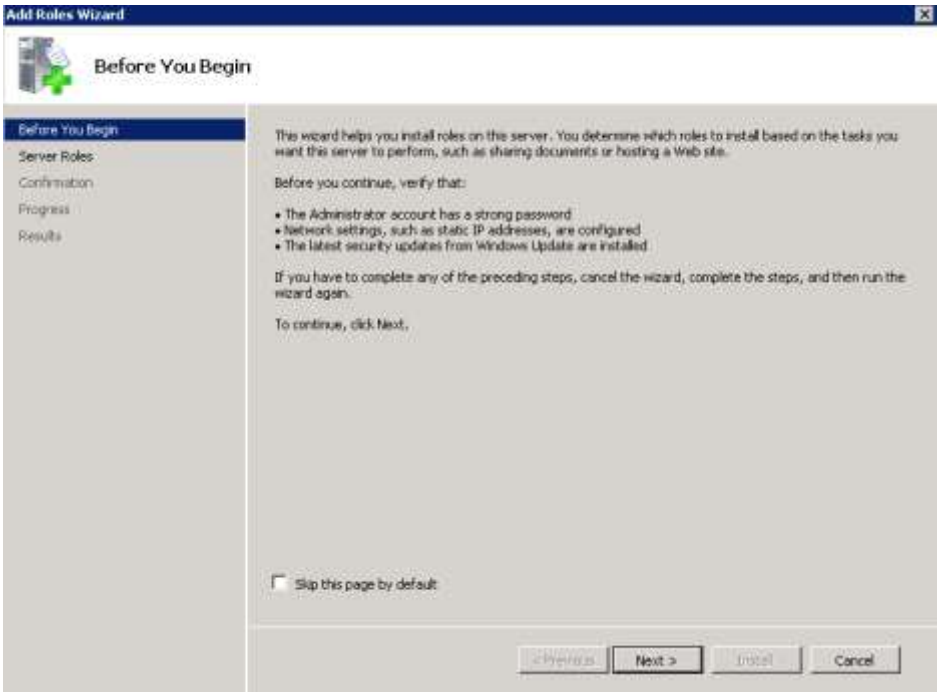

Figure 3-2 - Adding Server Roles

5. In the Select Server Roles page, check mark the **File Services and Web Server (IIS)** component, and then click **Install**.

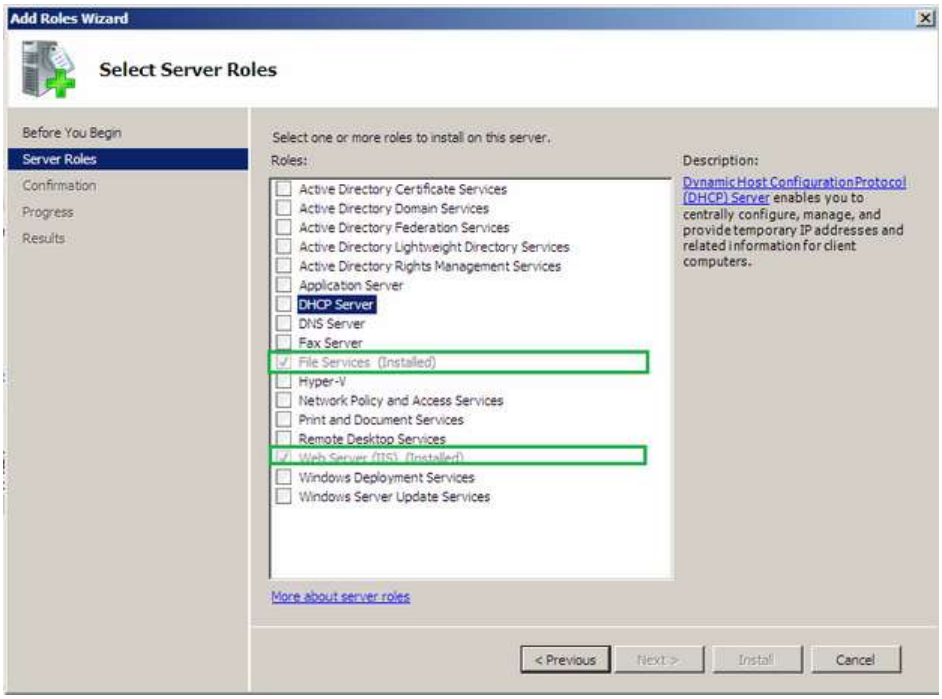

Figure 3-3 - Server Roles selection in Mobile Mustering App Server

6. After components installation completes, select **Web Server (IIS)** from the Server Manager container, and then select **Add Role Services**.

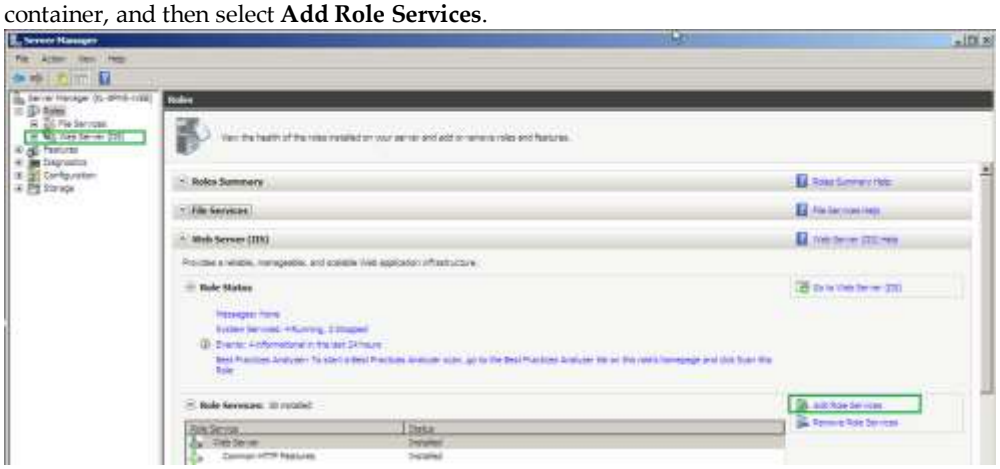

Figure 3-4 – Adding WebServices Roles to Mobile Mustering App Server

7. In Select Role Services page, check mark the **Management Tools, Common HTTP Features, Application Development, IIS 6.0 Management**, and then click **Install**.

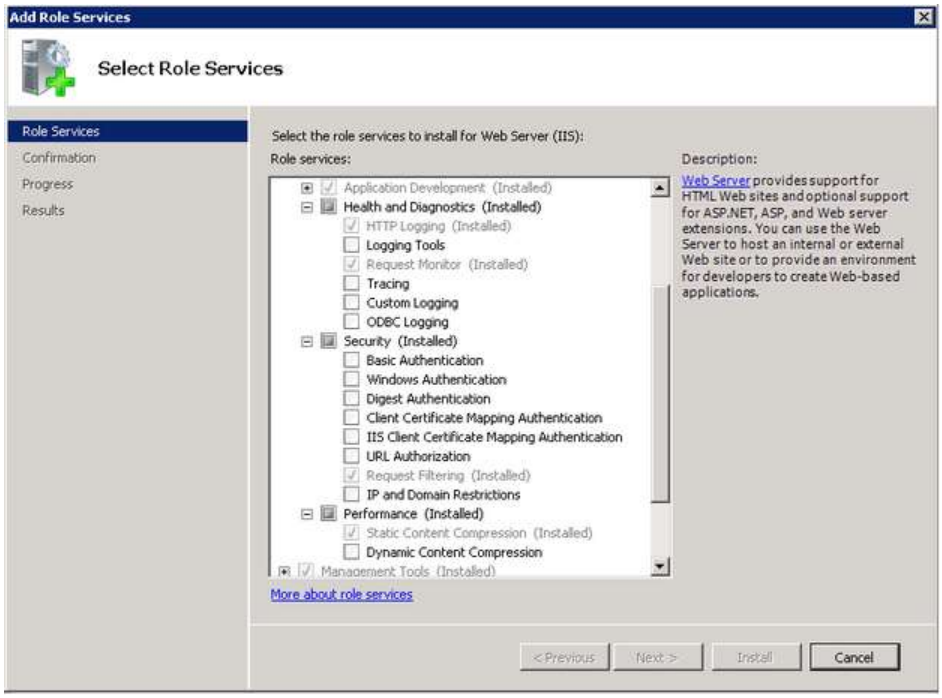

Figure 3-5 - Role Services selection in Mobile Mustering App Server

8. Next, select the **.Net Framework 3.5.1**, and then select **Add Features** from the Server Manager container.

Figure 3-6 - Adding Features to Mobile Mustering App Server

9. In Select Features screen, select the **.Net Framework 3.5.1 Features** and **Windows Process Activation Service**, and then click **Install**.

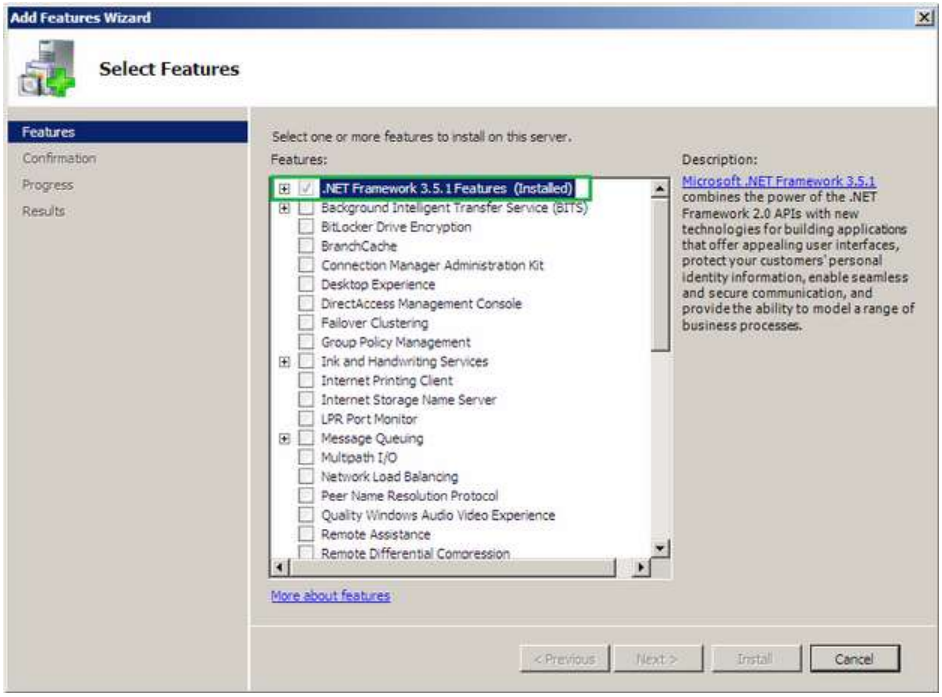

Figure 3-7 - Features selection in Mobile Mustering App Server

10. From the Server Manager container, select **.Internet Information Services (IIS) Manager**, then **Application Pools, DefaultAppPool,** and then **Advance Settings.**

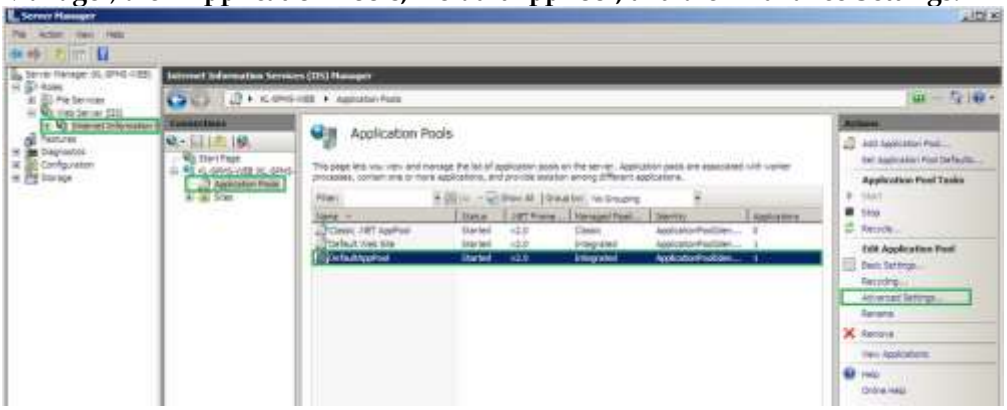

Figure 3-8 - Enabling Advance Settings in IIS

11. Ensure the **Enable 32-Bit Applications** is set to **True**.

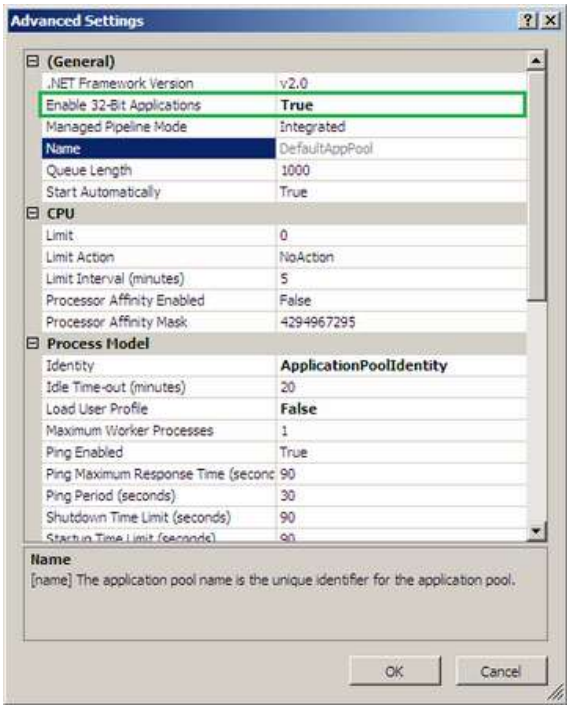

Figure 3-9 - IIS Advance Setting

3.2.2. Installing Web Services

1. Launch the **FCMusteringGeneralASPWebServiceSetup_2008.msi** application, and then follow installation steps.
2. At the end of the installation, these folder will be inserted into `C:\inetpub\wwwroot\FCMustering\` folder
   - Bin – where the web service binaries are located.
   - MusteringDBs – where encrypted databases are located for each devices.
   - Photos – where photos for each devices are located.
   - MusterDeploy – an installation file for Motorola MC55

3.2.3. Configuring Web Services for Connection

1. Navigate to **`C:\inetpub\wwwroot\FCMustering`** and open the **Web.Config** file.
2. Look up for section **`<appSettings>`** and insert **`<add key="ConnectionFCMobile" value="User Id=FCMOBILE;Password=super;Data Source=192.168.3.190/fidelio; Max Pool Size = 2;" />`, and then** Save the file.

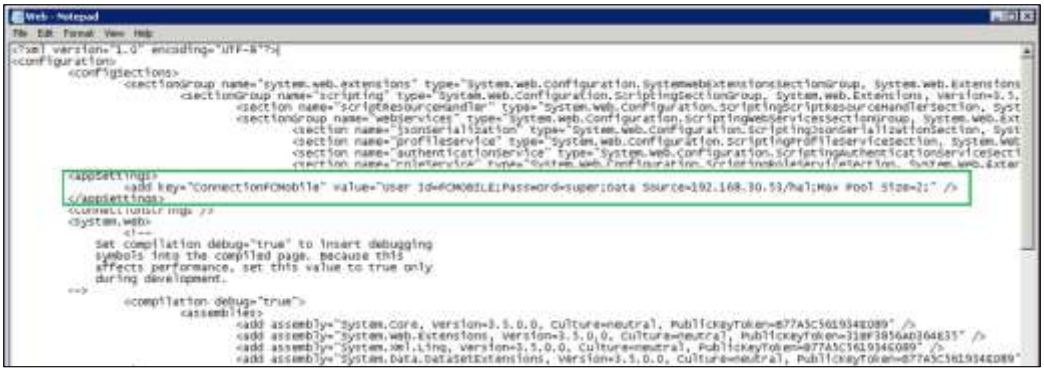

Figure 3-10 – Sample Web.Config file

3.2.4. Installing Sync Services

1. Run the **FCMusteringSyncServiceSetup.msi** application after installing the **FCMusteringGeneralASPWebServiceSetup_2008.msi** application, and follow installation steps.
2. The following folder will be inserted into `C:\Program Files (x86)\Fidelio\FCMobileSyncService\` folder
   - FCMobileSyncService_2015-05-06.log– Sync Service logs.
   - FCMobileSyncService.exe.config – a configuration file of Sync Service Binaries

3.2.5. Configuring Sync Services for Connection

1. Open the **`FCMusteringSyncService.exe.config`** file in **`C:\Program Files (x86)\Fidelio\FCMusteringSyncService\`**
2. Look up for section **`<appSettings>`** and insert the connection strings per below.

```
<appSettings>
    <add key="ConnectionFCMobile" value="User
Id=FCMOBILE;Password=super;Data Source=192.168.3.193/fidelio; Max
Pool Size = 2;" />
    <add key="CHGMobileInRefreshInterval" value="30" />
  </appSettings>
```

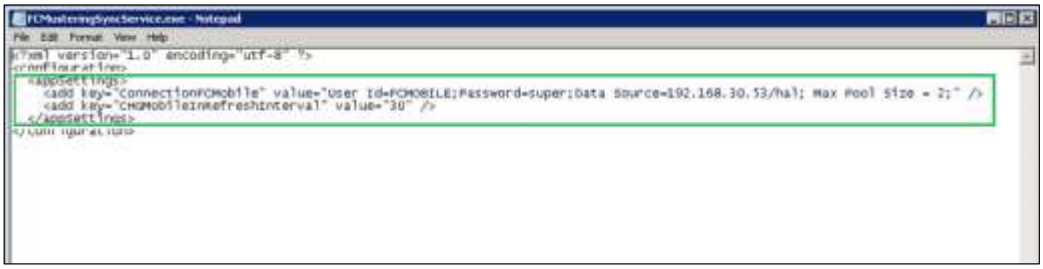

Figure 3-11- Sample Sync Service Script

3.2.6. Verifying the SSL Connection

To ensure that the SSL connection is properly setup,

1. Go to the Server Manager screen and select **IIS Manager, Default Web Site**.
2. From the **Actions Panel** on the right, select **Bindings** under **Edit Site**.

Figure 3-12 - Verifying the SSL Connection

3. In the Site Bindings screen, select **Add** and enter the **Port Number** in the pop up box.

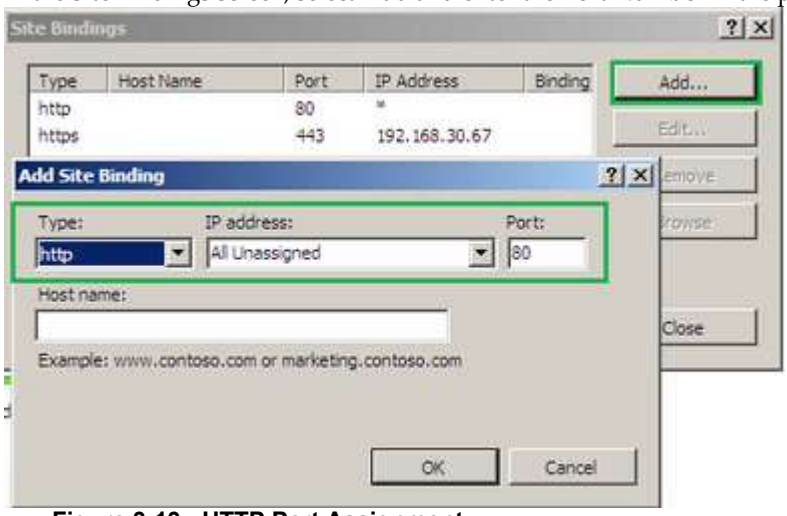

Figure 3-13 - HTTP Port Assignment

Note: This port number is for the use on mobile devices, and the port number *must* be the same number with the client software.

4. In the **Connections section,** expand the **Sites** container and select **Default Web Site, SSL Settings**, and then *uncheck* **'Require SSL'**.

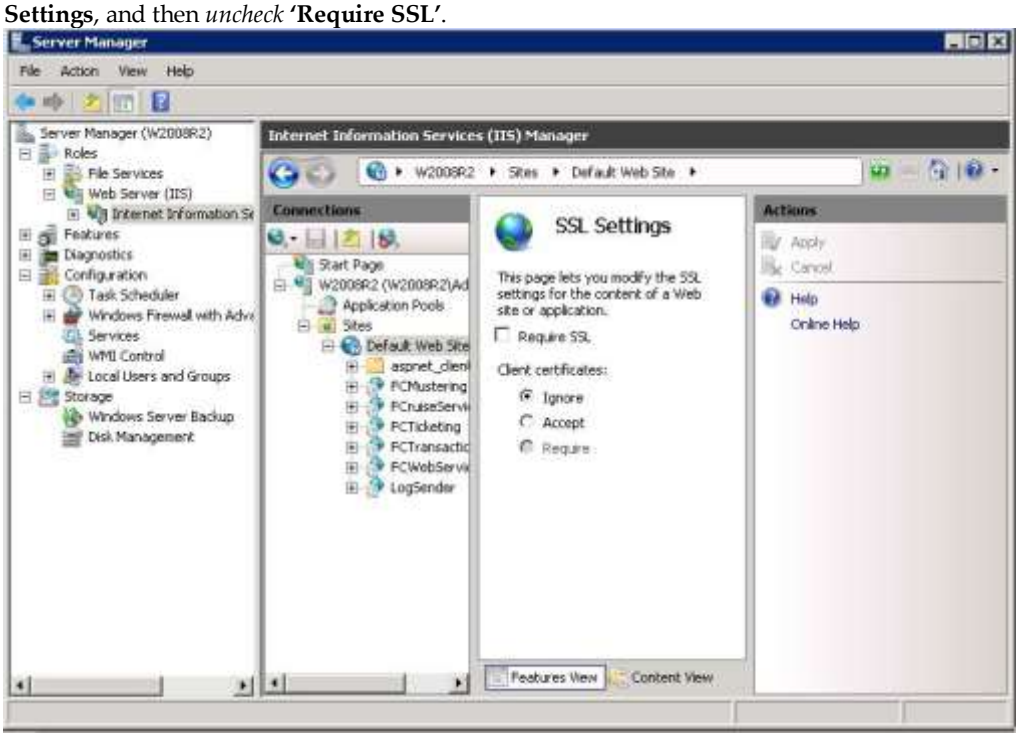

Figure 3-14 - Disabling the SSL Settings

5. Next, select **FCMustering** and then check mark **Require SSL** in SSL Settings.

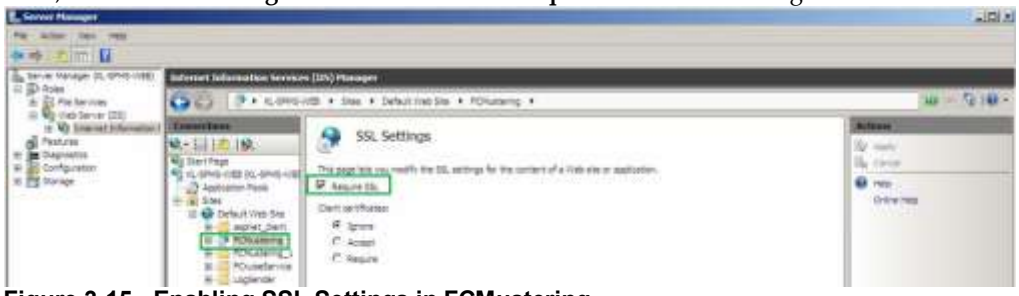

Figure 3-15 - Enabling SSL Settings in FCMustering

6. Click **Apply** to save the setting.
7. In the **Default Web Site, FCMustering**, select **Directory Browsing**, and then select **Enable** from the Actions Panel on the right.

Figure 3-16 - Enabling Directory Browsing

8. Next, go to **Control Panel, Windows Firewall**, **Advance Settings** and then select **Inbound Rules**.

9. On the right pane of the screen, click **New Rule**.

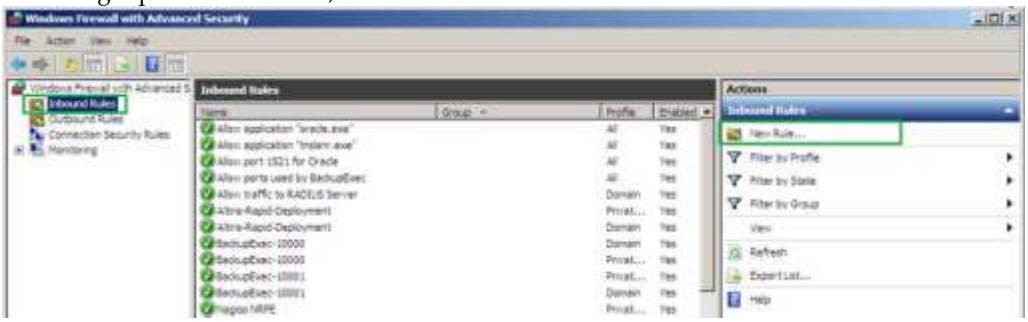

Figure 3-17 – Adding New Windows Firewall Rule

10. Under Rule Type, select **Port**, and then click **Next**.

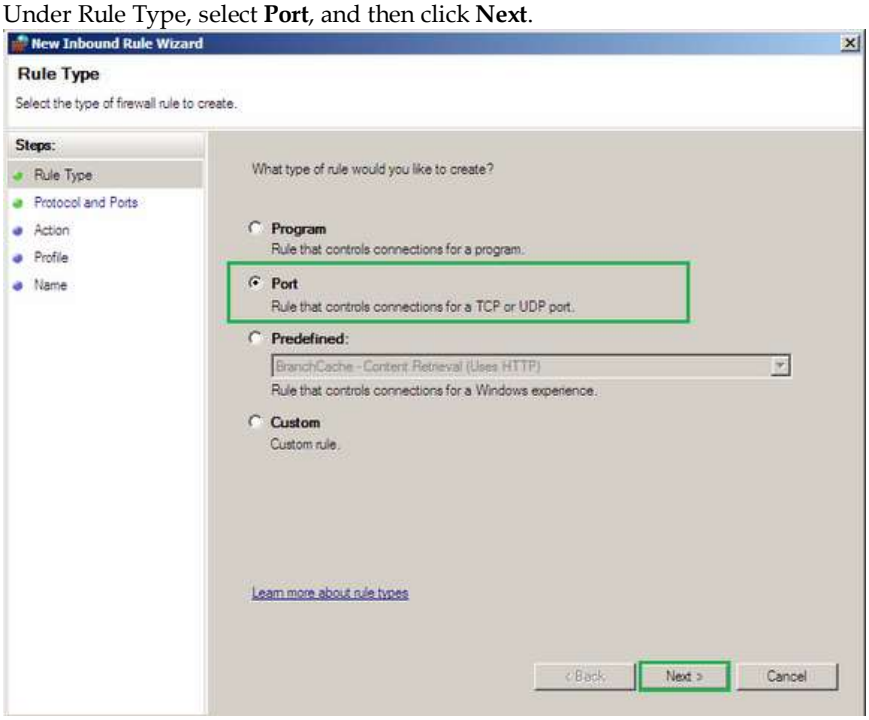

Figure 3-18 – Enabling Port number to Windows Firewall

11. In the Protocol and Ports screen, select **TCP** and specify the earlier defined port number, and then click **Next**.

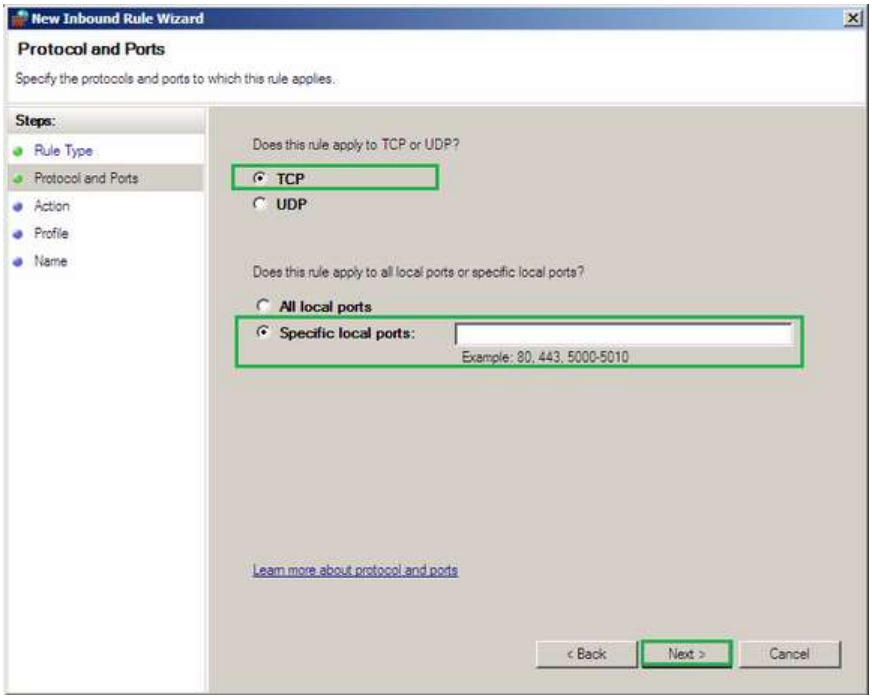

Figure 3-19 - Adding TCP Port Number

12. Under **Action**, select **Allow the connection** and then click **Next**.

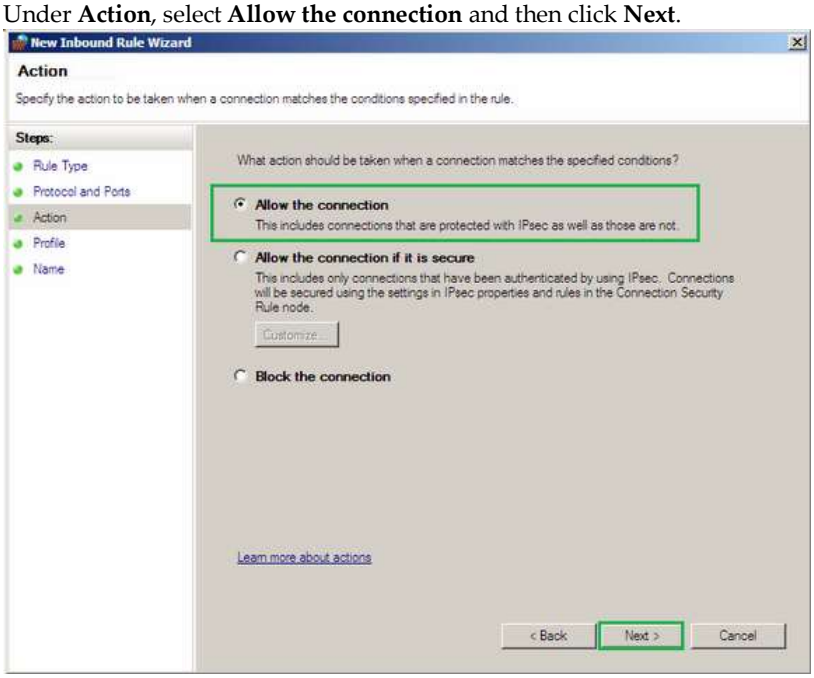

Figure 3-20 - Defining type of connection

13. Under **Profile**, check mark all the area to apply this rule - Domain, Private or Public.

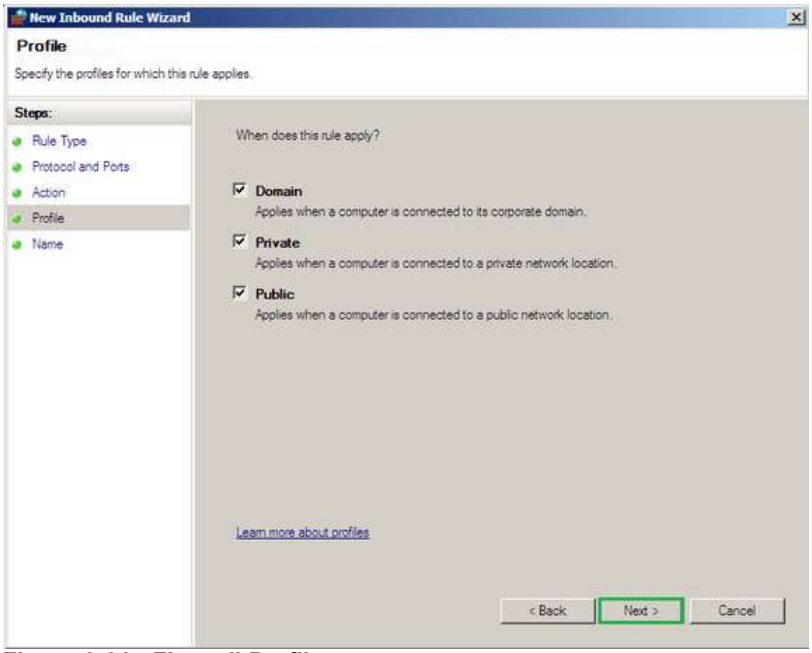

Figure 3-21 - Firewall Profile type

14. Insert a **Profile name** and description if any, then click **Finish** to complete the rules setup.

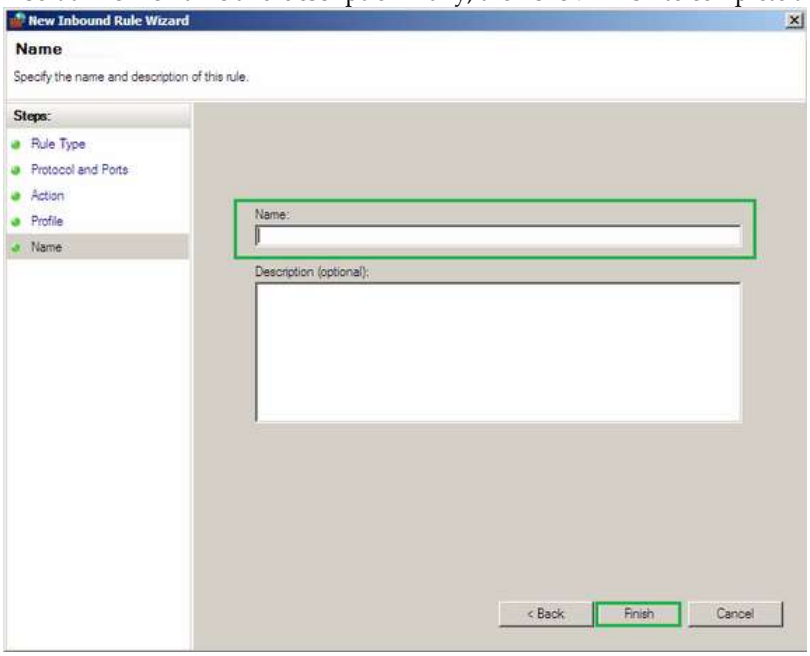

Figure 3-22 - Firewall Profile Name

15. Repeat the above steps until all ports are set up.
16. In **Mustering Application** on mobile device, key in the correct **IP** and earlier configured **SSL** port.

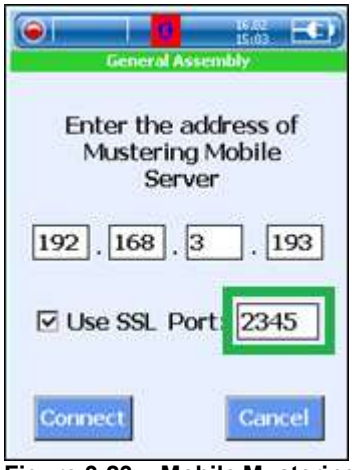

Figure 3-23 - Mobile Mustering port setup screen.

3.2.7. Generate Self Sign Certificate

This section describes the steps to generate an SSL Certificate required by the Web Server initiate a secured browser session.

1. In the Server Manager container, select **Web Server (IIS), Internet Information Service.**
2. Double-click the **Server Certificate** icon and select **Create Self-Signed Certificate** on the right panel.

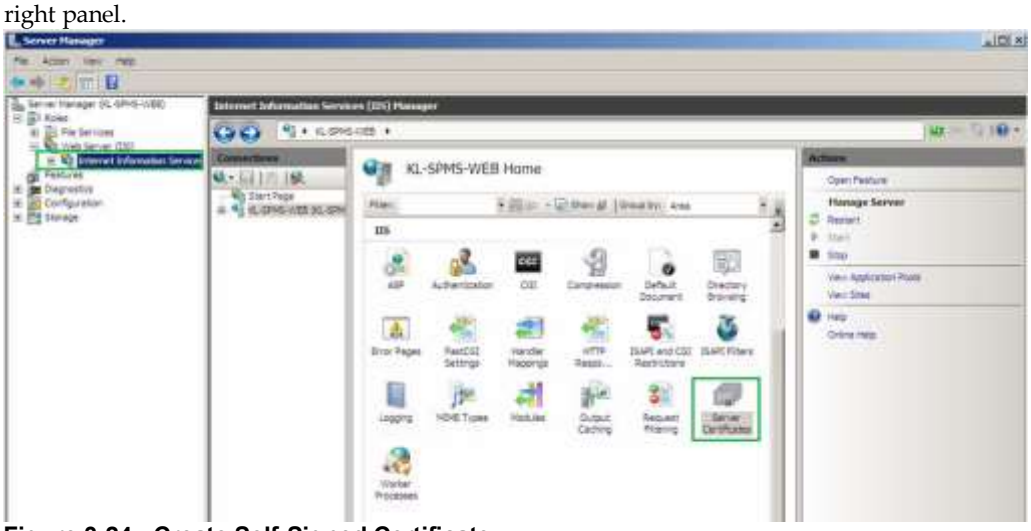

Figure 3-24 - Create Self-Signed Certificate

Figure 3-25 - Create Self-Signed Certificate

3. Enter the **Certificate name** and then click **OK** to save.

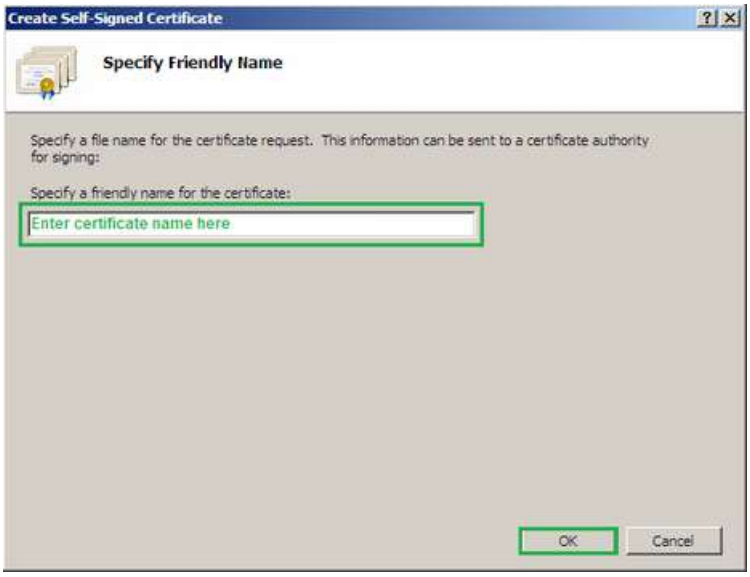

Figure 3-26 - Self Signed Certificate

3.2.8. Assigning Self Sign Certificate

Below section describes the steps to bind the earlier generated Self Sign Certificate to the Server Manager.

1. In the Server Manager container, select **Web Server (IIS), Internet Information Service, Default Web Site.**
2. In the Actions section on the right, select **Bindings.**

Figure 3-27 - Binding SSL Certificate

3. In the Site Bindings window, click **Add**.

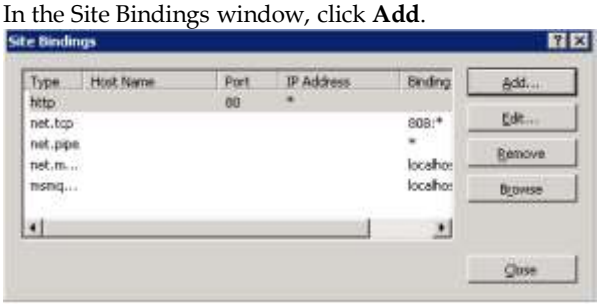

Figure 3-28 – Site Binding window

4. Select **https** from the drop-down list under **Type,** then enter the IP address, and leave the port as default (port no: 443), and then select the SSL certificate from the drop-down list.

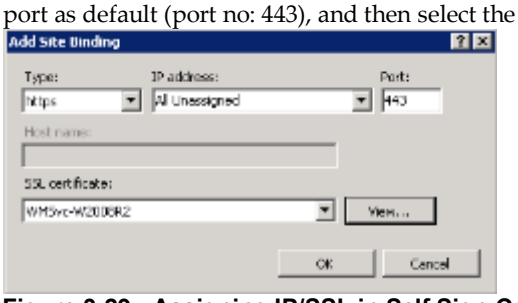

Figure 3-29 - Assigning IP/SSL in Self Sign Certificate

5. Click **OK** to save.

3.2.9. Verifying the WebServices connection

To ensure the WebServices connection is properly setup,

1. Open a web browser (e.g. Internet Explorer or Mozilla Firefox).
2. Input the URL, e.g. *https://192.168.3.193:2345/FCMustering/MainASPWebService.asmx*.

If the **Web Service** is configured correctly, the following page will be shown.

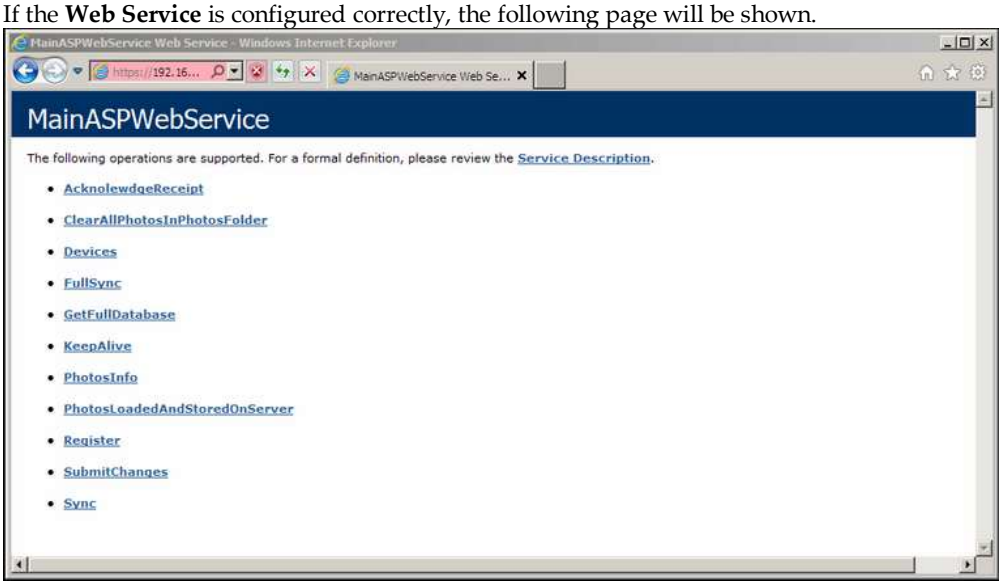

Figure 3-30 - Verifying Webservices connection

3.2.10. Verifying Sync Services

To ensure the Sync Services is properly setup,

1. In Server Manager container, expand the **Configuration** container, and then select **Services**.
2. Check and ensure the **FCMusteringSyncService** has started and the startup type is *Automatic*.

Figure 3-31 - Verifying FCMusteringSyncService

3.3. Fidelio Cruise Setup

Apart from the setting up the hardware and database, the Fidelio program would also require some changes, for example deployment of Fidelio Cruise program and Cabin setup.

3.3.1. Installing Developer Express 13.1

From **Release 7.30.0848 and above**, the **FC WPFDash** application is compiled under VS2012 with DevExpress 13.1, and a .**NET** installation is required.

1. Download the .Net setup file from Fidelio Cruise FTP release folder: **`"/Fidelio/Fidelio Cruise SPMS/Release730/FCruise Setup/MS NET 2013 Addon Setup/FC" SPMSNet2013AddOnSetup.7z".`**
2. Unzip the file to a temporarily folder.
3. Run the **FC SPMSNet2012AddOnSetup.exe** and install to **Fidelio Cruise** folder.
4. On Fidelio Cruise NET2012 Add On Setup page, click **Install.**
5. On the Ready to Install the Program page, verify that the destination folder is point to **Fidelio Cruise**, and then click **Install** to proceed.

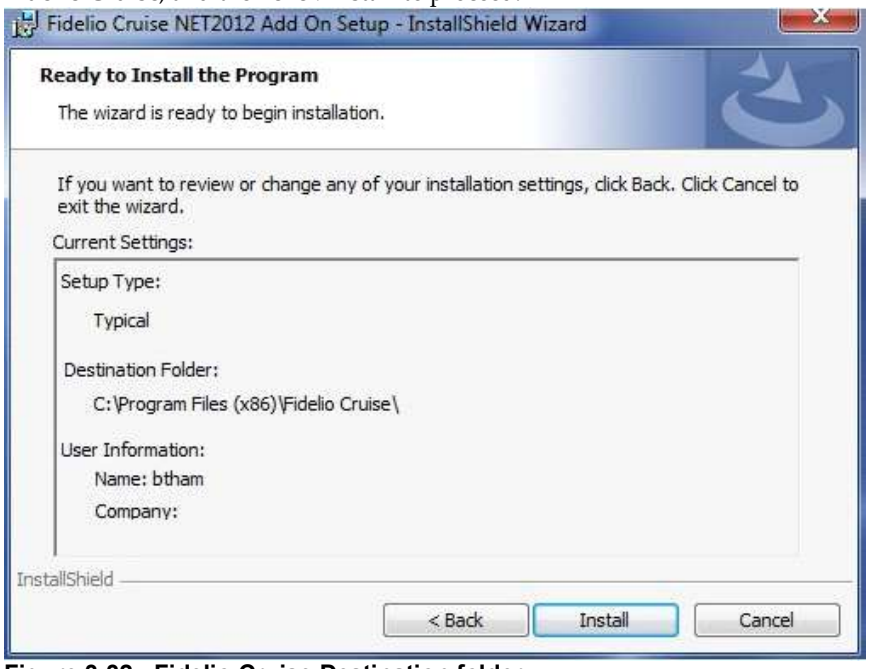

Figure 3-32 - Fidelio Cruise Destination folder.

6. Click **Finish** to complete the installation and exit.

3.3.2. Configuring Fidelio Cruise System Data

In order to ensure all passengers/crew on board are accounted for in each **Muster Station**, it is essential that the **Muster station**, **Lifeboat** and **Cabin** are correctly setup. These entries are entered through **Administration** module.

Life Boat/ Life Raft Setup

1. Login to **FC Administration**, and select **Administration** from the menu bar.
2. Select **Safety Setup**, and then **Life Boat/Life Raft Setup** from the drop-down list.
3. Right click on the blank field to bring up the option box, and then select **Add** to add new lifeboat.
4. Insert the **description, capacity** and **all other relevant fields** in the details section on the right.
5. Click **Apply** to save settings.

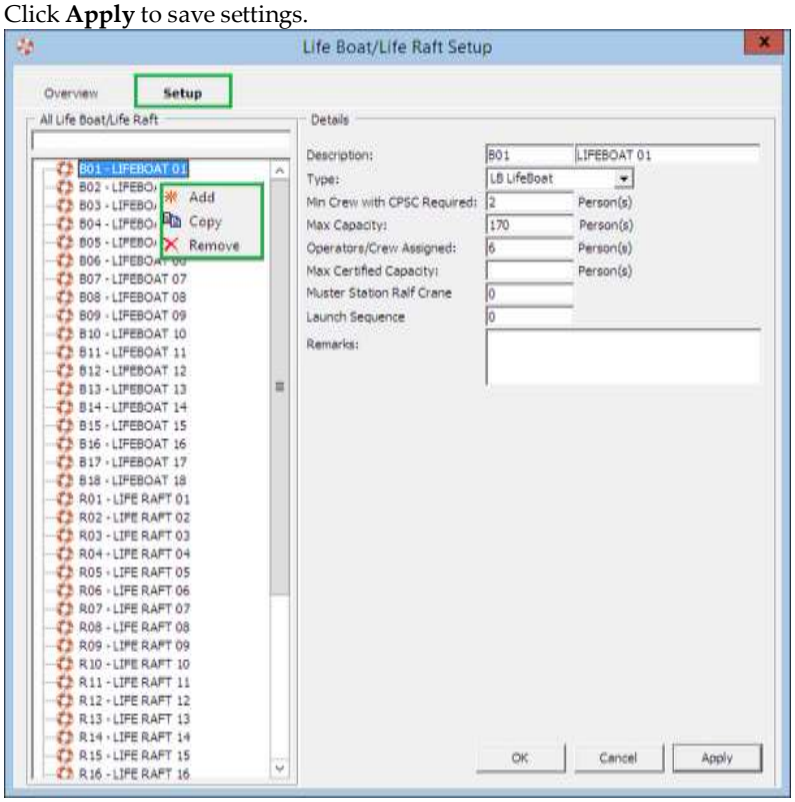

Figure 3-33 - Adding Lifeboat/LifeRaft

Muster Station Setup

1. In **Administration** module, select **Administration** from the menu bar.
2. Select **Safety Setup**, and then **Muster Station** from the drop-down list.
3. Right click on the blank field to bring up the option box, and then select **Add** to add new muster station.
4. Insert the **description, capacity** and select the **Lifeboat Type** for this Muster Station.
5. Click **Apply** to save settings.
6. To setup more muster station, repeat the above steps.

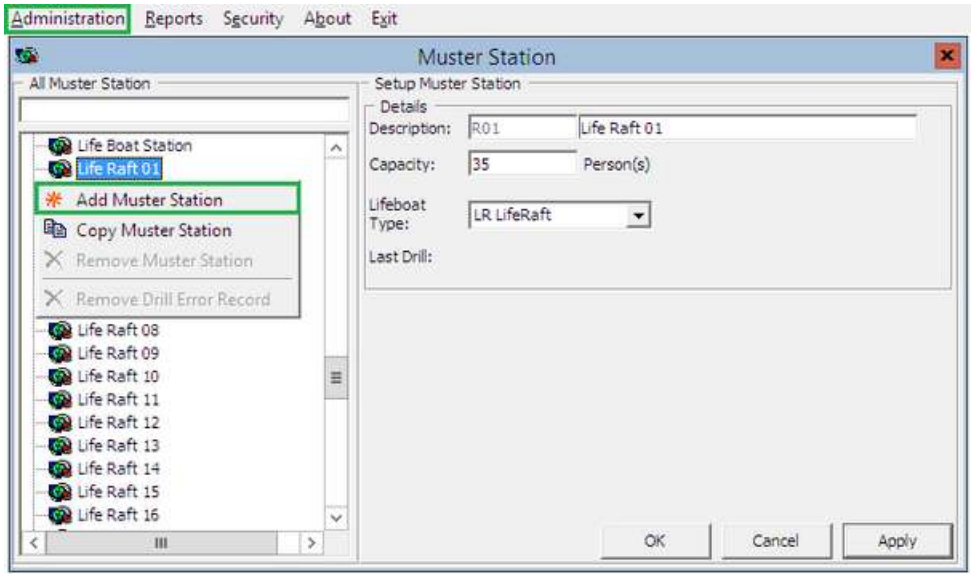

Figure 3-34 - Adding Muster Station

Setting up Vertical Zone and Stateroom

1. In **Administration** module, select **Administration** from the menu bar.
2. From the drop-down list, select **Stateroom Setup, Staterooms,** and then **Cabin Setup.**
3. Select **Edit** under **Vertical Zone** to open the configuration form.

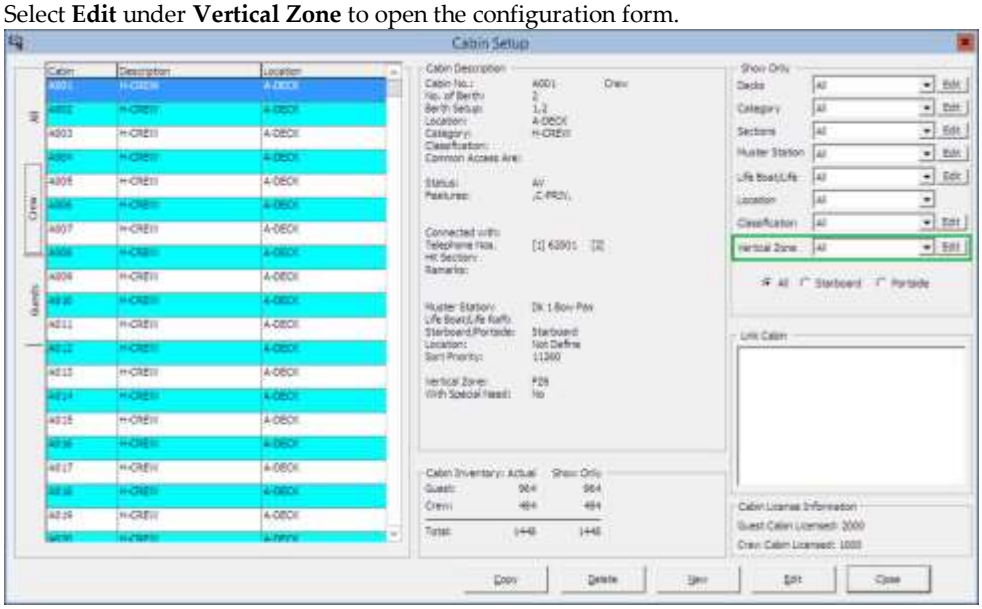

Figure 3-35 – Setting up Vertical Zone in Cabin Setup

4. Click **New** in the Configure Main Vertical Zone form.

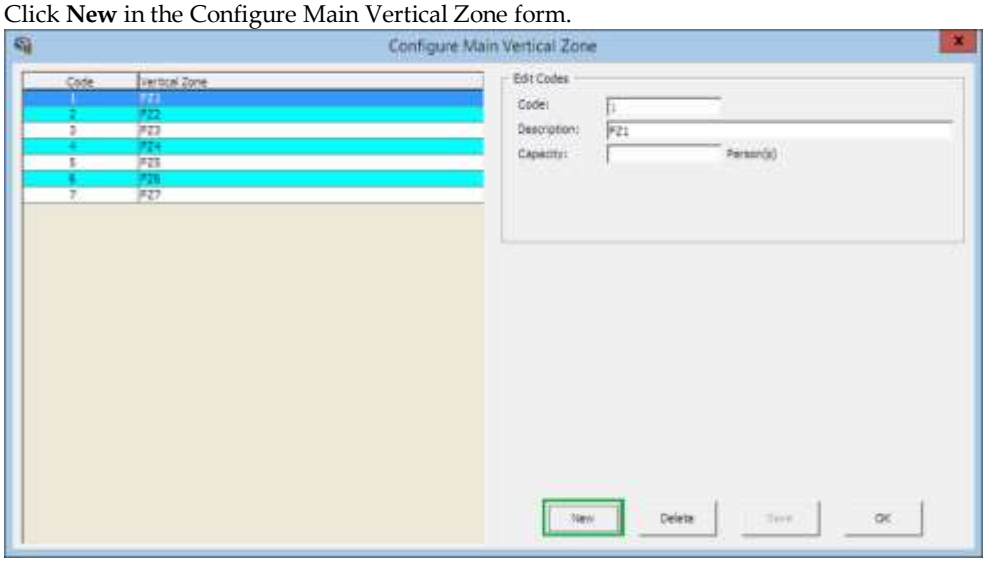

Figure 3-36 - Adding New Vertical Zone

5. Enter a **short code, description** and **capacity** in the form, and then click **Save** to return to the Cabin setup form.
6. In the **Cabin setup** form, select the **cabin number**, and then click **Edit** to open the **Edit Cabin** form.

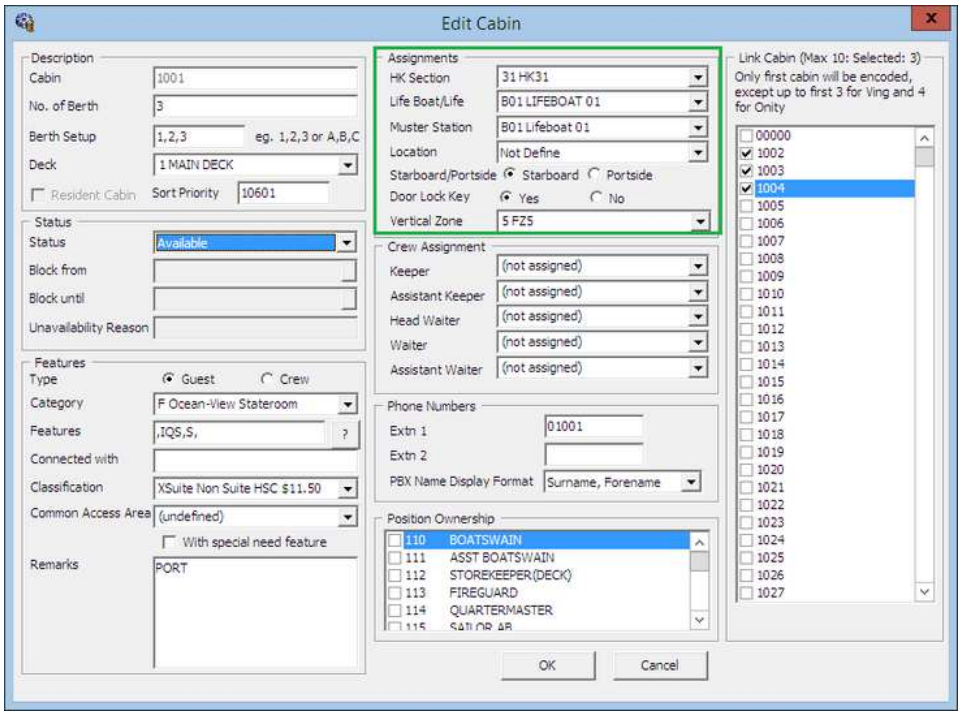

Figure 3-37 - LifeBoat, Muster Station, Location and Vertical Zone assignment

7. Assign the **LifeBoat/LifeRaft, Muster Station, Location and Vertical Zone** for this cabin, and then click **OK** to save the assignment.

3.4. IFC Mobile Sync Interface

The Mobile Sync Interface is a synchronization program that synchronizes data between the SPMS and the Mobile database, based on an interval time configured within the **IFC Mobile Sync Interface**.

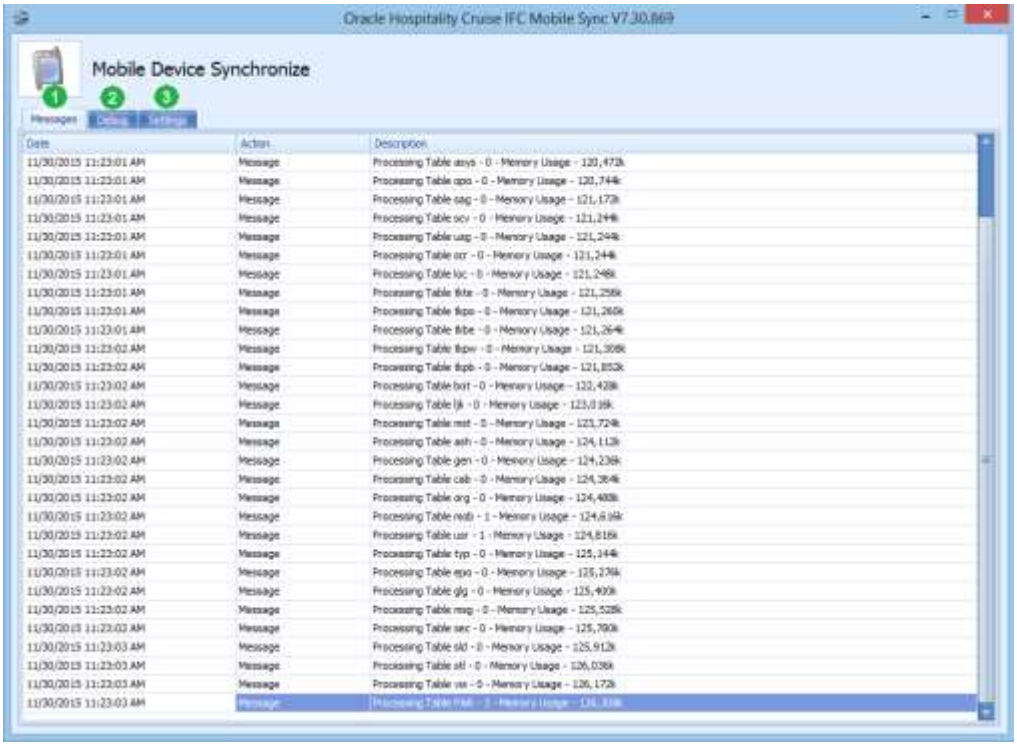

Figure 3-38 - IFC Mobile Sync Interface screen

Table 3-1 - Function definition of IFC Mobile Sync

Field Name	Field Definitions
1. Messages	Tab that indicates the synchronization activities.
2. Debug	Tab that represents all activities in debugging format with SQL Commands.
3. Settings	Tab that defines the required settings and synchronization functions.

3.4.1. Configuring IFC Mobile Sync Interface

With the correct setup of the interface, data between Fidelio DB and FCMobile DB will be synchronized seamlessly.

1. Launch the **IFC Mobile Sync.exe** and navigate to **Settings** tab.
2. Enter the **FC Mobile Database name** as defined in Oracle Net Manager.
3. Enter the **Refresh Interval Seconds** for the interface to perform the synchronization between the Ship database and the Mobile database.

> **Note:** The default FCMobile Database is '*Fidelio*', and the Refresh Interval (Seconds) is defaulted to *60 seconds*.

4. Click **Apply** to save the settings. These settings are also saved to **FCSettings.par** file.

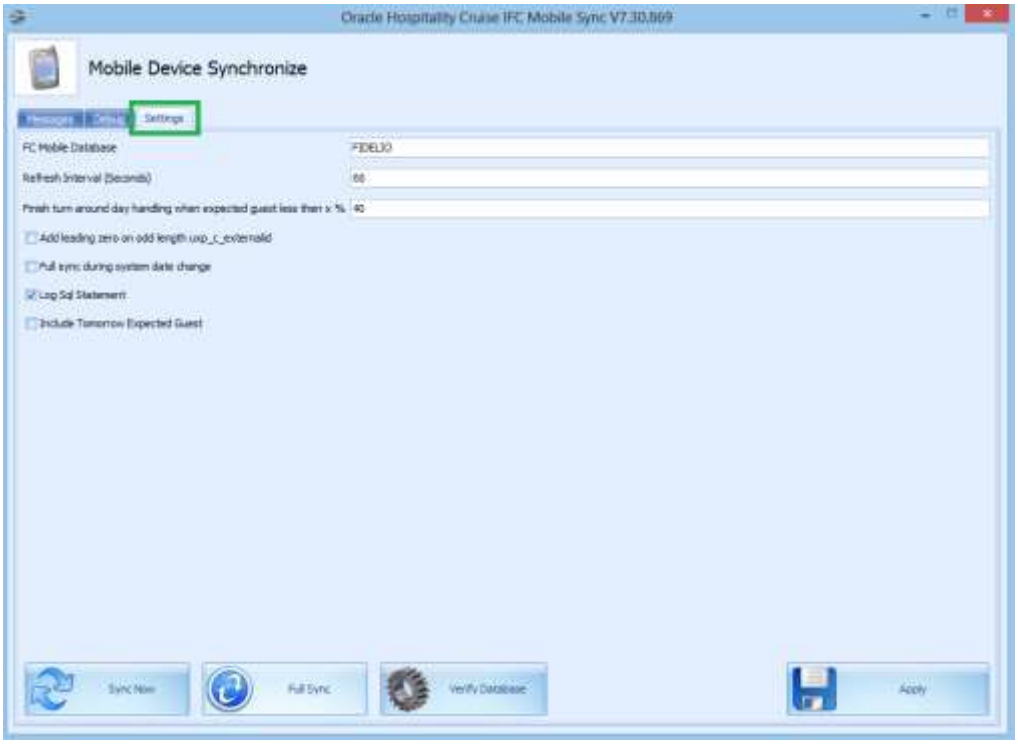

Figure 3-39 - IFC Mobile Sync Settings

Below are the Optional functions available in IFC Mobile Sync Settings:

Field Name	Field Definitions
Refresh Interval (Seconds)	Triggers synchronization automatically according to the pre-defined seconds.
Enable Turn Around Day Handling	This function adds a message to **CHG_MOBILE_IN** table, signifying the turnaround day. ▪ If the system date change matches the cruise start date, message **'START_TURNAROUND_DAY'** will be written to CHG_MOBILE_IN table. ▪ If **'Expected Check-In guest <** %' as per setup in Mobile Sync Setting, message **'END_TURNAROUND_DAY'** will be written to CHG_MOBILE_IN table. ▪ If **'Expected Check-In guest >** %' as per setup and if current System Cruise changed, message **'END_TURNAROUND_DAY'** will be written to CHG_MOBILE_IN table.
Add leading zero on odd length uxp_c_externalid	This function adds leading zero to the UXP_C_EXTERNALID (Odd length) in FCMOBILE db whenever a full synchronization is performed.
Full Sync during system date change	This function triggers a Full Synchronization to be performed automatically during system date change.
Log Sql Statement	This function writes the sync log into **MobileSync_201xxxxx.txt** in Fidelio Cruise folder.
Include Tomorrow Expected Guest	This function includes passenger departing the next day into synchronization.
Sync Now	The Sync Now is an on-demand synchronization process, which checks for record change that require updating in CHG_MOBILE_OUT in Mobile database to Ship database, followed by CHG_MOBILE_IN in Ship database to Mobile database.

Field Name	Field Definitions
Full Sync	The Full Sync triggers synchronization between FCMOBILE_DB with the Ship database. It truncates the FCMOBILE_DB prior to updating it with the latest data from Ship database.
Verify Database	The Verify Database updates the FCMOBILE_DB structure with the latest version. System checks for the version in **`FCMOBILE.PAR.MOBILE.MOBILE.DB,`** and if it is out of date, a warning prompt **'Please Run Verify database first'** will pop up before Full Synchronization can be perform.

Table 3-2 - Field definition of IFC Mobile Sync Settings

3.4.2. Creating FCMobile Schema

When creating the FCMobile User in Database Preparation, a Database Verification is required before FCMobile Schema is created and below are the steps.

1. Launch **IFC MobileSync.exe** from Fidelio Cruise folder.
2. Go to **Settings tab** and select **Verify Database** to perform a database verification.

> **Note:** User will be prompt to login before performing a database verification. Only users with access rights '**Allow Run Verify Database**' are allowed to perform this task.

3.4.3. Performing IFC Mobile Sync

An on demand synchronization can performed when the need arises, and this is performed through **IFC MobileSync.exe.**

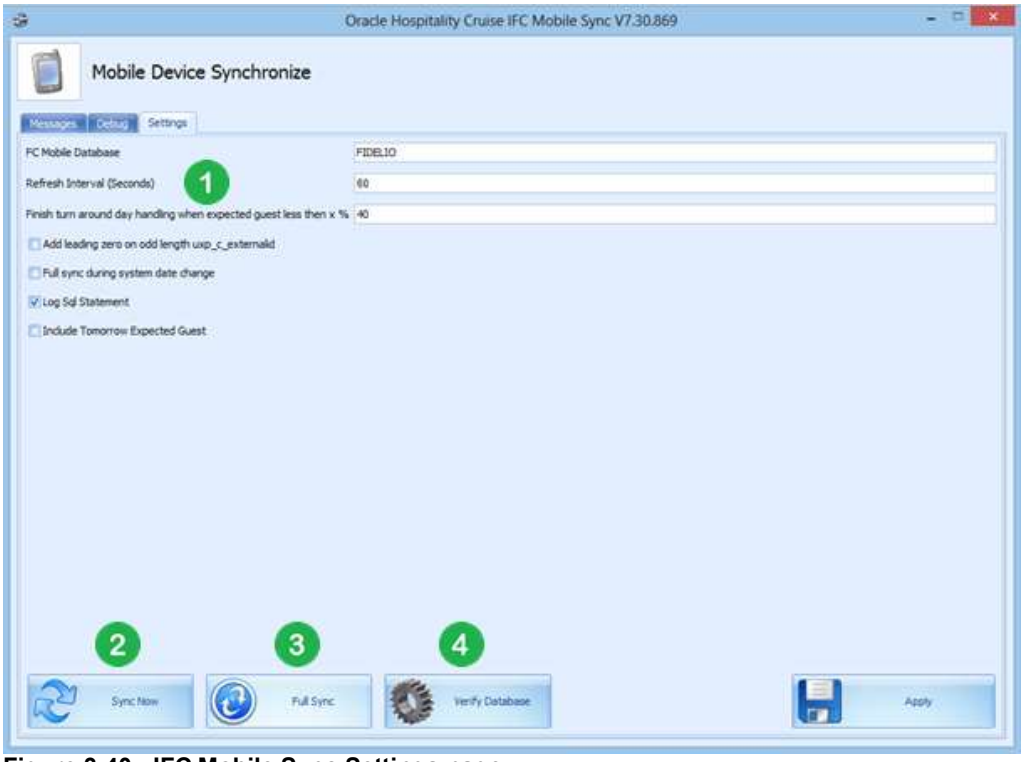

Figure 3-40 - IFC Mobile Sync Settings page

Performing a Synchronization

1. Launch **IFC MobileSync.exe** from Fidelio Cruise folder and navigate to the **Settings** tab.
2. Verify that the FC Mobile Database is point to the correct ship database[1] and click **Apply** to save the changes.
3. Select **Sync Now**[2] to perform synchronization immediately or select **Full Sync**[3] to perform a complete synchronization.

> **WARNING:** The **FULLSYNC** will *truncate data in FCMobile Schema* and sync all relevant data and photos from Fidelio to FCMobile Schema. If the parameter value in ' **Mobile DB Version'** is ***not the same*** in both Fidelio and FCMobile Schema, IFC Mobile Sync will prompt for database to be verified first. User will be prompt to login before database verification.
>
> Only users with access rights '**Allow Run Verify Database**' are allowed to perform database verification.

4. If the parameter `Mobile, Mobile DB Version` value is not same in Fidelio and FCMobile schema, System will prompt for database to be verified first.

[1] FCMobile Database
[2] Sync Now button
[3] Full Sync button

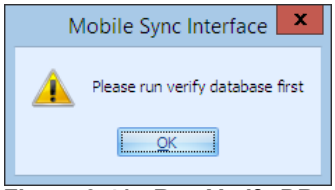

Figure 3-41 - Run Verify DB prompt

5. Click the **Verify Database**[4] at the bottom of the screen to update the FCMOBILE. DB structure to the latest version.

> **Note:** User will be prompt to login before performing a database verification. Only users with access right '**Allow Run Verify Database**' is allowed to perform this task.

6. At the end of the verification process, System will insert a message **'a Run Verify Database – Completed'**.

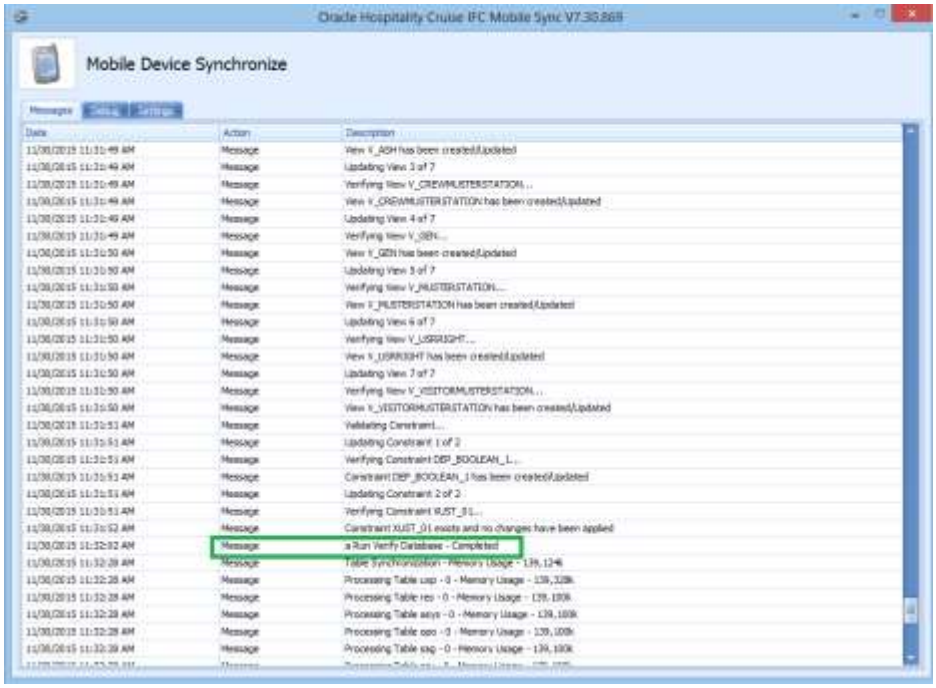

Figure 3-42 - Database Verification complete

Performing a Full Synchronization

1. Repeat the above steps and then select **Full Sync** to perform the synchronization.
2. If there are pending changes from **Mobile DB to Fidelio DB**, System will prompt a warning message.

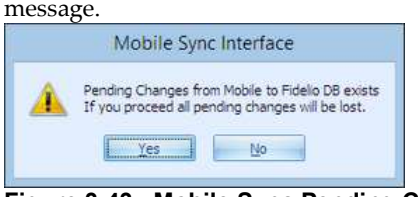

Figure 3-43 - Mobile Sync Pending Changes prompt

[4] Verify Database button

3. Click **Yes** will ***wipe out*** all pending changes and **No** will cancel the Full Sync.
4. Enter the **login ID and password** when prompt.
5. At the end of the synchronization process, ensure the tables were synchronized without an error.

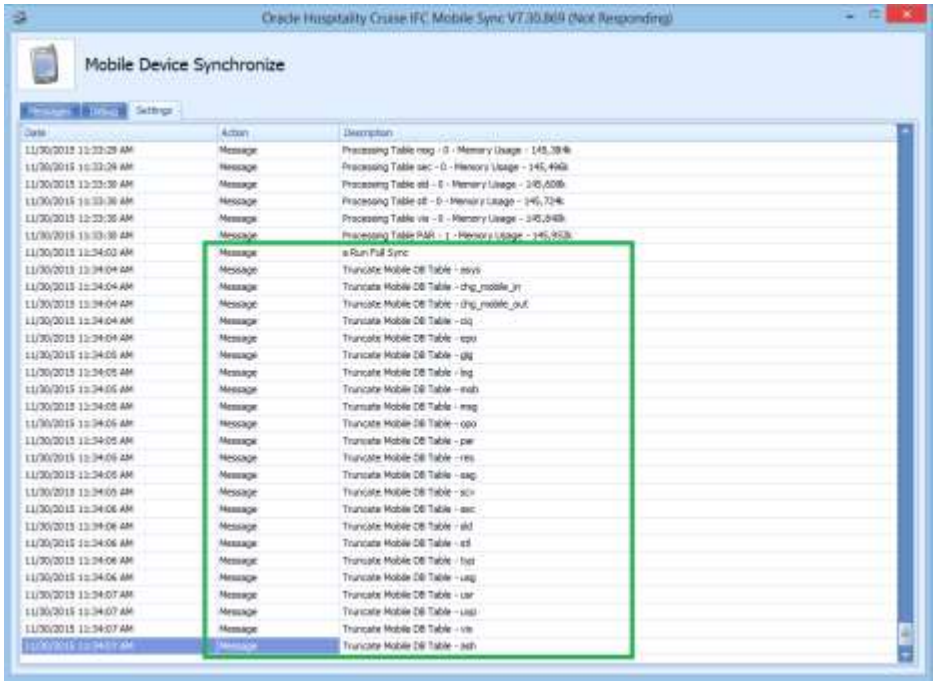

Figure 3-44 – Synchronized tables in IFC MobileSync

4. FC WPFDash

The Muster Dashboard (FC WPFDash.exe) is designed to provide users a real time count and progress overview to the bridge, enabling user to monitor the mustered count for each muster station/lifeboat, and assisting the Ship operation to quickly and efficiently account for all passengers and crews onboard in an emergency situation. The program comes in three preset modes and they are Emergency Passenger Drill mode, General Assembly mode and Abandon Ship mode.

4.1. Installing .NET Application on WPF Dashboard station

With the Muster Dashboard program being a .NET application, this would require a .NET client to be installed prior to using this application. A copy of the installation guide is downloadable from *Fidelio SharePoint / Products/SPMS/SPMS Release Documents/SPMS Upgrade - Installers Guide.docx*.

1. Complete the .NET Client installation per instructions in `SPMS Upgrade - Installers Guide.docx`
2. Download the latest version of Fidelio Cruise Programs from the FTP Server.
3. Copy the following files to the **Fidelio Cruise** folder of the **Client PC** that runs the Muster Dashboard.
   - FC WPFDash.exe
   - FidelioSPMSBusiness.dll
   - FidelioSPMSData.dll
   - FidelioSPMSDB.dll
   - FidelioSPMSUI.dll

> **Note:** The version for above **DLL's** and **FC WPFDash.exe** *must* be the same.

4. Run **FC Database Installer.ex**e to restore all custom changes made to the database objects, i.e.; Index, View to the actual SPMS database requirement.

4.2. Accessing WPF Dashboard

1. Launch the **FC WPFDash.exe** and select the server to login when prompt.

Figure 4-1 - WPFDash Server selection

2. Once login, System displays the **Dashboard Main Window** with drill graphs, device connection status and settings per value saved in parameter **Mustering Mode**.

Figure 4-2 – Overview of Muster Dashboard screen

Table 4-1 - Definition of Muster Dashboard screen

Field Name	Field Definitions
1. Mode displayed	Displays the current muster mode.
2. Muster Status	Displays the Mustering / Drill Status.
3. Muster Assembly Drill tab.	Displays the graphical view of Muster Drill/Muster Assembly.
4. Muster by Vertical Zone tab	Displays the graphical view of Vertical Zone.
5. Mobile Device tab	Displays the Mobile Devices status, whether it is Online/Offline, Battery Mode and device serial number.
6. Guest Pie Chart view	Displays the Overall Guest Count in Pie Chart.
7. Crew Pie Chart view	Displays the Overall Crew Count in Pie Chart.
8. Search function	Passenger Look Up button.
9. Settings	Muster Mode Set up.

4.3. Switching Muster Dashboard Mode

The Muster Mode Setup allows user to perform a muster mode change, resets the device mode, and start/stop the Passenger Drill Mode.

1. In the Dashboard overview screen, click **Settings**.
2. In the Muster Mode Setup screen, click **radio button or the drill name** to select the mode.
3. Change the **Refresh Seconds** if necessary. The default seconds is 5.
4. Click **Save** to confirm the mode change, and initiates and transmits the selected mode to the handheld devices.

5. A click on **Reset** button beside the mode name will reset the **Total Count** shown in the Dashboard.

Figure 4-3 - Muster Mode Setup Screen

When an **Emergency Passenger Drill Mode** is selected, an added option is made available in the Muster Mode setup, enabling user to:

- Stop or Start a drill.
- Display Drill for Today Only.

Figure 4-4 – Function to stop current drill

Figure 4-5 - Function to start a drill

If '**Display Drill for Today Only**' is chosen, the graph presentation of the total mustered count is changed from '**Previous date until current**' to '**Current Date**' only, and the current date is the **system date**.

4.4. Muster Drill Modes

The Muster Dashboard is pre-configured with three Mustering Mode, and each of these modes represents different mustering routine, with and information projected in the overview screen may defer. The pre-configured modes are:

- Emergency Passenger Drill
- General Assembly Drill
- Abandon Ship

4.4.1. Emergency Passenger Drill

The **Emergency Passenger Drill Mode** represents the routine mustering drill for passengers boarding on the first day of cruise, and this mode only involves the passengers.

Figure 4-6 - Emergency Passenger Drill screen

In the **Muster Assembly Drill** tab, a detailed bar graph indicating the total count corresponding to the statuses is shown, and mouse over the bar graph will display the statistic of the Muster station.

Below are the information displayed when hovering the mouse over the Life Boat bar graph.

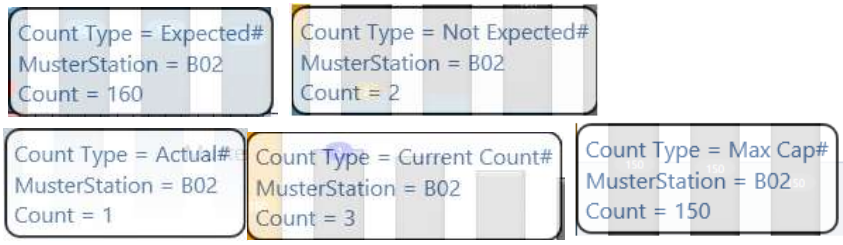

Figure 4-7 - Emergency Passenger Drill Lifeboat statistic

Double click the bar graph will display the passengers list, either by **registered passenger** or **expected to register** at the muster station.

Figure 4-8 - Emergency Passenger Drill Registered/Expected Passenger screen

To view the **expected to register passengers**, click the "**X** '**Mark here to Show Missing Person only**", and then click the **Refresh** icon on the right of screen.

Figure 4-9 - Emergency Passenger Drill Expected Passenger List

To view the registered passengers, **uncheck** the '**Not Accounted For'**, and then click the **Refresh** icon on the right.

Figure 4-10 - Emergency Passenger Drill Registered Passenger List

4.4.2. General Assembly Drill

The **General Assembly Mode** represents an Emergency Mustering Check In to the muster station, and this does not represent a full evacuation. All passengers mustered at the muster station are required to wait for further orders that may potentially lead to abandoning the ship.

The view of the General Assembly Mode is split into two separate tabs - **Life Boat** or **Life Raft**.

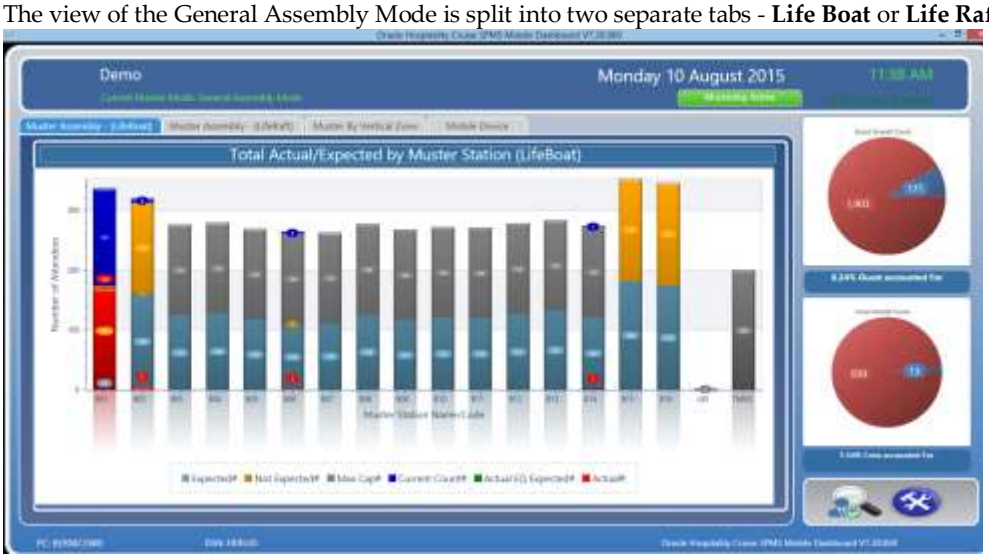

Figure 4-11 - General Assembly Mode Lifeboat

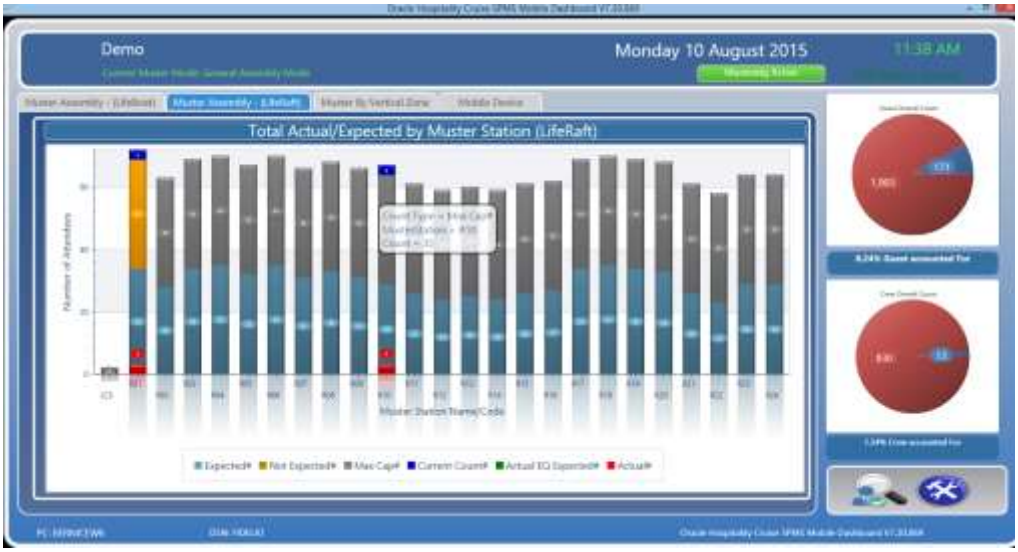

Figure 4-12 - General Assembly Mode Life raft

The General Assembly Drill tab displays a detailed bar graph with the total count corresponding to the status, and mouse over the bar graph displays the statistic of the Muster station.

Below are the information displayed when hovering the mouse over the Life Boat and Life Raft bar graph respectively.

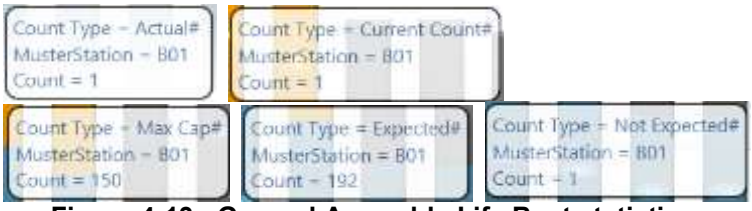

Figure 4-13 - General Assembly Life Boat statistic

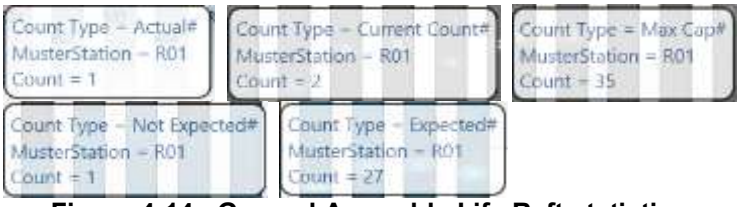

Figure 4-14 - General Assembly Life Raft statistic

Double click the bar graph will displays the passengers list, either by **expected to register passenger or crew** at the muster station.

Figure 4-15 - General Assembly Drill Assembly Registered Account List

To view the register passengers and crew, **uncheck** the "**X Not Accounted For**", and then click the **Refresh** icon on the right.

Figure 4-16 - General Assembly Account List Expected Account List

4.4.3. Abandon Ship

The **Abandon Ship Mode** displays an overview of the lifeboat and liferaft with detailed count of total expected, mustered-so-far and muster-still-pending in each tab. This mode activates the lifeboat capacity checking on the handheld devices when a full evacuation arises.

In the **Abandon Ship Mode**, the view is split into two separate tabs – a Life Boat or Life Raft view.

Figure 4-17 - Abandon Ship by LifeBoat view

Figure 4-18 - Abandon Ship by Liferaft view

Similar to **Muster Assembly Drill** tab, a detailed bar graph indicating the total count corresponding to the status is shown, and hovering the mouse over the bar graph will display the statistic of the Muster station.

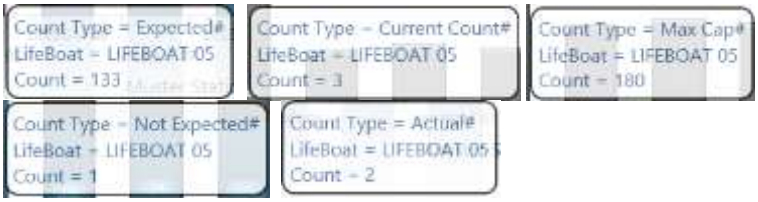

Figure 4-19 - Muster Assembly Life Boat statistic

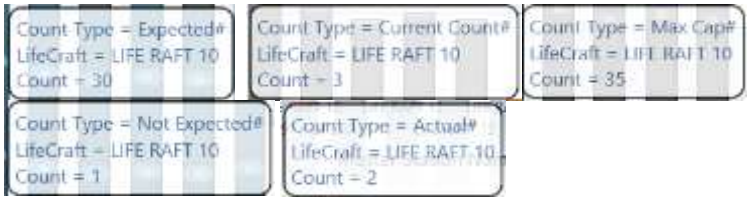

Figure 4-20 - Muster Assembly Life Raft statistic

Double click the bar graph will displays the passengers list, either by **passenger or crew due to register** at the muster station.

Figure 4-21 - Abandon Ship Registered Account List

To view the expected to register passengers, select the "**X** '**Not Accounted For**", and then click the **Refresh** icon on the right of the screen.

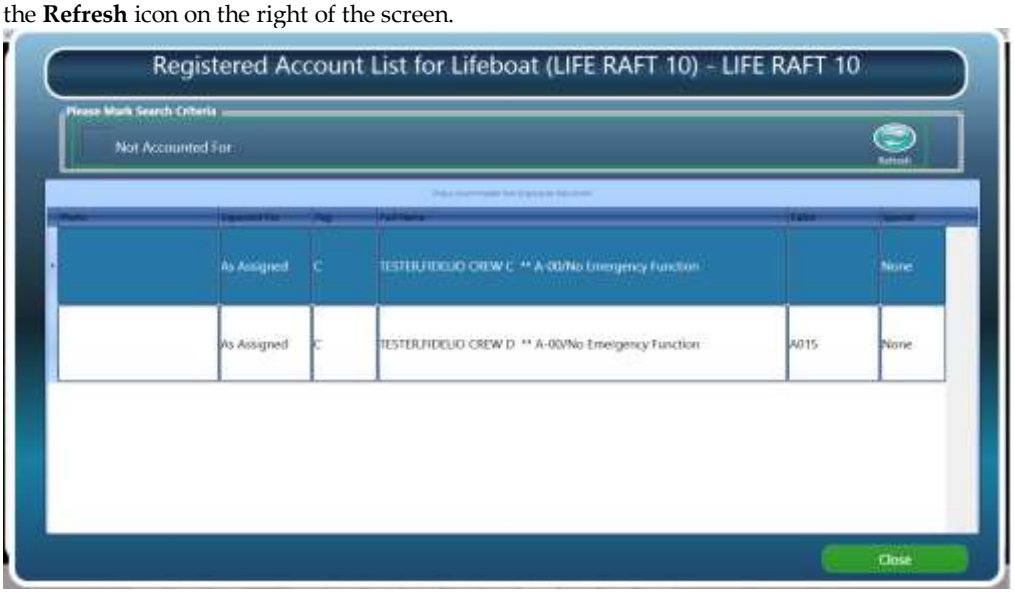

Figure 4-22 - Abandon Ship Missing Person Account List

4.5. Muster By Vertical Zone

In the **Muster by Vertical Zone** tab, the graph indicates the evacuation of main vertical zones for each cabin assigned, and this view is dependent on Main Vertical Zone (MVZ) setup in each cabin under **FC Administration, Stateroom** setup. Refer *Setting up Vertical Zone and Stateroom*.

Figure 4-23 - Muster by Vertical Zone screen

Similar to **Muster Assembly Drill** tab, a detailed bar graph indicating the total count of corresponding of the statuses are shown, and hovering the mouse over the bar graph displays the statistic of the Vertical Zone.

Below is the summary of information shown when hovering the mouse over the bar graph.

Figure 4-24 - Summary Information of Muster by Vertical Zone

Double click on the bar graph will displays the passengers or crew list **registered** at the muster station.

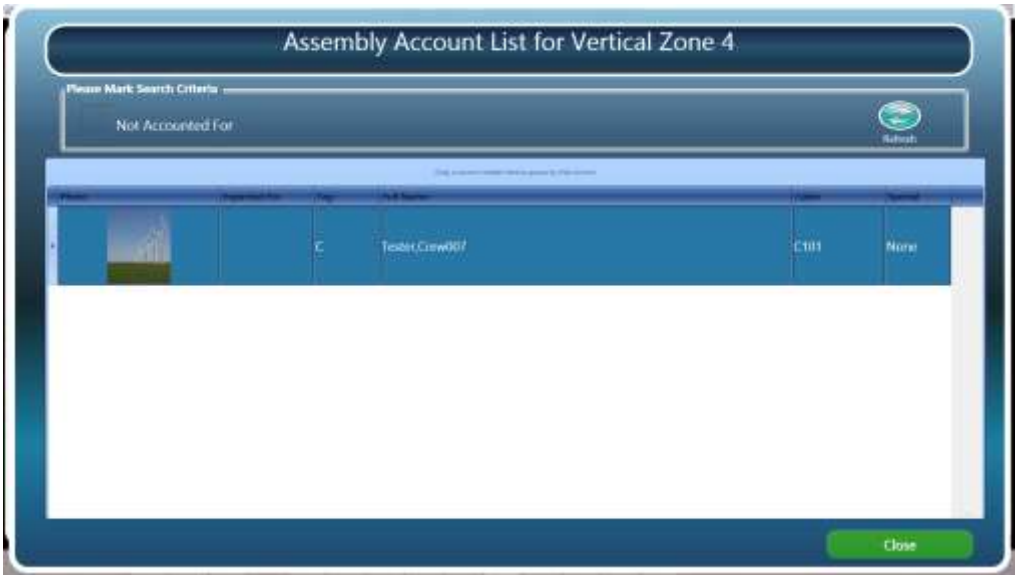

Figure 4-25 - Muster by VMZ Assembly Registered Account List

To view the expected to register passengers, **uncheck** the "**X Not Accounted For**", and then click the **Refresh** icon on the right of screen.

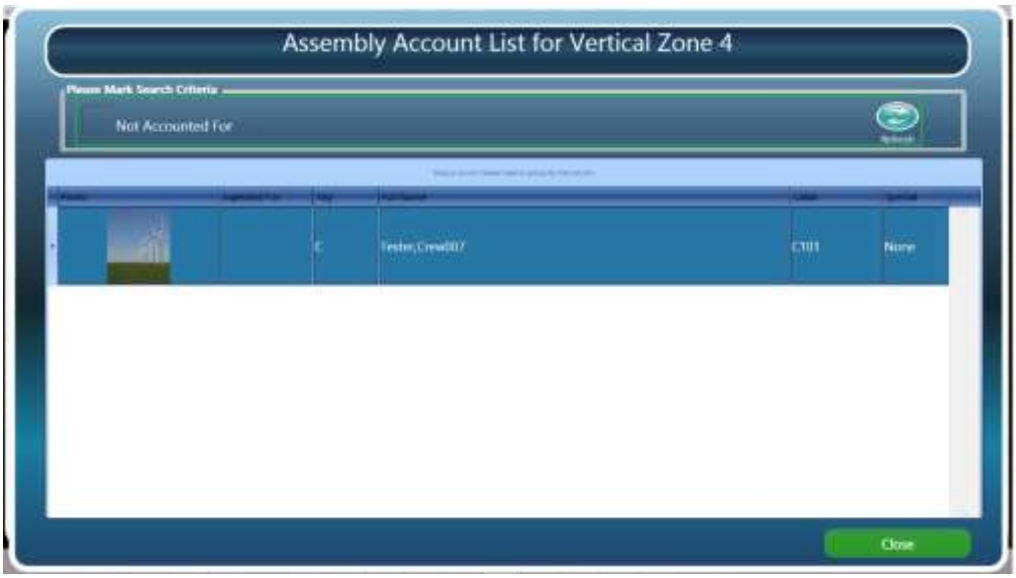

Figure 4-26 - Muster by VMZ Assembly Expected Account List

4.6. Mobile Device Dashboard

The **Mobile Device** tab provides an overview of the handheld devices used in Mobile Mustering. Information such as **Device Name, Status - Online or Offline, Battery Level by percentage** and **Serial Number** are shown in a single view.

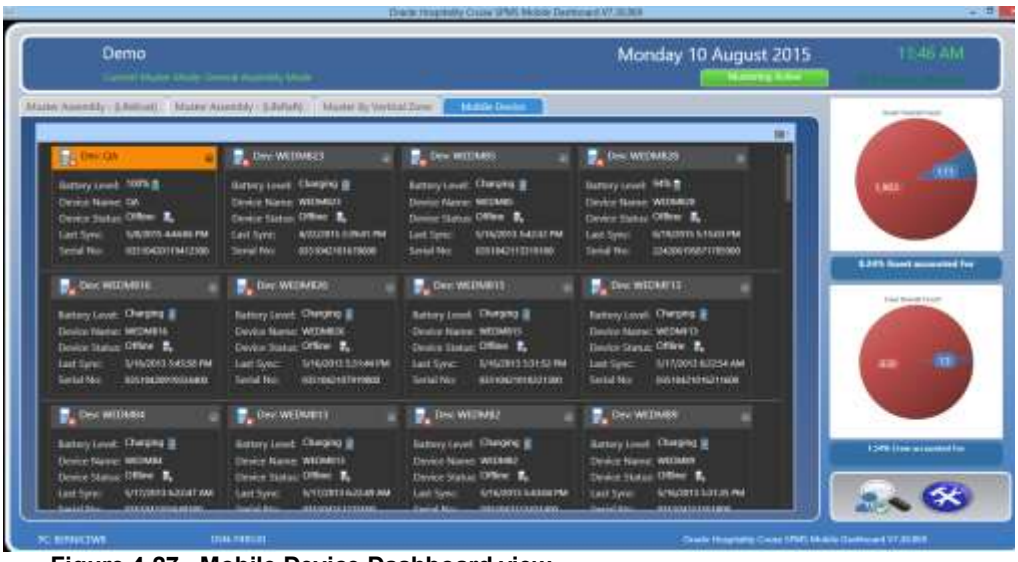

Figure 4-27 - Mobile Device Dashboard view

4.6.1. Resetting Mobile Device Dashboard

The Reset mode in Mobile Dashboard allows user to reset previous drill counts before performing the next drill.

1. In the Dashboard overview screen, click **Settings**.
2. In the Muster Mode Setup screen, click **Reset** button next to the drill name to reset.
3. Click **Save** to confirm.

System writes a log into `MUSTERLOG` table by each mustering mode in every reset preformed. This triggers an update during data synchronization when a Reset event is found and writes the following statement into MUSTERLOG table

```
"UPDATE musterlog SET musterlog_syncdate = SYSDATE WHERE
musterlog_syncdate isNULL"
```

Mobile Dashboard will compare the Last Reset Sync Date (`MUSTERLOG_SYSDATE`) with the device last sync date (`MOB_LAST_SYNC`), and the duration set in Parameter '`Mobile Device Reset Duration Threshold`'. If the duration is *more than* the threshold specified, devices that are currently in use will populate in Mobile Device tab, as illustrated in *Figure 4-27 - Mobile Device Dashboard view*.

4.7. Navigating the Passenger Search function

The **Passenger Search** function enables user to manually lookup for passenger using an **Account by Name, Cabin number** or simply by **scanning passenger board card**. Apart from functioning as a search tool, it is possible to register a passenger with this function.

Figure 4-28 - Passenger Search Screen

Table 4-2 - Definition of Passenger Search screen

Field Name	Field Definitions
1. Search Bar	Search bar that supports name, cabin number or scan board card.

Field Name	Field Definitions
2. Passenger Registration Status	Displays the Passenger registration status: X = Yet to register ✓ = Registered Orange header color = selected account.
3. Passenger's Details	Displays the status and muster station registration.
4. Select of Muster station	Defines the Muster station to register the guest to.
5. Cancel or Register	A confirmation button to register the passenger or cancel the registration.
6. Additional menu options	Additional options available to passenger search.

To Search for an Account

1. At the bottom right of the **Main Muster Dashboard** screen, click the **Search** icon.
2. Enter the **Account** in the Search Bar.
3. The default search result is displayed in alphabetical order.
4. Click the **Additional menu box** icon on the top right of the screen to change the display order.

To Manually Register a Passenger

1. Look up for an **Account** in the Search Bar.
2. Select the **Passenger** that are yet to register. The header color of the selected account is highlighted in orange, and multiple selection is permissible.
3. From the **Muster station** drop-down list, select the muster station to register the passenger to.
4. Click **Register** to confirm the process.
5. System will prompt for confirmation as you register the passenger. Select **Yes** to proceed.

Figure 4-29 - Passenger Registration prompt.

6. System will prompt another confirmation once the passenger is successfully registered, and the muster station is shown in the passenger's detail screen, under **Expected/(Actual)**.
7. Click **OK** to exit.

To Unregister an Account

1. Look up for an **Account** in the Search Bar.
2. Select the **Passenger** that are already registered. The header color of the selected account is highlighted in orange, and multiple selection is permissible.
3. Click **UnRegister** at the bottom left of the screen to confirm the process.
4. Select **Yes** to proceed with un-registration when prompt.

Figure 4-30 - Passenger Un-registration prompt

5. Once the un-registration is successful, click **OK** to exit.

5. Mobile Mustering Device

The following section describes the setup and usage of Mobile Mustering application on Mobile Devices.

5.1. Setting up Mobile Devices

Before you begin with any setup, ensure the connection to the appropriate Mobile Server and the PC the device connects to is established.

1. Download the **FCMustering_x.x._xxxx.zip** from **Fidelio FTP/Partners/5pro/FCMUSTERING** folder.
2. Unzip the **FCMustering_x.x.x_xxxx.zip** to a temporarily folder.
3. On the setup file *.msi file, right click and select **Send to**, then select the **Mobile name** to send the setup file to.

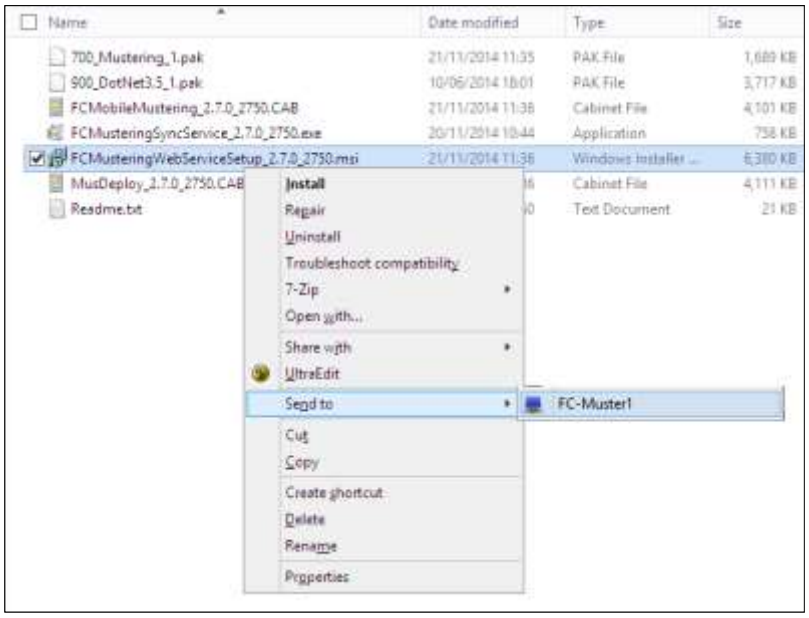

Figure 5-1 - Sending setup file to mobile device

4. On the Mobile Device, open the **File Explorer**.

Figure 5-2 - File Explorer on Mobile Device

5. Locate the latest **FCMobileMustering_x.x.x_xxxx.CAB,** and then double click on the file.

Figure 5-3 - Locating Mobile Mustering setup file

WARNING: Various installation files for other supported devices are deployed in the same setup file. Ensure you select the correct setup file for your device.

- Motorola MC55A – Setup file MusDeploy_x.x.x_xxxx.CAB.
- Motorola PSION EP10 – Setup file FCMobileMustering_x.x.x_xxxx.CAB
- Nordic Device – Setup file 700_Mustering_1.pak

6. Select the location to install when prompt.
7. Once installation is successful, you will receive a prompt per below, and a folder FCRUISE is created in **SD-MMC-Card\Fcruise**.

Figure 5-4 - Successful installation prompt on mobile device

8. Make a **Cold boot** on the mobile device by holding down the red button on the device keypad, and then release the red button once the device restarts.
9. At the end of the installation, go to main menu screen and launch the **FCMobile Mustering** application.

Figure 5-5 - Mobile Device Main Screen

10. On the first launch of the **FCMobileMustering** application, System will prompt for an **IP** and **SSL Port** to be inserted. Enter the SSL port according to the port number set up in earlier topic, *Verifying the SSL Connection*.

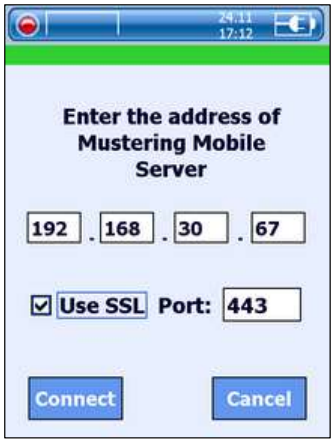

Figure 5-6 - Mobile Device SSL Port Setting

Note: Ensure the Use SSL box has a check mark.

11. Select **Activate as New** or **Activate as replacement** when prompt.

Figure 5-7 - Activating Mobile Device as New

When Activate as New is selected:

System will prompt for device name to be inserted, and update the table MOB.MOB_Name field.

Figure 5-8 – Registering Mobile Device as New

Note: If device is activated as new, the drop-down list will only prompt available device name.

Activate as replacement

System will list all devices name registered in 'MOB' table in the drop-down list. Selecting the device name from the drop- down list sets off a notification prompt, "**This device is already registered. Device name <Device name> will be used**". New device ID will be assigned to the selected device name when **Register** is pressed.

Figure 5-9 - Registering Mobile Device as Replacement

12. Once a connection to the **Mobile Server** is established, and the device is successfully registered, all the necessary data will be downloaded onto the device as illustrated in below screen shots.

Figure 5-10 - Data Preparation on Mobile Device

5.2. Using the Mobile Device

On successful registration of the device, options such as Manual People Search, Total Count Window, Special Needs Count, Passenger Registration, Modes Switching are available to user when they login to the device.

Below is the main screen of the device and its function:

Figure 5-11 - Mobile Mustering Main screen

Table 5-1 - Definition of Mobile Mustering Main screen

Field Name	Field Definitions
1. Online/Offline Mode	Online or Offline indicator between Application Server and mobile device. Green = Online Red= Offline.
2. Sign On Muster Station	Muster Station this device signed on to.
3. Passenger Count.	Total number of registered passenger count.
4. Date/Time Indicator	Date and Time indicator.
5. Battery Indicator	Battery indicator.
6. Mustering Mode	Current Mustering mode user is log in to.
7. Application Version	Mobile Mustering application version.
8. Total Count View	Total Count View - for all or by Passenger, Crew or Visitors.
9. Special Needs Count	Special Needs Count - for all passengers or by adult / children.
10. Cabin Look Up	Cabin or Name look up.
11. Miscellaneous Setting	Miscellaneous and Settings.

5.2.1. Login to Device

1. On the device desktop screen, click the **FCMobileMustering** icon.
2. Select to login by scanning the user barcode through a barcode reader, or manually enter the username and password when prompt.

Figure 5-12 - Mobile Device Login Screen

3. Select the **Muster Station** from the drop-down list and click **Proceed**.

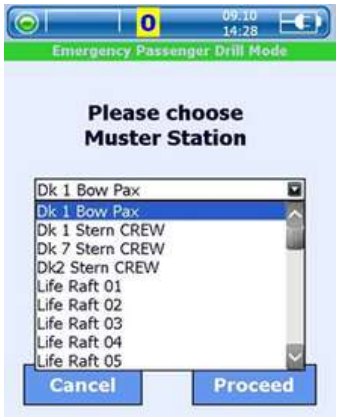

Figure 5-13 - Muster station selection during login

Note: The device will return to the main mustering screen once user select the muster station. If several devices of the **Muster Station** are **'Online'**, the devices will remain in sync. The mobile device works in both Online and Offline mode to support a real emergency situation and in the event where the ship power may be compromised.

5.2.2. Total Count

The **Total count** status window displays an overview of Total Count for Registered , Pending and Maximum passengers allowed according to the signed on assembly station and Mustering mode. The behavior and screen displayed in all Mustering modes are identical, except the in **General Assembly** and **Abandon Ship** where **Crew** and **Visitors** tab are added.

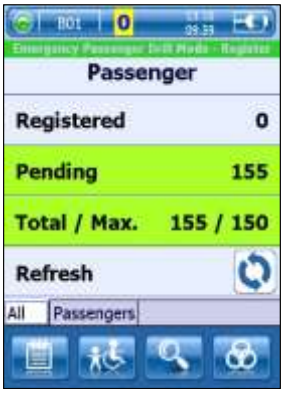

Figure 5-14 - Emergency Passenger Drill Mode

Figure 5-15 - General Assembly Mode

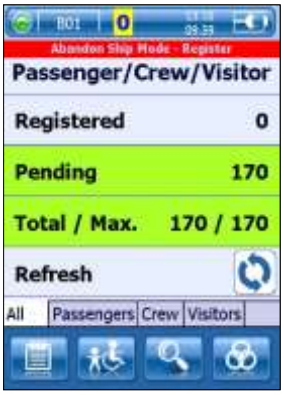

Figure 5-16 - Abandon Ship Mode

To view the Total count,

1. Press the **Clipboard** icon at the bottom left of the screen.
2. Select **Registered** or **Pending** to display the passenger list of the Muster Station.

Figure 5-17 - Total Count Passenger List

3. Double click the passenger name will display the passenger name in full.

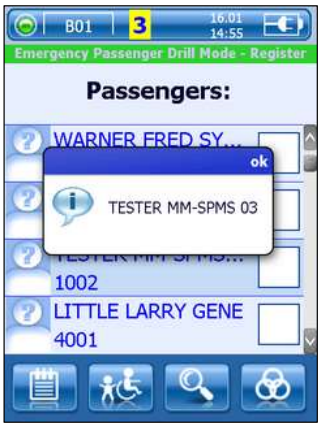

Figure 5-18 - Passenger Name Display

4. To return to the passengers list, click **OK** on the top right of the pop up window.
5. To return to the Total Count screen, click the **Clipboard** icon.
6. To refresh the Total Count, click the **Refresh** icon. This process synchronizes the device data with FCMobile DB.

5.2.3. Special Needs Count

The **Special Needs** screen displays the passenger counts with special needs and the total children on board.

To view the Special Needs count,

1. Press the **Accessible** icon at the menu bar. The default display tab is **All**.
2. Press **Special Needs** or **Children** tab to display information of the respective section.

Figure 5-19 - Special Needs Count

3. Select **Registered** or **Pending** to display the passengers list.

Figure 5-20 - Special Need and Children List

4. A check mark is placed when the passenger name is selected, and this enables the user to **register** the passenger at the same time.

5.2.4. Search Guest

The Search Guest function enables user to look up the guest information either by cabin number or name.

To search for guest

1. Click the **Search** icon on the menu bar, enter the cabin number or guest name in the field provided, and then click **Search**.

Figure 5-21 - Passenger Search function and list

2. Click the '**Click to search other stations'** on the passenger list to include search on other muster station. Passenger registered at other muster station will have the check in status indicated in *yellow*.

Figure 5-22 - Passenger List, including other Muster station

3. To register the passenger, place a check mark in the box on the right and then press the **Green** button on the keypad. This will register the passenger to the signed in muster station, or reject the registration depending on the parameter defined. Refer *PAR_GROUP MOBILE, Current General Assembly Handling Mode* and
4.
5. Passenger Registration

Figure 5-23 - Selection of Passenger Registration

6. Click the passenger name to further display the passenger's details such as name, cabin number, registration status, registered muster station, date and time.

Figure 5-24 - Passenger/Crew details

7. Tapping on the name area will prompt a dialog box, displaying the registration information including special needs, if any. When a crew name is selected, the crew ***Emergency Function*** is shown in the pop up window.

Figure 5-25 - Additional Passenger/Crew details

5.2.5. Passenger Registration

Passenger Registration function is available in all Mustering modes, and the registration would only require a passenger's board to be scanned. The passenger is automatically registered once the board card is scanned and the registration status is set to IN in his/her details. Besides registering the passenger by scanning his/her board card, manual registration is also permissible.

To manually register a passenger

1. Press the **Clipboard** icon.
2. In the **Total Count, Pending** list, select the passenger name or scan the passenger board card.
3. Place a check mark in the check box besides the passenger name and then press the **Green** button on the keypad to proceed with registration.

Figure 5-26 - Expected Passenger Registration screen.

4. When the registration is successful, user will receive a prompt, and the message context defers when registering passenger in different modes.

Figure 5-27 - Successful registration of passenger

5. The above process updates the Registered Count and changes the passenger's status to **IN** in the passenger list. The list also displays the passengers name by cabin number order and children are labeled in red.

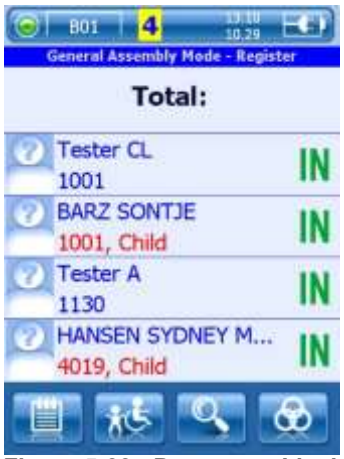

Figure 5-28 - Passenger List in Muster station

Note: Passenger Registration to the muster station is still permissible when the capacity reaches the maximum.

To manually register an Unexpected passenger

1. Repeat the above steps.
2. Do note that the behavior of the registration in step 2 varies and is dependent on the setting defined in Parameter `PAR_MOBILE, Current General Assembly Handling Mode`.
    - If parameter is set to **1**, this allow unexpected person to be registered in current signed in Muster station.
    - If parameter is set to **2**, user will be prompt to either continue to register the unexpected person on current Muster station or reject it.

Figure 5-29 - Incorrect muster station registration prompt

- If parameter is set to **3**, registration of the unexpected person on current Muster station is ***forbidden***.

Figure 5-30 - Forbidden registration of passenger prompt

5.2.6. Miscellaneous & Settings

Miscellaneous and Settings tab enables user to switch muster station or modes, synchronizes the device data with Mobile Server and reconnecting the Wi-Fi connection. These functions are accessed by pressing the **Setting** icon on the menu bar.

Figure 5-31 - Miscellaneous & Settings options

The Miscellaneous and Settings have four tabs and each of the tab has different functions.

Table 5-2 - Mobile Device Miscellaneous and Settings Function

Tab Name	Function Definitions
Settings	▪ Change Muster Station o Enables user to switch muster station swiftly. ▪ Date and Time format o To change the date/time format on the device. ▪ Change Mustering Mode o Enable user to switch between available modes, and only function when the device is *Offline*. ▪ Unregistration Mode o Enable user to switch from registration to un-registration mode or vice versa. ▪ Create New Issue o Enable user to log an issue encountered on the device.
Full Sync	▪ Full Sync ▪ Data Sync
Other Settings	▪ Log Off ▪ Exit
WiFi	▪ Reconnect an offline WiFi.

Changing Muster Station

To switch from one Muster station to another,

1. Press **Setting icon** on the menu bar.
2. Select **Settings** tab, and then **Change Muster Station**.
3. Select the Muster Station from the drop-down list, and then click **Proceed** to switch to the selected Muster station.

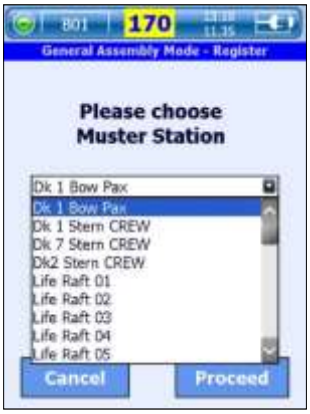

Figure 5-32 - Muster station selection

4. When there are no passengers in the selected Muster station, System will be prompt for confirmation to procced or return to main screen. Click **Yes** to continue switching or **No** to return to the main screen.

Figure 5-33 - Muster Station with Zero passenger

Changing Date Time Format

To change the Date and Time format,

1. Press the Date Time format
2. Select the Time and Date format to display, then click **Save**.

Figure 5-34 - Date/Time Setting Screen

Switching Mustering Mode

Mustering mode change can *only* be performed when the device is **Offline**.

To Change a Mustering Mode,

1. In Settings tab, select **Change Mustering Mode**.

Figure 5-35 - Change Mustering Mode screen

2. Select the mode to switch to when prompt, and then press **Proceed**.

Figure 5-36 - Mode selection screen at Change Muster Station

3. Select the Muster Station from the drop-down list when prompt, and then press **Proceed** to complete the switch.
4. Once the Mustering mode is changed, navigate to Total Count, Special Needs menu or Search to continue mustering.
5. The Mustering Mode can also be switch from **FC WPFDash** by sending a request to the Mobile Server with the device being **Online**. The device will receive the following message, indicating the mode being switch to.

Figure 5-37 - Switching Mustering mode in FC WPFDash

Changing Registration Mode

The Unregistration Mode enables user to de-register passenger(s) from the Mustering Mode.

To Un-register a passenger,

1. In Settings tab, select **Unregistration Mode**.

Figure 5-38 - Unregistration Mode

> **Note:** Once **Unregistration Mode** is selected, the mode is automatically switched to **Registration Mode**.

2. Press the **Clipboard** icon to return to Total Count screen.
3. Place a check mark in the check box next to the name, and then press the **Green** button on the keypad.
4. Status of the passenger(s) will change from **IN** to **OUT,** and this increases the **Pending** count automatically.

Figure 5-39 - Manual Un-registration

Figure 5-40 - Un-registration by scanning passenger board card

5. Un-registration of the passenger is **prohibited** if the selected passenger is registered in other muster station.

Figure 5-41 - Forbidden un-registration

Create New Issue

The Create New Issue is an issue tracker function that enables user to log an issue encountered on the device.

1. In the **Settings** tab, select **Create New Issue,** which navigates user to a new window.

Figure 5-42 - Create Issue window

Field Name	Function Definitions
Connection Status	Display current device connection. If the Muster mode is Offline, the send issue to the server will fail.
Name	Name of person reporting the issue.
Type	Type of issue pre-defined in the system.
Description	Description field of the issue.

Table 5-3 - Field definitions of Create New Issue

2. In the **Name Field**, enter the name of person who report the issue.
3. Select the type of issue from the drop-down list, and enter the issue in the **Description field,** and then press **Send**.
4. The device will prompt the progress bar when an issue is send.

Figure 5-43 - Progress bar when sending an issue

5. If the application status is *Offline* or the issue failed to send, then the issue is saved in `\\\WinCE Device\Storage Card\FCruise\Issues\Mustering\` folder.
6. Check the internet connectivity and press **Send again** when the issue failed to send.

Figure 5-44 - Failed to send an issue

Online and Offline

Once the application has started and data is synchronized to the device, user may continue to work Offline.

When the device loses its connection with the Mobile Server, user is required to select the Mustering Mode after selecting the Muster Station.

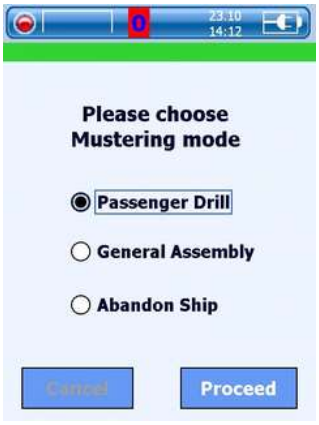

Figure 5-45 - Drill mode selection

When the Mustering Mode is switched to **Offline**, the status displayed in Total Count will automatically change to **Red**.

Figure 5-46 - Offline Mode Total count screen

Synchronizing Device data

If the devices were in **Offline** mode for a period of time, it is advisable to synchronize the device data and keep it current.

To perform a Synchronization,

1. Press the **Settings** icon and select **FullSync** tab.
2. Select the type of synchronization to perform
   - **Full Sync:** Deletes database from the device and download the newest data from the server. System delete all photos from the device and re-download the newest photos from the server during full synchronization. Function is use when there are changes in FCMobile Schema.
   - **Data Sync:** Deletes database from the device and download the newest data from the server.

Figure 5-47 - Synchronization screen

Other Settings

In Other Settings tab, user is able to **Log Off** from the session or **Exit** from the application.

1. In the **Other Settings** tab, select **Log Off** or **Exit**.

Figure 5-48 - Log off / Exit screen

2. If **Exit** is selected, the device will prompt for user name and password. Board card may be scanned or manually enter the username and password to Exit.

Figure 5-49 - Exit screen using a barcode or manually

Reconnecting WiFi Connection

The WiFi option is made available to **Psion device** only. When **Wi-Fi reconnect when offline** is checked, the device network will automatically reconnects when the device is placed on the craddle.

Figure 5-50 - WiFi reconnection setting for Psion device

6. Upgrading Mobile Mustering

As applications are being updated periodically, the following section describes the steps to upgrade the application and services on the server and mobile clients.

6.1. Updating Mobile Schema

To ensure FCMobile Schema is up-to-date, perform an IFC Mobile Synchronization by:

- Verifying the database
- Perform a Full Synchronization.

See *Performing IFC Mobile Sync* for more details.

6.2. Mobile Services Reinstallation

Before you begin to reinstall the Mobile Services on the Server, any existing services must be uninstalled.

6.2.1. Stopping Mobile Sync Services

Mobile Sync Services must be stop before reinstalling the Mobile Services.

1. In the **Server Control Panel, Administrative Tools**, select **Services**.
2. Right click the **FCMobileSyncService** and **s**elect **Stop** to stop the services.

6.2.2. Uninstalling Web Service and Sync Service

Previously installed Services must be removed prior to reinstalling the services again.

1. In **Server Control Panel, Programs and Features**, right click the **FCMobileSyncService** and select **Uninstall**.
2. Select **Yes** when prompt.
3. Repeat the same to uninstall the **FCMobileSyncService**.

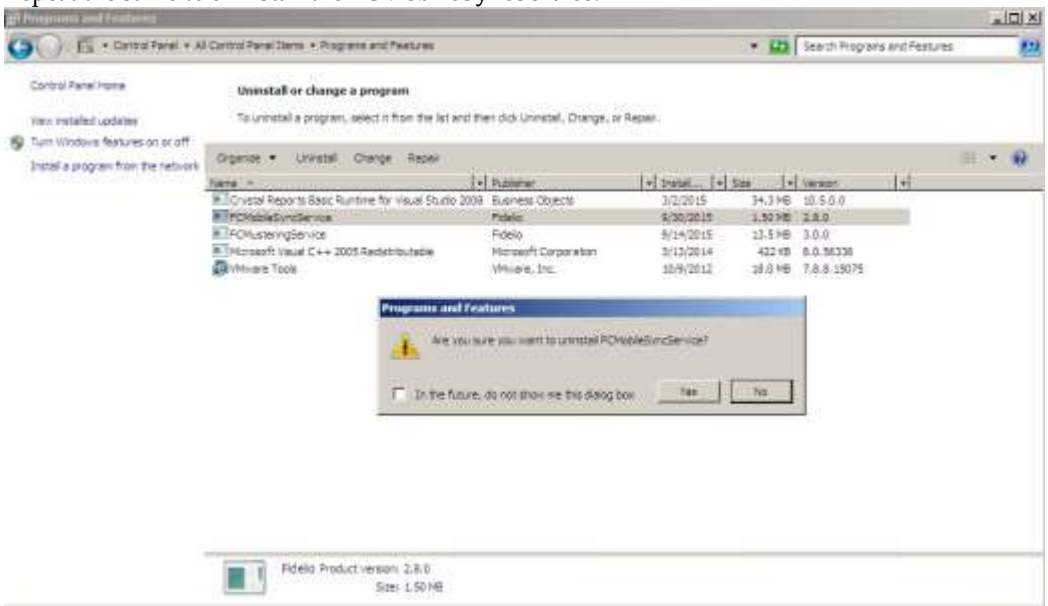

Figure 6-1 - Removing Webservices and Sync Services

6.2.3. Reinstalling Web Services

After uninstalling both the Services, reinstall the services with the latest setup file.

1. Download the latest FC Mustering installation file from OHC FTP site and unzip the file to a Temp folder.
2. Click **FCMusteringWebServiceSetup_3.0.0.xxxx.msi** to begin installation.
3. Click **Next** on the follow on prompts until installation completes.

6.2.4. Reinstalling Sync Services

1. Download the latest FCMobileSyncService installation file from OHC FTP site and unzip the file to a Temp folder.
2. Click **FCMobileSyncServiceSetup_2.8.0_xxxx.msi** to begin installation.
3. In the **Select Installation Folder** window, *do not change* the folder path defined and select **Everyone** in Install FCMobileSyncService for yourself**.**
4. Click **Next** on the follow on prompts until installation completes.

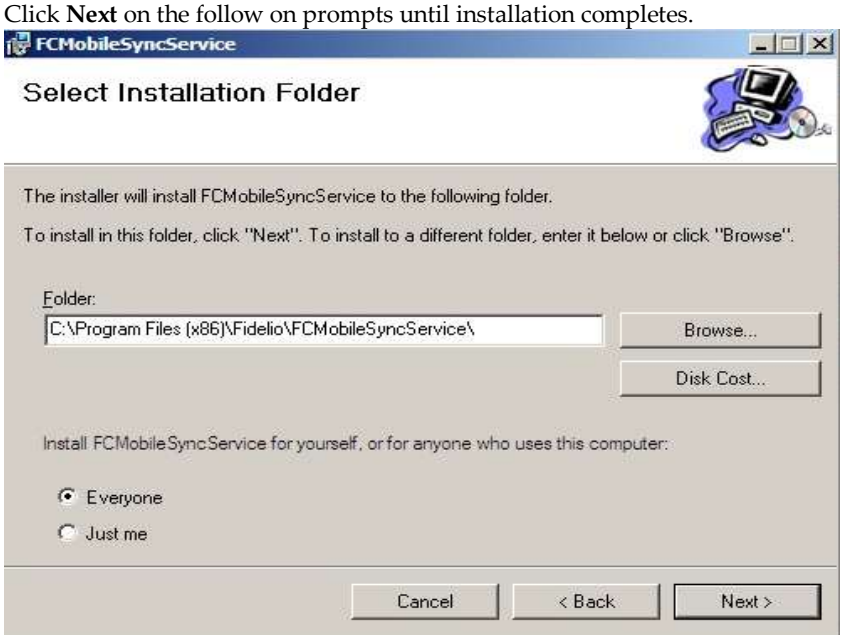

Figure 6-2 - Sync Service installation path

6.2.5. Configuring Web Services

1. Open Window Explorer and navigate to **`C:\inetpub\wwwroot\FCMustering`** folder.
2. Open the **Web.Config** file.

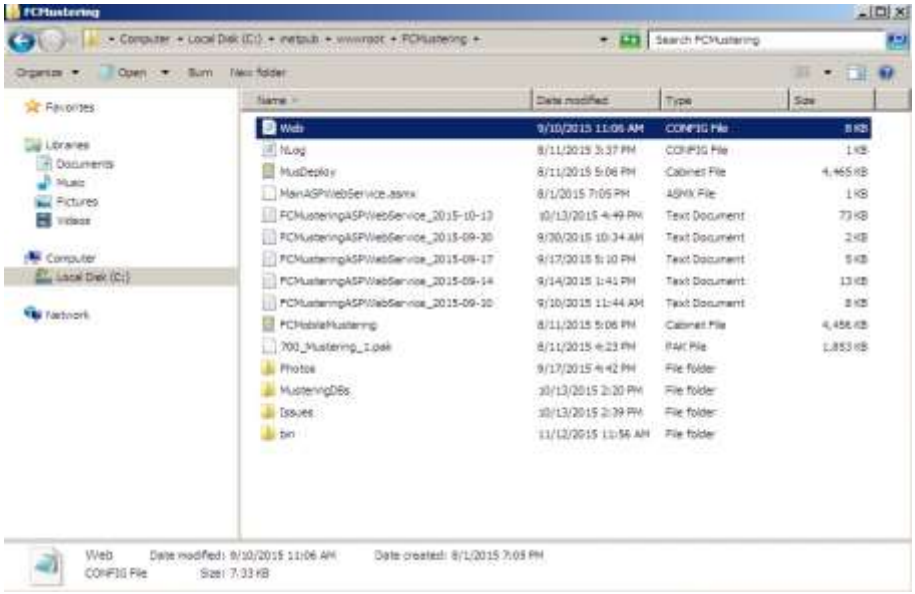

Figure 6-3 - Edit Web.Config file

3. Search for **<appSettings>** and change the database setting of following line with below strings, and then save the file.

```
<add key="ConnectionFCMobile" value="User
Id=FCMOBILE;Password=super;Data Source=192.168.3.190/fidelio; Max Pool
Size = 2;" />
```

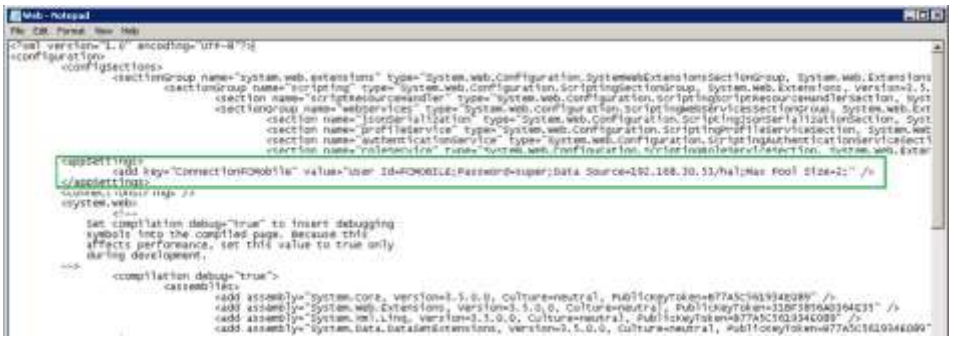

Figure 6-4 – Configuring WebServices string

6.2.6. Verifying Web Services Connection

To ensure that the WebServices connection is properly setup,

1. Open a web browser (e.g. Internet Explorer or Mozilla Firefox).
2. Input the URL, e.g. *https://192.168.3.193:2345/FCMustering/MainASPWebService.asmx*

If the **Web Service** is configured correctly, the following page will be shown.

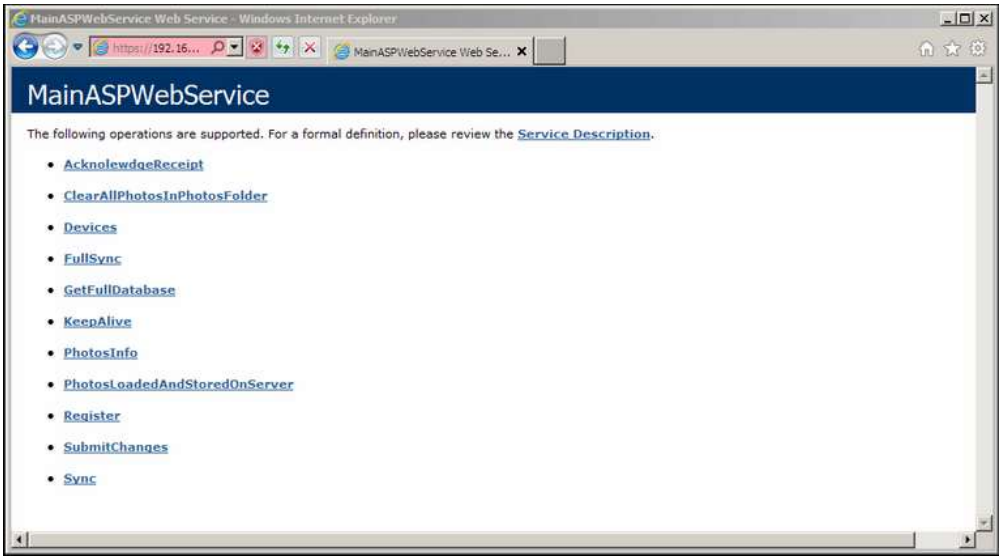

Figure 6-5 - Verifying Webservices connection

6.2.7. Configuring Sync Services Connection

1. Open the **`FCMusteringSyncService.exe.config`** file in **`C:\Program Files (x86)\Fidelio\FCMusteringSyncService\`**
2. Look up for **`<appSettings>`** section and insert the connection strings per below.

```
<appSettings>
    <add key="ConnectionFCMobile" value="User
Id=FCMOBILE;Password=super;Data Source=192.168.3.193/fidelio; Max
Pool Size = 2;" />
    <add key="CHGMobileInRefreshInterval" value="30" />
  </appSettings>
```

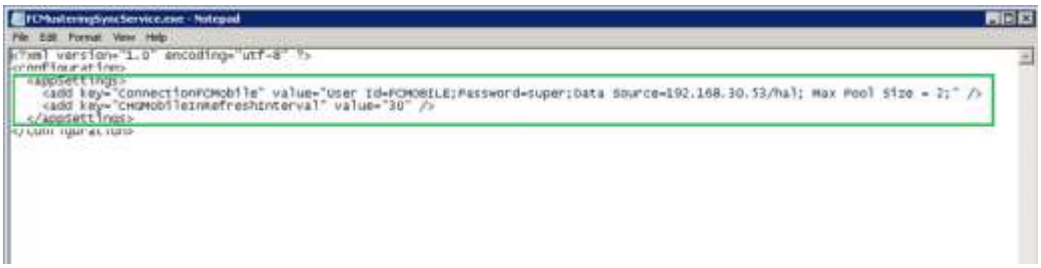

Figure 6-6- Sample Sync Service Script

6.2.8. Verifying Sync Services Connection

To ensure the Sync Services is properly setup,

1. Under the Server Manager container, expand the **Configuration** container, then select **Services**.

2. Check and ensure the **FCMusteringSyncService** has started and is set to startup **Automatically**.

Figure 6-7 - Verifying FCMusteringSyncService

6.3. Mobile Client Reinstallation

Prior to reinstalling the Mobile Client services on the handheld devices, previously installed services must be removed.

6.3.1. Uninstalling FCMobileMustering Application on Handheld device

1. In **Settings, System, Remove Programs** function, select and remove the following application from the handheld device.
   - Fidelio FCMusteringDeploy
   - Fidelio FCMobileMustering

Figure 6-8 - Uninstalling of FCMobile Mustering Application

2. Next, go to **File Explorer, My Device, Application, FCruise** folder and delete sub-folders **Mustering and Drill**.

Figure 6-9 - Removing Mustering and Drill sub-folders

3. Click **Yes** to continue with deletion.
4. Next, go to **My Device, Storage Card** and delete the **FCruise** folder.
5. In **My Device, Program Files** folder, delete the **FCMobileMustering** folder. Select **Yes** to proceed with deletion when prompt.

6.3.2. Reinstalling FCMobileMustering Application on Handheld device

1. In Windows Explorer, select the latest **FCMobileMustering_x.x.xxx.CAB** file**, right click** and select **Send to** to transfer the file to the device.

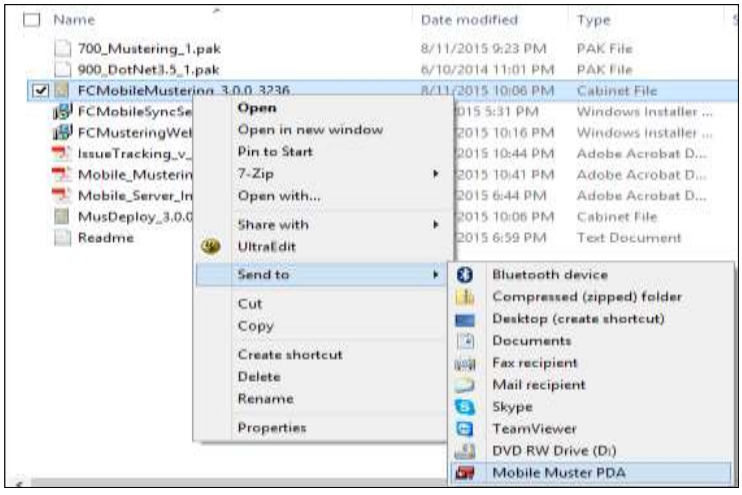

Figure 6-10 - Sending installation file to mobile device

2. On the mobile desktop, open the **File Explorer**.
3. Locate the latest **FCMobileMustering_x.x.x.xxxx.CAB** file, **double click** the file and select the location to install.

Figure 6-11 - Installation destination

WARNING: Various installation files for other supported devices are deployed in the same setup file. Ensure you select the correct setup file for your device.
- Motorola MC55A – Setup file MusDeploy_x.x.x_xxxx.CAB.
- Motorola PSION EP10 – Setup file FCMobileMustering_x.x.x_xxxx.CAB
- Nordic Device – Setup file 700_Mustering_1.pak

4. Device will prompt below message upon successful installation and an FCruise folder is created under **SD-MMC-Card.**

Figure 6-12 - Creation of FCruise folder upon successful installation

5. Perform a **Cold boot** by **holding the red button** on the device keypad for *8 seconds*, and then release the red button once the device restarts.
6. Launch the FCMobile Mustering application from the device main screen.

Figure 6-13 - Mobile Mustering icon on device

> **Note:** Ensure the mobile device is connected to the internet.

7. Enter the IP and SSL port when prompt on the first launch of the FCMobileMustering application.

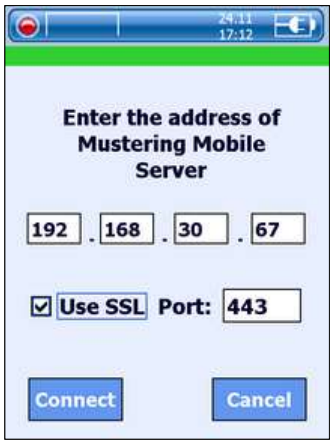

Figure 6-14 - Mobile device IP and SSL Port setting

> **Note:** Ensure the '**Use SSL**' has a check mark.

8. Select **Activate as New** or **Activate as replacement** when prompt, and then click **Register**.

Figure 6-15 - Activating Mobile Device as New

When Activate as New is selected:

System will prompt for device name to be inserted, and update the table MOB.MOB_Name field.

Figure 6-16 – Registering Mobile Device as New

Note: If device is activated as new, the drop-down list will only prompt available device name.

Activate as replacement

System will list all devices name registered in 'MOB' table in the drop-down list. Selecting the device name from the drop- down list sets off a notification prompt "**This device is already registered. Device name <Device name> will be used**". System will assign a new device ID when **Register** is pressed.

Figure 6-17 - Registering Mobile Device as Replacement

9. Once a connection to the **Mobile Server** is established and device is successfully registered, all necessary data will be downloaded onto the device as illustrated in below screen shots.

Figure 6-18 - Data loading from FCMobile Schema to Mobile Device

Appendix A. User Security Group

This section describes the user security access group, which permits the user in accessing or viewing the Mobile Sync Interface and Mobile Mustering Module. These security privilege is assigned in the **User Security** module.

Table A-1 – Mobile Sync Interface Access Rights

Security Reference No	Description
4543	Allow Run Verify Database
3174	Allow Run Full Sync
3173	Allow Shut Down Mobile Sync Application

Table A-2 – Mobile Module Access Rights

Security Reference No	Description
4454	Allow Dashboard Setup
4465	Allow Reset Abandon Ship Count
4463	Allow Reset Drill Count
4464	Allow Reset General Assembly Count

Appendix B. Parameters

This section describes the **Parameters** available to the Mobile Mustering module. They are accessible the **Administration** module under **System Setup**, **Parameter**.

PAR_GROUP GENERAL

Table B-3 - PAR Group General

PAR Name	PAR Value	Description
Default Muster Station for visitor		The value from MST_ID

PAR_GROUP MOBILE

Table B-4 - PAR Group Mobile

PAR Name	PAR Value	Description
Default Muster Station for visitor		The value from MST_ID
Allow Crew Card Login Bypass	0 or 1	Allow login using crew card scanning as long as crew credential is valid in Mobile DB
Current General Assembly Handling Mode	1, 2, or 3	Different Prompt Handling for General Assembly Mustering : 1 - Allow anybody at muster station without prompt, 2 - Prompt when incorrect muster station reported/User decide 3 - Disallow wrong muster station and prompt assigned station
Disable Dashboard Drill Mode Changes	0 or 1	Disable Changing Mode from Dashboard
Disable Unregister Mode	0 or 1	0 - Enable unregister mode 1 - Disable unregister mode
Enable Mobile Data Sync	0 or 1	0 - Disable 1 - Enable Mobile Data Sync to FCMobile DB
FC Mobile Mustering Client Version	E.g: 2.6.0.2664	Mobile Mustering Client Version
FC Mobile Mustering Client Version Major	1	Mobile Mustering Major Version
Last Update Date/Time	Example: 20130925122924	Last Sync Date and Time in ISO format
Mobile DB Version		Mobile DB Version

PAR Name	PAR Value	Description
Muster Drill For Today Only		0 - Muster Dash will show All (Previous + Today) 1 - Muster Dash only show drill for Guest Arrived Today Only
Mustering Mode	0,1, or 3	0: Assembly Drill 1: Assembly 2: Abandon Ship
Offline Timeout	Example: 6	Number of hours allowed to use in offline mode before sync is require
Open Login Enabled	0 or 1	0 - Must use correct login details 1 - Allow Open Login/Blind Login
Passenger Drill Assembly Status	0 or 1	Indicate Start/Stop of Passenger Assembly Drill
Add leading zero on odd length uxp_c_externalid	0 or 1	0-Do not add leading zero 1-Add leading zero
Refresh Interval		Before the DB is sync from server, the default value = 60
Reset ASH, GEN when go shore side	0 or 1	0- Set the gen_reset=0,ash_reset=0 when go shore side 1-Set the gen_reset=1,ash_reset=1 when go shore side

PAR_GROUP MUSTER

Table B-5 - PAR Group Muster

PAR Name	PAR Value	Description
Disable Dashboard Mobile Tab	0 or 1	Disable Dashboard Mobile Tab
Disable Dashboard Chart Grid Lines	0 or 1	Disable Cross Hair Gridline for the Charts
Mobile Device Reset Duration Threshold		Duration threshold in seconds to check against last reset sync time