



This page intentionally left blank

Modified By	Date	Version	Changes
Cherie Elpel	16 June 2014	1.0	First Draft
Cherie Elpel	16 June 2014	1.0	Final
William Fan	6 October 2014	1.1	Updated for CrewMobile v1.6
William Fan	31 October 2015	2.1	Airline Specific Requirements, Push Notification for Android/WP, Premium Features
Bea Tabuñar	11 February 2016	2.1.7	Update template and format
Bea Tabuñar	15 July 2016	2.4.0	Update template. Display of events, comments and flight information
William Fan	2 August 2016	2.4.0	Updated screenshots for duty detail, flight info and Mobile for Enterprise.
Cy De Guzman	24 August 2016	2.4.3	Updated screenshot for duty detail, added TAFB and Layover time in Duty Detail table, added Deadhead other and Ground Transportation to Duty Detail-Sectors intro. Modified Push notifications. Added Push Notifications section.
Cy De Guzman	21 November 2016	2.6.0	Push Notifications for Flight Updates, User Preferences
Cy De Guzman	30 January 2017	2.7.2 / 2.7.2E	CrewMobile Calendar Sync, Booking References in CrewMobile, PAX Label in Flight List, Display Pay Credit in Trades, Default Date Range for Trip Trades, Updated User Preferences
Cy De Guzman	16 March 2017	3.0.0	Updated Subscription screenshot, CrewWatch for iOS
Cy De Guzman	27 April 2017	3.0.9	Open Time Drops, Open Time Drops for Crew Swap Board, Convert Day Off to Personal Time Off/ Gold Days, GUI image, Swaps and Open Time section update.
Cy De Guzman	08 March 2018	3.3.0	Updated duty details screenshots Added booking reference and status in duty details - sectors table
Bea Tabuñar	30 July 2018	3.4.0	Cart Checkout

DISCLAIMER:

This user guide is for training purposes only. The information contained in this user guide is current at the time of publication. It can be used to reference and may be subject to change.

Table of Contents

What are merlot's applications?	6
Logging into CrewMobile	7
What is CrewMobile?	7
CrewMobile Audience	7
CrewMobile Prerequisites	7
CrewMobile for Enterprise	7
Supported Phone and Tablet Devices	8
First Time Registration	8
Offline Use	9
Permissions	9
The Graphical User Interface (GUI)	10
Airline Specific Themes	10
Offline Use	10
CrewMobile Feature Functionality	11
View Duties and Duty Changes	12
Messages	16
Sign On/Sign Off	19
Expiries	23
Expenses	24
Wake Up Calc	28
Premium Features	30
Push Notifications	33
Push Notifications for Flight Updates	34
Calendar Sync	36
Swaps	39
My Trades	40
Inbox	43
New Swap	43
Direct	46
Open Time	49
CrewWatch for iOS	51
Setting Up CrewWatch	51
API Changes for CrewWatch	53
Push Notifications for CrewWatch	53
CrewWatch Subscription	54
Configuration and Settings	55
User Preferences	56
Application Flow Diagram	57

vMobile Glossary



What are merlot's applications?

The merlot aero suite is a complete organizational management solution offering all aspects of airline resource planning and control to ensure the safety, efficiency and quality of your crew and operational environment.

merlot.aero is a comprehensive suite of applications covering all aspects of your airline needs. It has been developed with the entire business process in mind, including the customer process from the moment ticket sales are planned until the point the passenger reaches their destination.

For your convenience, merlot applications are divided into two main categories:

- Aircraft Applications
- Crew Applications

There are a number of applications under these two main categories.

Aircraft applications include:

- AircraftSchedule
- AircraftFollow
- AircraftPortal
- AircraftMobile

Crew applications include:

- CrewPlan
- CrewBuild
- CrewRoster
- CrewPortal
- CrewMonitor
- CrewFollow
- CrewPayroll
- CrewMobile



Logging into CrewMobile

What is CrewMobile?

CrewMobile provides airline crew with the ability to view the latest crew related information on mobile devices such as phones or tablets. Crewmembers can also sign on for duty using CrewMobile. It enables airline operations employees to securely distribute timely and relevant information to crew members including duty assignments, duty changes and messages.

CrewMobile is available for airlines that currently use the merlot.aero suite of applications.

CrewMobile Audience

CrewMobile users are airline crew members and airline operational employees that use merlot crew applications.

CrewMobile Prerequisites

The prerequisite to use the CrewMobile application is the current use of the merlot.aero suite of applications.

CrewMobile is available as a free download from the following App stores:



CrewMobile for Enterprise

Your airline may have additional requirements for using CrewMobile. For example, some airlines may require users to download CrewMobile from their mobile device management (MDM) tool or internal enterprise App Store. Some airlines may also require mobile users to connect to their corporate Virtual Private Network (VPN) first to access crew information.

Please follow the instructions given by your administrator if they differ from this guide.

Supported Phone and Tablet Devices

Fully supported platforms:

- iOS 6 and later (including iPod Touch, iPhone and iPad)
- · Android 4.0 and later
- BlackBerry 10.2 and later
- Windows Phone 8.1

Deprecated platforms:

- Android 2.x and 3.x
- BlackBerry 6-7
- Windows Phone 7, 8.0

We have offered the app for these deprecated platforms in the past, however we no longer actively support these platforms. We recommend users who are still using these platforms to update to a supported device if possible.

As part of continuous improvement, we add and deprecate platform versions from time to time. This ensures our apps are available on a wide range of popular devices currently on the market.

First Time Registration



To login to CrewMobile use your merlot.aero credentials and your mobile token. A mobile token is available through your merlot administrator or the Login Centre in CrewPortal, if you have access to the CrewPortal application. The token is in the format ABC-DEF and is not case sensitive.

CrewMobile for Enterprise: A mobile token is not required if CrewMobile is installed via your airline's mobile device management (MDM) tool.

The Register screen displays when CrewMobile is accessed for the first time. To register in CrewMobile, follow these steps:

- 1. Enter your merlot id
- 2. Enter your merlot password
- 3. Enter your mobile token.
- 4. Tap on the **Register** button.

Once logged in you are directed to the CrewMobile Main menu.

The user ID and password credentials are the same credentials as used in CrewPortal. Contact your airline operations support team or merlot.aero if you do not have access to CrewPortal.

Once registered, CrewMobile remembers your credentials. You will not need to login again unless you change your CrewPortal password. You must be online to register.



Offline Use

If your device is no longer connected to the Internet, for instance if you are in airplane mode, you can still view previously downloaded duties and messages. Please note the information displayed may not be up-to-date.

You will not be able to update information (i.e., sign-on, acknowledge or delete messages) or access crew information while offline.

Permissions

On iOS, you will be prompted to enable push notifications and location services, select **Allow** for push notifications and locations services.

On BlackBerry, you will be prompted to enable advanced features, select Allow to enable advanced features.

We request these permissions in CrewMobile:

- Internet Access: To connect to the merlot.aero web servers to retrieve and update information.
- Phone ID: To register and log into your merlot.aero account from your device and deliver push notifications.
- **Location:** Your location is used as one of the methods to determine whether you are at the correct port for sign on or off. See the Sign On/Off feature description for details.
- Camera: Allows you to take a photo of your receipt and include it in your expense claim. See the Expenses feature description for details.
- **Device Storage:** Storage is used for caching purposes so that you can view your duties and messages while offline (flight mode).
- **Push Notification:** Allows the airline to notify you about duty changes and urgent messages, even when the CrewMobile app is not open. This is currently available for all registered iOS, Android and Windows devices.
- Find Accounts on Device, Google Play billing service: (Android only) Allows you to purchase premium features via your Google Play account. Premium features are optional tools that may be useful to some crew members.
- Prevent phone from sleeping, run at start up: (Android only) These permissions are used for the optional Wake Up Calc feature, so that it could trigger alarms to wake up the phone and yourself at the appropriate times. See Wake Up Calc feature description for details. To minimize battery use, CrewMobile does not run any other processes in the background.



The Graphical User Interface (GUI)

The merlot.aero suite of applications eliminates the use of text commands by employing a Graphical User Interface (GUI). Let's explore the CrewMobile GUI:



- 1. Login Centre: Access to user information, option to change passwords and view premium feature subscription details.
- 2. Features: Access duties, duty changes and messages by tapping on the applicable feature
- **3. Premium Features:** Access Sign On/Offs, Expenses, Expiries and Wake Up Calc by tapping on the applicable feature. Your airline may have chosen to hide or disable some features.
- 4. Version Data: Current version of the CrewMobile application

Airline Specific Themes

If your airline has selected a custom theme, the user interface in your copy of CrewMobile may differ from the screenshots in this guide. Unless otherwise indicated, CrewMobile still functions in the same way with or without a custom theme.

Offline Use

If your device is no longer connected to the Internet, for instance if you are in airplane mode, you can still view previously downloaded duties and messages. Please note the information displayed may not be up-to-date. You will not be able to update information (i.e., sign on, acknowledge, delete) or access crew information while offline.



CrewMobile Feature Functionality

This section provides users with an overview of merlot.aero CrewMobile features and functions in order to carryout CrewMobile related tasks.

CrewMobile features are accessed from the main menu and include the following:

- The Calendar feature enables users to view their duties
- The Duty Changes feature enables users to view notifications of duty changes
- The Messages feature to used manage CrewPortal messages
- The Sign On/off feature is used to sign on and off for duty
- The Expenses feature is used to enter expense details and take photo of receipts for expense claims
- The Expiries feature is used to view expiry and planned dates for critical courses and certifications
- The Wake Up Calc feature is used to calculate duty and sign on times in various time zones and to set alarms to wake you up in time for duty.

Each feature will be discussed in detail.

Please note that some features might not be available to you. Your airline might have chosen to hide or disable a feature, or it might not be supported on the current version of the Merlot server system or your device platform. You could tap on the disabled feature to see why it was disabled.

Some features are only available with a premium feature subscription and you will be prompted to purchase when you try to open it. See the premium features description for more information.

CrewMobile supports push notification on iOS, Android and Windows Phone devices. Push notification allows the airline to notify you about urgent duty changes and messages when you do not have CrewMobile open.

View Duties and Duty Changes

Duties and duty changes can be viewed as a list, or in the form of a monthly calendar.

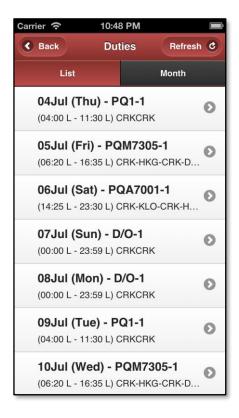
Tap on the **Duties or Duty Changes** icons in the Main menu to view duties or duty changes respectively, then tap on either **List** to view as a list or **Month** to view in a calendar format.

Both viewing options are discussed below, starting with the list view.

Duty Changes Icon Duties Icon







List View

To view duties in a list, follow these steps:

- 1. Tap the **List** button.
- 2. Tap on a particular duty in the list to view duty detail.

The Duties page list view contains a list of duties for the logged in crewmember.

Duty



The duty consists of the duty date and day, pairing name, flight times and route.

Navigational aids at the top of the Duties display screen:

Field	Description
Back button	Takes the user back to the main menu
Refresh button	Refreshes the screen and downloads the latest data
Month	Tap the Month button to go to the calendar view.

Calendar View



To view duties and duty changes in the calendar view, follow these steps:

- 1. Tap the Month button.
- 2. Tap on a particular day in the calendar to view the duty. Days highlighted in red indicate that there are duties on that day.
- 3. Tap on a particular duty to view duty detail.

Today's date and the selected date are displayed in black. Other dates that have duty information are in red. Dates that do not have duties are in grey.

The Duties page calendar view contains the following fields:

Field	Description	
Monthly	Displays duties for a crew member in a calendar	
Calendar	format, tap the date to view the actual duty	
Green Arrows	Tap green arrows (< >) to change months.	

The duty consists of the duty date and day, pairing name, flight times and route.

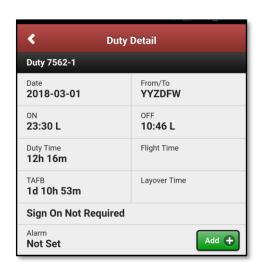
Navigational aids at the top of the Duties display screen:

Field	Description
Back button	Takes the user back to the main menu
Refresh button	Refreshes the screen and downloads the latest data.
List	Tap the List button to go to the list view.

Duty Detail

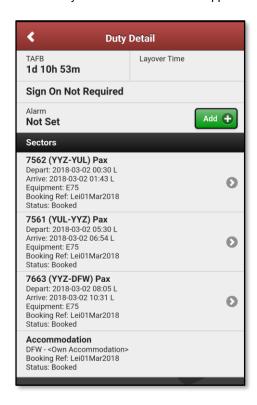
When you open a duty, you can view the duty details including flight, transportation and accommodation booking references, TAFB and Layover times and departure/arrival port information.

The Duty Details display contains the following fields:



Field	Description
Pairing	Pairing Name, e.g. 7618-1
Date	Date of duty, e.g. 2016-08-06
From/To	Route, e.g. YYZPHL
ON	Duty start time (L indicates local time)
OFF	Duty end time (L indicates local time)
Duty Time	Length of duty time, e.g. 7h 32m
Flight Time	Length of flight time, e.g. 4h 17m
TAFB	Time away from base, e.g. 2d 14h 00m
Layover Time	Layover time until next duty, e.g. 10h 35m
Signed On	Whether a sign on is required and whether it has been recorded for this duty
Alarm	Alarm time (for Wake Up Calc)
Sectors	List of duty sectors (see below for more detail)
Comments	List of public training, pairing, duty and/or crew pairing comments (see below for more detail)

A list of duty sectors and comments appears at the bottom of this screen.





If your duty change requires acknowledgement, you will see a green Acknowledge button at the bottom of the screen. Tap the **Acknowledge** button to acknowledge your duty change.

Duty Details - Sectors

Tap on sector or event type to view the crew information.

The Sector view display screen contains the following fields:

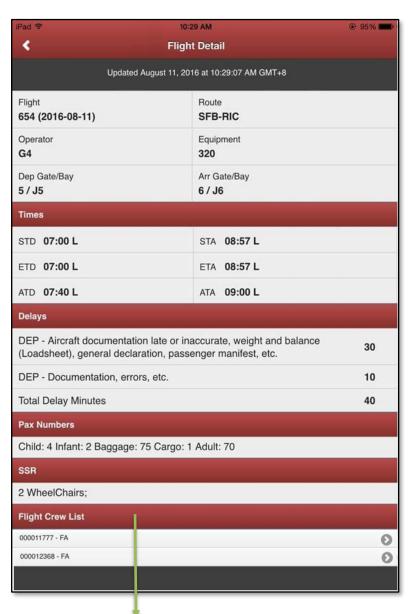
Field	Description
Flight number	Flight number, e.g. 7618, 7617, 7546
Route	Route, e.g. YYZ-DCA, DCA-YYZ, YYZ-PHL
Rego/tail number	Aircraft rego or tail number, e.g. 376, 376, 387
Gate & Bay	Departure/arrival gate and bay, if available
Depart	Departure date and time
Arrive	Arrival date and time
Equipment	Equipment or aircraft type e.g. Embraer
Booking	Booking reference code for crew airline booking -
Reference	operating and non-operating
Status	Booking status of crew airline booking
Non-flight events	Other events or activities in the duty such as meetings or accommodation with provider

Navigational aids at the top of the Duty Details display screen:

Field	Description
Back button	Tap the Back button to go back to the previous screen.

Tap the navigational aid to perform the selected action.

Flight and Crew Info



When you tap on a flight sector from the Duty Detail screen, the Flight Info screen appears.

This screen provides additional information about the flight.

Field	Description
Flight	Detailed information is displayed about the selected flight number.
Route	Departure and arrival airport
Operator	Operator of flight service
Equipment	Type of equipment
Dep/Arr Gate/Bay	Gate or bay in the departure/arrival port
STD	Scheduled time of departure on the specified flight
STA	Scheduled time of arrival on the specified flight
ETD	Estimated time of departure on the specified flight
ETA	Estimated time of arrival on the specified flight
ATD	Actual time of departure
ATA	Actual time of arrival
Delays	Displays delay information (minutes and reason) for the specified flight.
Pax Numbers	Passenger count of the flight.
SSR	SSR for this flight.
Flight Crew List	For each crew member: Crew 'Known As' Example: Name - Garth Employee Code - 354 Employee Rank - CPT PAX Identifier - Pax



Depending on your airline's configuration, not all sections may be displayed.

Navigational aids at the top of the Crew Info display screen:

Field	Description	
Back button	Tap the Back button to go back to the previous screen.	

Tap the desired navigational aid to perform the selected action.

Messages

To access crew messages, tap on the **Messages** icon in the main menu. This feature enables crew to view CrewPortal messages and to acknowledge messages as required.



The number of new messages is visible at the top of the Messages icon.



CrewPortal messages are displayed on the Messages screen.

To view messages, follow these steps:

- 1. Tap the **Messages** button.
- 2. Tap on a message to open the message.

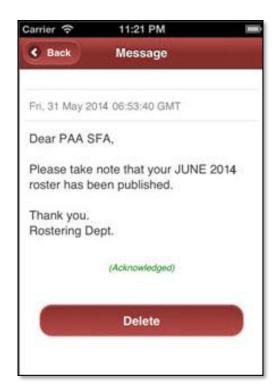
A green circle indicates messages requiring acknowledgement, and a red exclamation mark indicates urgent messages. Two red exclamation marks are shown as an example on the screen shown here.

Navigational aids at the top of the Messages display screen:

Field	Description
Back button	Takes the user back to the previous screen.
Refresh button	Refreshes the screen and downloads the latest data.

Tap the desired navigational aid to perform the selected action **Message Detail**

This message screen displays the text of the message.



When you open the message, you can read the message text here.

Acknowledge

If this message requires acknowledgement, you will see a green **Acknowledge** button. If this message has already been acknowledged, you'll see the text (Acknowledged) as shown here.

Delete

Tap the red **Delete** button to remove this message from your message list.

Navigational aids at the top of the Message display screen:

Field	Description
Back button	Tap the Back button to go back to the previous Message screen.

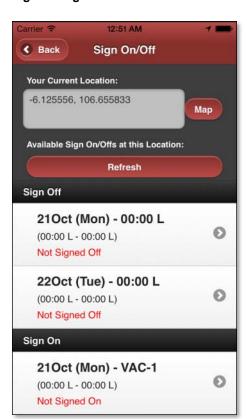
Sign On/Sign Off

To access the Sign On/Offs feature, tap on the **Sign On/Offs** icon in the Main menu. The Sign On/Off feature is used to sign on or off for duty.

Sign On/Offs Icon



Sign On/Sign Off



Once the GPS coordinate displays for your current location, tap the **Refresh** button to retrieve the duties available for sign-on or sign-off. Your location may take some time to appear, particularly if you are in a basement or other enclosed area.

You may also be able to sign on by connecting to a designated Wi-Fi hotspot. You do not have to wait for your device to detect calculate the GPS coordinate if signing on via Wi-Fi hotspot. Please check with your airline to confirm which sign on methods are configured at your airport.

If a user is eligible to sign-on via mobile, the CrewMobile app will get a list of available duties for the crew member to sign-on or sign-off at their location/port at the current local time.

Tap on the duty to sign-on/off or to view sign-on/off details. The process for sign on and off is similar.

Optionally, you may tap the **Map** button to view your location on a map. Refer to the Map page for more information on this feature.

Sign on and off rules are configured in the merlot Configure application. These rules include how much time the sign on/off will be available before duty, time period for late sign on, and sign on methods at each port.

The Sign On/Off screen shown here shows duties not signed off and duties not signed on.

Fields in the Sign On/Sign Off display screen:

Field	Description
Your Current Location	GPS coordinates of current location of mobile user.
Мар	Map button which links to map to view crew member location.
Available Sign Ons/Offs at this Location	List of duties eligible for crew sign on.
Refresh	Refresh button to refresh list of duties.
Sign Off	Shows whether the crew member has signed off from duty.
Date	Duty date and day of the week.
Pairing	Pairing
Time	(05:10 L-13.55 L) duty start and end time in local time.
Sign On	Shows whether the crew member has already signed on for duty

Sign On Eligibility Checks



Your airline may require you to complete certain actions before signing on or off. If there are any required actions for you, these will be displayed when you tap the **Refresh** button.

Common actions include requiring you to acknowledge a duty change and/or message first (which you could do from CrewMobile), or if you have an expired critical course or certification (which requires you to contact your airline's operations department).

Navigational aids at the top of the Sign On/Off display screen:

Field	Description
Back button	Takes the user back to the main menu
Refresh button	Located in the middle of the screen. It refreshes the screen and downloads the latest data.

Tap the desired navigational aid to perform the selected action.

Map

The Map button enables you to view your location on a map. This is provided for your information only, so that you could check that the geo-location sensors on your device have identified your correct location.



closer to a window if possible.

To use the Map screen, tap the $\bf Done$ (iOS) or $\bf Back$ button (Android) to return to the Sign On/Off screen.

Troubleshooting

CrewMobile should be able to determine your location most of the time. However, this might not work in a few situations.

To troubleshoot location issues, follow these steps:

1. Make sure you have enabled the location feature on your device. On iOS, go to Settings > Privacy > Location Services and make sure it is ON for the device and for CrewMobile.

On Android, go to Settings > Location access and make sure Access to my location is ON with both GPS Satellite and Wi-Fi/mobile network sources selected. You may need to restart your device.

On BlackBerry, go to Options > Device > Location Settings and make sure Location Services and Aiding is on. Select Menu > Refresh Location.

On Windows Phone, go to Settings > Location and make sure it is switched on.

- 2. Make sure your device is not in airplane mode. Your device must have Internet access to sign in.
- GPS does not work in enclosed spaces. Try somewhere outdoors or

Alternatively, you can also sign on via mobile if your device is connected to a designated company Wi-Fi network.

Navigational aids on the Map display screen:

Field	Description
Back button	Tap the Done (iOS) button or the Back button (Android) to return to the Sign On/Off screen.

Sign-On Details

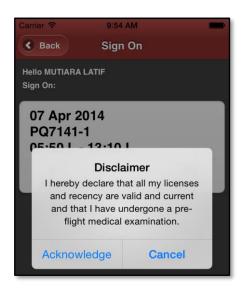
The Sign-on screen has duty sign-on details with a countdown timer.



The Sign-on display screen contains the following fields:

Field	Description
Name	Name of crew
Sign-on:	
Date	Duty date, 21 March 2014
Pairing	Pairing Name, PQM7491-1
Duty Time	Duty start and end times, 05:10 L-14:05 L
Countdown	Count down timer to remaining time to sign in: 2 Days, 20 Hours, 43 Minutes and 45 Seconds.
Sign On Comments	Enter a comment in the freeform text field.A comment may be required if you are late for your sign on.

Tap the **Sign On** button to sign-on for the duty.



Sign-On Disclaimers

Some airlines may require the crew to accept a disclaimer before signing on in certain departments and/or airports. Please read the disclaimer carefully and tap on **Acknowledge** to complete your sign on.

Navigational aids at the top of the Sign-on Details display screen:

Field	Description
Back button	Tap the Back button to go back to the previous screen.

Expiries

To access the Expiries feature, tap on the **Expiries** icon in the Main menu. The Expiries feature is used to view expiry and planned dates for critical qualifications (courses and certifications).

Expiries Icon



Expiries



The Expiries display screen contains the following fields:

Field	Description
Last Updated	The time information was last downloaded. This would be the current time unless you are in offline mode.
Code	Qualification code, e.g. PC
Name	Qualification name, e.g. Proficiency Check
Status	Status, e.g. Passed
Expiry Date	Expiry date, e.g. Expires 2015-01-31 or Expired on 2014-07-31.
Next Planned Date	Next planned date, e.g. 2014-01-07.

Expired items are highlighted in red.

Information on this screen is provided for your information. Please contact your airline's operations department if you have any items that are expired or near expiry, because they may prevent you from signing on for your duty.

Navigational aids at the top of the Expiries display screen:

Field	Description
Back button	Takes the user back to the Main menu to exit the application or to perform a new function.
Refresh button	Refreshes the screen and downloads the latest data.

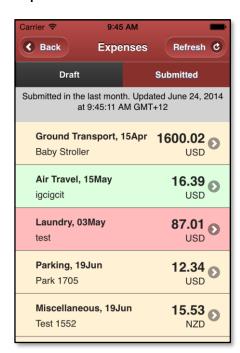
Expenses

To access the Expenses feature, tap on the **Expenses** icon in the Main menu. The Expenses feature is used to enter expense details and take photo of receipts for expense claims.

Expenses Icon



Expenses List

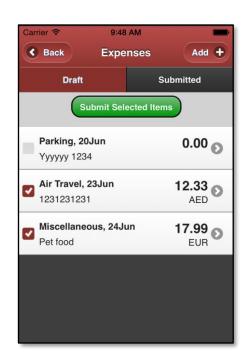


The Expenses screen contains the following fields:

Field	Description
Last Updated	The time information was last downloaded. This would be the current time unless you are in offline mode.
Туре	Expense type, e.g. Laundry
Date	Date that the expense was incurred, e.g. 03May
Description	Expense description, e.g. test
Amount	Amount claimed, e.g. 87.01
Currency	Expense currency, e.g. USD

The Expenses List screen contains two tabs.

The **Submitted** tab contains expenses that you have submitted for approval. The list is filtered to show only items updated in the last month. Items are displayed in one of three background colours: **orange** means the item is pending review, **green** means the item has been approved and **red** means the item has been declined.



The **Draft** tab contains expenses that you have created in CrewMobile. These items are saved on your mobile device only, and you could create, view and update them anytime even while offline.

Switch to the **Draft** tab and tap the **Add** button to create a new expense.

Bulk Submit

Once expense item(s) are completed, you could either submit them individually as you create them in the Expense Detail screen, or complete a number of items then bulk submit.

The individual submit option is most suitable if you have a good mobile Internet connection at all times. The bulk submit option is most suitable if you had limited Internet connectivity when you entered the expenses (e.g. flight mode or roaming), and now you wish to submit them once you're back in the office.

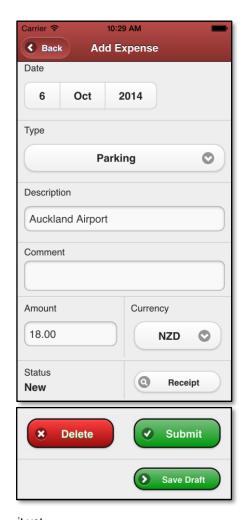
To bulk submit, tap the checkbox next to expense items in your drafts list, then tap the **Submit Selected Items** button. Tap on an expense item to open the **Expense Detail** screen to view or update it.

Navigational aids at the top of the Expenses List screen:

Field	Description
Back button	Takes the user back to the main menu.
Refresh button	Refreshes the screen and downloads the latest data for submitted expenses (on Submitted tab).
Add button	Adds a new expense (on Draft tab).

Tap the desired navigational aid to perform the selected action.

Expense Detail



The Expense Detail screen contains the following fields:

Field	Description
Date	Receipt date or when the expense was incurred, e.g. 20 Jun 2014
Туре	Expense type dropdown, e.g. Parking
Description	Expense description, e.g. Auckland Airport
Comment	Additional comments to support your claim (optional)
Amount	Amount claimed, e.g. 18.00
Currency	Expense currency dropdown, e.g. NZD
Status	Current status of your claim, e.g. New.

The Status field is read-only. For draft (new) or pending expense items, you could update all other fields. For approved or declined expense items, all fields are read-only.

Tap the **Receipt** button to open the **Expense Receipt** screen, where you can capture or view the receipt image.

Tap the **Submit** button to save changes to the server for your manager to review. You must complete all required fields before submitting.

Tap the **Save Draft** button to save changes on your mobile device only. This is useful if you are working offline, or you wish to complete some of the fields later. Your manager would not be able to see any expenses that is saved as a draft in CrewMobile. This option is not available if the expense item has already been submitted.

Tap the **Delete** button to delete an expense item that you have recently submitted. You can only delete an expense item if your manager has not approved or declined

it yet.

Navigational aids at the top of the Expense Detail screen:

Field	Description
Back button	Takes the user back to the Expenses List screen to view other expenses.

Expense Receipt



The Expense Receipt screen displays the receipt for your expense item. If you have not attached a receipt yet, an image placeholder with a plus (+) icon appears instead.

Add Receipt

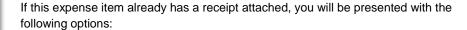
If this expense item does not already have a receipt attached, you will be presented with the following options:

Tap the **Library** button to select an image from the photo library (also known as gallery) on your device. This is useful if you have already taken a photo of this receipt earlier using your device's camera app, or you have an electronic/email receipt and you have saved a screenshot.

Tap the **Camera** button to take a photo of your paper receipt using your device camera.

Please retain your original receipt in case your airline requests to see them later. Check with your manager regarding the business rules for expense claims at your airline.



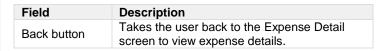


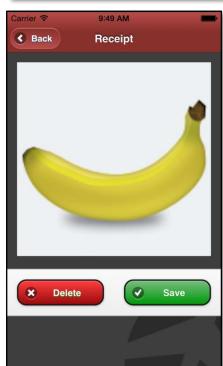
Tap the **Delete** button to delete the receipt image.

Tap the **Save** or **Close** button to return to the Expense Detail screen.

To replace a receipt image, tap the **Delete** button to delete the existing image first, then tap the plus (+) icon in the image placeholder to add your new image.

Navigational aids at the top of the Expense Receipt screen:





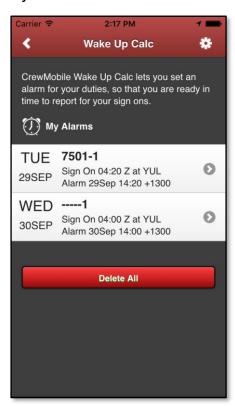
Wake Up Calc

To access the Wake Up Calc feature, tap on the **Wake Up Calc** icon in the Main menu. The Wake Up Calc is used to view duty and sign on times in various time zones. You could also set and manage alarms to help you wake up on time for your duty.

Wake Up Calc Icon



My Alarms List



The My Alarms list screen contains the following fields:

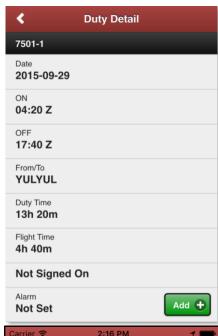
Field	Description
Date	Alarm day of week and date in device local time, e.g. TUE 29 SEP
Duty Name	Duty name, e.g. 7501-1
Sign On	Sign on time and port, e.g. Sign On 04:20 Z at YUL
Alarm Time	Alarm time in device local time, e.g. Alarm 29Sep 14:20 +1300

Tap on an alarm item to open the **Set Alarm Time** screen to view or update it.

Tap the **Delete All** button to remove all CrewMobile alarms on your device.

Navigational aids at the top of the Wake Up Calc – My Alarms list screen:

Field	Description
Back button	Takes the user back to the Main menu to exit the application or to perform a new function.
Settings button	Opens the Wake Up Calc – Settings screen.





Add an Alarm

To add an alarm:

- Open the **Duties** screen, select the duty that you would like to set an alarm for.
- 2. In the **Duty Detail** screen, tap the **Add** button in the Alarms row.
- 3. Review the alarm time in the **Set Alarm Time** screen, tap the **Add** button.

Wake Up Calc alarms must be associated with duties. You could set 1 alarm per duty.

If the duty times change, CrewMobile will prompt you to update your alarm time. If you are de-allocated from the duty, CrewMobile will remove the associated alarm.

Time before sign on: Alarm time must be between 0 hours 1 minute and 23 hours 59 minutes before sign on time. Default value is configured in the **Wake Up Calc – Settings** screen.

Set Alarm Time

The Set Alarm Time screen contains the following fields:

Field	Description
Duty Name	Duty name, e.g. 7501-1
Sign On	Sign on time and port, including time zone at sign on port, e.g. 2015-09-29 04:20 Z at YUL, Time zone: EDT -0400
Time before sign on	Set alarm time to this number of hours and minutes before sign on time. Tap the hours and minutes value to change duration. Changing this duration will update the alarm time at port (next field).
Alarm time at port	Alarm time at sign on port, including time zone at sign on port. Tap the hours and minutes value to change time. Changing this time will update the time before sign on (previous field).
Alarm time in Zulu; Alarm time in device time zone	Displays calculated alarm time in Zulu (UTC) time and device local time. Device local time is shown only if your device time zone is different from sign on port time zone.

Tap the **Add** or **Update** button to set the alarm.

Tap the **Delete** button to remove this alarm (when updating existing alarm).

Navigational aids at the top of the Wake Up Calc - Set Alarm Time screen:

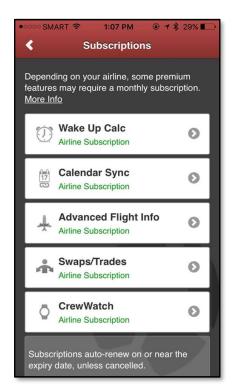
Field	Description
Back button	Takes the user back to the Duty Detail screen or Alarm list screen.



Premium Features

From the **Home** Screen, tap the employee name to open the **Log in Centre**, then tap the **My Subscriptions** button to open the **Subscriptions List** screen.

Premium features are available on iOS, Android and Windows Phone platforms only.



Premium Features – Subscriptions List

The subscription list screen shows both personal and airline subscriptions that are either purchased or available for purchase. Some features may not be available to you, depending on your device platform and your airline configuration.

Personal Subscriptions are premium features that you purchase for your own use.

Airline Subscriptions are premium features that an airline has purchased for all its employees to use.

The Subscriptions list screen contains the following fields:

Field	Description
Feature Name	Premium feature name, e.g. Wake Up Calc
Subscription	Whether the feature is active, e.g. Inactive,
Status	Active or Airline Subscription

Tap on a feature item to open the Feature Detail screen to view or purchase it.

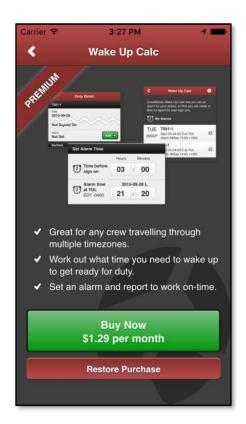
Tap **Manage Renewals** (iOS, Android only) to view subscription expiry or renewal dates, or to cancel a subscription.

Tap **Restore Purchases** (iOS only) to re-activate subscriptions that you have already purchased, e.g. purchases that you have already made on another iOS device linked to your Apple ID, or if you have just uninstalled and reinstalled CrewMobile. On

Android, your active subscriptions are always updated automatically on all your devices linked to your Google ID.

Navigational aids at the top of the Subscriptions list screen:

Field	Description
Back button	Takes the user back to the Login Centre screen.



Premium Features - Feature Detail

The **Feature Detail** screen describes how this feature works and allows you to purchase it or open it (if already purchased).

The Feature Detail screen contains the following fields:

Field	Description
Promo Image	Image or screenshots of key components of this feature.
Description	Description of this feature.
Buy Button	Button with price is displayed if you have not purchased this feature yet
Open Button	Button is displayed if you have already purchased this feature
Restore Purchases	Button is displayed (iOS only) if you have not purchased this feature yet. Tap this button if you have already purchased the feature on any device using your Apple ID.

Monthly Subscriptions

Premium features are sold as monthly subscriptions. On iOS and Android, your subscription will auto-renew unless cancelled.

Prices and taxes may vary by location. The local currency price for your location will be displayed on the purchase screen before you purchase.

iOS:

- Subscriptions will be charged to your preferred payment method in your iTunes account. This might be your iTunes store
 credit or a credit card.
- Your subscription will automatically renew unless cancelled at least 24 hours before the end of the current period. Your account will be charged for renewal within 24 hours prior to the end of the current period.
- No cancellation of the current subscription is allowed during active subscription period (if you cancel, your subscription remains active until the current period expires).

Android:

- Subscriptions will be charged to your preferred payment method in your Google Play account. This might be your Google
 Play store credit, your phone bill or a credit card. If you have never purchased anything from Google Play before, you will
 be prompted to select a payment method.
- Your subscription will automatically renew unless cancelled before the end of the current period.
- No cancellation of the current subscription is allowed during active subscription period (if you cancel, your subscription remains active until the current period expires).
- You can manage your subscriptions in the Google Play app under My Apps > Subscriptions.

Windows Phone:

- Subscriptions will be charged to your preferred payment method in your Microsoft Store account. If you have never purchased anything from the Microsoft Store before, you will be prompted to select a payment method.
- Your subscription will not automatically renew. You will be prompted to tap **Buy** when the previous period expires.
- If you delete and reinstall CrewMobile, or reset your phone, you will need to purchase it again.

Navigational aids at the top of the Feature Detail screen:

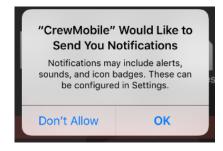
Field	Description
Back button	Takes the user back to the Home or Subscriptions List screen.



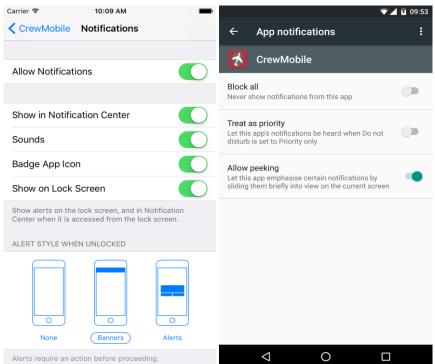
Push Notifications

Crew members can set up push notifications for multiple registered mobile devices by managing their phone notification settings. You can enable or disable push notifications independently on each device. For offline setup, push notification request will reapply once you are online.

For iOS users, upon your first login to CrewMobile, you will be asked for permission to receive push notifications. Android and Windows Phone 8 push notifications are enabled by default.



Tap **Allow Notifications** (iOS) to enable push notifications. Tap **Block All** (Andoid and Windows Phone 8) to disable push notifications.



On flight mode, notifications may be delayed, or not delivered at all.

Notifications are not available to devices where CrewMobile was uninstalled.

Push Notifications for Flight Updates

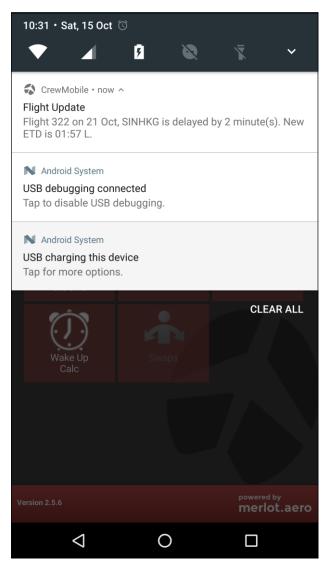
Push notifications for flight updates alert crew members of flight status in real-time. This is available for airline and personal subscriptions of the **Advanced Flight Info** premium feature.

Crew members can personally set up flight update push notifications in their own devices through the My Preferences screen.

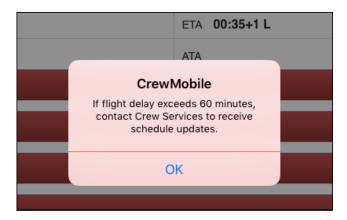
merlot.aero My Login If you have changed your password in the portal, please update it here. Vivian (000)**Update Password** My Subscriptions **Flight Update Notifications** When your duty flight has been delayed by more than the threshold, a notification would be sent to you. ETD On Changes Threshold 30 Minutes **Update Settings** Version 2.5.6 https://z.merlot.aero/trunk

When flight update is available, all affected crew members will receive a notification through their mobile devices.

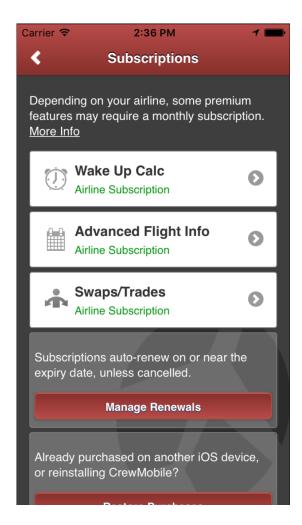
Clicking on the notification launches the application.

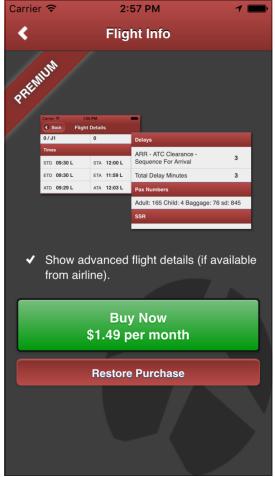


An example of a disclaimer text is shown below.



Users can purchase or renew personal subscriptions to this premium feature via My Subscriptions.





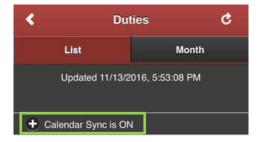


Calendar Sync

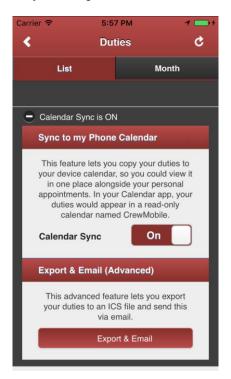
CrewMobile Calendar Sync is a premium feature that provides users a synchronized platform for work duties and personal appointments by consolidating rosters to mobile device calendars or other calendar software.

Setting Up Calendar Sync

Users using iOS 8 and above or Android 4 and above with premium feature subscription can enable Calendar Sync for CrewMobile.



Tap on the status bar to display the Calendar Sync settings section.

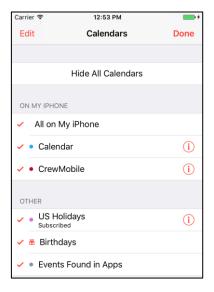


Calendar Sync Settings Sections:

A. **Sync to Phone Calendar** - Toggle the switch to enable Calendar Sync. Once switched on, an initial sync will take place. This setting automatically updates device calendars whenever duty data is downloaded.



A new calendar will be created for a more efficient calendar management and to avoid duplication of existing calendar events with similar names.



If a similar calendar exists prior to activating Calendar Sync, a confirmation dialog box will be displayed.



Users have an option to activate or deactivate the existing the calendar. When deactivated, the existing calendar will be deleted from the device.

The CrewMobile device calendar is read-only. Users may add more notes to an event, but changing the event name, dates/ times and first paragraph of notes field is prohibited. Comments, certain flight details and sign on status are not included in the calendar event.

Note: Data is refreshed only when CrewMobile is running.

B. **Export & Email ICS** - Tap **Export & Email** in the Calendar Sync settings to generate and send an ICS file. Click **OK** to confirm the action. The ICS file is sent as an attachment to the system's default email application as a draft email.



Crew who do not have an active premium subscription for Calendar Sync will see this option at the bottom of the Duties screen.



Swaps

The **Swaps** feature allows crew members to swap and trade flights to other crew members from the current day up to 40 days in the future. This can be adjusted as needed.

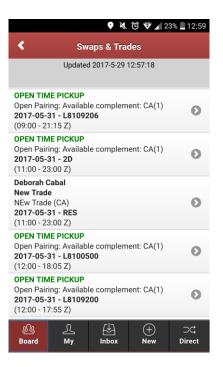


NOTE:

This functionality is not available for Geneva-as-a-Service.



in the main menu. This will launch the Swaps & Trades board.



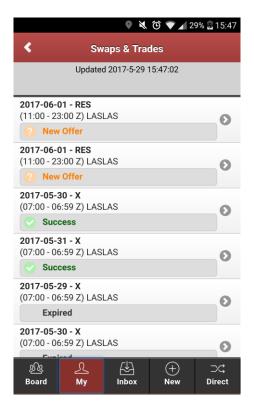
The Swaps & Trades display screen contains the following fields:

Field	Description
Last Updated	The time information was last downloaded. This would be the current time unless you are in offline mode.
Title or Crew Member Name	Displays Open Time, Open Time Drop or Name of crew.
Description	Displays description for the pairing.
Date and Pairing Type	Displays pairing date and pairing type.
Timing	Displays pairing timings.

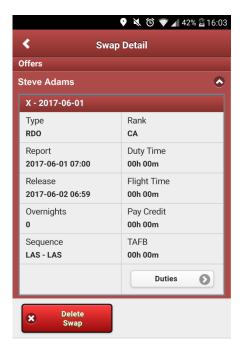
My Trades

You can view all your traded duties by clicking in the Swaps & Trades board menu. In the list, you will see *New Offers*, *Successful* and *Expired* trades.

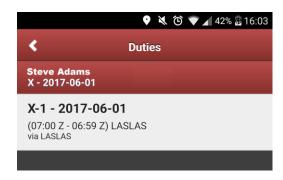
2



You can view the Swap details by clicking on the duty. Click **Delete Swap** if you do not want to take the offer.

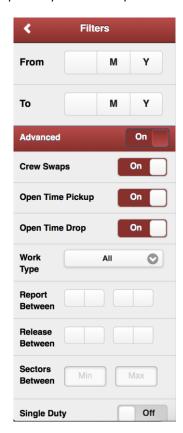


Click on **Duties** to view the duty being offered.

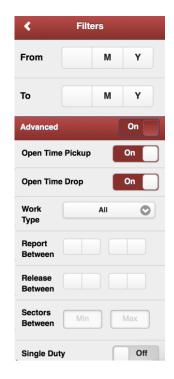


Trade Board Search Filters

Trade Board filter options have been re-organized to ensure efficiency when users filter between different types of trades. The new options are *Crew Swaps*, *Open Time Pickup* and *Open Time Drop*.

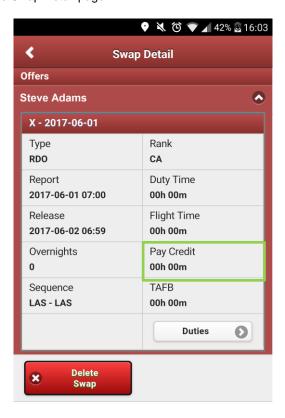


Note: The Open Time menu - Advanced filters will no longer include the Crew Swaps option, including crew-created trades.



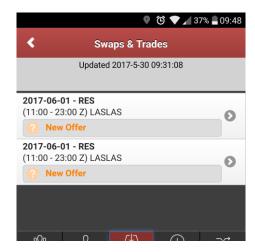
Pay Credit in Swaps & Trades Board

You can view Pay Credit details in the Swap Detail page.



Inbox

Swaps > Inbox allows you to view and acknowledge trade-related messages.

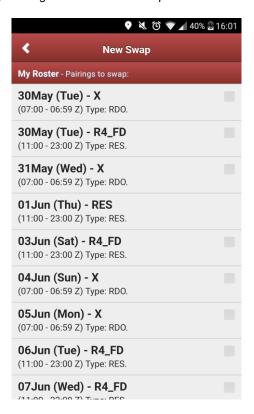


New Swap

Crew can submit a new trade or swap by clicking



in the Swaps & Trades board menu.



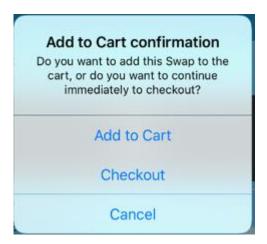
To submit a new swap:

- 1. Select the pairing you want to trade.
- 2. Click Next.

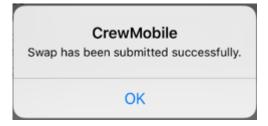
- 3. Provide a Title and a Description for the trade.
- 4. Click Submit.



A notification message to confirm submission of trade displays.



Selecting **Add to Cart** will pool all swaps in the cart for bulk check out later. Selecting **Checkout** will finalise the swap for validation and will give the prompt below. Click **Cancel** to discard changes.

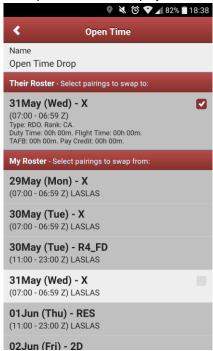


Converting Days Off

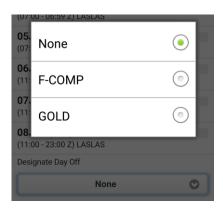
The **Designate Day Off** drop-down list in the *Swaps & Trades* board allows crew members to convert regular rest days to *Personal Days Off* and *Gold Days*.

To convert a regular rest day:

1. Select either an *Open Time Pickup* pairing or *Open Time Drop* pairing to swap from the trade board. The Open Time board displays.

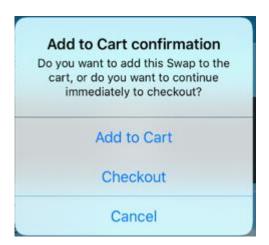


- 2. Select the pairing to swap to or from your list.
- 3. (Optional) Convert the selected pairing by selecting from the Designate Day Off list.

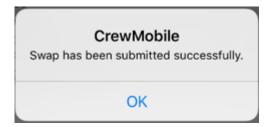


4. Click Submit.

A notification message to confirm submission of trade displays.



Selecting **Add to Cart** will pool all swaps in the cart for bulk check out later. Selecting **Checkout** will finalise the swap for validation and will give the prompt below. Click **Cancel** to discard changes.



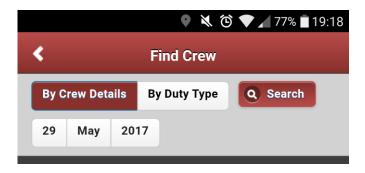
Direct

You can trade with a specific crew or duty in the Direct tab.

To submit a direct trade:

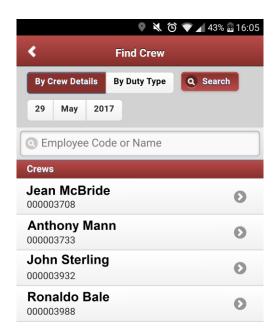
 $\supset \subset$

Click from the Swaps & Trades menu.
 The Find Crew screen displays.



- 2. Set the Date.
- 3. Select By Crew Details or By Duty Type.
- 4. Click Search.

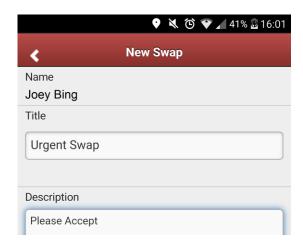
If you select searching by crew details, names of crew with swap offers will be displayed.



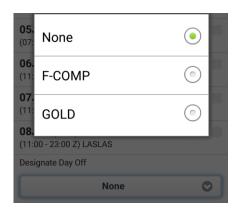
- 5. Select a crew by searching the Employee Code or Name or by simply clicking on the name of the crew in the list.
- 6. Select a duty.



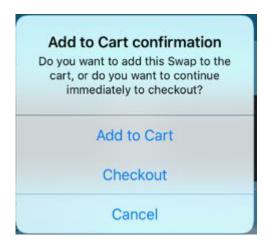
The New Swap screen displays.



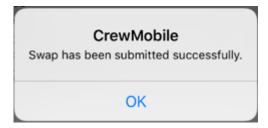
- 7. Enter a Title and Description for the swap.
- 8. Select duties from Their Roster and My Roster.
- 9. (Optional) Convert the selected pairing by selecting from the Designate Day Off list.



- 10. Click Submit.
- 11. A notification message to confirm submission of trade displays.



Selecting **Add to Cart** will pool all swaps in the cart for bulk check out later. Selecting **Checkout** will finalise the swap for validation and will give the prompt below. Click **Cancel** to discard changes.



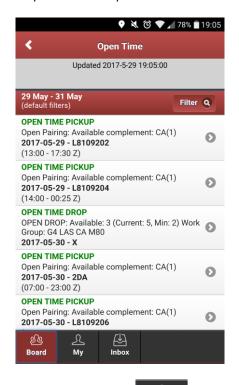
Open Time



NOTE:

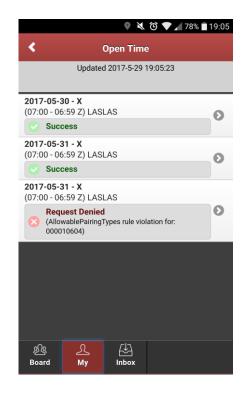
This functionality is not available for Geneva-as-a-Service.

Crew can easily identify Open Time Drop and Open Time Pickup entries in CrewMobile.



Trade Open Time Drop and Open Time Pickup pairings by clicking

2016 | COMMERCIAL IN CONFIDENCE | Page: 49 of 59



Separation of Swaps and Open Time Boards

Swaps and Open Time boards now have separate sections in the Premium Features menu.





Note: If your airline does not have an active subscription to the Open Time Premium feature, the Open Time icon will be displayed in a disabled (greyed out) icon.

CrewWatch for iOS

The new CrewWatch provides an easy-to-use application which downloads and displays duties, flights and events in an Apple Watch.

Setting Up CrewWatch

To enable CrewWatch:

If you are installing *CrewMobile+CrewWatch* for the first time and have not logged into *CrewMobile* on your iPhone, a Log In message will be displayed:



Existing CrewMobile users can enable CrewWatch using their mobile devices.

1. Open the Apple Watch application using your iPhone.

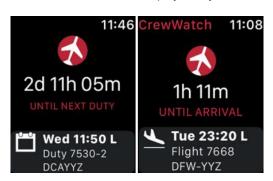


2. Enable Show App on Apple Watch.

You can now access CrewWatch in your Apple Watch.



Duties, flights and events downloaded from CrewMobile are now displayed in your watch's home screen.



Tapping on an item displays information about a duty, flight or event.



If there are no items in the duty list, an error message will be displayed instead.



The display will be based on your Sign On time, or your next flight departure or arrival, or your next event. Once the time for an item has passed, your watch will display the time until the next item. Non-timed events, such as accommodation, will not have the Time Until countdown.

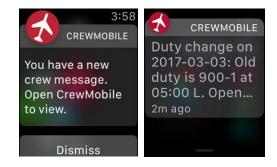
CrewWatch is not directly connected with the merlot server and only reuses the duties downloaded from *CrewMobile*. Therefore, only duties that are within 3 days will be displayed. To access full information of your future duties, the use of mobile devices is advised.

API Changes for CrewWatch

The CrewNotifierService.GetDuties method is now modified to allow CrewWatch to calculate time until the crew member's next departure/ arrival accurately.

Push Notifications for CrewWatch

Receiving push notifications are dependent on the Locked/Unlocked state of a device and whether an Apple Watch is on the wrist.



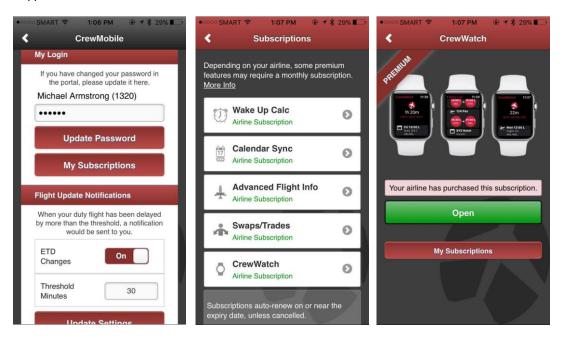
• When an Apple Watch is on a user's wrist and unlocked, notifications are delivered directly to the Apple Watch. Unless the user's iPhone is also unlocked and the screen is on, notifications are delivered to the iPhone.



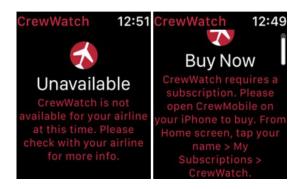
When an Apple Watch is not on the user's wrist or is locked, notifications are delivered directly to the iPhone.

CrewWatch Subscription

A user must have a premium feature subscription to utilize *CrewWatch* and the application only runs on iPhone iOS 9.0 or above, paired with an Apple Watch OS 2.0 or above.



If you do not have an active monthly subscription, the following messages will be displayed:



Configuration and Settings

This section contains details on application settings from the application and from the server. Each subsection indicates if the settings are for crew or for Administrators to manage.

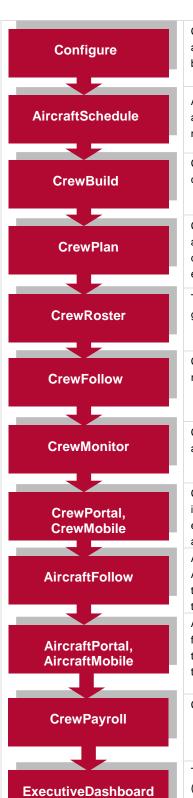


User Preferences

User preferences are settings that determine the behaviour of certain sections of the application. These can be accessed by Administrators in Configure.

User Preference	Values	Description
CPTimeMode	L = Local (default)	Time mode for all times displayed in CrewMobile and
	S = Standard	CrewPortal
	Z = Zulu	
DisplayBookingAccommodation	True(Default) / False	Displays the accommodation references in the Duty
		Detail screen.
DisplayBookingTransport	True(Default) / False	Displays the transport booking references in the Duty
		Detail screen.
DisplayFlightDetailsDelays	True(Default) / False	Displays delay codes and reasons in the Flight
		Details screen
DisplayFlightDetailsFlightCrewList	True(Default) / False	Displays a list of crew assigned to the flight in the
		Flight Details screen
DisplayFlightDetailsGateBay	True(Default) / False	Displays Gate and Bay information in the Flight
		Details screen
DisplayFlightDetailsPax	True(Default) / False	Displays passenger and baggage numbers in the
		Flight Details screen
DisplayFlightDetailsSSR	True(Default) / False	Displays SSR information in the Flight Details screen
isVisiblePreferenceFlightUpdateNotifications	True(Default) / False	Enables push notifications for flight updates
NonWorkingDutyTypes	AVL, RDO, VAC,	Non-working duty types for layover calculation.
	HOL, UVL	
PushNotificationsETDDisclaimerText	Text	Displays push notification disclaimer text
PushNotificationsETDShowDisclaimer	True/ False (Default)	Displays push notification disclaimers
PushNotificationsETDThresholdMinutes	True(Default) / False	Displays time threshold in minutes to notify crew for
		flight updates.
PushNotificationsETDUpdates	True(Default) / False	Controls flight update push notifications for ETD
		changes.

Application Flow Diagram



Configure application is a central place where all crew and aircraft configuration information can be accessed. The application defines the core set of configuration requirements that are the building blocks that allow merlot applications to be used in the way required by your airline.

AircraftSchedule improves the development of flight schedules while ensuring operational integrity and meeting the needs of airlines for increased efficiency in scheduling. The application includes a maintenance planning capability.

CrewBuild develops efficient crew pairings that achieve business goals while meeting the needs of crew and managing changes that arise after the roster is published.

CrewPlan plans and monitors all revalidation and qualification checks, medicals, license renewals, annual leave and administrative needs. Crew shortfalls or surplus information is accurately calculated by fleet, rank or base and can be aggregated at daily, weekly or monthly levels. This extends to future establishment planning.

The CrewRoster application allows the user to develop efficient crew rosters that achieve business goals while meeting the needs of crew.

CrewFollow provides airlines with the best information to act on in response to crew disruptions resulting from (amongst other things) sickness, no-shows and crew-related disruptions on the day.

CrewMonitor identifies and monitors changes within merlot for disruptions that will impact pairings and pairing allocations to crew members.

CrewPortal and CrewMobile provide airline crew with the ability to view the latest crew related information on a computer or mobile device such as phones or tablets. It enables airline operations employees to securely distribute timely and relevant information to crew members including duty assignments, duty changes and messages.

AircraftFollow provides a real time graphical representation of your airline's live status for the day. AircraftFollow allows the user to manage incoming and outgoing aircraft and related operational tasks on a day-to-day basis. The application provides accurate and timely information to improve the decision support process.

AircraftPortal and AircraftMobile provide outstations with the ability to view the latest schedules and fight-related information on a computer or mobile device. Updates to departure and arrival times, terminals, gates and bays can be done from here. These also allow management a quick look at the day's operations.

CrewPayroll manages complex pay and allowance calculations for crew.

The ExecutiveDashboard provides executive level reporting including key performance indicator (KPI) data to help airlines gauge operational and employee success.

CrewMobile Glossary

Field	Description		
Base	The port to which crewmembers are expected to commence and finish their tasks / activities.		
Company Pairing	Also called Generic Pairing, Ground Pairing, Non-flight Pairing, Standard Pairing These are pre-defined non-flight pairings that can be allocated to crew. Examples of these are: Administration Days, Days Off, Annual Leave and Sick Leave. Also known as Standard Pairing or Generic Pairing.		
Duty	A grouping of flights and / or activities that can be performed legally by a crew member during one work period. One or more duties combined together define a pairing.		
Duty Change	An update to a published pairing where the history of changes for a duty are recorded.		
Duty Change Notification	Whenever an assigned published pairing or duty is modified, the assigned crew need to be notified of the change to ensure they made aware of the latest version of the pairing. This is referred to as a duty change notification and is sent to crew via CrewPortal and CrewMobile.		
Employee	The generic term for people who are trained to perform specific tasks/activities. Within Flight Operations, the employees are generally referred to as crew or crewmembers; and within Maintenance, the employees are generally referred to as engineers, mechanics, avionic technicians etc.		
Expiry	An expiration date of a qualification		
Flight	Also called sector The transport taken from a departure point to an arrival point.		
Local Time	The time in local time at location at which the pairing or event is occurring. If the location is the same or in the same time zone as the company base or headquarters location this time will be the same as the company value.		
Mobile Token	Required for access to CrewMobile, available through the airline merlot administrator or through merlot.aero.		
Pairing	The generic unit of work and non-work that can be assigned to a crew member. A pairing is comprised of none, one or more flights and/or activities grouped together into one or more duties. A pairing may span over multiple days. One or more duties combined together define a pairing.		
	A pairing is from home base to home base so it can encompass a number of duties each with individual report and release times. In this way pairings can span a single or multiple days. Pairings are usually built for all crew that carry out identical work. For instance the Captain, the First Officer and the Flight Attendants, who all stay together, will be on the same pairing. To ensure consistency and simplicity of allocation a Pairing will be the only unit of activity that can be assigned to a crew member. There are some exceptions to this but in general this concept applies across the suite of applications.		
Roster	A roster is simply a defined period of time within which the crew member's work and non-work assignments are defined.		

Notes