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Modified By	Date	Version	Changes
Darryl Horton	24 October 2013	1.0	First Draft
Darryl Horton	30 October 2013	1.1	Added Table of Contents
Emgee Taute	05 November 2013	1.2	Review
Cherie Elpel	03 February 2014	1.3	New Screenshots and Edit
Bea Tabuñar	29 August 2016	6.6.11	Updates from previous releases
Bea Tabuñar	21 October 2016	6.7.2	Find Reserves, Direct Open, Monitoring
			Panel, Allocation Filter
Bea Tabuñar	03 November 2016	6.7.2 E1	Gantt Visualization
Cy De Guzman	23 February 2017	6.8.1	Updated Framework Applications - UI Activity Log
Cy De Guzman	7 March 2017	6.8.2	Updated Framework Applications - Memory Monitoring Tool
Cy De Guzman	27 April 2017	7.0.0	Improved Visualisation of Line Types, Gantt Visualization Menu for Tool tips and Totals Columns – Updated the following sections - Allocation Panel, Allocation Gantt Advanced Filters, Gantt Options, Name Block, Find Reserves, Direct Open, Employee Roster Report After Duty Rest Indicator
Cy De Guzman	16 Aug 2017	7.1.0	Activity Panel –updated screenshot, Flights tab – updated screenshot, added Onward Flight column Standard Pairings – updated table with OPD. Employee Roster Report – Updated screenshot and included Active Employee Profile display. Show Totals Column – added a section for Automation of ADD (OPD) Day Minimum Monthly Guarantee Process
Cy De Guzman	04 December 2017	7.2.1	Equipment Currency Report for Dual-Rated Crew - updated CrewFollow Reports> Equipment Currency Report screenshot Pay Credits on the Day of Operations – updated Pairing Panel title to Pairing Details Panel, Modified Pairing Details Panel subtopic titles, Added Cancel Pairings topic, texts and screenshots, updated Pairings screenshot updated Action Buttons
			Remove Employee-Related Options from Allocation Gantt Right Click Menu - updated Right Click Options – Allocation Gantt > Open Crew Allocation History and Employee Qualification Summary GOLD Day Assignments in Crew Allocation History - updated Right Click Options - Pairing > Crew Allocation History and Pairing Allocation History screenshots, included gold day allocations
Cy De Guzman	31 January 2018	7.3.0	Additional Split Pairing Functionalities – added Split Pairing section in Pairing Details Panel, added scenarios

Т			
			updated Pairing Details Panel > Pairing Panel
			and Grid > Complement screenshot
			added Equipment Group in Complement
			columns
			updated Assigned Crew table > Split
			updated Complement list > Split
			Visual Indicator for Non-Acclimatized Crew -
			added Toggle Non-Acclimatised Period topic
			in Gantt Options
			moved Toggle Required Rest Indicator topic to
			Gantt Options
			added Non-acclimatize periods in Gantt
			•
			Display table with screenshot
			Find Employees Based on Port - changed
			Advanced to Advanced Filters in Tools Menu
			> Direct Open
			rearranged Advanced Filters table fields and
			descriptions
			added Include out of base Employees in Direct
			Open table
			updated Direct Open > Advanced Filters
			screenshot
			updated Right Click Options > Find Reserves
1			screenshot
Cy De Guzman	08 Mar 2018	7.3.1	Updated activity panel - main screenshot
Cy De Guzillali	00 IVIAI 2010	7.3.1	
			Updated filtering screenshot
			Added Retain layout on refresh in Criteria for
			Filter table
			Added new subtopic Retain Layout on Refresh
Cy De Guzman	08 Mar 2018	7.3.1	Added Voyage Report for Thai Smile -
			Journey Log section
Cy De Guzman	11 July 2018	8.1.0	Include Out of Base Employees Filter for Crew
			Applications - updated the ff:
			allocation panel screenshot -
			UMAllocationPanel
			Crew Selection - UMCrewselection
			crew selection table - added include out of
			base employees
			Applying a filter screenshot - UMapplyingfilters
			added 3.(Optional) To include out of base
			employees in the filter, enter a pairing type in
			the PairingType field. This will enable the
			Include out of base Employees option. in how
			a filter can be applied to the Allocation Gantt.
			removed The list of YUL CPT that are active
			between 01-31 January 2016, inclusively, are
			displayed in the filtered crew list. in how a filter
			can be applied to the Allocation Gantt.
			Applying a filter screenshot for #5 -
			UMapplyingfilters5
			removed All 45 rosters will be displayed in the
			Allocation Gantt. Details on the Allocation
			Gantt will be discussed in a later section.
			Advanced Filters screenshot

			replaced Direct Open allocation gantt filters to allocation panel filters moved allocation filter to allocation gantt section renamed allocation filter to allocation gantt filter Ability to Control Data for Manual Swap Quota - Added IncludeInManualSwapCount in Manual Swap Quota table
Bea Tabuñar	11 July 2018	8.1.0	Updated colour definitions for Activity Panel > Flights tab Updated Gen Dec CBP report image
Bea Tabuñar	October 2018	8.20	Updated Equipment Currency Report screenshot Duty Change Options configuration Callout Standby Options

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.

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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



Framework Applications

The merlot.aero suite of applications eliminates the use of text commands by employing a Graphical User Interface (GUI). You are presented with the following options available in all applications across the merlot.aero suite.



These are Framework Applications that will follow you throughout the merlot suite.

This icon is the Job Engine . If red, this means the job engine has stopped. If green, the job engine is running.

This icon is the signal strength of your connection to the Internet.

The Memory Monitoring tool displays memory utilization for merlot applications in real time.

Memory utilization is displayed in three different levels:

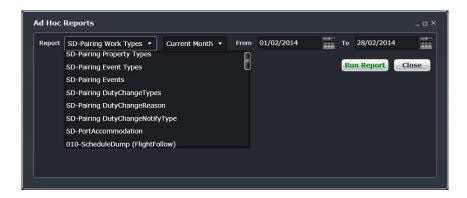
Icon	Level	Range
500 MB	Low (Green)	0MB-700MB
800 MB	Moderate (Yellow)	701MB - 1000MB
1002 MB	High (Red)	1001MB and above

Hovering the mouse over the tool icon displays the following information:

- 1. Icon label Memory Monitor
- 2. Memory consumption in MB with KB conversion e.g. 64 MB (65660 KB)
- 3. Level of memory consumption e.g. Low

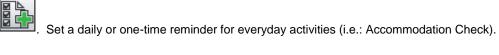


This icon is Ad Hoc Reports Ad hoc reports are available in all the applications and modules across the merlot.aero suite while specific application reports are available in the Reports drop-down menu.



You can add notes to the Shift Log for any system user to view.





This is the send documents



icon. Send a document to a crew member or to a fellow merlot.aero user.



This is the mail icon. Send messages to crew or co-workers via SMS, email or directly within the merlot.aero suite.



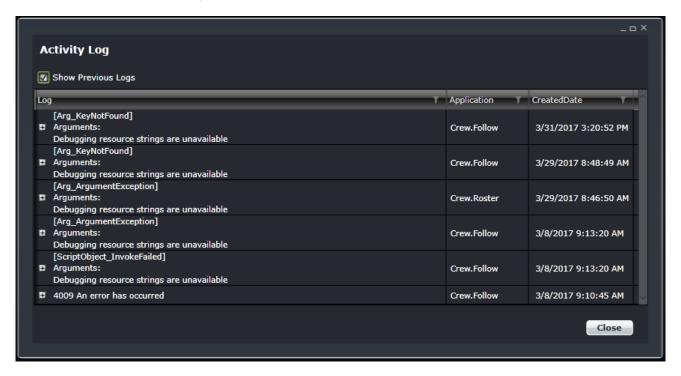
This icon allows you to navigate through the entire merlot.aero suite.



When the application setting *UseUIDebug* is set to True, the New Activity Log menu will be visible under the **Login Centre** and available for use. All incoming Merlot UI Error Logs will not be displayed in the existing error log in the application nor trigger the alert unless the error is related to *Insert/Add/Delete rows*.

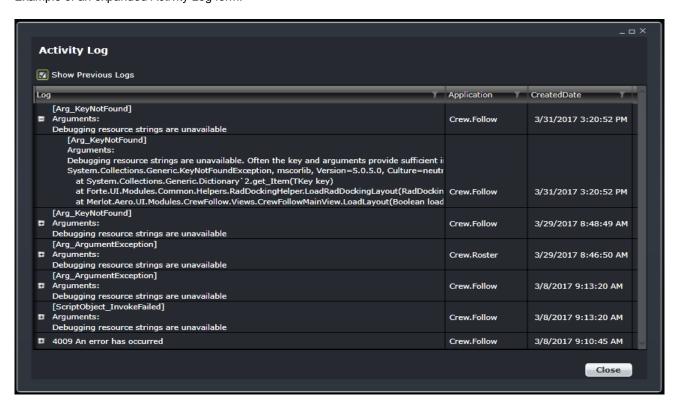


Example of a collapsed Activity Log form:



When a user expands the log value, the complete details of the selected UI error log will be displayed.

Example of an expanded Activity Log form:



Logging into CrewFollow

With your merlot aero credentials simply \log in and select CrewFollow.





What is CrewFollow?

CrewFollow is an airline management system tool that monitors and manages all crew movements during your day-to-day operation. It provides airlines with up to date information, allowing the airline to act in response to crew disruptions resulting from amongst other events, sickness, no shows and other crew- or aircraft-related disruptions.

CrewFollow Prerequisites

Prior to undertaking tasks in CrewFollow, it is first necessary to publish rosters in CrewRoster. Please refer to the CrewRoster User Manual for more detail on this process.

Tasks in AircraftSchedule take place before action in CrewRoster. The user imports a Standard Schedules Information Manual (SSIM) or creates a new schedule. Once all the flights are in the schedule, the schedule is marked active. Please refer to the AircraftSchedule User Manual for more information.

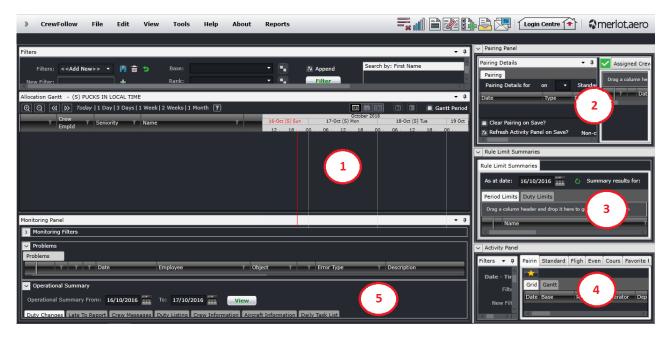
In CrewPlan, training and qualification events are pre-assigned for crew members. Please refer to the CrewPlan User Manual for more detail on this process.

CrewBuild enables the user to build pairings which are then assigned to crew in CrewRoster. It should be noted that users can also build pairings within CrewRoster.

For customers that have ad hoc operations, flight schedules may be directly created in AircraftFollow instead of AircraftSchedule. Pairings can also be created and assigned directly in CrewFollow.

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 CrewFollow GUI:



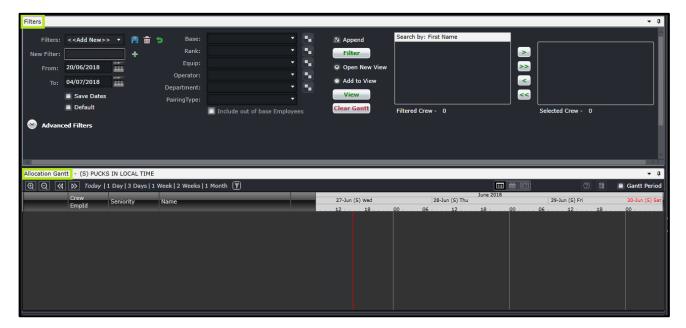
- 1. Allocation Panel: Crew member assignments are displayed and modified here
- 2. Pairing Panel: View and modify the details of the pairings
- 3. Rule Limit Summaries: Displays the cumulative flight and duty hours until a certain date
- 4. Activity Panel: List of pairings, flights and activities that can be allocated to the crew
- 5. Monitoring Panel: Identify and monitor changes that could result in legal violations or problems

The next sections provide users with an overview of merlot.aero application panel functionality to carryout CrewFollow tasks.



Allocation Panel

To assign work to employees, there needs to be some way to view the employees and their availability over time. The Allocation Panel provides this view, which then allows the allocation of pairings from the Activity Panel to employees that are displayed, allows for re-assignment of work between employees, or removal or de-allocation of pairings from an employee's roster.



The Allocation Panel is divided into two parts: The **Filters** and the **Allocation Gantt**. The filter allows users to select the crew rosters they would like to load into the Allocation Gantt. The Allocation Gantt displays the selected crew's roster and allows users to modify each as needed. Each part will be discussed in the next sections.

Filter

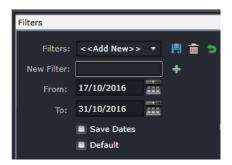
At the top of the Allocation Panel is the filter. The purpose of the filter is to define the set of employees that will be displayed within the Allocation Panel. This filter does not affect the other panels.

When CrewFollow is opened, the basic filter is displayed and the advanced filters are collapsed.

The Filter for the Allocation Panel can be divided into three sections:

- 1. Filter dates
- 2. Crew selection
- 3. Advanced filters
- 4. Allocation filter

Filter Dates



To allow users to specify and save filters, a Filters field and associated Save, Delete and Reset icon buttons as well as a Save Dates checkbox are provided above the drop-down calendars.

The Filters field is a combination of a drop-down lists that displays the previously saved filters, as defined by the user, along with template filters that apply to all users. There is also the ability to enter a new filter name in the New Filter field and to click the plus (+) icon to add the new filter.

The date range of the rosters to be viewed must be selected through the drop-down calendars provided.

- From A date field. The start value of the date range
- To A date field. The end value of the date range
- Save Dates The selected date range will be the default date for the saved filter

Note: The date controls throughout the merlot suite have built-in short-cuts. These shortcuts allow users to instantly select different date targets, such as the current day (*T*), or the start of a month (*M*), a quarter (*Q*) or a year (*Y*).

The Save Dates check box allows the user to control whether a filter they define is set to a specific date range or if the selected filter inherits the current date range.

Part of the process when loading the Allocation Panel is to apply a default filter. This is to facilitate rapid filtering of displayed data to the data that the user refers to most frequently. To allow the user to set a default filter, the filter section contains a Default check box. When this button is clicked, the currently selected filter is saved as the default filter for the application.

When the Allocation Panel is loaded, it determines the current user and the application context and defaults to the relevant filter.

Crew Selection



The second part of the filter is for crew selection. This has drop-down filter criteria on the left side and crew lists on the right side.

Each filter criterion is described below. This allows users to select a group of crew to display in the Allocation Gantt. Multiple selections can be made for each of the criterion below.

Field	Description
Base	A drop-down field that displays the active crew bases
Rank	A drop-down field that displays active ranks and / or rank groups
Equip	A drop-down field that displays the active aircraft or equipment types or groups that crew operate
Operator	The Operator drop-down menu filters the grid to show information based on selected airline operators
Department	A drop-down field that displays active departments. It is an area within an airline or company that is tasked with providing particular services of a similar type. For example, Flight Operations (i.e. the manning and operating of aircraft), Maintenance (ensure the aircraft are able to operate safely), Ramp (the parking and coordination of aircraft resupply between flights).
Pairing Type	A drop-down field that displays the kinds of pairings to be displayed. This looks at the pairing or duty on the day/s being searched. For example, if you select RES for 01 June, all RES duties on the 01 June will be displayed even if the pairing starts on 31 May.
Include out of base Employees	This filter option is enabled only when a pairing type is indicated in the <i>PairingType</i> field. When enabled, includes out of base employees assigned with a specific pairing type(s) on a wider date range.

The middle section has some buttons that control the way crew rosters are displayed in the Allocation Gantt.

Field	Description
Append	When this is selected, different crew selections can be added to the selected crew list (box at the right) even if the criteria changes. If this is not selected, the names in the selected crew list will be removed whenever any of the criteria is changed. This is selected by default.
Filter	This button takes the criteria on the right side and displays the crew names in the filtered crew list (box at the left).

Open New View / Add to View	Only one of these two options can be selected at one time. The selected option will be used when the View button is clicked.
	Open New View will remove any open rosters in the Allocation Gantt and display the rosters of the crew listed in the selected crew list. This is selected by default.
	Add to View will retain the open rosters and add the rosters of the crew listed in the selected crew list.
View	This button takes the names on the selected crew list and displays their rosters in the Allocation Gantt.
Clear Gantt	This button removes all open rosters displayed in the Allocation Gantt.

The section to the right has the list of filtered and selected crew.

Field	Description
Search by: Employee Code Filtered Crew - 0	A list of crew names based on the filter criteria. The list will appear only after Filter is clicked. The number at the bottom shows how many crew are in the filtered list. The header of the box shows how the crew list is sorted. By default, the list is sorted by employee code. To change the sorting, right click on the header and select your preferred sort option. Last Name First Name Employee Code Known As
Buttons > >> < <<	The four buttons transfer the names from the filtered crew list to the selected crew list and vice versa. To do this, click on one name from either list and click the corresponding button. The single-arrow buttons move names to the left or right one by one. The double-arrow buttons move all names to the left or right.
Selected Crew List Selected Crew - 0	A list of selected crew taken from the filtered crew list. The box will have a list only if employee names are moved from the filtered crew list. The number at the bottom shows how many crew are in the selected crew list.

Applying a Filter

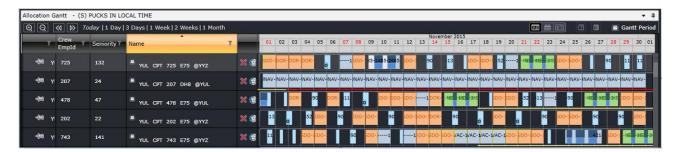
Below is an example of how a filter can be applied to the Allocation Gantt.



- 1. Select a date range or apply a saved filter.
- 2. Select the filter criteria that allows you to focus on the set of crew that you need to work on. For example, you can select to work on one base first and then select captains.
- 3. **(Optional)** To include out of base employees in the filter, enter a pairing type in the *PairingType* field. This will enable the **Include out of base Employees** option.
- Click Filter
- 5. Click on the double right arrow to bring all the names to the selected crew list.



6. Click View.



Note: If all fields are blank and Filter is selected, all active crew members for the selected date range will be displayed in the filtered crew list.

Rosters are loaded in the Allocation Gantt only if there is at least one crew in the selected crew list and when **View** is clicked.

There is an option to use exclude a criterion. For example, to load all activities except for FPG pairing type, select FPG and then Ctrl+ Click FPG. This will turn the selection red and the results will not include FPG.



Advanced Filters



Advanced filters allow users to search for crew with more specific characteristics. This section is collapsed by default.

The fields are described below:

Field	Description	
Group	Provides a list of employee profiles or groups. Selecting any group filters our crew members who belong to the group within the selected filter date range. Multiple groups can be selected. For example, crew members who have recently come on board can be grouped as Green or IOE. When either group is selected for the filter, crew with the Green or IOE profile for the filter date range will be listed in the filtered crew list.	
Certification	Provides a list of certifications that crew can achieve. Certifications are qualifications taken on crew's own time. Examples of which are language speaking skills and medical. Certifications may or may not need to be renewed. Multiple certifications can be selected for the filter criteria.	
Attribute	Provides a list of attributes or pre-defined characteristics of crew that can be used to require or restrict the number of crew in a flight or route. Multiple attributes can be selected for the filter criteria. For example, a crew member can have a Mandarin-speaking attribute. In a flight going to any city in China, at least one Mandarin-speaking crew is required. The attribute of the crew is used to determine if that requirement has been met.	
Line Type	A drop-down list of active line types.	
Course	Provides a list of active courses. Multiple courses can be selected for the filter criteria. This option needs to be used with either option below: • Instance – Crew who are taking the course within the filter date range will be displayed in the filtered crew list. If Ignore Planned is selected, the course pairings with Planned property will not be considered in the filter. • Expiry – Crew who will expire for the selected course/s within the Start Date and End Date will be displayed in the filtered crew list	

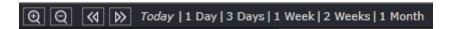
The same steps in Applying a Filter can be followed when using the advanced filter criteria.



Allocation Gantt

The Allocation Gantt allows a user to have a visual representation of a crew member's roster. From this view, the users can identify how many days each crew is working and when they have a day off. Rest in between duties is also displayed. Each section is discussed below.

Zoom and Navigation Options



The Allocation Gantt can be resized to appear wider or narrower. The section at the top left has buttons that allow users to zoom in/out and navigate through the dates of the roster.

Field	Description
@ Q	Zoom in and zoom out. Zooming in expands the Gantt and zooming out makes it narrower.
< >	Scroll left and scroll right. Moves the Gantt left to an earlier date and time and right to a later date and time.
Today 1 Day 3 Days 1 Week 2 Weeks 1 Month	Preset views. Click on any of the options to adjust the Gantt. Today – moves the view to the current date 1 Day – adjusts the Gantt to a one-day view 3 Days – adjusts the Gantt to a three-day view 2 Weeks – adjusts the Gantt to a two-week view 1 Month – adjusts the Gantt to a month-long view

Allocation Gantt Filter

When rosters are loaded in the Allocation Gantt, the content can be filtered even further. This can be done by clicking on the filter icon beside the zoom settings.



Click on the filter button to bring up the Filter View form. Alternatively, users can also use the Shift + L hotkey or double click the date on the Gantt timeline.

Using the button will set the default date range to the first day of the Allocation Gantt filter date range. The same thing is applied when using Shift + L, but if a pairing is selected upon using the hot key, the date range will be based on the selected pairing. The double-click option will take the date from the Gantt timeline.



The form contains the following fields:

Field	Description	
From / To	Date and time range of the filter. This defaults to the first day of the Allocation Gantt filter date range and follows the application's time mode.	
Search	Accepts a set of characters that are part of a pair label or pair type. This is not case-sensitive.	
Search By	Options include: 1. Pairing - Default option. Filters the results based on pair labels. 2. Pair Type - Filters the results based on pair type 3. Flight - Filters the results based on flight number	
Results Box	Displays the results of the filter. Each result has a tick box that determines that the result is selected.	
Select All / None	Select All ticks all the results and displays all of them in the Allocation Gantt. None will display rosters that do not have a pairing assigned on the selected day/s.	
Filter / Clear Filter	The Filter button will apply the filter to the Allocation Gantt. The Clear Filter button will reset the filter to the default values without applying the previous filter criteria.	
Close	This will close the form.	

If a user needs to isolate reserves for a certain date, the following steps must be followed:

- 1. Open the filter.
- 2. Ensure the date range is correct.
- 3. Select Pairing Type in the Search By option. The list of available pair types on the selected date/s will be displayed.
- 4. Select RES.

- 5. Click Filter.
- 6. Click Close.



Rosters with RES pairings on the selected date/s are displayed. The filter icon turns blue if a filter is applied.



The filter can also be used to display rosters that have holes or days without pairings assigned.

- 1. Open the filter.
- 2. Ensure the date range is correct.
- 3. Select any Search By option.
- 4. Untick the Select All box and tick the None box.
- 5. Click Filter.
- 6. Click Close.



Rosters without assignments on the selected date/s will be displayed.



Pinned rosters will not be affected by the filter and will still be displayed at the top of the Allocation Gantt.

Gantt Options

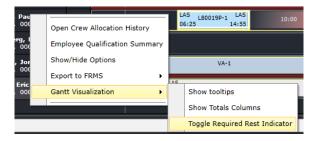


Towards the upper right corner of the Allocation Gantt are more options for the Gantt view.

Field	Description
Normal, Pre-	By default, normal pairings are displayed. If Pre-planned is selected, all pairings with the pre-
planned,	planned property, like courses, will be isolated. If Requested is selected, all requested pairings
Requested	or pairings that were granted from CrewPortal requests or bids will be isolated.

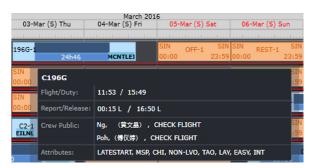
Show Tool tips	Displays the Flight/Duty details, Report/Release times and Assignment Properties when the mouse is hovered over a puck.
Show Totals Column	Displays Period totals.
Gantt Period	Isolates totals based on the Gantt period. This will be discussed later in this document.

Right-click anywhere on this bar to access the Gantt Visualization options.



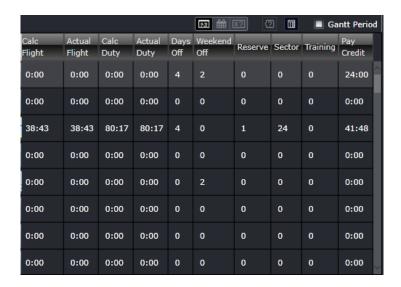
Show Tool tips

When selected, a tool tip will be displayed when hovering or clicking a pairing. It contains the name of the pairing, flight and duty times, report and release times, public comments for crew and pairing attributes.

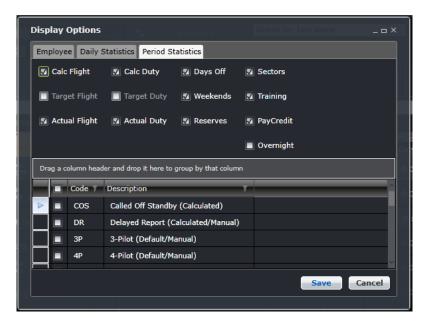


Show Totals Columns

Clicking on **Show Totals Columns** displays several columns that tally how many pairings fulfill each column's characteristic. Each row corresponds to one roster. In the image below, rosters were open from the 16th to 31st of October and the first roster for that period has 4 days off and 2 weekends off in the schedule that is currently displayed.



Users have the option hide or display certain columns. This can be done by right-clicking on any of the columns then selecting Show/Hide Options. Go to the *Period Statistics* tab. Select or deselect a column option then click **Save**.



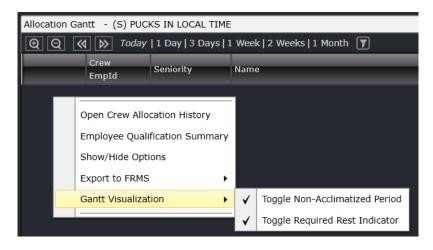
Column	Description
Calc Flight	Calculated flight time. If credit rules for flight time are applied, the total will be reflected here. Credit flight rules can be set up in Configure in the Flight and Duty Credit Rules screen under the Rules menu.
Calc Duty	Calculated duty time. If credit rules for duty time are applied, the total will be reflected here. Credit duty rules can be set up in Configure in the Flight and Duty Credit Rules screen under the Rules menu.
Days Off	Total number of days off based on the pair type RDO.
Sectors	Total number of operating sectors or flights. Deadhead and deadhead other events not included.

Target Flight	This column displays the target flight hours of the selected crew. This is based on the total credit flight hours for the roster period divided by the number of available mandays for the roster period. To enable this option, set the user preference <i>DisablePeriodTarget</i> in Configure to True.
Target Duty	This column displays the target duty hours of the selected crew. This is based on the total credit duty hours for the roster period divided by the number of available mandays for the roster period. To enable this option, set the user preference <i>DisablePeriodTarget</i> in Configure to True.
Weekends	Totals the number of weekends (Saturday and Sunday) in the open period.
Training	Number of training pairings for the roster based on pair types SIM and TRN
Actual Flight	Total flight hours without any credit rules applied.
Actual Duty	Total duty hours without any credit rules applied.
Reserves	Number of reserves in the period based on pair types RES and ARD
PayCredit	Total pay credits for the period
Overnight	Number of overnights or layover days
Pairing Attributes	This section contains a list of pairing attributes. Select the attributes to be monitored to display the column.

Trip rig credit rules can be applied to the Pay Credit column. If the pairing pay credit value is higher than the sum of the duties' pay credit, the difference, referred to as X, will be used. If the pairing on the last day of the date range finishes on the last day, the whole pay credit value is used. Otherwise, if the last pairing ends outside of the date range, X will not be counted for the part of the pairing within and outside of the date range.

For example, the date range is 01-30 June and the pairing on June 30 ends on 01 July with rig pay credit of 4:00 and sum of duty pay credit is 2:30. The difference, or X, is 1:30 or 1.5. For the date range, X will not be considered since the latest duty (01 July) is outside of the date range. If the date range for processing is 01 June to 31 July, X will be considered. The total pairing pay credits will be displayed in the Pay Credit total column.

Toggle Non-Acclimatised Period



When the Toggle Non-Acclimatised Period option is selected, the following will occur:

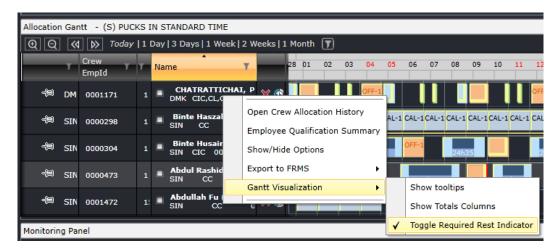
- Trigger the view of non-acclimatised periods in the Allocation Gantt;
- Hide the check icon when there are no non-acclimatised periods displayed in the Allocation Gantt;
- Display a check icon when non-acclimatised periods are displayed within the Allocation Gantt; and
- Display the non-acclimatisation period lines.

Toggle Required Rest Indicator

The Allocation Gantt displays an after-duty rest indicator to aid users monitor the amount of rest required for a crew after a duty.

To enable the After Duty Rest indicator:

- Load crew rosters.
- Right-click the name of the crew.
- Enable Gantt Visualization > Toggle Required Rest Indicator.



When the rest indicator is enabled, the Allocation Gantt tool tip will display the *Required Rest* information. A red haze is added after the duty puck. The required rest is displayed in the center. The rest port and the rest end time are placed at

the end of the indicator. The rest end time is calculated as the sum of the release time and required rest time. Hovering the mouse over the indicator displays details of required rest.



The Allocation Gantt after activating the After Rest Duty Indicator.



Day Off



Multiple-day Pairing



Rest In Violation



Open Crew Allocation History

The Crew Allocation History can only be accessed in the Allocation Gantt by right clicking on the name of the crew.

See Crew Allocation History.

Employee Qualification Summary

This brings out the summary of qualifications for the selected crew.

Like the Crew Allocation History, the Employee Qualification Summary only displays by right clicking on the name of the crew in the Allocation Gantt.

Show/Hide Options

This brings out the display options for the Allocation Gantt.

Export to FRMS

See the Export to FRMS.

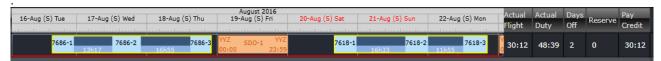
Gantt Visualization

See **Gantt Options**.

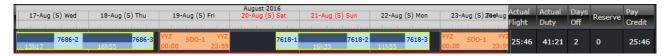
Gantt Period

The Totals columns in crew applications consider all days selected in the Allocation Panel filter. If the Gantt Period checkbox is selected, the totals will be based on the dates that are visible in the Allocation Gantt. For example, if the entire month of January was selected and the Totals columns are selected, the totals will be based on 01-31 January. If a 1-week view is selected and the Gantt Period checkbox is selected, the totals will be based on the 7 days displayed in the Allocation Gantt, specifically the duties that have the start of the day visible. If the user slightly moves the Gantt to hide the beginning of the first day, the calculation excludes the first day.

For example, the image below shows the totals from the 16th to the 22nd. Notice that there is only one rest day



As you scroll one day forward (17th to 23rd), the totals change with the addition of another rest day and the hiding of the first duty on the 16th.

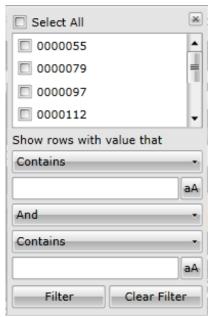


If you prefer to include the first day in the totals even if only part of that day is visible, set the user preference *RollingTotalsPartialPairings* to True.

Name Block

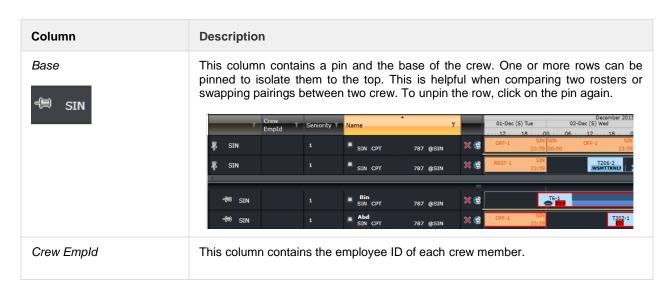


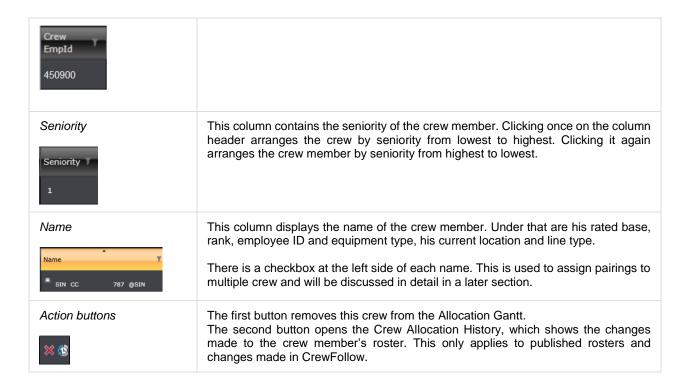
The left side of the Allocation Gantt has the name block. These columns have basic information about each crew member and can be used to sort them.



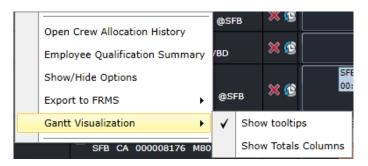
Each column has a filter icon () that when clicked will display a list of all the options available for the column and a filter to search for phrases within the entries.

Clicking on each column header arranges the displayed rosters according to that column. In the image above, the rosters are arranged alphabetically by name.



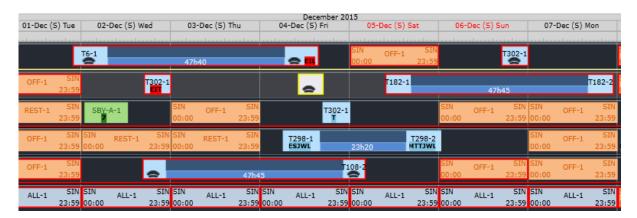


Users can also right click on the name to bring out more options:



Option	Description
Open Crew Allocation History	This brings out the Crew Allocation History form, which displays the changes made to the crew's roster.
Employee Qualification Summary	This brings out the summary of qualifications for the selected crew.
Show/Hide Options	This brings out the display options for the Allocation Gantt.
Export to FRMS	The option included here is SAFE, which is an FRMS provider. Once this is selected, the crew member's roster will be exported to FRMS. The date range is based on the Allocation Panel filter.
Gantt Visualization	Presents options for tooltips and totals columns.

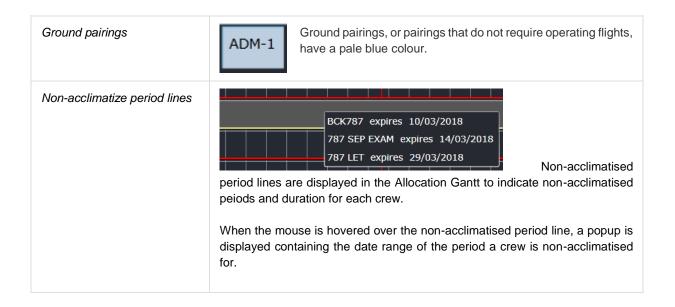
Gantt Display



The Gantt display contains all the pairings assigned to crew. Each column represents one day and each row represents one crew member. Users can scroll through the Gantt by clicking and dragging the timeline where the dates are displayed.

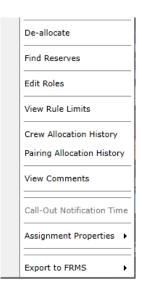
There are several symbols and colours in the Gantt. These are discussed below.

Column	Description
Flight pairing	A flight pairing has at least one operating flight. The pair label is displayed at the center. If space permits, the report and release ports will be displayed on either side. This flight pairing lasts one day and starts and ends in the crew's base. By default, flight pairings are bright blue.
Multiple day flight pairing (discuss rest between)	T22-1 LNLF 23h45 NL This is a flight pairing that lasts two days. Each block of work is a duty. This pairing contains two duties and has 23 hours and 45 minutes of rest in between.
Reserve	SBY-777-1 This is a reserve pairing. By default, reserve pairings are green.
Training pairing, student	BCK787 This is a training pairing for a student. It is distinguished by the graduation cap under the pair label. Training pairings have yellow borders.
Training pairing, instructor	This is a training pairing for an instructor. It is distinguished by the captain hat under the pair label. Training pairings have yellow borders.
Pairing with properties (preplanned, requested, etc.)	Several pairings could have letters under the pair labels. These are assignment properties, which indicate certain characteristics that crew schedulers need to be aware of. In the example above, the first duty has a late finish and has none-to-low visibility.



Right Click Options - Pairing

More information and action options are available when you right click on a pairing. Note that the pairing must be left-clicked first before accessing the right-click options.



De-allocate

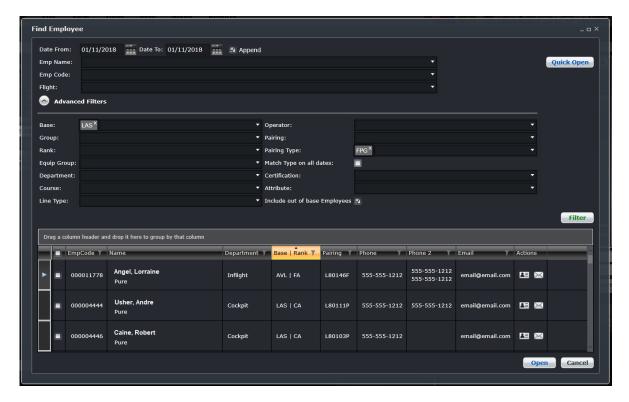
This option removes the pairing from the crew member's roster.

Allocate Sick Leave

This replaces the pairing with a sick leave.

Find Reserves

This displays the <u>Find Employee form</u> with preset filters for home and airport reserves that can replace the selected crew for that day.



It also displays the duties 3 days before and after the target date. Should the number of days need to be changed, Administrators can change the number in the user preferences *BackwardDaysDisplayed* and *ForwardDaysDisplayed*.

This function is more often used in CrewFollow where reserves are activated.

Edit Roles

This is an alternative way of assigning roles in the Pairing panel. Both seats and roles can be updated in the form below.

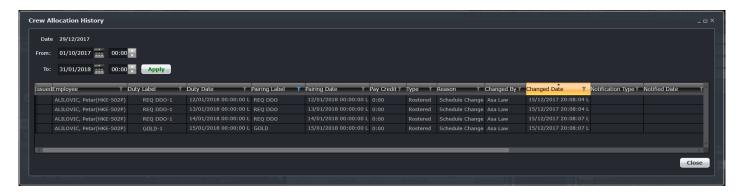


View Rule Limits

This option displays the crew's hours in the Rule Limit Summaries.

Crew Allocation History

This form displays the history of the changes made to the crew member's roster. The historical changes are kept track once the roster is published. Entries in gray are the originally assigned pairings, while entries in white are changes made in the live roster in CrewFollow.



Pairing Allocation History

This form shows the history of changes made to the selected pairing.



View Comments

Public and private comments on the pairing can be added and viewed from here.



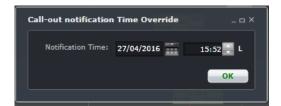


Comments can be added to multiple crew at the same time. Simply click on the Add New link in the public or private comments section, then select Crew Pairing. Select the crew members and enter the comment. Click **Save**.



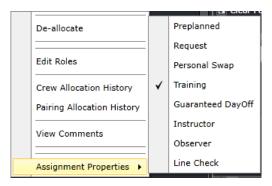
Call-Out Notification Time

This allows the user to adjust the time that the crew member was called out from standby. The time is reflected in the crew's pairing.



Assignment Properties

Assignment properties can be selected and deselected from this list.

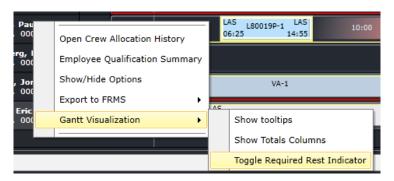


Export to FRMS

This allows the roster of the individual crew or the crew assigned to the pairing to be exported to an FRMS provider. See <u>Export to FRMS</u> for complete details.

Right Click Options - Allocation Gantt

These options are available when you right click on a crew name, the timeline or the Totals Columns.





Pairing Details Panel

The Pairing Details Panel is a core component of the merlot crew application as it is the only functionality that is used to create and modify pairings. Pairings are the key definitions of work which are assigned to crew members.

There are two primary purposes that the Pairing Panel can be used for:

- Creation of pairings by inserting groupings of flights and events together within a pairing
- Modification of existing pairings by changing the duties, flights and events that comprise a pairing



To be able to assign work to crew members, the individual work activities need to be grouped together into meaningful units of work. It is the Pairing Panel that provides the functionality to group flights and events together into duties, which then comprise a pairing. These pairings are the units of work that can be assigned to crew members.

The Pairing Panel displays the data associated with a pairing that is in the process of being created, or an existing pairing. To display the information about a pairing in a logical and focused manner, the Pairing Panel contains the following main screen components or sections:

- Pairing Details Lists the duties, flights and events that comprise the pairing, and when they commence
- Exceptions (Tick/Cross) Green-tick or red-cross to display pass/fail information of rules applied to the pairing
- Assigned Crew Contains the list of crew members who have been assigned to the pairing
- Recurrence The period and frequencies of the recurrence of the current pairing
- Complement The number and types of crew members who are required to be assigned to the pairing
- Attributes Additional ways to classify pairings



Pairing Panel and Grid

This section contains details of the duties and the flights and events that when combined define the work involved within the pairing. It also identifies the status of a pairing, whether a pairing is a Standard Pairing or not, and the pairing version.

Pairing Details Panel



Surrounding the Pairing Grid are fields and controls that provide general and configuration associated information about the pairing.

The pairing, duty and flight/event information is displayed to the user via a scrollable grid containing three different levels of data. These three levels are:

• **Pairing** - The information displayed in the grid columns relate to the whole pairing. There will only be one pairing level row in the grid. The pairing level row will always be the first data row in the grid.



• **Duty** - The information displayed in the grid columns relate to the duty within the pairing. The duty is comprised of the flight and/or events on the subsequent grid rows up until the next duty row, or to the end of the row in the grid. Each duty represents the work required for one day, thus there can be one or more duty rows. For ease of managing the data within a pairing and allowing the user to focus on single duties at a time, the duty level is collapsible and expandable.



• Activities consisting of Fights and Events - The information displayed in the grid columns relate to the individual flights or events within a duty.



The columns are described below:

Column	Description
Date	Date of the pairing/duty/event
Туре	Pairing or duty type
Pair	Name of the pairing, or pair label
Duty	Name of the duty, or duty label
EventFlight	Flight number or name of the event
Equip	Equipment type of the flight. This is blank if the event does not involve a flight
From	Departure port of the flight, or the location of the event
ReportDep	Report time of the duty, or the start time of the event
То	Arrival port of the flight, or the location of the event
ReleaseArr	Release time of the duty, or the end time of the event
FlightTime	If it is an operating flight, this holds the time from departure to arrival time. If credit flight time is required, it is applied in this field. The total flight time is displayed in the Duty and Pairing levels.
DutyTime	Duty time for each event. If credit duty time is required, it is applied in this field. The total duty time is displayed in the Duty and Pairing levels.
PayCredit	If pay credits are granted for the event, the value will be displayed. If you hover on the field, the pay credit, calculated credit and rig credit will be displayed. Pay credits are calculated and saved for all versions of an active pairing.
RestGrdTime	Amount of time spent on the ground when not in flight.
TAFB	Time away from base. This is the total time from report time of the first duty to the release time of the last duty in the pairing.
Action	These action buttons are discussed in the Pairing Actions section.

Additional note for PayCredit - Trip rig credit rules can be applied to the Pay Credit column. If the pairing pay credit value is higher than the sum of the duties' pay credit, the difference, referred to as X, will be used. If the pairing on the last day of the date range finishes on the last day, the whole pay credit value is used. Otherwise, if the last pairing ends outside of the date range, X will not be counted for the part of the pairing within and outside of the date range.

For example, the date range is 01-30 June and the pairing on June 30 ends on 01 July with rig pay credit of 4:00 and sum of duty pay credit is 2:30. The difference, or X, is 1:30 or 1.5. For the date range, X will not be considered since the latest duty (01 July) is outside of the date range. If the date range for processing is 01 June to 31 July, X will be considered. The total pairing pay credits will be displayed in the Pay Credit total column.



Pairing Creation

The first step in creating a new pairing is to have a blank or empty Pairing Panel.

Click **New** at the bottom right of the pairing panel. This will clear the Pairing Panel of the previously displayed pairing information and will display:

- A single blank grid row at the pairing level in the pairing grid, and
- A single blank grid row at the duty/flight/event level in the pairing grid.

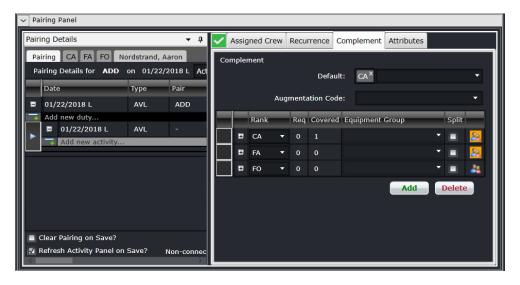


The date of the pairing you are building will initially be set at the first date defined by your Activity Filter. This can be amended as required to the correct date. Adding flights and events to the pairing will also adjust the date of the pairing, as needed.

The second step is to define what is required to occur as part of the pairing. There are two different and broad types of pairings, each with different purposes:

- 1. **Pairings without flights/events** A definition of a period of work or non-work without any detail of what work is going to occur within that period. Most of the pairings of this type are Standard Pairings, for example Days Off, Vacation and General Administration Days.
- 2. **Pairings with flights/events** Pairings in which duties are defined containing the specific flights and/or events that determine what work is to occur during the pairing.

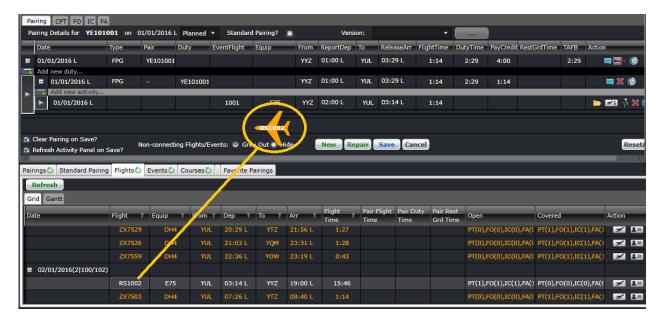
The third step is to ensure you have the complement defined for the pairing you are building. This is discussed further in the next section.



Pairing Build

There are many different methods available that will insert flights and/or events into a pairing. These different methods are provided to give flexibility in terms of how users create pairings and allow for quicker creation of pairings by users who are familiar with the airlines flight schedule. The methods to insert flights and/or events into a pairing are the following:

- 1. Select/Drag/Drop flights from the Flights or Events tab of the Activity Panel
- 2. Manually enter a date and flight number
- 3. Manually enter a date and event name



The above image shows dragging a flight from the Flight tab of the Activity Panel to the Pairing Panel.

Another option to add flights and events is to right click on the "Add new activity..." row and select to add a new flight, event or timed event. Go to the Creating Flights section for details on adding a flight.

Note: The report and release time of each duty that begins with a flight is automatically calculated based on the buffers set in Employee Report/Release Rules in Configure. If the duty begins with a deadhead other event, the report time buffer is based on the user preference DeadheadOtherReportMinutes. If the duty begins/ends with a timed event, the report/release time buffers are based on the user preferences DefaultReportMinutesBuffer and DefaultReleaseMinutesBuffer.

Repair Pairings

When pairings are being created or modified, they will be validated against the rules that apply to ranks included in the pairing. Further changes to flights or events may cause a variety of issues to be introduced into existing pairings which require them to be modified to be legal. The Repair button will essentially update the report and release times, flight and duty times, rest ground time, time away from base (TAFB), credit times, pay credits and the sequence of events. Accommodation events will also be added if an overnight is required. These updates are necessary if a flight or event is retimed, delayed, added or removed.



Click Save.

Save Pairings

The user can save a pairing by:

- Clicking Save; or
- Choose the File -> Save menu item.



Modify Pairings

An existing pairing can be changed by inserting or deleting flights and/or events from the pairing. The pairing can be loaded to the Pairing Panel by double clicking or dragging the pairing from the Pairing tab in the Activities panel. Flights and events can be added by double clicking or dragging the pairing from the Flights or Events tab, respectively. The user must click Save to commit the changes.

Events can be modified within the pairing by clicking on the action button. Clicking this will bring out the Edit Event form.

Flights cannot be modified in CrewFollow. Users must modify flight information in AircraftFollow or AircraftSchedule.

Cancelled flights that are still contained in a pairing are grayed out and have the cancelled flight icon (beside the flight number. These flights can be removed from the pairing. See the next section for instructions.

If the first event of the duty is removed, the duty label is changed accordingly. If you need to have the duty label retained whenever the first event is removed, set the user preference *AutoUpdatePairingLabel* to False in Configure.

Cancel Pairings

Pairings with initial publish or active state can be cancelled. This can be done by clicking **Cancel**. Pairings with crew assigned cannot be cancelled. Users are prompted to deallocate crew from a pairing first before proceeding to cancel. Cancelled pairings cannot be modified or assigned.

The cancellation of a pairing is reflected in the pairing version.

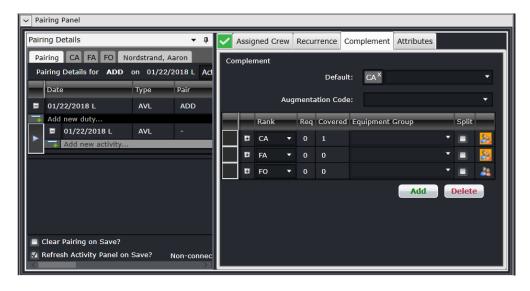
To reinstate a cancelled pairing, click Reinstate



Split Pairings

The split functionality is used when a crew is required to perform an activity other than his assigned duty.

The *Split* column in the *Assigned Crew* and *Complement* tabs allows splitting of duties and ranks. Splitting of duties with one assigned crew and rank complement with no assigned crew are also allowed.



When splitting a complement from a pairing with no crew, the following will apply:

- The selected complement will be in a separate pairing and will have the same required complement value
- o If a new complement is added after the split, and another split was done, the newly added complement will be in a separate pairing
- When splitting all ranks, nothing will change, as it is a requirement that at least one complement remains with the original pairing
- When splitting both in the Complement and Assigned Crew tabs, all the selected complements will be considered
- No change will be applied when splitting a pairing with only one complement



If there are crew assigned to a rank, the following will apply after applying a split:

- The selected rank will be added to a pairing containing the same rank
- o All crew assigned to a rank will be moved to a new pairing
- o Split is not allowed if there is only one rank in the Complement tab
- When splitting all ranks, nothing will change as it is a requirement that at least one complement will remain with the original pairing

Split Pairing Functionality Applied to Actual Scenarios

- 1. When splitting a pairing with an FO crew assigned, and there are other open rank complements i.e. CA and FA, the following will apply:
 - a. The FO rank complement and the FO crew will be in a separate new pairing;
 - b. The original pairing will drop the FO tab and the FO crew, given that they are already included in a new pairing; and
 - c. Changes such as adding more flights, or a deadhead assignment to the original or the new pairing will be allowed without affecting each other.
- 2. When splitting a CA rank complement from a pairing with no crew assigned to it, and only open rank complements i.e. 1 FO 3 FA, the following will apply:
 - a. The CA rank complement will be assigned to a separate new pairing with the correct number of required complements;
 - b. The original pairing will drop the CA rank complement and will retain the FO and FA rank complements;
 - c. Changes such as adding more flights, or a deadhead assignment to the original or the new pairing will be allowed without affecting each other.

All split activities done in the Assigned Crew and Complement tabs will be reflected in the Activity Panel.

Delete Events and Pairings

To remove a flight or event from a pairing:

- 1. Go to the Pairing tab. (This cannot be done on a rank tab or a crew tab).
- 2. Click on the row of the flight/event to be removed.
- 3. Click Save.

To delete a pairing:

- 1. From the Pairing Panel, click on the pairing level; or
- 2. From the Activities Panel, click and on the row of the pairing.

Pairing Actions

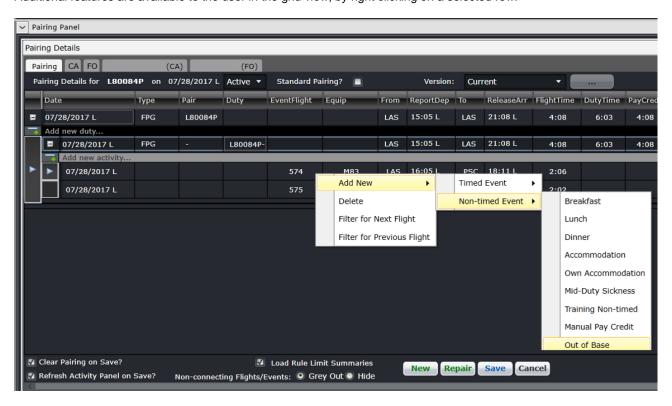
Each of the rows within the Pairing Details grid has different actions that can be performed on them dependent of the rows data level. The pairing action icons are as follows:



Action Button	Description
=	Edit. This can be used with timed events only.
⊠ i	Flight Information. Opens the Flight Information Window that displays flight details
* *	Toggle Operational/Non-operational State. Either of these icons are displayed on flights only. If crew is set to operate for the flight, the green icon is displayed. If crew is set to deadhead on the flight, the yellow icon is displayed. Click on the icon to switch between either options.
× .	Delete event. Removes the flight or event from the pairing.
(b)	View History. Displays the historical changes on the event, duty or pairing.
1	Move Up/Down. Moves an untimed event up or down.

Right Click Features

Additional features are available to the user in the grid view, by right clicking on a selected row.



The following options are available from the right click menu:

Option	Description
Add New	Allows users to add a Timed or a Non-timed event.
Delete	Deletes an event.
Filter for Next Flight	Filters for the next possible flights.
Filter for Previous Flight	Filters for previous flights.

Other Pairing Panel Options

There are more controls around the pairing grid that are essential to roster planning.

These are the options at the top of the Pairing Details panel.



- Status This drop-down list has the options Planned and Active. Planned pairings are not yet available for crew
 viewing while active pairings have been published for operations and crew. Publishing a roster automatically
 changes the status to active.
- Standard pairing selector selecting the tick box turns the pairing to a standard pairing.
- **Version** This drop-down list has the versions of the pairing since it was published. To view a previous version of the pairing, select the version and click on the [...] button beside it. A prompt will appear asking if that version will be loaded. This is available only for pairings published from CrewRoster.

These are the options at the bottom of the Pairing Details Panel.



- Clear Pairing on Save? When selected, this option clears the Pairing Details Panel after the Save button is clicked.
- Refresh Activity Panel on Save? When selected, this option refreshes all the loaded tabs of the Activity Panel after the Save button is clicked.
- **Non-connecting Flights/Events** When there are flights or events that do not match the previous arrival port or the next departure port, that event can be greyed out or hidden.
- Reset All this sets the options above to the default values.

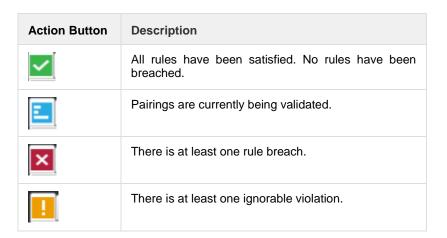


Pairing Exceptions

The Pairing Exceptions tab displays the results of rule validation for a selected pairing. It displays both pass and fail results for each rule.



When a pairing is created or loaded, the icon on the tab changes to reflect the status of rule validation. These are described below:



Having the green icon for all pairings is ideal. If the red icon appears, it is best to address the issue as soon as possible to avoid legality issues on the day of operations. Depending on the severity and behavior of the rules that are set in Configure, the changes to pairings can be saved despite existing violations.

Violation Icon	Description
	Critical. The violation is causing the crew to operate illegally. It needs to be addressed immediately.
<u></u>	Ignorable. This serves as a warning to the user. The crew is not yet operating illegally.
-	Critical – Override. The violation is critical but can be overridden by a supervisor or under captain's discretion.

Assigned Crew

The Assigned Crew section of the Pairing Panel displays the crew who are allocated to the selected pairing. The allocated crew are displayed within a simple grid that is view only apart from the Action buttons.



The Assigned Crew grid consists of the following columns:

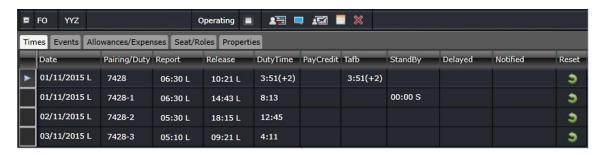
Column	Description
Rank	The rank of the crew member. If the crew member is rated for two or more ranks, the rank can be set for that pairing from this field.
Base	Home base of the crew member
Name	Name of the crew member
Roles	Roles of the crew member for the pairing, which can include Operating, Non-Operating, Student and Instructor
Split	The split functionality is used when a crew is required to perform an activity other than his assigned duty. The <i>Split</i> column in the <i>Assigned Crew</i> allows splitting of duties. For example, a crew needs to deadhead from YYZ to YUL before he can operate on the first flight which departs from YUL. Splitting of duties with one assigned crew is also allowed. To split a pairing, click on the tick box on the selected crew member's row, then click Save .
Action	View Pairing Allocations – opens the crew member's roster in the Allocation Gantt. This can be used in CrewPlan, CrewRoster and CrewFollow only. View Comments – opens the Comments form where public and private comments can be added to pairings. Public comments can be seen by crew in the employee reports and by users in the crew applications, while private comments can only be seen by users in the crew applications. View Employee Pairing Details – Switches to the crew member's tab in the Pairing Panel

Pairing Properties – Opens the Properties tab for the crew's pairing. This is displayed in the expansion below the crew member line

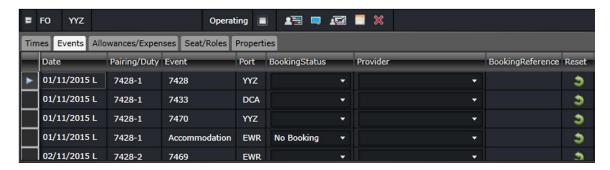
Deallocate Pairing – Removes the pairing from the crew member

The [+] button to the left of the crew member name displays more tabs that provide more information on the crew's pairing.

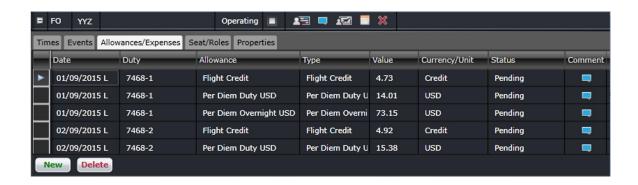
Times – displays the report, release and duty times of the whole pairing (first row) and each duty (succeeding rows). It also displays any pay credits applied to the pairing or duty, the time away from base, standby time (if the crew member was called out from standby), delay time, notified time for corresponding duty changes. All the fields in this tab can be modified except for Date, Pairing/Duty, DutyTime and Tafb. The Reset button will revert all changes back to the original values.



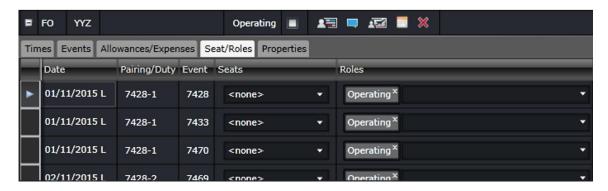
• Events – Lists down all the events included in the pairing. This allows bookings to be associated to accommodation, deadhead and transport events. Users can declare the booking status, provider of the booking and the reference. This information will be relayed to the crew through the employee reports.



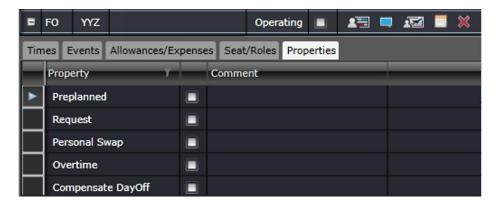
Allowances/Expenses – Displays allowances and expenses recorded against the pairing. Manual allowances
can be added by clicking on the New button. The allowances are added to the pairing once allowances are
generated in CrewPayroll.



• **Seat/Roles** – allows users to assign the seat and role of the crew member for each event in the pairing. Seats and roles are set up in Configure.

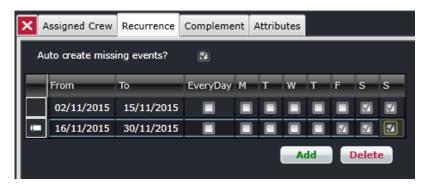


• **Properties** – allows users to assign Properties, which are characteristics of a pairing that require considerations on reassignment, payroll, and other operational consequences.



Pairing Recurrence

The Recurrence tab allows users to create identical pairings based on a repeating pattern over a specified date range.



This tab has a simple grid that allows users to specify the date range and the days of the week for the recurrence. To apply recurrence throughout the week, select the *EveryDay* checkbox.

The following columns in the tab are described below:

- From The start date of the recurrence.
- To The end date of the recurrence.
- EveryDay Automatically applies the recurrence on all the days of the week.
- M, T, W, T, F, S, S The days of the week.

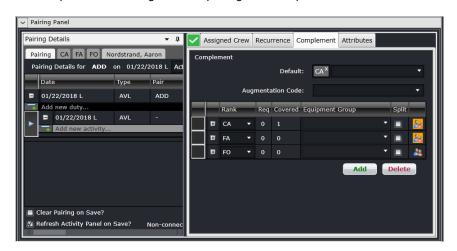
To add a new recurrence definition to a new or existing pairing, click Add.

To remove recurrence, select one or multiple rows then click **Delete**.

Click Save in the Pairing panel to apply changes.

Complement

A pairing complement is the number of crew from different ranks required to operate a pairing. By default, the pairing complement follows the complement of the flights in the pairing. The complement can be modified as needed.





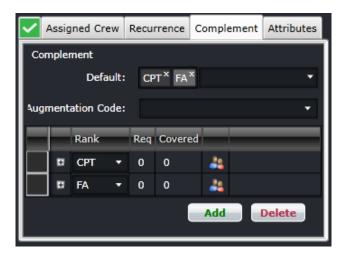
The Complement Grid is where the actual required complement of the pairing is defined. This grid consists of the following columns:

- Rank The employee rank from which this pairing needs a certain number of employees allocated. This column will always be non-editable.
- **Req** The required number of the employees of the associated rank that are needed to operate the pairing. This column is always editable
- Covered -The number of employees of the associated rank that have been allocated to this pairing.
 This column will always be non-editable
- **Equipment Group** The type of equipment group associated with the rank.
- **Split** The split functionality is used when a crew is required to perform an activity other than his assigned duty. The Split column in the *Complement* tab allows splitting of complement ranks. Splitting of ranks with no assigned crew are also allowed.

Clicking the (+) at the left of the rank expands the rank with more details similar to the Assigned Crew tab.

The other elements in this tab include:

• **Default** - This drop-down field contains active ranks where multiple selections can be done. If at least one rank is selected, all newly created pairings will have the selected ranks added with 0 Req.



Augmentation Code - This drop-down field provides preset complements that are variations of the default
equipment complement. These are needed for operations that require more crew. The options are set up in
Configure.

Without Augmentation Code

With Augmentation Code





- Add Adds another row.
- Delete Removes the selected row.

Changes to the Complement tab need to be saved by clicking on the Save button in the Pairing Panel.

Even though there is a defined Default Complement associated with the Pairing Panel, and requirements are calculated from the availability of Flights / Events within the Pairing, there are a number of occasions when the user will need to modify the complement to something other than the default. The user can manually set or change the required value in the rows in the Complement Grid. To add a requirement for a rank that is not displayed in the Complement Grid, click **Add**, and select an additional rank to be inserted into the Grid.

Pairing Attributes

Attributes are additional ways to classify pairings. These are described and used the same as the attributes for employees or equipment types. Attributes are also used in payroll generation, rule validation and roster optimization.

Multiple attributes can be assigned for each duty in a pairing by selecting the option/s from the Attributes drop-down list, then clicking on the Save button in the Pairing Panel. Attributes are set up in Configure.

In the example below, duty C2-1-1 has the attributes LATESTART (Late Start), NACC (Non-acclimatized), LAY (Layover pairing), FATG (Fatigue-inducing), EASY and INT (International).



Pairing attributes are set up in Configure.

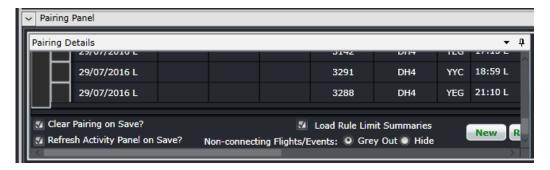


Rule Limit Summaries

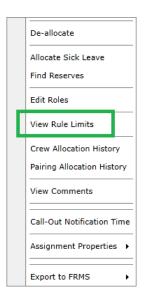
The Rule Limit Summaries panel helps users determine if a crew member is nearing their allowed flight and duty hour limits. This panel uses the *RulesEngine* in determining each output to ensure that the same logic for rule validation is used.

To display a crew member's hours:

1. The Load Rule Limit Summaries in the Pairing Panel is selected by default. This automatically updates the Rule Limit Summaries whenever the pairing is loaded, refreshed or saved.



- 2. Clicking on another crew member's tab in the Pairing Panel will load that crew member's data in the Rule Limit Summaries panel. This also relies on the *Load Rule Limit Summaries* option.
- Double-clicking on a pairing in the Monitoring Panel, specifically on a violation or problem related to a crew member.
- 4. Right-click on a pairing and select View Rule Limits.



The **As at date** defaults to the date of the selected pairing. Hours are counted from that date going backward. The date can also be changed by using the calendar option on its right side. It also has a refresh button () that can be used if changes were made to the crew's pairings. It also shows which crew member's summary is displayed.

There are two tabs in this panel. The first one is for Period Limits. This tab contains the summaries for rolling limit rules only i.e. Flight Hours in Days, Duty Hours in Months, etc.



The second tab is for Duty Limits. This tab contains the summaries for flight time rules, FDP rules and duty time rules. The columns in both tabs can be sorted and filtered like in other panels.



The columns in these panels are the following:

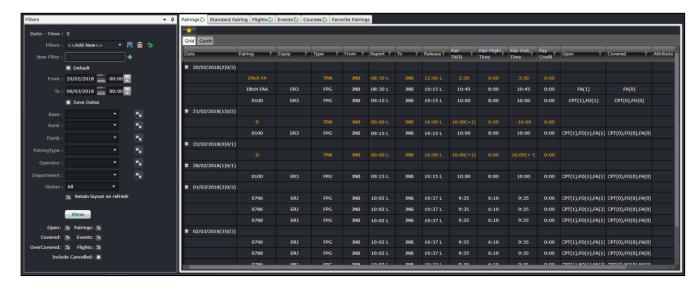
Field	Description
Status	Displays if the rule was passed (legal) or failed (illegal). This follows the same logic as the violations in the Monitoring Panel.
Name	Rule name, as set up in Configure.
Туре	Shows if the rule's validation period is based on a rolling period (Rolling) or calendar days (Calendar).
Limit	The threshold or maximum limit of the rule.
Period	The validation period for the rule, in Hours/Days/Months/Years.
Actual	The actual number of hours in hh:mm format.
Available	The amount of time before the limit will be reached. If the available amount is below the limit, a green arrow will be displayed beside it. If the available amount is equal to the limit, no arrow is displayed. If the actual time is over the limit, the variance will be displayed along with a red arrow.
Actual Period	The dates of the validation period i.e. 01/01/2016 - 31/01/2016.
Reference	Client Reference for the rule as set up in Configure.

Note: Rules involving flight hours, duty hours and FDP time have the rule parameter IncludeInRuleLimitSummaries with value set to True. This parameter controls which rules are included for display in the panel.



Activity Panel

The Activity Panel defines all the work to be completed by crew. It contains lists of created pairings and lists of all the flights and activities that have been or can be incorporated into the pairings. The Activity Panel is used to view open, covered, and over-covered pairings and flights, to create new events and to assist in creating and amending pairings.



To assign work to crew members, individual work activities should be grouped together into meaningful units of work and a list of available work then needs to be generated. This information is provided by the Activity Panel, which lists the work activities in the Flights and Events tabs, and then lists the created work in the Pairings and Standard Pairing tabs.

Any changes made in the Activity Panel will require a re-filter to view them. To do this, simply click View.

Filtering

The Activity Panel has an associated filter, which can be used to limit the activity information displayed to that which



matches the filter criteria. To aid the user in determining how much work is required to be created and allocated, the Activity Panel contains filters that are applied to the data on the tabs. These filters allow the user to focus on particular sets of data and to view the data that has been created or allocated, and/or work still requiring creation or allocation.

The Filter for the Activity Panel can be divided in the following subsections:

- Date and Time Filter
- Save a Filter or re-use existing Saved Filter
- Set Default Filter
- Criteria for Filter
- View the Data

Date and Time

To view crew data in the Activity Panel, users must load the data for a specified date range by entering a date range into the date control. A drop-down calendar is provided to select the date.

- From A date field. The start value of the date range
- To A date field. The end value of the date range
- Save Dates The selected date range will be the default date for the saved filter

Note: The date controls throughout the merlot suite have built-in short-cuts. These shortcuts allow users to instantly select different date targets, such as the current day (T), or the start of a month (M), a quarter (Q) or a year (Y).

Save Filter or Re-use an Existing Filter

To allow users to specify and save filters, the Filter Section has a Filters field and associated Save, Delete and Reset icon buttons as well as a *Save Dates* checkbox.

The Filters field is a combination of drop-down lists that displays the previously saved filters, as defined by the user, along with template filters that apply to all users. There is also the ability to enter a new filter name in the New Filter field and to click the plus (+) icon to add the new filter.



The **Save Dates** checkbox allows the user to control whether a filter they define is set to a specific date and time range or if the selected filter inherits the current date time range in the Monitoring Panel.

Set as a Default Filter

Part of the process when opening the Activity Panel is to apply a default filter. This is to facilitate rapid filtering of displayed data to the data that the user refers to most frequently.

To allow the user to set a default filter, the filter section contains a Default check box. When this button is clicked, the currently selected filter is saved as the default filter for the application.

When the Activity Panel is opened, it determines the current user and the application context and defaults to the relevant filter.

Criteria for Filter

The Filter section contains the following criteria which are used to determine which data is displayed in tabs on the Activity Panel:

Field	Description
Base	A drop-down field that displays the active crew bases
Rank	A drop-down field that displays active ranks and / or rank groups
Equip	A drop-down field that displays the active aircraft or equipment types or groups that crew operate
Pairing Type	A drop-down field that displays the kinds of pairings to be displayed
Operator	The Operator drop-down menu filters the grid to show information based on selected airline operators
Department	A drop-down field that displays active departments. It is an area within an airline or company that is tasked with providing particular services of a similar type. For example, Flight Operations (i.e. the manning and operating of aircraft), Maintenance (ensure the aircraft are able to operate safely), Ramp (the parking and coordination of aircraft resupply between flights).
Status	Pairing status drop-down menu which includes All, Planned, Active, Provisionally Active options.
Retain layout on refresh	This checkbox prevents the grid from returning to the default values.
Open	This checkbox indicates that the displayed data must include all open pairings or flights. Resulting pairings and flights are coloured in white (no assignments yet) or light blue (partially covered)
Covered	This checkbox indicates that the displayed data must include all covered pairings or flights. Resulting flights and pairings are coloured in orange



Over-covered	This checkbox displays pairings and flights that are over-covered or have more crew members on the pairing than the crew complement requires. Resulting flights and pairings are coloured in red
Pairings	This checkbox indicates if pairings will be loaded or not
Events	This checkbox indicates if events will be loaded or not
Flights This checkbox indicates if flights will be loaded or not	
Include Cancelled	This checkbox indicates if cancelled flights will be loaded or not

Note: By leaving a field Blank in any filter panel, you are asking for all options in that field to be included.

There is an option to use exclude a criterion. For example, to load all activities except for FPG pairing type, select FPG and then Ctrl+ Click FPG. This will turn the selection red and the results will not include FPG.



Applying the Filter

A **View** button is included as part of the Filter section to give the user control over when filter criteria are applied to the data they are viewing in the Activity Panel tabs. This allows them to make multiple modifications to filter criteria and then have these modifications applied to displayed data at the same time.

Any changes made in the Activity Panel will require a re-filter to view them. To do this click **View**, or to refresh the view of an individual tab, click on the green circular arrow on the tab.

Retain Layout on Refresh

Filtering either on Pairings > Grid or Flights > Grid, with the *Retain layout on refresh* checkbox on, will keep the following data after a refresh:

- Expanded dates;
- Filtered values in a column;
- Order of data sorted in a column;
- · Number of rows; and
- Row values.

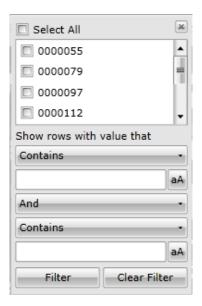
When new dates are added to the filter and previously filtered dates are still included, all the previously loaded data will still be displayed with the new set of data. But if the previously loaded dates are no longer included in the new filter, the previously loaded data will not be included in the display.

Data loaded within the two grids will be retained if the checkbox is selected, even if one of the grids is hidden.

Tab Filters

Within a filtered set of data, a user may need to filter through the results. A **Search Filter** is available at the top of most columns, which enables the user to narrow down the filter even further. For example, if you want to view certain flights, or

equipment type, or a particular departure port, then you could click on the filter as shown in the red square below. You can use one of the commands on this added filter to narrow your filter results.



Pairings



The Pairings tab displays the data associated with previously created and defined pairings. By default, pairings are grouped by date. Beside the date is a set of numbers that determine the number of open and actual pairings for the day.

01/11/2015(X|Y/Z)

In the example above, X is the number of open pairings. Y is the number of partially or fully covered pairings. Z is the number of pairings for the day.

The columns in the Grid tab are detailed below:

Column	Description
Date	Date of the pairing
Pairing	Name of the pairing, or the pairing label
Equip	The required equipment type/s for the flights in the pairing
Туре	Pairing type
From	Port where the pairing begins. This is where crew needs to report from
Report	Report time for the pairing
То	Port where the pairing ends. This is where crew will be released from
Release	Release time for the pairing
Pair TAFB	Time away from base (TAFB). This is calculated as the difference between release time of the last duty in the pairing and the report time of the first duty in the pairing
Pair Flight Time	Total flight time within the pairing
Pair Duty Time	Total duty time within the pairing
Pay Credit	Total pay credit for the pairing
Open	Displays the number of crew required for the pairing. The numbers are broken down per rank.

Covered	Displays the number of crew that are already assigned to the pairing. The numbers are broken down per rank.
Attribute	Displays an attribute or a set of attributes assigned to the pairing. Attributes determine a specific description of the pairing such as Easy/Hard, Domestic/International, etc. These are set up in Configure.
Action	Set of action buttons: Delete Pairing – click this button to delete a pairing Cancel Pairing – click this to delete a pairing on initial publish or active state. This icon is replaced by the Reinstate Pairing icon after a pairing is cancelled.
	Allow Personal Swaps – determines if this pairing can be swapped or traded with another crewmember

The different colours used for each pairing are:

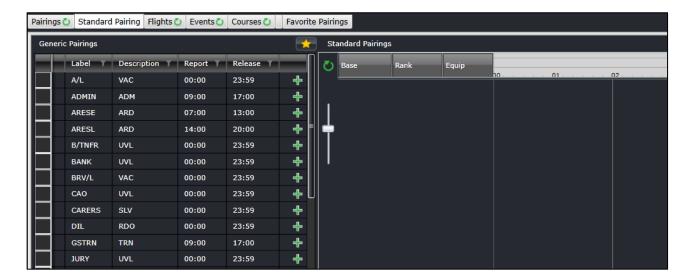
- White signifies an open pairing or no crew have been assigned to the pairing.
- Light blue signifies a partially covered pairing or some crew have been assigned to the pairing.
- Orange signifies a covered pairing or the pairing has all the crew required.
- Red signifies an over-covered pairing or there are too many crew assigned to the pairing
- Grey signifies a pairing with a cancelled flight. The cancelled flight icon also appears beside the pairing name.

The Gantt tab is intended to display the pairings in a Gantt view. It will be available in the future.

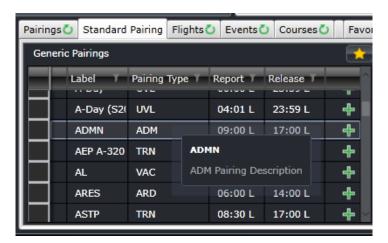
Standard Pairings

Standard Pairings are the predefined non-flight pairings that can be allocated to crew and can be assigned on any day. These can be assigned to any crew member regardless of rank and equipment type.

The Generic Pairings are built in the Standard Pairing tab of the Activity Panel, so you do not need to build a new pairing every time you need one. These have been predefined in Configure. These Generic Pairings can be inserted into a Flying Pairing (FPG) or assigned directly to crew in CrewPlan, CrewRoster and CrewFollow.



Each pairing can be configured to display a longer description when the mouse hovers on it. This makes it easier for users to know what each standard pairing is for.



The Standard Pairings are displayed so that they can be allocated to employees in the Allocation Panel, or incorporated into other pairings created in the Pairing Panel. It does not require the filter for pairings. All generic pairings set up in Configure are displayed. The pair types under the Description column are listed below.

Pair Type	Definition
ADM	Administration. Used for employees who will perform administrative duties in an office. Time spent is included in the employee's duty time unless specified otherwise.
ARD	Airport reserve or standby. Standby time spent in the airport. Crew may be required to sign on at the airport. Time spent is included in the employee's duty time whether called out or not, unless specified otherwise.
AVL	Available day. A placeholder in a crew's roster that indicates that the crew is not required to work on this day but can be assigned work later on. Time spent in this pairing may be included in the employee's duty time unless specified otherwise.
CFP	Course Flight Placeholder (for Optimiser use only). This is used as a placeholder for potential course or training assignments.

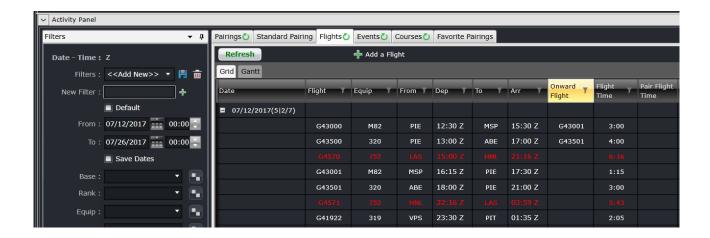
DHD	Deadhead. This is used for duties that have deadhead or deadhead other events only. Time spenin this pairing may be included in the employee's duty time unless specified otherwise.
FPG	Flight pairing. This is the default option for pairings that have at least one operating flight.
GRD	Ground activity. Similar to administration pairings, this pairing is used for work in the airport, i.e. doing engine tests. Time spent is counted against duty time.
HOL	Public holiday. This is a non-work pairing and does not add any duty or flight time against the crew.
OPD	Obligation to Perform. OPDs is similar to an Available day (AVL) with reference to validating rules and utilization of preferences. Pairings such as ROE and ADD are categorized under this pairing type.
RDO	Rostered day off. This is a non-work pairing and does not add any duty or flight time against the crew. For days off rules, this is the primary pair type considered by the rule when validating the roster
RES	Home reserve or standby. Standby time spent at home or in a suitable accommodation. This may o may not be included in the duty time of the crew, depending on the regulatory rule requirements.
SIM	Simulator training. This is a work pairing used to identify training or instruction in a simulator. Time spent is counted as duty time.
SLV	Sick leave. This is assigned to crew who call in sick or have planned medical appointments.
SOC	Subject to Operational Clearance. This is a placeholder for crew who were previously considered illegal or not fit to fly. Crew will only be allowed to operate once they are cleared by the airline.
TRN	Ground training. This is a work-pairing signifying training on ground (does not require any flying) Time spent is considered as duty time.
UVL	Unavailable day. This is a non-work pairing used as a placeholder for crew who are not available to work on the day. This is not considered as a day off, unless specified otherwise.
VAC	Vacation. This is a non-work pairing that represents a crew's vacation or personal holiday.

Flights

The Flight tab displays the data associated with flights from the published flight schedules. By default, flights are grouped by date. Beside the date is a set of numbers that determine the number of open and covered flights for the day.

01/11/2015(X|Y/Z)

In the example above, X is the number of open flights. Y is the number of partially or fully covered flights. Z is the number of flights for the day.



The columns are detailed below:

Column	Description
Date	Date of the flight
Flight	Designator and flight number
Equip	Equipment type of the flight
From	Departure port
Dep	Departure time
То	Arrival port
Arr	Arrival time
Flight time	Difference between on chocks and off chocks
Pair Flight Time	Total flight time within the pairing
Pair Duty Time	Total duty time within the pairing
Pair Rest Grd Time	Total pay credit for the pairing
Onward Flight	Displays succeeding flights numbers
Open	Displays the number of crew required for the flight. The numbers are broken down per rank.
Covered	Displays the number of crew that are already assigned to the flight. The numbers are broken down per rank.
Action	Set of action buttons:
	Flight Follow Complement Delta – Displays the complement for the selected flight.
	Crew Assigned to Flight – Displays the operating and deadheading crew in the selected flight.



The different colors used for each flight are:

- White signifies an open flight, or none of the operating seats have been assigned to a pairing.
- Light blue signifies a partially covered flight, or some of the operating seats have been assigned to a pairing.
- Orange signifies a fully covered flight, or all operating seats in the flight have been assigned to a pairing.
- Red signifies an over-covered pairing, or there are pairings associated with one or more operational seats.
- Grey signifies a cancelled flight. The cancelled flight icon also appears beside the flight number.

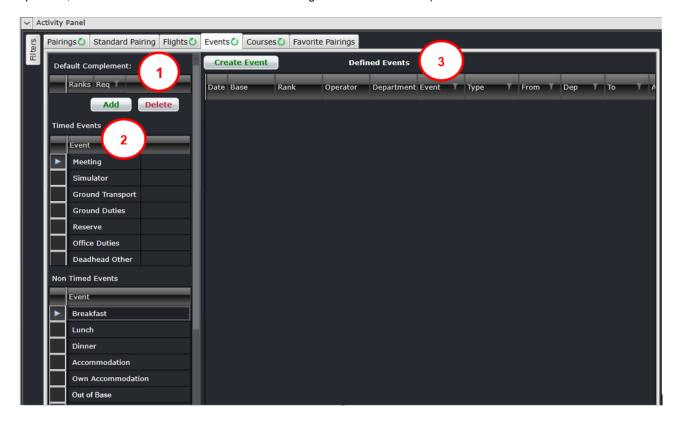
The Gantt tab is intended to display the flights in a Gantt view. It will be available in the future.

The flight designator can be displayed or hidden by setting the user preference *ShowDesignator* to True or False, respectively, in the Configure application. Also, the IATA code for the designator is displayed by default. If the airline requires ICAO codes throughout the application, please contact Customer Support.

Events

An event is an activity within a pairing and is not an active flight.

The Events tab contains the list of previously created existing timed events which can be inserted into pairings in a similar way to flights. It also contains lists of the configured generic types of both timed and non-timed events that can be added into pairings. The Events tab also provides the functionality to allow timed events to be created that can later be inserted into pairings, as well as the ability to modify and delete existing timed events (for the rest of this section unless otherwise specified, the term event will be used to refer to existing created timed events).

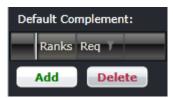


The Events Tab contains 3 main screen components or sections:

- 1. Default Complement Grid Defines the default complement for newly created events
- 2. Generic Event Lists Two simple scrollable lists containing timed and non-timed events
- 3. **Defined Events -** Where the data matching the filter criteria is displayed

Default Complement Grid

This section allows the user to define the complement for any events that are created directly from this instance of the Activity Panel. By default, when the Activity Panel is open the Default Complement Grid will default to empty.

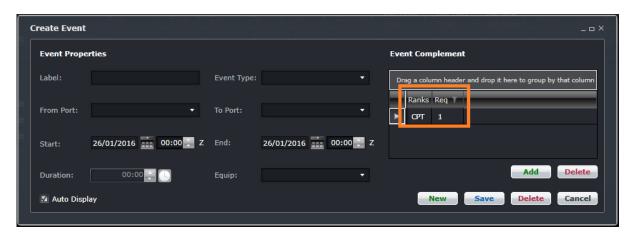


To add a complement:

- 1. Click Add.
- 2. Select a rank from the drop-down field in the Ranks column.
- 3. Enter the number of crew required for the selected rank under the Req column. The changes are automatically

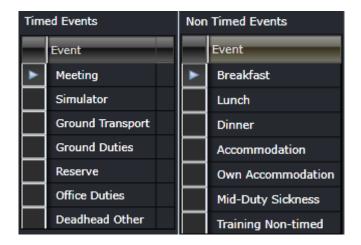


The complement will be automatically added when a new event is created. Details of which will be discussed in the next sections.



Generic Event Lists

The Generic Event lists consist of two lists. The first list has all the configured timed events and the second list has all the configured non-timed event types within the merlot system. These events can be added into any pairing to indicate non-flying activities that crew need to accomplish. In doing so, the user is prompted to enter any necessary information required to include an event of that type within the pairing.





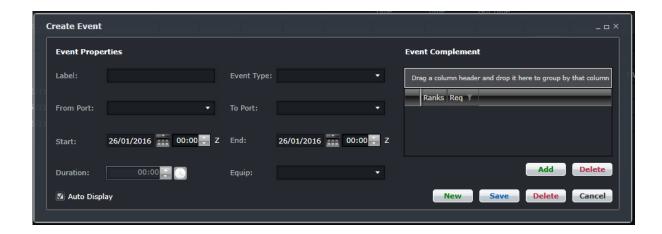
Defined Events

This is a very simple text-based grid presentation of the events that match the applied filter criteria. The columns are described below:

Column	Description
Date	Date of the flight
Type	Event type, as described in the list of timed and non-timed events
From	Departure port
Dep	Departure time
То	Arrival port
Arr	Arrival time
Duration	Length of time for the event
Pair Flight Time	Total flight time within the pairing
Pair Duty Time	Total duty time within the pairing
Pair Rest Grd Time	Total pay credit for the pairing
Modify	A button that allows users to modify details of the event
Open	Displays the number of crew required for the event. The numbers are broken down per rank.
Covered	Displays the number of crew that are already assigned to the event. The numbers are broken down per rank.

Creating and Modifying Events

In addition to allowing the creation of new events, a Create Event button is included. If the user has the Create security privilege granted to the Activity Panel – the Create Event button icon will be enabled. When a new timed event is created, the Create Event form is displayed to allow the entry of the information required to define a timed event.



The Event Form is comprised of two sections:

- **Event Properties** This section located on the left side of the form contains all of the specific fields required to detail the characteristics of the event.
- Event Complement This section in a grid on the right side of the form defines the number of each rank of crew member required for the event. If the Default Complement is set in the Events tab, it will be applied here.

This form also has Save and Cancel buttons. When **Save** is clicked the information entered in the form is saved into the event table either as new record or as an updated existing record. Then the form is closed.

When **Cancel** is clicked, the form is closed with the information entered in the form not being saved. If the Cancel button is clicked in the midst of dragging/inserting the timed event into a pairing, then that insertion will also be cancelled.

When an event is being modified, the form will be populated with information about the timed event. This same event form is used to modify existing created timed events. To modify an event, click on the **Yellow Folder** under the Modify column. If you want to include an event into a pairing, drag it to the Pairing Panel as if you were adding a flight.

The fields in the Create Event and Edit Event forms are described below:

Column	Description
Label	Name of the event
Event Type	Event type, as described in the list of timed and non-timed events
From Port	Departure port
To Port	Arrival port
Start	Departure time
End	Arrival time
Duration	Length of time for the event
Equip	Equipment type if the event occurs in an aircraft (deadhead other, simulator)

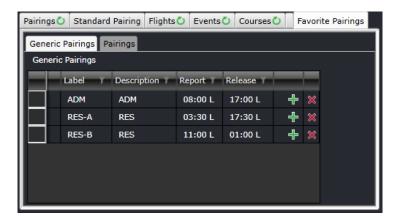
Courses



The Courses tab is intended to display the course instances that occur on the selected filter date range. This will be available in the future.

Favorite Pairings

The Favorite Pairings tab holds a list of pairings from the Pairings and Standard Pairings tabs marked as favourite.



To include a pairing in the Favorites tab:

- 1. Select a pairing from the Pairings or Standard Pairing tab.
- 2. Click

The pairing will be listed under the Favorite Pairings tab.

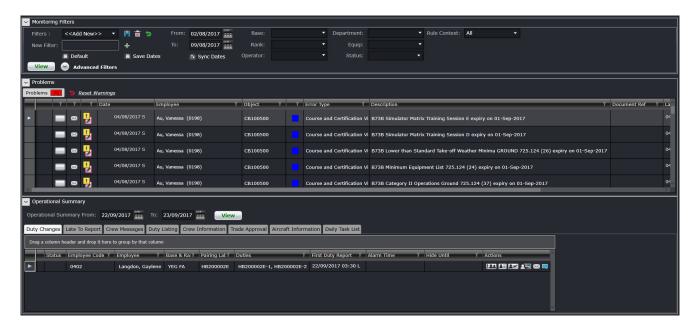


Monitoring Panel

The Monitoring Panel is a core component of the crew applications as it provides the functionality that allows the user to be kept informed and up-to-date regarding changing information and consequential impacts on the operational assignments of employees. In short, the Monitoring Panel displays the information required to operationally manage employee assignments.

The different types of information displayed within the Monitoring Panel serves two main purposes:

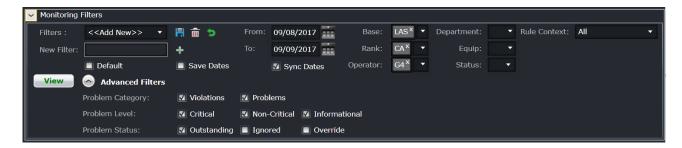
- Informs the user that modifications have been made that affect employee assignments in the operation and the
 effects of those modifications
- Provides lists of information that the user needs to action, or as an aid when working on other tasks, to ensure
 that all operational requirements are met. This means that all flights have the correct employees operating them
 and the employee assignments are valid and legal.



Monitoring Filter Panel

The purpose of the filter section is to limit the operational information displayed, in this case, crew and problem detection information, to that which matches the filter criteria. This allows the user to focus on aspects of the day-to-day operation that they are responsible for.

Also, to aid in the efficiency of using filters, default filters are defined in the Monitoring Filter Panel in the CrewPlan, CrewRoster and CrewFollow applications. In addition, users will be able to save filter criteria as named filters, and subsequently select and apply the saved filters. This allows for a quick and efficient means of switching between different sets of operational information.



The filter for the Monitoring Panel can be divided in the following sub-sections:

- 1. Date for Filter
- 2. Save a filter or reuse an existing filter
- 3. Set as a Default Filter
- 4. Criteria for Filter
- 5. Advanced Filters
- 6. View the data

Date Filter

To view crew data in the Monitoring Panel, users must load the data for a specified date range by entering a date range into the date control. A drop-down calendar is provided to select the date.

- From A date field. The start value of the date range
- To: A date field. The end value of the date range

The Operational Summary has a separate date filter that allows users to have a smaller range for that panel. Select Sync Dates to make sure both panels will follow the same date. If you would like to have a different date range for the Operational Summary panel, deselect Sync Dates.

Note: The date controls throughout merlot suite have built-in short cuts. These short cuts allow users to instantly select different date targets, such as the current day (*T*), or the start of a month (*M*), a quarter (Q) or a year (Y).

Save a Filter or re-use an Existing Filter

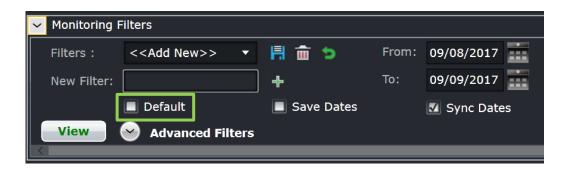
To allow users to specify and save filters, the Monitoring Filters panel has a *Filters* field and associated **Save**, **Delete** and **Reset** icons as well as a *Save Dates* checkbox.

The Filters field is a combination of a drop-down lists that displays the previously saved filters, as defined by the user, along with template filters that apply to all users. There is also the ability to enter a new filter name in the New Filter field

and to click the plus icon to add the new filter.

The Save Dates check box allows the user to control whether a filter they define is set to a specific date time range or if the selected filter inherits the current date time range in the Monitoring Panel.

Default Filter



To speed up workflow processes, default filters may be set up in the Monitoring Filters Panel. The default filter facilitates the rapid filtering of the displayed data that the user refers to most frequently.

To allow the user to set a default filter, the filter section contains a Default check box. When this button is clicked, the currently selected filter is saved as the default filter for the application.

When the Monitoring Panel is opened, it determines the current user and the application context and defaults to the relevant Criteria.

Criteria for Filters



The filter section contains the following criteria which are used to determine which data is displayed in the tabs in the Monitoring Panel:

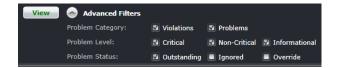
Field	Description
Base	A drop-down field that displays the active crew bases
Rank	A drop-down field that displays active ranks and / or rank groups
Operator	The Operator drop-down menu filters the grid to show information based on selected airline operators
Department	A drop-down field that displays active departments. It is an area within an airline or company that is tasked with providing particular services of a similar type. For example, Flight Operations (i.e. the manning and operating of aircraft), Maintenance (ensure the aircraft are able to operate safely), Ramp (the parking and coordination of aircraft resupply between flights).
Equip	A drop-down field that displays the active aircraft or equipment types or groups that crew operate
Status	Pairing status drop-down menu which includes All, Planned, Active, Provisionally Active options
Rule Context	A drop-down field for the applicability of violations. Options include All, Planning (violations from planning rules) and Active (violations for published rosters)

There is an option to use exclude a criterion. For example, to load all activities except for FPG pairing type, select FPG and then Ctrl+ Click FPG. This will turn the selection red and the results will not include FPG.





Advanced Filters



The Advanced Filters section of the Monitoring Filters Panel has numerous check boxes to control the level and status of violations and/or problems that the user would like to view in the Problems panel, including violation/problem level and status options.

Advanced Filter	Description
Problem Category	Allows users to select to display Violations and/or Problems in the Problem panel.
Problem Level	 Critical - The violation and/or problem must be addressed before crew can fly Non-Critical - The violation and/or problem needs to be addressed, however it is not preventing crew from flying Informational - Information is being provided regarding a pairing or crew member
Problem Status	 Outstanding - The violation and/or problem has not been addressed yet Ignored - The violation and/or problem has been ignored by a user and will only be reassessed if the pairing is changed. User and time stamp information is recorded. Override - The violation and/or problem has been determined as not being a problem or violation and is overridden by the user, generally a supervisor, with user and time stamp information recorded

View the Filtered Data

The View button applies the filter criteria and displays the resulting data in the Monitoring Panel tabs. Any modifications to the filter criteria need to be reapplied by clicking **View**.

Problems Panel

During the daily operation of the airline, changes will occur that impact crew assignments flights and qualification modifications. These changes can result in assignments and pairings becoming illegal. As part of the merlot *RulesEngine*, there are routines that periodically and continually validate crew assignments and pairings against the configured rules of the airline. If these routines determine that an assignment or pairing is no longer valid, an exception will be generated for the illegality and that exception will be displayed within the Problems tab.





The Problem tab previously had violations and problems separated. They are now combined in order for users to manage them more easily.

Basically, violations and problems are different types of issues to be dealt with by the airline. A <u>violation</u> is any breach of a configured rule that has been generated by the merlot *RulesEngine*. Rules are generally configured to enforce published regulatory requirements from government agencies and other company rules as defined in the airline's operations manual. <u>Problems</u> are all other non-rule based exceptions generated by the **Problem Detection Engine** (PDE), such as incorrect report/release times, illogical flight/pairing data, and crew complement issues.

Sample problems are shown below for illustrative purposes.



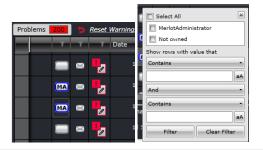
The image above shows 9 unread problems listed in the grid. The background of the number turns red if there is at least one unread problem. If all the problems have been read, the background will turn grey.

Clicking the *Reset Warnings* link located next to the tab will reset the warnings so that any new information will be presented and is easily identifiable to users. Alternatively, click on View in the filter panel. Note also that the system automatically updates the information in this panel with an interval of 5 minutes.

The columns are described below:

Column	Description
Grouping	Several instances of a problem can be logged against one crew member. For example, an expiry violation that was not yet resolved was raised for each day that a crew member worked. Having them separated can lead users to miss out on more urgent issues. These are now grouped together and can be collapsed/expanded. In the image below, the purple box shows a collapsed group of violations. The pink box shows the expanded violations.
	D 2 04/09/2016 Z T502 Minimum Rest Period Rule 23:40 hours rest between 3-Sep 2
	■ 2
	C128 Minimum Rest Period Rule -1:00 hours rest between 2-Sep :
	□ 📨 🛂 09/03/2016 12:4 C128 -1:00 hours rest between 2-Sep 1
	Problems will be grouped together if the BaseEmployeeRule parameter AllowMonitorGridCollapse is set to True. This is set to False by default. This can be adjusted in Configure.
Assignment	Problems can now be "grabbed" by a user to signify that he is accountable for resolving the problem. By default, all problems have an empty square which means that the problem is unassigned. If a user clicks the box, he assigns the problem to himself and his initials will be placed on the square and the border will turn blue. Assignments of other users have a green border. In the example

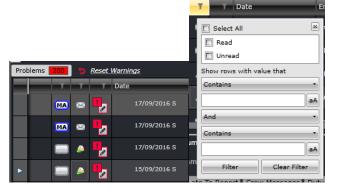
below, the initials are for Merlot Admin. Users cannot remove their assignments, but other users can reassign a problem to them by clicking on the same box. The column can also be filtered by clicking on the header.



Status

This makes it easier to identify which problems have been read . New problems added to the

view are unread by default. In the image below, the first two records are unread and the last two records are read. To mark a problem as read, double-click on the envelope icon. The user name and time stamp of reading a problem is recorded in the database. This column can be filtered by clicking on the header.

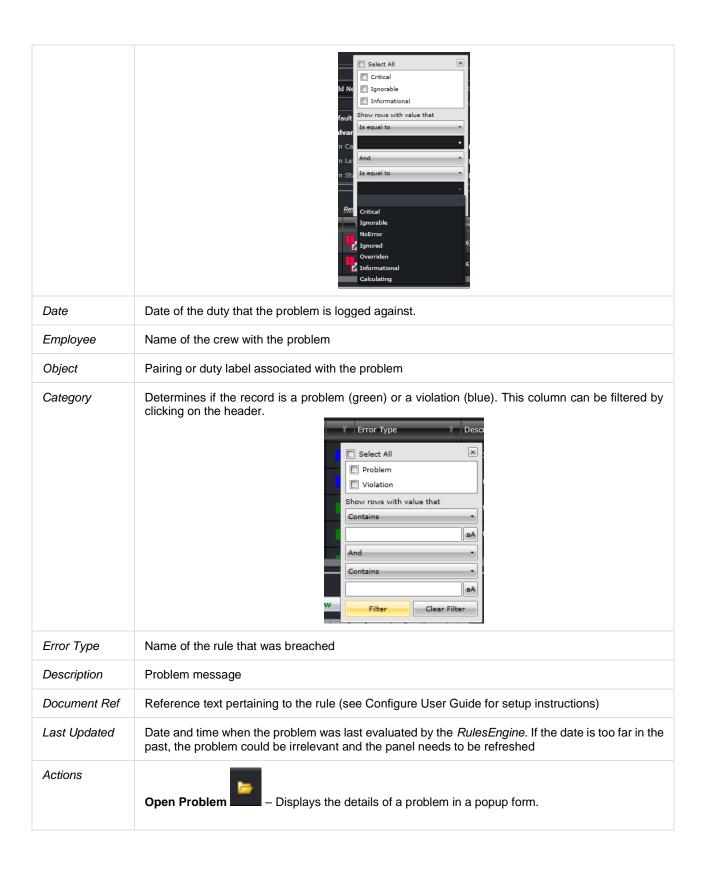


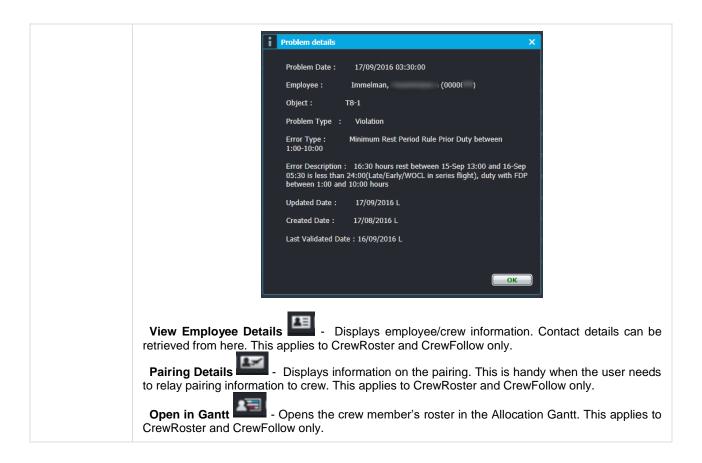
Note: New problems are displayed in bold. In the image below, the first problem is new and the second problem is pre-existing.



Severity

Displays the severity and behaviour of the problem. This column can be filtered by clicking on the header.





Right-clicking on any column of a problem brings out the following options:

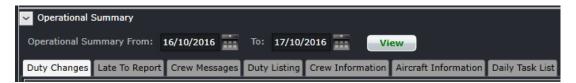


- **Ignore** marks the problem is ignored by the user and hides the problem until reversed. The user name and timestamp are recorded in the database. Use this sparingly as it might lead to a compliance breach.
- Override allows the user (with the appropriate security access) to override a violation and allow the affected crew member to proceed with the duty. The user name, timestamp and comments are recorded in the database.
- Re-evaluate violation triggers the RulesEngine to validate the corresponding duty and removes the violation if
 it is no longer applicable.
- **Print** prints the violation in a PDF file or through a connected printer.



Operational Summary Panel

The Operational Summary section has a set of important operational tabs displayed. Each of the tabs is refreshed periodically to ensure that the information displayed is current.



The date range in this panel copies the date range in the Monitoring Panel filter by default. If Sync Dates is not selected, the Operational Summary date range can have different dates that will allow users to have a smaller set of data to work with in this panel.

Each of the Operational Summary tabs is discussed separately below.

Duty Changes

The Duty Changes tab displays all the duty change notifications created by users when they modified crew's pairings. These notifications have not been acknowledged by crew yet. The Duty Changes tab allows the user to view all the duty changes that crew have yet to acknowledge and to manually contact employees, if necessary, to ensure they are aware of the changes to their roster. This ensures the operation is not disrupted due to crew failing to report for the assigned duties.

Duty change notifications are removed from this tab when the crew member acknowledges it in CrewPortal or CrewMobile. Alternatively, users can mark the duty change as acknowledged after discussing with the crew member.

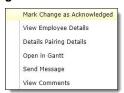


The columns are described below.

Column	Description
Status	Displays an icon if the duty change has gone past the alarm time or hide time
	This appears if the Alarm time is up
	This appears if the notification is past the Hide time
Employee Code	Crew member's ID
Employee	Crew member name

Base & Rank	Crew member's base and rank
Pairing Label	Name of the affected pairing
Duties	Duties included in the pairing
First Duty Report	Report time of the first duty in the pairing
Alarm Time	Sets a certain time for users to be alerted if the duty change has not been acknowledged by the crew member
Hide Until	Sets a certain time when the duty change notification will be made visible to crew in CrewPortal and CrewMobile
Actions	Set of action buttons, discussed in the next section

Right Click for Actions



Action Icons



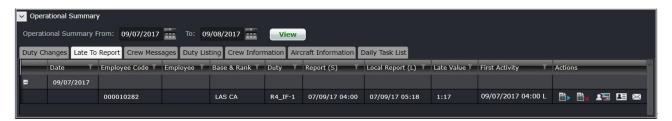
To allow the user to manage duty changes, the following actions can be performed on a selection of duty changes, via right click or by use of the appropriate Action icon (Action icons are described from left to right):

Column	Description
Mark Change as Acknowledged	The user can contact the crew member and inform him of the duty change. Afterwards, the user can use this to mark the notification as acknowledged on the crew member's behalf
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here
Pairing Details	Displays information on the pairing. This is handy when the user needs to relay pairing information to crew
Open in Gantt	Opens the crew member's roster in the Allocation Gantt. This applies to CrewFollow only.
Send Message	Opens the New Message box for the user to create and send a message to the crew member
View Comments	Displays the public and private comments for the pairing



Late to Report

The Late to Report tab displays the list of crew who have not signed in for their duty for the selected dates.



The columns are described below:

Column	Description
Date	Date of the duty
Employee Code	Crew member's ID
Employee	Crew member name
Base & Rank	Crew member's base and rank
Duty	Name of the affected pairing
Report (S)	Report time of the duty in Standard time, or the time zone of the company's main office
Local Report (L)	Report time of the duty in Local time, or the time zone of the port where the crew member is
Late Value	Amount of time the crew member is late
First Activity	Report time of the duty in Zulu time
Actions	Set of action buttons, discussed in the next section





To allow the user to manage duty changes, the following actions can be performed on a selection of duty changes, via right click or by use of the appropriate Action icon (Action icons are described left to right):

Column	Description
Manual Report	This allows the user to report for the duty on the crew member's behalf. The user can enter the exact report time and add a comment indicating why the crew member was late.
Failed to Report	This allows the user to mark the crew as a no-show. A reserve or standby will eventually need to be called out.
Open in Gantt	Opens the crew member's roster in the Allocation Gantt. This applies to CrewFollow only.
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here
Send Message	Opens the New Message box for the user to create and send a message to the crew member
Print	Prints a list of the records currently displayed

Crew Messages

Messages can be sent to crew via email, SMS or via CrewPortal. They are displayed until they are read and acknowledged by the crew.



The columns are described below:

Column	Description
Date	Date when the message was created
Status	Indicator if the message has been read or not
Sent As	Messaging option selected. Options are Application Message, SMS or Email
Importance	The selected Importance level of the message

Employee Code	Crew member's ID
Employee	Crew member name
Base & Rank	Crew member's base and rank
Sent By	Name and email address of the sender
Subject	Message subject
Read	Timestamp when the message has been read by crew. This applies to application messages only.
Acknowledged	Timestamp when the message has been acknowledged by crew. This applies to application messages only.

Right Click for Actions



Action Icons



To allow the user to manage crew messages, the following actions can be performed on a selection of messages, via right click or by use of the appropriate Action icon (Action icons are described left to right):

Column	Description
Print	Prints a list of the records currently displayed
View Message	Displays the body of the message
Mark as Acknowledged	The user can mark the message as acknowledged only if the crew has read the message
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here

Duty Listing

The Duty Listing Tab provides a list of crew assigned with standby and administrative duties. This allows the users to quickly identify any possible replacement crew during disruption.

To allow flexibility in how the duties in the Duty List are viewed and managed, display of information in the Duty Listing tab can be modified based on the configuration options / functionality.



The columns are described below:

Column	Description
Date	Date of the duty
Employee Code	Crew member's ID
Employee	Crew member name
Base	Crew member's base
Rank	Crew member's rank
Equip	Crew member's rated equipment types
Sen	Seniority
Credit	Credit duty hours for the duty
Type	Pairing type
Duty	Name of the duty, or duty label
Report	Report time of the duty
Release	Release time of the duty
Rest Before	Amount of rest prior to the duty
Rest After	Amount of rest after the duty
Dates	The duties one day before and five days after are displayed. The highlighted column is the selected date.
Actions	Set of action buttons, discussed in the next section





The Duty Listing tab is informational and no modifications can be made on it. The following actions can be performed on a duty via right click or by use of the appropriate Action icon (Action icons are described left to right):

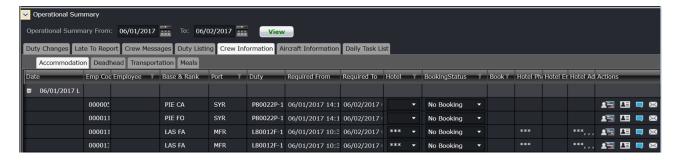
Column	Description
Print	Prints a list of the records currently displayed
Open in Gantt	Opens the crew member's roster in the Allocation Gantt. This applies to CrewFollow only.
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here
View Comments	Displays the public and private comments for the pairing
Send Message	Opens the New Message box for the user to create and send a message to the crew member

Crew Information

The Crew Information tab provides information about crew logistics such as accommodation, transportation, and deadhead details for the dates selected in the Monitoring Panel Filter criteria.

Accommodation

The Accommodation tab holds details on crew's hotel requirements. If a crew member's duty has an Accommodation event, a corresponding row will appear in the tab, which can also be accessed in the Pairing Details panel in CrewRoster and CrewFollow.



The columns are described below:

|--|

Date	Date of the duty
Employee Code	Crew member's ID
Employee	Crew member name
Base & Rank	Crew member's base and rank
Port	Port where the accommodation is required
Duty	Name of the duty, or duty label
Required From	Release time of the duty that brings the crew to that port
Required To	Report time of the next duty
Hotel	Name of the hotel. The list of options is taken from Configure
BookingStatus	Booking status options include Not Booked, Booked, Pending Confirmation, Cancelled, Not Required, Pending Cancellation, No Booking
BookingReference	Text field where booking references can be entered
Hotel Phone	Hotel phone number. This is taken from Configure
Hotel Email	Hotel email address. This is taken from Configure
Hotel Address	Hotel address. This is taken from Configure
Actions	Set of action buttons, discussed in the next section

Right Click for Actions Print Open in Gantt View Employee Details View Comments Send Message

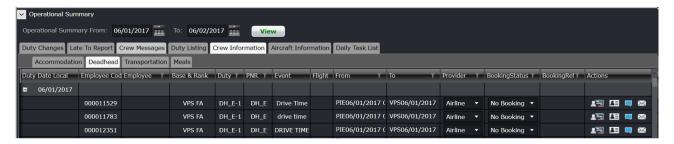
Accommodation records cannot be removed from the Accommodation tab. The following actions can be performed on a record via right click or by use of the appropriate Action icon (Action icons are described left to right):

Column	Description
Print	Prints a list of the records currently displayed
Open in Gantt	Opens the crew member's roster in the Allocation Gantt. This applies to CrewFollow only.
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here
View Comments	Displays the public and private comments for the pairing



Deadhead

The Deadhead tab holds details on crew's deadheading requirements. If a crew member's duty has deadhead or deadhead other event, a corresponding row will appear in the tab, which can also be accessed in the Pairing Details panel in CrewRoster and CrewFollow.



The columns are described below:

Column	Description
Date	Date of the duty
Employee Code	Crew member's ID
Employee	Crew member name
Base & Rank	Crew member's base and rank
Duty	Name of the duty, or duty label
PNR	Passenger Name Record. Referencing the flight that the crew member is deadheading on
Event	Name of the event, or event label for deadhead other events
Flight	Flight number if it is a deadhead within the airline
From	Departure time
То	Arrival time
Provider	Provider of the deadhead flight – Own Accommodation (provided by crew) or Airline
BookingStatus	Booking status options include Not Booked, Booked, Pending Confirmation, Cancelled, Not Required, Pending Cancellation, No Booking
BookingReference	Text field where booking references can be entered
Actions	Set of action buttons, discussed in the next section

Right Click for Actions Action Icons

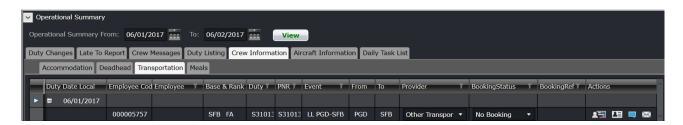


Deadhead records cannot be removed from the Deadhead tab. The following actions can be performed on a record via right click or by use of the appropriate Action icon (Action icons are described left to right):

Column	Description
Print	Prints a list of the records currently displayed
Open in Gantt	Opens the crew member's roster in the Allocation Gantt. This applies to CrewFollow only.
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here
View Comments	Displays the public and private comments for the pairing
Send Message	Opens the New Message box for the user to create and send a message to the crew member

Transport

The Transport tab holds details on crew's transport requirements. If a crew member's duty has a ground transport event, a corresponding row will appear in the tab, which can also be accessed in the Pairing Details panel in CrewRoster and CrewFollow.



The columns are described below:

Column	Description
Date	Date of the duty
Employee Code	Crew member's ID
Employee	Crew member name

Base & Rank	Crew member's base and rank
Duty	Name of the duty, or duty label
PNR	Passenger Name Record. Referencing the transport that the crew member is traveling on
Event	Name of the event, or event label for deadhead other events
From	Departure time
То	Arrival time
Provider	Provider of the transport – Own Accommodation (provided by crew) or Airline
BookingStatus	Booking status options include Not Booked, Booked, Pending Confirmation, Cancelled, Not Required, Pending Cancellation, No Booking
BookingReference	Text field where booking references can be entered
Actions	Set of action buttons, discussed in the next section

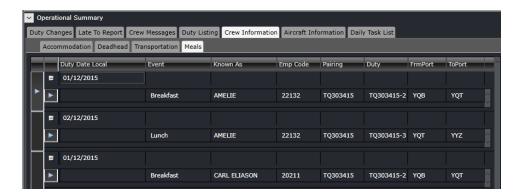


Transportation records cannot be removed from the Transport tab. The following actions can be performed on a record via right click or by use of the appropriate Action icon (Action icons are described left to right):

Column	Description
Print	Prints a list of the records currently displayed
Open in Gantt	Opens the crew member's roster in the Allocation Gantt. This applies to CrewFollow only.
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here
View Comments	Displays the public and private comments for the pairing
Send Message	Opens the New Message box for the user to create and send a message to the crew member

Meals

The Meals tab holds details on crew's meal requirements. If a crew member's duty has a meal event, a corresponding row will appear in the tab, which can also be accessed in the Pairing Details panel in CrewRoster and CrewFollow.



The columns are described below:

Column	Description
Duty Date Local	Date of the duty, in local time
Event	Meal event name
Known As	Name of crew
Pairing	Name of the pairing, or pair label
Duty	Name of the duty, or duty label
FromPort	Departure port
ToPort	Arrival port

Right Click for Actions

Print
Open in Gantt
View Employee Details
View Comments
Send Message

Meal records cannot be removed from the Meal tab. The following actions can be performed on a record via right click or by use of the appropriate Action icon (Action icons are described left to right):

Column	Description	
Print	Prints a list of the records currently displayed	
Open in Gantt	Opens the crew member's roster in the Allocation Gantt. This applies to CrewFollow only.	
View Employee Details	Displays employee/crew information. Contact details can be retrieved from here	
View Comments	Displays the public and private comments for the pairing	
Send Message	Opens the New Message box for the user to create and send a message to the crew member	



Trade Approval

Crew schedulers manually approve and reject swaps in the *Trade Approval* tab. This tab is displayed when the user preference *AllowSwapManualApproval* is to True in Configure.



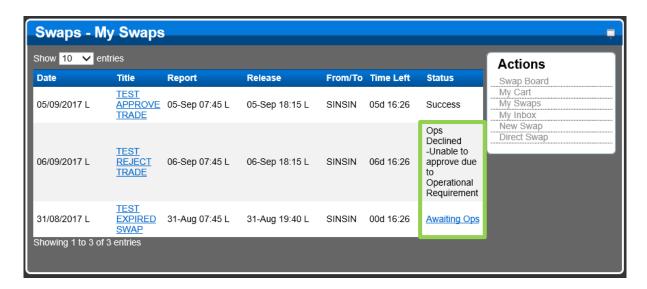
The Trade Approval columns in the tab are described below:

Field	Description			
Date of Trade	The date of the first pairing up for trade.			
Rank	Rank of the pairing pushing up for trade.			
Equip Type	The equipment type of the pairing originally assigned to the initiator.			
Initiator	The name of the employee initiating the direct trade, or initially posted the trade on the trade board. The format will be Last Name, First Name.			
Initiator's Pairing(s)	The pairing(s) currently assigned to the initiator, up for direct or indirect trade.			
Respondent	The name of the employee that is the target of a direct trade, or placing an offer for a trade on the trade board. The format will be Last Name, First Name.			
Respondent's Pairing(s)	The pairing(s) currently assigned to the respondent, up for direct or indirect trade.			
Transaction Date	Direct Trade: The date/time that a trade was approved by both employees, and submitted for OPS approval listed as per the time mode of the module			
Actions	The following <i>Trade Approval</i> actions are described below: View in Gantt - Loads both crew mentioned in the trade. Message - Includes both crew mentioned in the trade in the "TO" field of			
the message.				
Approve — Approves a trade.				
	Reject - Rejects a trade.			

Users can sort and filter data in all the columns within the tab except the Action column.

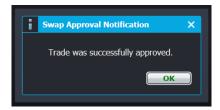
Manual Approval Process

Two new status labels are now displayed in CrewPortal > My Swaps, Awaiting Ops and Ops Declined.



After a direct or an indirect swap is accepted by a crew, the system automatically classifies the swap by tagging it as *Awaiting Ops* and holds the approval. Once a swap is approved, the status will change to *Success*.

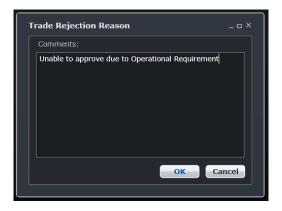
When a swap is approved in CrewFollow, the system will notify the user by displaying the message below:



In the event of a violation, upon approval of a swap, a warning will be displayed.



Users can either *Reject* a swap approval or *Cancel* the violations within the swap. If a user rejects a swap, the status will update to *Ops Declined* and a *Trade Rejection Reason* window will be displayed.





Manual Swap Quota

To limit the number of swap requests from each crew, airline administrators can setup the number of swaps for manual approval using the following user preferences. The quota applies both to the swap initiator and the respondent crew.

User Preference	Value	Description
ManualSwapQuotaPeriod	1 (Default) – Applies to Roster Period 2 – Applies to Calendar Month	The period the manual swap quota will apply to.
ManualSwapQuotaNumber	NULL (Default)	The number of allowable swap requests for manual approval. A null or blank value indicates unlimited swaps.
IncludeInManualSwapCoun - This user preference is only	OnlyManuallyApprovedSwaps (Default)	When calculating for the swap quota, the system will only consider manually approved swaps.
applicable when the existing AllowSwapManualApproval user preference is set to True.	ManuallyApprovedAndRejectedSwaps	When calculating for the swap quota, the system will consider both manually approved and rejected swaps.

The following applies when Manual Swap Quota is setup:

- 1. Only swaps that are tagged as Awaiting Ops will be counted;
- 2. Deleted swap requests prior to admin approval and rejected swaps due to a rule violation will not be counted against the quota.

Crew members who already reached the quota will receive a notification saying, "Cannot submit swap/trade due to maximum quota of << Manual Swap Quota Number >> reached for this <<Roster period/ Calendar Month>>" when attempting to submit a swap request.

Aircraft Information List

The Aircraft Information List tab is part of future development in CrewFollow.

Daily Task List

Operationally, there are number of tasks that are required to be performed daily by individual users or groups of users to ensure the smooth running of the operation. Often these tasks need to be completed by a certain time of the day.

To help the Operations Department manage these daily tasks, the client will be able to define task lists that apply to different sets of users. When the user displays the Daily Task List tab, they will see the tasks they are required to complete during their shift.



Where there are multiple users responsible for the completion of tasks, all those users will see the same task in their task lists and any of them will be able to complete it. When the Daily Task List is displayed, the tasks displayed in the list are tasks where the user is included as part of the responsible list of the associated task group. By default, only those tasks for the current date will be displayed. However, the user will be able to select to view their task list for different dates, by adjusting the date of the Daily Task List.

To allow the user to manage their task list, actions listed can be performed on selected items on the list. The user can use standard <Ctrl + Shift > click functionality to be able to select multiple displayed pairings. These actions are triggered using the Right Click menu options or appropriate icons.

The completion date-time and the user who completed the task are recorded. Once the task has been completed it will be displayed in the list to allow other users who share the responsibility for the task to see who completed the task and when it was completed.

Display of the information in the Daily Task List tab can be modified based on the configuration options/ functionality to allow flexibility in how the tasks in the task list are viewed and managed.



CrewFollow Specific Tasks

This section provides an overview of CrewFollow specific tasks. Some of these tasks might not apply to your airline.

Daily Checks (no particular order):

- Check for the number of reserves for the day. If there aren't enough, check for options for crew to call out from day off.
- Notify crew with pending duty change notifications.
- Monitor crew members who need to sign on for their duties. Call up crew if they are late for sign on.
- Monitor roster changes for crew members involved in disrupted flights. Observe compliance requirements.
- Manage crew-requested trades or swaps of pairings.
- Manage rosters of sick crew members and allocate a reserve for the de-allocated duty.

For days in the near future:

- Try to achieve the ideal number of reserves for the next few days.
- Check for violations in the Monitoring Panel and resolve them.
- Notify crew with pending duty change notifications.
- Ensure all flights are fully complemented.

For days in the not so distant past:

- Update pairings with discrepancies
- Generate reports



CrewFollow Actions

Pairings and rosters can be viewed by multiple users at any time. Users with the required access rights can also make changes to pairings and rosters. In some cases, a pairing that is in view could be updated by another user or process. If the user viewing the pairing attempts to change it based on the outdated version in view, a Pairing Update Conflict popup will be displayed.

Pairing update conflict

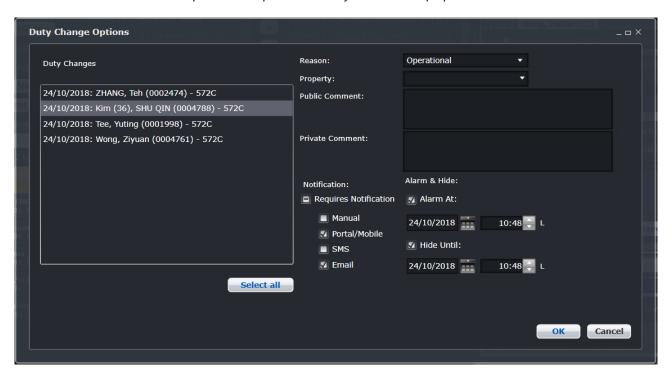
Pairing 713 on date 19/08/2016 00:00:00 has been previously updated by Sharlene on 23/08/2016 07:22:07Z.
Do you want to override the pairing updates (Yes), or cancel your updates (No)?

Yes No

Selecting **Yes** will override the changes made by the other user or process. Selecting **No** will discard the current user's changes and the user must reload the pairing and apply the changes again.

Duty Changes

Any modifications to rosters or assigned pairings require crew notification. This ensures that crew are aware of the changes to their roster and the notification process is kept track in the system for audit purposes.



The box on the left contains the names of all crew affected by the duty change. Changes can be applied directly to all crew in the list or in batches.

- To apply changes for all the crew, make sure all the names are highlighted. If not, click the **Select all** button. Choose the options on the right side, then click the **OK** button.
- To apply changes for one crew, select the name. To apply changes to more than one crew but not all, press the **Ctrl** button and click on the names. Once the name/s are selected, choose the options on the right side, then click



the **OK** button. The form will continue to display the remaining crew names that require updates until all of them are updated.

The **Reason** field requires a generic classification for the duty change. Typically, duty changes caused by delays are considered **Operational**. **Personal Swap** is used for swaps that crew requested. The list of reasons is configurable. Please contact your Administrator to modify the list.



Administrator Note

Duty Change Reasons are set up in **Configure** >> **Operations** >> **Pairing** >> **Duty Change Reason**. If the user preference *DutyChangeReasonRequired* is set to True, the Reason field becomes mandatory. Otherwise, it can be left blank. The preference is set to False by default.

The **Property** field allows users to set characteristics of a pairing that require considerations on reassignment, payroll, and other operational consequences. Select the applicable property/properties.

Some properties might not apply to all crew in the list. Make sure to press the **Ctrl** button when selecting crew names in the list box.

Some reasons could be associated with one or more properties. When such a reason is selected, the associated property/properties will be automatically displayed. This field may be configured as mandatory.

When pairings are swapped or replaced, the property may be transferred to the next assigned crew. A prompt will be raised to give the option of transferring or removing assigned properties.



Administrator Note

Duty Change Reasons are set up in **Configure** >> **Operations** >> **Pairing** >> **Assignment Property**. To associate a property to a reason, go to **Configure** >> **Operations** >> **Pairing** >> **Assignment Property**. If the user preference *DutyChangePropertyRequired* is set to True, the Property field becomes mandatory. Otherwise, it can be left blank. The preference is set to False by default.

Public Comments and **Private Comments** can be added to give crew some context on why the change was done and if there are other things to be noted by users afterward. If either field is mandatory, the **OK** button will only be enabled if either field is filled out. Spaces only or special characters only are not allowed. Public comments can be seen by all crew in their roster reports, while private comments can only be seen by the affected crew member only.



Administrator Note

If the user preference *DutyChangeCommentsRequired* is set to True, the comments field becomes mandatory. Otherwise, it can be left blank. The preference is set to False by default.

The **Notification** section gives users the option to send a notification to crew or not. There are cases when crew do not need to be notified, like when the crew was verbally informed of the change while the user made the changes, or if the change was made while the crew is operating a flight. Notifications can be sent manually (the user calls up the crew or informs him face-to-face), through the Portal/Mobile applications, SMS, or email.

The **Alarm & Hide** options provide flexibility in how the notification is sent to crew. An alarm can be set to remind the user or other crew schedulers to notify the crew of the changes. This will not affect the crew member. Simply enter the date and time when the alarm must ring. The duty change can also be hidden from crew (not visible in CrewPortal and CrewMobile) until a certain time. This is handy when the changes are not yet final. Enter the date and time when the duty change can be made available for the crew member. The **Hide Until** options may be hidden from view if the users do not need it.



Administrator Note

If the user preference *DutyChangeHideUntilVisible* is set to True, the Hide Until section is hidden. The preference is set to False by default.

Sending a duty change notification is tracked in the system, including the name of the user and the timestamp of sending the notification. When the crew member views or acknowledges the notification, the timestamp of that action is tracked as well

A notification may be omitted by clicking the Cancel button or clicking the Close button at the upper right corner of the form. The duty changes will not be affected.

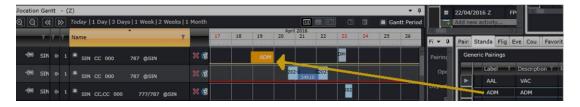


Administrator Note

If the user preference *DutyChangeCancelButtonVisible* is set to False, the Cancel button and Close button are hidden. The preference is set to True by default.

Assign Pairings

Pairings can be assigned to crew by selecting the pairing from the Pairing Panel and then dragging it to the roster of the designated crew member. The pairings can be from the Pairings or Standard Pairings tab.

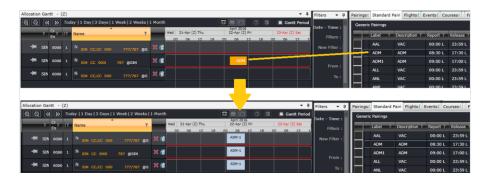


When assigning a standard pairing, make sure that the pairing is assigned under the correct date. Standard pairings have the default report and release times but not the dates, unlike built pairings.

Multiple Crew Assignment

A pairing can be assigned to multiple crew at the same time. This is helpful when all complements (pilots and cabin crew) are to be filled up through pairing assignment. This can also be used when a set of crew members will be assigned the same pairing on the same day, i.e. a number of reserves for one day.

The checkbox on the left side of the crew's name allows for multiple crew assignment. Select the checkboxes for all the crew who will be assigned the same pairing. This will turn the crew's names orange. Click and drag the pairing from the Pairing Panel to one of the crew's rosters and drop the pairing.



Deselect the checkboxes before assigning another pairing.

Multiple Day Assignment

A standard pairing can be assigned to one crew member for more than one day. This is helpful when a crew member goes on a long absence (vacation, maternity leave, sabbatical, etc.).

To assign multiple pairings, click on the **Shift** button, then click and drag the standard pairing towards any day on the crew member's roster. Release the **Shift** button and the mouse button. A calendar will pop up. Select the correct year. Use the **Shift** or **Ctrl** buttons when selecting dates. **Shift** highlights dates from the first selection to the next selection. Use this when the pairing must be assigned to consecutive days. **Ctrl** allows you to pick several days with gaps in between.



This option can only be used for standard pairings and can be used to assign the standard pairings to days that are not currently viewed in the Gantt.

De-allocating Pairings

To de-allocate or remove a pairing from a crew member's roster, click on the pairing to select it. Right-click on it then select De-allocate Pairing. The pairing will be removed from the roster and if it is a non-standard pairing, it will be reflected in the Pairing tab as partially covered.

To remove several pairings from one or more crew, select all the pairings by using **Ctrl** + click, then right-click on one of the selected pairings and select De-allocate Pairing.

Moving Pairings



A pairing can be reassigned from one crew member to another instead of de-allocating it from one crew member then assigning to the other. This can be done when the receiving crew member does not have a pairing on the same day. Simply click and drag the pairing from the currently assigned crew member to the receiving crew member. A prompt confirming the change will appear. Click **Yes** to proceed or **No** to cancel.

Tip: Pin the rosters of both crew to make it easier to drag the pairings.

Swapping Pairings

Pairings that are assigned to crew can be interchanged instead of de-allocating and re-allocating both. This can be done by swapping the pairings. Press **Shit + Ctrl** then click and drag the pairing from the first crew member over the pairing of the second crew member. A prompt confirming the change will appear. Click Yes to proceed or No to cancel.

Tip: Pin the rosters of both crew to make it easier to swap the pairings.

Retaining Historical Pairings

There is a way to retain pairing data in the past and prevent users from modifying them. This is controlled by the user security *Historic Pairing Override* and the user preference *Historic Pairing Override Hours*. The user security setting determines which users can override the limit of modifying past pairings, while the user preference determines how many hours in the past the pairings can be modified. If a user has the user security and the override hours are for 24 hours only, the user will be able to modify pairings within 24 hours in the past. If the pairing is beyond 24 hours, the user is no longer allowed to update the pairing.

Managing Sick Days

Crew can call in sick before the start of their duty or right in the middle of their duty. Instructions for managing both scenarios are details below.

Casual Sick Day

If a crew member calls in sick before the start of his duty, the entire duty needs be removed and then replaced by a sick day.

- 1. Right click on the pairing and select "Allocate Sick Leave".
- 2. When prompted if the pairing will be replaced with sickness, click Yes. Selecting No will stop the process and no changes will be made.
- 3. A prompt will appear once the sick day is assigned. The Duty Change Options form will also pop up for notification requirements.
- 4. The pairing is replaced with a CSL pair type.
- 5. The de-allocated pairing must be assigned to another crew member (a standby or someone called up from day off).

Mid-duty Sick Day



A mid-duty sick day is given when the crew member calls in sick after he has reported for the duty. This allows the operated flights to be credited to the crew in terms of flight and duty hours and payroll.

- 1. Double click on the pairing assigned to crew.
- 2. Split the crew member from the rest of the other crew in the pairing.
- 3. In the pairing of the sick crew member, remove the flights and events that he cannot operate.
- 4. Add the Mid-Duty Sickness event from the Activity Panel.
- 5. Click Save.

The removed flights and events need to be assigned to another crew.

Creating Flights

Certain situations require flights to be created immediately. For example, a charter flight that was booked on the last minute requires to be prepared immediately. Instead of having to go to AircraftFollow or wait for another user who has security rights for AircraftFollow, the user can add the flight directly in CrewFollow. This can be done in two ways:

- Click the Add a Flight link at the top of the Flights tab; or
- Right-click on the Pairing Detail panel and select Add New then select Flight.



Enter the details as needed then click Save.

Calling Out Standbys

To apply a standby callout, drag the new pairing over the standby pairing. You will be prompted to confirm the new allocation.



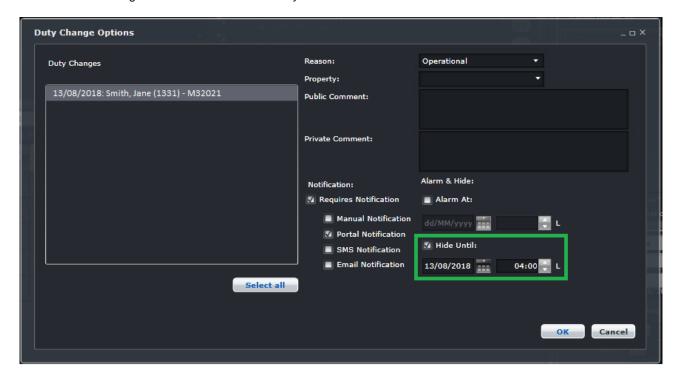
The standby pairing will be replaced by the new pairing.

Depending on the time of pairing replacement, the report times of the standby and the new pairing, and the required settings, a prompt like the one below will appear. The system needs to confirm that the standby will be activated at that moment. This means that the crew will be taken out of standby and will be assigned to the new pairing. Standby activation may be applied earlier than the standby duty's report time if the user confirms it.



The prompt above may remind the user if the reserve period has not started yet, if applicable.

It may also state that the duty change notification will be hidden until the report time of the standby/reserve duty. The option to hide a notification is managed with the user preference *CallOutHideDutyChangeDefault*. When set to True, the Hide Until option in the Duty Change Options form will be selected, and the time will be set to the report time of the new duty (see image below). When set to False, it will not be selected. This option is useful for cases when the crew should not be informed of the change until the start of the new duty.

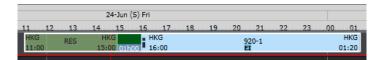


A standby callout is indicated in the Allocation Gantt by a translucent green puck beside the new pairing. This is controlled by the user preference *CallOutGanttVisualization* which set to True by default.



Clicking on the new pairing highlights both the standby and the new duty. A tool tip shows the details of the new duty. The calculated flight and duty times are displayed instead of the actual times. The Standby Period shows the start and end time of the standby and Notified At shows the time when crew was notified by the crew scheduler. Double clicking on the duty displays the details of the new duty in the Pairing Details Panel.

If the standby is called out after the standby duty, the same behaviour above is observed, but the pucks are connected together, similar to a multiple-day pairing. This only makes it visually more understandable for the user.



For tracking purposes, the end of the standby is recorded in the Times tab of the Pairing Details Panel.



Each customer has its own requirements for the report and release times for called out standbys. These can be controlled by the following user preferences:

User Preference	Description and Values
ReserveEndOnCallOutNotification	 Controls the end time of the standby. If set to <i>False</i>, the release time of the standby will be followed. If set to <i>True</i>, the release time of the standby will be set to the notification or callout time
CallOutDutyCalculationMethod	 Determines how the duty time for a standby callout must be calculated based on any of the following values SignOnReserve – default value. Duty time is calculated from the report time of the reserve pairing. SignOnNewDuty – Duty time is calculated from the report time of the new duty SignOnNewDuty+ReservePriorCallOutNotification – Duty time is calculated based on the new duty plus a buffer time that includes the time between the sign on time of the reserve/standby and the call out time
CallOutReportTimeMethod	Determines if the report time will be based on the reserve pairing or the new pairing. This applies to home reserves (RES) only. Airport reserves (ARD) will always retain the original ARD report time. • NewDutyReportTime – report time will be based on the new duty • OriginalReserveReportTime – report time will be based on the reserve duty
CallOutNotificationOverride	This configures how the callout notification time is set. True – Default value. Users can manually override the callout notification time False – The time when standby is activated after assigning the new duty is recorded as the callout notification time
CallOutPostReserveTimeThreshold	The buffer (in minutes) after the reserve pairing that a new duty assignment can be considered as a standby activation



Calling Out on a Day Off

To indicate that a crew member is called out on their day off, drag the new pairing over the day off. You will be prompted for confirmation. Select **Yes**.

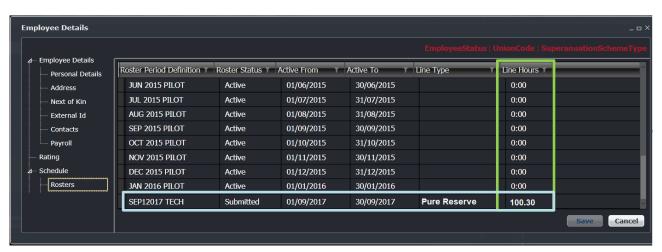
Automated Minimum Monthly Guarantee

Additional Duty Designated (ADD) days are placeholder duties for crew to work. This is under the pair type OPD. Crew members with Pay Credit Hours equal or greater than 70 hours acquired from *Open Time Pickup*, *Voluntary Junior Assignment* and *Voluntary Flying Notification* within a roster period will have all remaining ADDs (OPDs) converted to **ADDX (pair type RDO)** starting from the next day onwards. The conversion is handled by *ADD day minimum monthly guarantee process* job (job type *PCHConvertPairingtoRDOJob*). Validation of Pay Credit Hours for the next roster period is only allowed if roster has been published. Past and current ADDs (OPDs) are excluded from this.

Set the following user preferences to the values below to enable the conversion:

User Preference	Description	Value
MinPCHLatestOPDActivationTimePrior	Time of day value before an OPD assignment.	18:00
MinPCHLatestOPDActivationCalendarDaysPrior	Number of calendar days prior to an OPD that will be validated for a working duty assignment.	1
MinPCHPairingLabelToCheck	Pairing label(s) to be checked for the automated Pay Credit Hours (PCH) Monthly Guarantee Process for conversion. Multiple entries are allowed, must be separated by a comma.	ADD
MinPCHUseUnusedADDProcess	Activates/Deactivates the automated process conversion of unused ADD.	TRUE

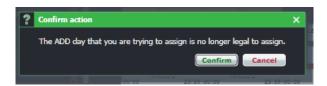
The values displayed in the **Line Hours** column in Employee Details > Schedule > Rosters are considered the Original Pay Credit Hours Bid Award for a crew within a roster period.





All converted ADDX are assigned a duty change reason of "**Schedule Change**" and assignment property **X** and no duty change notification will be sent to affected crew members.

Unused ADDs (OPDs) which are converted to a working duty after 1800 PST of the day prior to an OPD, will trigger a notification.



Select Confirm to replace the unused OPD or Cancel to proceed without making changes.

All ADDs (OPDs) for the current and next day is validated at 1800 PST and undertakes the same process mentioned above for the automatic conversion to days off (RDOs).



Menu Options

File Menu

Reset Layout brings all the panels back to their default sizes and positions.

View Menu

The View menu contains time mode options.



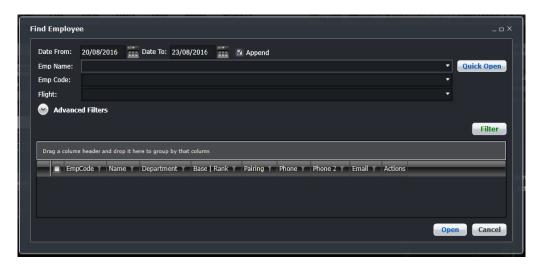
- Zulu (Z) Zulu time is known as Greenwich Mean Time (GMT)
- Port (L) Port time is local time in the departure or arrival port of the flight
- Standard (S) Standard time is local time at your company headquarters

Tools Menu

Direct Open

Direct Open is a tool that allows users to search for specific crew members. This works similar to the Allocation Panel filter, but it presents more information about each crew member and allows for faster searching. This comes in a basic view and an advanced view.

The basic view below can be accessed by using the hot key **Ctrl + F** from the Allocation Gantt, or going to the Tools menu then selecting Direct Open.



Field	Description
Append	Selecting this will add the rosters of the selected crew to your current view in the Allocation Gantt. If this is not selected, the current view will be replaced by the results of this search.
Date From Date To	The dates on top default to the current date in Standard time mode. Searching for crew in limited to actively rated crew within the entered date range.
Emp Name	Enter the first few letters of an employee's last name to bring out a list of suggestions.
Emp Code	Enter the first few characters of an employee's code or ID to bring out a list of suggestions.
Flight	Enter the flight number for the selected date range. Entering the first few numbers will bring out a list of suggestions. The crew assigned to the selected flight will be included in the search results.
Quick Open button	Click this button to display the rosters of the searched crew in the Allocation Gantt
Filter button	Click this button to display the details of the searched crew in the grid below the button.

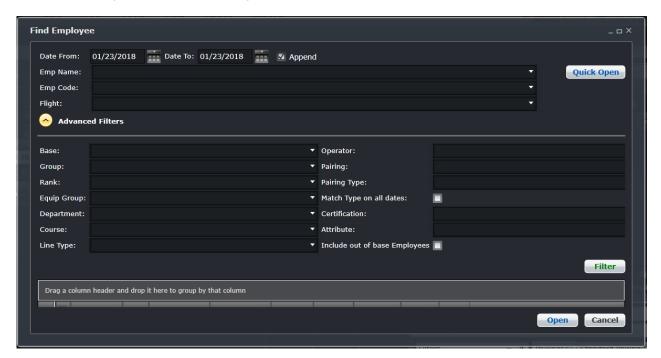
The *Emp Name*, *Emp Code* or *Flight* field can be used independently of each other. Selecting at least one option from one of them will bring search results. Multiple entries can be entered for each field.

The search results in the Find Employee form display the crew member's employee code, name, department, base and rank, pairings for the next 4 days, phone numbers and email address. The action buttons to the right allow the user to view the employee details and to send the employee a message.

The search results can also be ranked by column by clicking on the column header. They can also be filtered further using the filter icon in each column. If the *Advanced* section (Ctrl-A) or the chevron button is not expanded, no loading of data for the pairing filter will take place. Setting the End date to the same date will not load pairing and flight data and setting the End date to a different date will only load flight data once.

When accessing the *Advanced* section or the chevron button is expanded, the loading of filters will only be processed once.

The **Advanced Filters** view can be accessed by using the hot key **Ctrl + A** from the Allocation Gantt, or going to the Tools menu then selecting Direct Open and clicking on the Advanced Filters button.



Field	Description
Base	A drop-down field that displays the active crew bases
Group	Provides a list of employee profiles or groups. Selecting any group filters our crew members who belong to the group within the selected filter date range. Multiple groups can be selected. For example, crew members who have recently come on board can be grouped as Green or IOE. When either group is selected for the filter, crew with the Green or IOE profile for the filter date range will be listed in the filtered crew list.
Rank	A drop-down field that displays active ranks and / or rank groups
Equip Group	A drop-down field that displays the active aircraft or equipment types or groups that crew operate
Department	A drop-down field that displays active departments. It is an area within an airline or company that is tasked with providing particular services of a similar type. For example, Flight Operations (i.e. the manning and operating of aircraft), Maintenance (ensure the aircraft are able to operate safely), Ramp (the parking and coordination of aircraft resupply between flights).
Course	Provides a list of active courses. Multiple courses can be selected for the filter criteria.
Line Type	A drop-down field that displays active line types.
Operator	The Operator drop-down menu filters the grid to show information based on selected airline operators.
Pairing	A drop-down field that displays all pairings.

Pairing Type	A drop-down field that displays the kinds of pairings to be displayed. This looks at the pairing or duty on the day/s being searched. For example, if you select RES for 01 June, all RES duties on the 01 June will be displayed even if the pairing starts on 31 May.
Match Type on all dates	If selected, this will display only the crew with pairings that match the selected Pairing Type and on the selected dates.
Certification	Provides a list of certifications that crew can achieve. Certifications are qualifications taken on crew's own time. Examples of which are language speaking skills and medical. Certifications may or may not need to be renewed. Multiple certifications can be selected for the filter criteria.
Attribute	Provides a list of attributes or pre-defined characteristics of crew that can be used to require or restrict the number of crew in a flight or route. Multiple attributes can be selected for the filter criteria. For example, a crew member can have a Mandarin-speaking attribute. In a flight going to any city in China, at least one Mandarin-speaking crew is required. The attribute of the crew is used to determine if that requirement has been met.
Include out of base Employees	Displays all duties for pairings indicated in the <i>Pairing Type</i> field for the indicated date in any port.

Transaction Mode

Transaction Mode provides a playpen or "what if" capability in modifying rosters. If you don't like the changes you just made, you can simply cancel it and the roster will return to its original state.

To start Transaction Mode, go to the Tools menu and choose Transaction Mode.

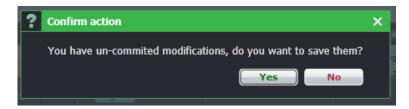
Once selected, you will notice a red bar across the application under the menu bar indicating that you are in transaction mode.



When you are finished, you can choose to Save it or Cancel these changes.

These three menu commands are related to each other:

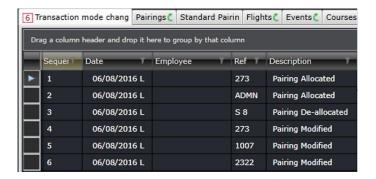
• **Immediate Save Mode** – this is the default option when using CrewFollow. If you select this while in transaction mode, you will be asked if you want to save or discard your changes before going back to Immediate Save Mode.



- Save/Commit Transaction commits the changes made and returns CrewFollow back to Immediate Save
 Mode
- Cancel Transaction discards any changes made and returns CrewFollow back to Immediate Save Mode.



While in transaction mode, the Activity Panel will display the *Transaction mode tab changes* as soon as one roster or pairing change is made.

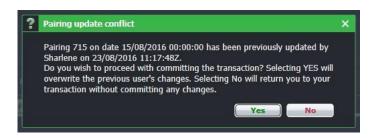


The tab contains the following columns:

Column	Description
Sequence	The order in which the change was made
Date	Date of the affected pairing
Employee	Name of the employee assigned to the pairing. If this is blank, it means multiple employees are affected or an unassigned pairing was changed
Ref	Pairing name. Clicking on the pairing name will load it in the Pairing Details Panel.
Description	Indicates if the pairing was allocated, de-allocated, modified or created, or when a flight complement is modified

The number of changes made is displayed on the left side of the tab. The Activity Panel filter will not affect the contents of this tab. Once transaction mode is committed or saved, the tab and its contents will disappear.

If an updated pairing in transaction mode was updated by another user or process before the current transaction was committed, a Pairing Update Conflict popup will be displayed. This allows the user to choose what to do with the updates.

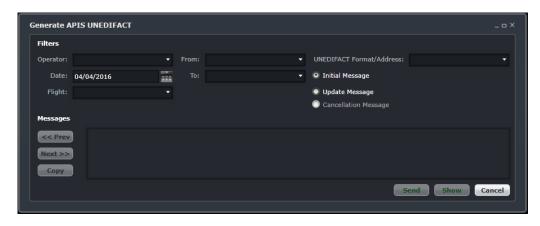


Selecting **Yes** will override the changes made by the other user or process. Selecting **No** will discard the current user's changes and the user must reload the pairing and apply the changes again.



Generate UNEDIFACT APIS

This form is used to manually send crew information via APIS messages to a country's border control authority.



To complete the APIS UNEDIFACT form are as follows:

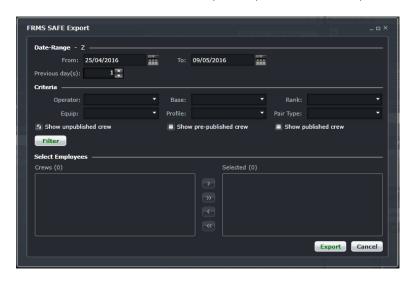
- 1. Select the Operator, Date and Flight number from the respective drop-down lists.
- 2. Select the From and To airports (departure and arrival, respectively) from the drop-down lists.
- 3. Enter the UNEDIFACT Format/Address
- 4. Select the radio button for Initial Message or Update Message, as it applies.
- 5. Click Send to send UNEDIFACT data or click Cancel to close the form without generating a message. Show displays message content in the message window. The message can be copied by clicking Copy, and then paste it on an email template.

The **Show** button displays the message content in the message window and the message can be copied by clicking **Copy**, and then paste it on an email template.



Export to FRMS

This option allows users to send roster information to a third-party fatigue risk management system (FRMS), where rosters can be analysed through fatigue management models instead of work-rest limits managed by rules. The only FRMS that can process merlot.aero data is FRMSc's SAFE. Select this option to proceed with the export.



To export crew rosters to an FRMS:

- Select the date range to be exported.
- Select the number of days prior to the period that needs to be included.
- Select the applicable criteria (Profile, Rank, Pair Type, Equip, Base). If these fields are blank, all crew will be included in the validation process.
- Select Show unpublished crew, Show pre-published crew or Show published crew as applicable.
- Click the **Filter** button.
 - The filtered crew information will display in the Select Employees section's Filtered Crew box.
- In the Crews box, select crew members by highlighting a name or group of names and move them to the Selected Crew section using the arrow buttons (>,>>).
- Click **Export** to submit the roster for validation, or **Cancel** to close the form without generating action.

Access to this form is controlled by user security option FRMSSAFEStandardExport. Before exporting data to SAFE, review the user preferences FRMSSAFEPairingTypes and FRMSDefaultPriorDays and the job configuration for FRMSSAFEExportJob.

Real-time validation with an FRMS is not yet covered at this time.

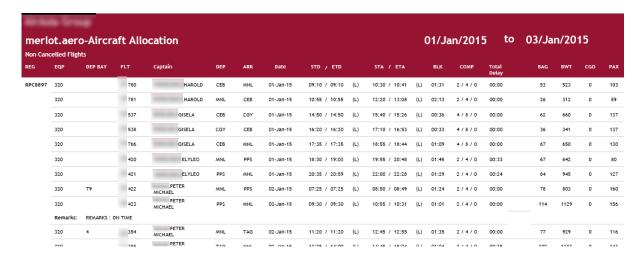


Reports

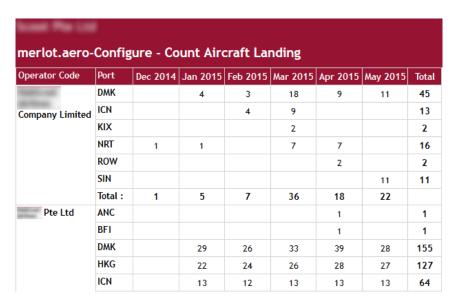
To view Reports within CrewFollow, select the Reports tab and choose a report from the menu.

Some of the reports are airline specific reports. Reports can be customized to meet specific customer requirements.

Aircraft Allocation Report



Aircraft Landing Count Report





China Custom Form Report

中华人民共和国海关

航空器机组人员出入境携带物品清单

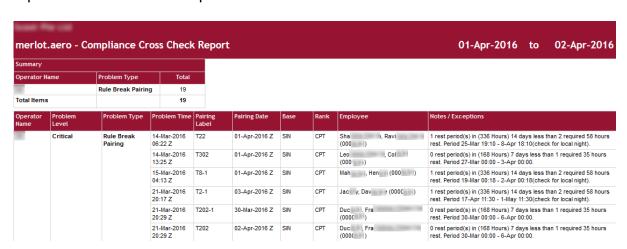
Crew list with their Personal Articles Currencies&Precious Metals

出境日期/Date of Departure:	17 Apr 2016	航班号/Flight No.: TZ	182 入境日期/0	Date of Arrival: 17 Apr 2	2016 航班号/Flig	ght No. :
姓名 NAME	职务 POSITION	携出物品 ARTICLES CARRIED IN	海美批注 CUSTOM'S APPROVAL	携入物品 ARTICLES CARRIED OUT	海 美批注 CUSTOM'S APPROVAL	备注 REMARKS
WEBER DANIEL	CPT	NIL		NIL		
CHUNG GRANGE TAI MING	FO	NIL		NIL		
WONG MENG FONG (WANG MINGFANG)	CIC	NIL		NIL		
TAY CHOR WEI (ZHENG	CL	NIL		NIL		

Colombo Customs Report

ලී ලංකා රජයේ රේගු දෙපාර්තමේන්තුව / SRILANKA CUSTOMS නළධාරීන්ට සහ නෞකා සේවකයන්ට අයත් පෞද්ගලික වස්තු Customs 11 LIST OF PRIVATE PROPERTY IN POSSESSION OF THE OFFICERS AND CREW _ සමාගම / LINE යාතුාවේ නම දින න් පිටත්ව ට පැමිණි දින ගමන Voyage මුතු, මැණික් සහ අංකය, නම සහ පදවිය උම්කොළ රාත්තල් සුරුට්ටු ගණන සිගරුට් ගණන මදපසාර ගැලලාම් ගිණි අච් විස්තර පතොරොම් වෙඩි තීරුබද ගෙවිය යනු අත්සන ව්රේශීය හා ශී් ලංකා මුදල් උණ්ඩ අදිය වෙනත් අනගි දැය වෙනත් ඔඩු No.,Name and Rank Gold Bullion Precious Stones & Other Dutiable & Gold Coins other Valuables Goods Currency

Compliance Cross Check Report



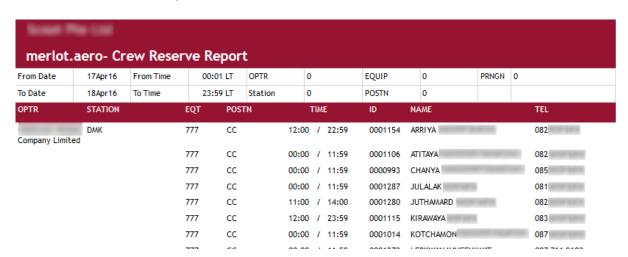
Crew Board Report



Crew Log Book Report



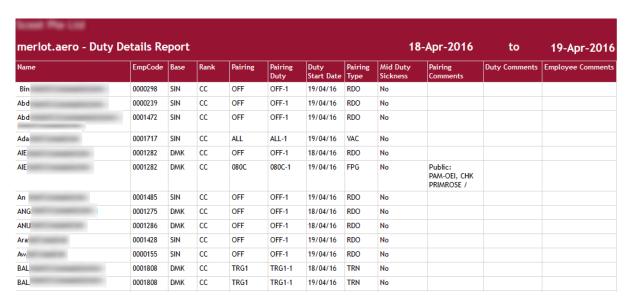
Crew Reserve Details Report



Document/Message Acknowledgment Report



Duty Details Report

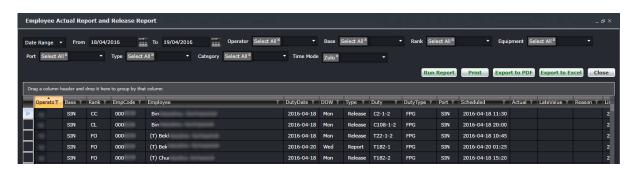


Embarkation Disembarkation Report

飞机入/出境登记表 EMBARKATION / DISEMBARKATION FORM

国籍 NAT'LTY	Singapo	ore	出入境时间 YYYY-M		年月日时分 YYYY-MM-DD HH:MM 2016-04-17 01:46		FROM SIN	至	TO TAO	机型 A / C		TYPE 787		
机号 FLIGHT NO	TZ186	;	种类 AC			机员人数 CREW		外 FRGN	共 TOTAL	乘客人数 PAX	Ф CHINESE	外 FRGN	共 TOTA	L
	任务 DUTY			姓名 NAME		国籍 NAT'LTY	性别 SEX	年齡 DOB		件号码 SS-NO.	号码 ID-NO.	签证 VISA	签证号码 NON-VISA	签发机 美 ISSUED
	CPT	CH.	AN	_			M	09-May-	A36	-				
	FO	VAI	N				M	04-Aug-	NWC					
	CIC	LIM	1				F	03-Sep-	A28	190000				
	CIC	1AT	N			F	17-Feb	E45	1980					
	CL	AN	G				F	06-Jun	E41					
	CL	HU	ANG			Taiwan	F	18-Sep	309					
	СС	AM	IANDA	-			F	17-Jan	A35	-				
Ş	СС	AN	G	-		Singapore	F	16-May	E47					
机 机 机 机	CC	ΑZ				Singapore	F	19-Sep	E37					
NAMES OF CREW	CC	BR	EANNI	CE			F	02-Jan	E53	100000				
REW	CC	BU	VA			Singapore	F	19-Oct	E48	-				

Employee Actual Report and Release Report





Employee Briefing Report



Employee DTA Details Report



Employee Group Roster Report





Employee Overnight by Port Report

iei lot.	.aei o-	Configure - Employee (overnight s	ctay by For		O I-Api	-2010 10	02-Apr-20	10		
perator	Rank	Name	DMK	HGH	ICN	KIX	MEL	NKG	NRT	00L	SYD
		Company Limited									
	CPT										
		Fer				1					
	FO										
		Bla							1		
		Lie				1					
		Total For FO:				2			1		

Employee Roster Report

merlo	ot.aero	Emp	oloyee R	loste	r Repo	rt							<u>Print</u>			
Name: Employ	ee Code:							Tai-Kun Chen 0004338					CPT SIN 1/May/20	017 to 31/Ma	y/2017	
Day	Date	Duty	Property	From	Report	То	Release	Scheduled Route I	Block	Flight Time	Duty T	ime	TAFB Time	Rest Time	Sector(s)/Event(s)	Allowances
Mon	29-May L	952-1		SIN	03:00 L	HKG	09:00 L	2:30		3:30	6:00		34:40	23:30	952 SIN 4:00 L DMK 5:30 L OP 953 DMK 6:30 L HKG 8:30 L OP - HKG <accom></accom>	
Commer	nt:	[Profil	e] CPT (T) C	hen Tao	(0003227) oper	ating flight	ts 952/953 is member	of LOV	V EXPERIENCE	TECH CR	W				
Tue	30-May L	952-2		HKG	08:30 L	SIN	13:40 L	3:40		3:40	5:10				954 HKG 9:30 L SIN 13:10 L OP	
Commer	nt:	[Profil	e] CPT (T) C	hen Tao	(0003227) oper	ating flight	ts 954 is member of LO	OW EXP	PERIENCE TECH	CREW					
Totals:									6:10	7:10	11	1:10	34:40			
19-Jun-	2017 13:24	(SIN)	- v1.0.0.542	250									powe	ered by www	v.merlot.aero	

Line type codes are displayed inside a parenthesis in the Employee Roster Report header.

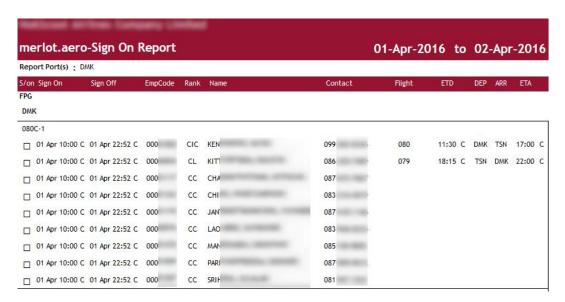
Line type codes are displayed inside a parenthesis in the Employee Roster Report header.

Active employee profiles are displayed last in the sequence of values for the report's *Comment* section and a line will be displayed separately for every active profile in a flight.

Additional note for PayCredit: Trip rig credit rules can be applied to the Pay Credit column. If the pairing pay credit value is higher than the sum of the duties' pay credit, the difference, referred to as X, will be used. If the pairing on the last day of the date range finishes on the last day, the whole pay credit value is used. Otherwise, if the last pairing ends outside of the date range, X will not be counted for the part of the pairing within and outside of the date range.

For example, the date range is 01-30 June and the pairing on June 30 ends on 01 July with rig pay credit of 4:00 and sum of duty pay credit is 2:30. The difference, or X, is 1:30 or 1.5. For the date range, X will not be considered since the latest duty (01 July) is outside of the date range. If the date range for processing is 01 June to 31 July, X will be considered. The total pairing pay credits will be displayed in the Pay Credit total column.

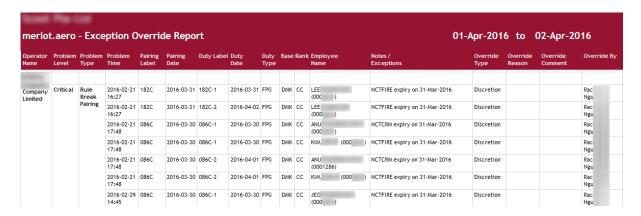
Employee Sign On Report



Equipment Currency Report

merlot.ae	ero - E	quipm	nent Curi	As at 06-Dec-2017 Z						
Operator Name	Base	Rank	Equipment	Crew	Nr of Flights in First Flight In Currency Currency	Second Flight In Currency	Last Flight In Currency	Expire	Next Planned Earliest Date on Equip	Next Planned Latest Date on Equip
	YYC	FO	DH4	(26432) (FO - DH4)	25 14-Nov-2017 Z	14-Nov-2017 Z	21-Nov-2017 Z	13-Jan-2018 Z (60)		
	YYC	FO	DH4	(26432) (FO - DH4)	25 14-Nov-2017 Z	14-Nov-2017 Z	21-Nov-2017 Z	13-Jan-2018 Z (60)		
	YYC	F0	DH4	(27216) (FO - DH4)	25 23-Nov-2017 Z	23-Nov-2017 Z	01-Dec-2017 Z	22-Jan-2018 Z (60)		
	YYC	FO	DH4	(27216) (FO - DH4)	25 23-Nov-2017 Z	23-Nov-2017 Z	01-Dec-2017 Z	22-Jan-2018 Z (60)		

Exception Override Report

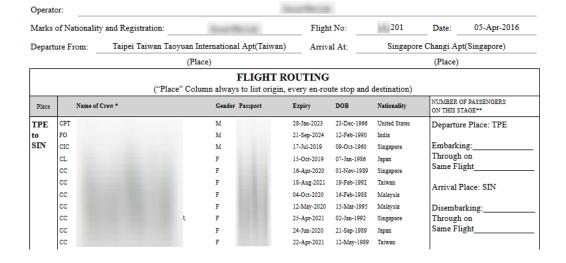


Expiries Report



General Declaration Report - ICAO

GENERAL DECLARATION (Outward/Inward)





merlot.aero's General Declaration Report follows the ICAO standard. However, some countries require different details that deviate from it. The filter criteria allow certain details like changing the designator and displaying the employee code and passport issue date.

For Taiwanese and Hong Kong passport holders entering China, a different document is required and its details must be included in the report. The document types needed are Mainland Travel Document (China) for Taiwan and Home Re-entry Permit (China) for Hong Kong. The applicable document must be entered for the employee. Also, all ports in China must have either documented selected in the Immigration tab of the port.

General Declaration Report - CBP

Owner or Operator AllegiantAir Marks of Nationality and Registration 220I Departure from Plattsburgh International A (Plat	irport(United States) Arrival at Charlotte County A	rate 01 April 2018 irport(United States) (Place)
PLACE	TOTAL NUMBER OF CREW	NUMBER OF PASSENGERS ON THIS STAGE (1)
PBG PGD Declaration of Health Persons on board known to be suffering from illn of accidents, as well as those cases of illness dis		Departure Place: Embarking
	ad to the spread of disease: tment (place, date, time, method) during the flight. If no e flight give details of most recent disinsecting:	

Ignored Exceptions Report



Indian Crew Baggage Declaration

CREW BAGGAGE DECLARATION (PRIVATE PROPERTY LIST)

Arrival	From BLR Flight No.	720	Date 01	/02/2015 De	eparted For		Flight No.		Date	
Compl	lete prior arrival								Complete or	n departure
Rank	Name of the crew member	Watches Clocks Type	Cigars Cigarette s Tobacco	Cameras Type make Cost	Personal Jewellery in use	Any other articals	Currency Foreign & Indian	Signature	Currency Foreign & Indian	Signed all items taken on departure
CPT	JAM!									
FO	ВНИ									
SFA	KIR									
FA	RID									
FA	TWI									
FA	SYE									



Indian Temporary Landing Permit Report

Spons	oring Airline	-India	Passpor	t No.	Secret Revise	Arrival Date	01/02/201	5 05:47	Depa	arture will	be from	
Place	Of Stay		Date Of	Issue	29/04/2010	No Of Crew men	nbers		From	Airport		
Capta	in Name	JAM	Place O	f Issue	Mumbai	Arrived On Flight	6		On F	light No.		
Natior	nility	India	Valid up	to	28/04/2020	Arrived From	BL	R	On D	ate		
Serial No.	Designation	Full Name as capitals as mentioned in Passport	Nationality	Passport N	o. Date Of Issue	Place of Issue	Valid upto	Crew Pa	ss No.	Signatu Crew me		Remarks
1	FO	ВНИ	India	Secretary and	20/06/2008	3 Ghaziabad	19/06/2018					
2	SFA	KIR	India	Sear Rent	24/05/2011	COCHIN	23/05/2021					
3	FA	RID	India	Search con	16/08/2013	GUWAHATI	15/08/2023					
4	FA	TWI	India	Search Co.	16/04/2010	JALANDHAR	15/04/2020					
5	FA	SYE	India									
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

undertake that the expenses ofstay of the crew will be borne by us and the crew will not be permitted to visit any restricted area. All crew members will be leaving as scheduled and original of this landing permit will be surrendered at the

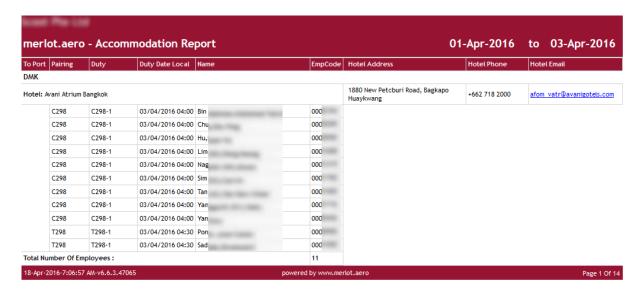
Japan Crew List Reports

To follow

Paxing Internal Report

Paxin	g Intern	al					01-#	Apr-2016	to	07-Apr	2016
Pairing	Duty	Duty Date Local	Duty Route	Employee	Flight/Event	Route	Pax Departure	Pax Arrival		Booking Status	Reference
C298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Yon	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	
C298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Tak	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	
C298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Ram	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	
298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Har	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	
298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Pua	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	
C298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Bin	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	
298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Yeo	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	
C298A	C298A-1	01-Apr-2016 05:30 L	SINKIX	Chn	298	SINDMK	01-Apr-2016 06:28 L	01-Apr-2016 07:48	L	No Booking	

Port Accommodation Report



Port Currency Report



Port Meal Event Report

To follow

Route Currency Report

To follow

Travel Allowance Report

neri	Ot.a	ero-1	ravel Al	lowai	ice	U	I-Mai	-201	0 10		17-A	pı -zı	UIC	0 -	- 0	
Flight	Detail	ls - All 7	Times in Lo	cal												
Pairing		Flight	Sector	ETD	ETA	ATD	ATA	Origi	nal Hou	ırs	Corre	ection s		AC Regular	AFL Number	Remarks
Date								PH			PH					
01/M	ar/16	127	CAN - SIN	05:55	10:00	06:27	10:28									
01/M	ar/16	128	SIN - CAN	01:25	04:55	01:31	05:25									
NO NO	nce De		NAM	ΙE		ALL	.OWANCE	PAYM	ENT			TOTAL			ſ	REMARKS
						TA			TA\$			TA				
1	000	Sali										C	0.00			
2	000	Shu										C	0.00			
3	0000	Yi-										(0.00			
		_									_		0.00			

Violation Report

nerlo	t.aero	o - Violation	Keport		01-/	Apr-201	16	to 04-Apr-2010
)ate	Time	Ignored By	Ignored Reason	Override By	Override Reason	Override Action	Problem Level	Notes
/04/16								
	00:04			Suresh		4	Critical	Flight 298- DMKKIX Cannot Be Operated By An Employee Belonging To LOWEXPCC : Shina
	00:04			Suresh		4	Critical	Flight 287- KIXKHH Cannot Be Operated By FOREIGNER CREW : Kanae
	00:04			Abdullah		4	Critical	Flight 185- TAOSIN Cannot Be Operated By FOREIGNER CREW : Akina
	00:04			Abdullah		4	Critical	Flight 188- SINTSN Cannot Be Operated By An Employee Belonging To LOWEXPCC : Eunice

Voyage Report

LOCAL	DATE:	01-Apr-2016	5			VOYAG	E REP	ORT				4		
ID	(NMC	USE ONLY)		Endorse	ement 🗆 🛭	Ferry 🗆 Ti	raining 🗆	Test FIt 🗆	Revenue [
		STAFF NO.					NAME					R	EPORT	
1		000	Ha	ıy									16:35	
2		000	G	D\$	-								16:35	
3		000	Ng),									16:05	
4		000	Ko	h									16:05	
5		000	Fo	0									16:05	
6		000	Ye	0									16:05	
7		000	W	u									16:05	
8		000	Ch	 18									16:05	
9		000	Bi	nt									16:05	
10		000	Lir										16:05	
11		000	Ad	la									16:05	
12														
13														
ALL TIN	IE IN UTC													
	FLT NO	REG	FROM	то	STD	STA	BLK	OFF CHK	TAXI	T/0	LDG	ON CHK	ACT BLK	PF
1	188	Marriagh.	SIN	TSN	17:35	23:30	05:55							
2														
3														

Voyage Report for Thai Smile - Journey Log

STAFF NO. RANK NAME DUTY DUTY 2 DUTY 3 DUTY 4 REPORT		DATE:	03-Feb-2	2018					URNEY I		u	72.04.01				ری	øthai VIE	
00244		(NMC U	SE ONLY)			Endorse	ement 🗆	Ferry 🗆	Training [Test Fit	Reven	ue 🗆						
2		STAFF	NO.	RANK			NAI	ME		DUTY 1	DUTY 2	DUTY:	3 DU	JTY 4		R	EPORT	
76070 AP KREEWONG, VACHIRAPORN 22:15 76486 CA KHAOKHAM, THANAPORN 22:15 76486 CA KHAOKHAM, THANAPORN 22:15 76719 CA THANASOTHORN, PANISA 22:15 76719 CA THANASOTHORN, PANISA 22:15 77	1	LOUIS PARTICIPATION								PIC								
76486	2		Zanataa taa taa la	atomic and	mental sistem	and the second of the second of the second	No. of the Control of		unia unia unia unia unia								April 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
76854 CA LEAWWILAIKUNLAWAT, SATITHORN 22:15	3												_					
Time Ca	10000	Lagrana											1					
	about the	Communication (communication)	diameter and the	see in Section in part of	ation must bold to	A STATE OF THE STA	and the state of the state of the state of	The same of the same of the same	ORN						TARRA NA CARA	*ATAAFSTAAFSTAATAS		
TIME IN UTC	3	7671	9	CA	TH	HANASOTHO	DRN, PANIS	A					_				22:15	
TIME IN UTC						****												
FLT NO REG													L					AAINE LAAINE
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This report is only available to Thai Smile.

Application Flow Diagram

Configure **AircraftSchedule** CrewBuild CrewPlan CrewRoster CrewFollow CrewMonitor CrewPortal, CrewMobile **AircraftFollow** AircraftPortal, **AircraftMobile** CrewPayroll **ExecutiveDashboard**

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.



CrewFollow Glossary

Term	Definition
AOC	Air Operator's Certificate Also referred to as Operator or Operator Code
	The AOC is the approval granted by a national aviation authority (NAA) to an aircraft operator to allow it to use aircraft for commercial purposes. This requires the operator to have personnel, assets and system in place to ensure the safety of its employees and the general public.
Base	The port to which crew members are expected to commence and finish their tasks / activities.
Block Hour	Also called block time, blocks or flight hours
	The time from the moment the aircraft door closes at departure of a flight until the moment the aircraft door opens at the arrival gate following its landing. Block hours are the industry standard measure of aircraft utilization (see above). Many airlines consider a block hour to be from the time the chocks are removed from the wheels of a departing aircraft, after doors have been closed, until the time the chocks are put in place at the wheels after arrival at the airport gate before the doors are opened.
Broken Pairing	A pairing that has any of the following characteristics: • does not return to its start location;
	 has events that conflict with the previous or next event's port; or has overlapping events within it.
	Note that there are other types of exceptions that indicate problem pairings, but these are broken in terms of structure rather than rule limits.
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.
Company Time	This refers to the time at which the pairing or event is occurring converted to the company's base or headquarters location
Course Instance	An occurrence of a course scheduled for a specific day, which is allocated to crew members' rosters.
Covered Pairing	A pairing that has all complements filled.
Covered Sector	A flight that has been assigned to a pairing.
Crew	A specific type of employee required for flight operations. This term is interchangeable with <i>employee</i> .
Crew Complement	The number and types of crew required for a pairing.
Crew Flow	The sequence of flights and events contained within a crew's duty. This may or may not be aligned to aircraft sequence.

Currency Requirements	Also called recency requirements Pilots need to meet certain currency requirements in order to remain legal to operate. These can include instrument currency, night currency, various approach currencies, etc.
Delay	Deviation between the scheduled time of departure/arrival and the actual time of departure/arrival
Department	The areas within an airline or company that are tasked with providing particular services of a similar type. For example, in an airline there are Flight Operations (i.e. the manning and operating of aircraft), Maintenance (ensure the aircraft were able to operate safely), and Ramp (the parking and coordination of aircraft resupply between flights).
Departure Time	The time the aircraft departs from the specified port. There are three sets of arrival times used in the system: • Scheduled time of departure (STD) - the original departure time • Estimated time of departure (ETD) - the expected time of departure. This can change depending on the performance of the previous flights. • Actual time of departure (ATD) - the exact time the aircraft stops
Disruptions	Operational events that occur on or around the day of operation that result in the need to modify pairings that could lead to breaching compliance rules. Disruptions can be manifested as a flight delay, diversion, return or cancellation. Some causes of disruption are air traffic, weather and technical problems.
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 crew members; and within Maintenance, the employees are generally referred to as engineers, mechanics, avionic technicians etc.
Equip Config	Each equipment type can have more than one configuration for seats and cargo. This will affect the assignment of flights to aircraft rego/tails.
Equipment Group	The grouping of a similar set of equipment types. For example, a 737 which could be comprised of 733 and 734 equipment types.
	This can also be used as a reference to indicate the equipment types that a crew member is legal to operate on as part of his rating.
Equipment Type	Also called aircraft type.
	Model of the aircraft. A specific type of aircraft that has distinct characteristics, for example a 733 or 734.
	This can also be used as a reference to indicate the equipment types that a crew member is legal to operate on as part of his rating.
Flight	Also called sector
	The transport taken from a departure point to an arrival point.

Flight Complement	The number and types of crew required to operate a flight.
Flight Pairing	A pairing that contains at least one operating flight.
Gantt	A Gantt chart, commonly used in project management shows you what has to be done in terms of activities, tasks and events and when in terms of scheduled dates and time.
GMT	Greenwich Mean Time Also called Zulu time
	The time at location at which the pairing or event is occurring converted to Greenwich Mean Time (GMT) value.
Ground Pairing	A pairing that contains only ground activities. No operating or deadheading flights are included.
Local Time	The time at the 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.
Open Pairing	A pairing that has at least one complement still requiring a crew member to be assigned.
Open Sector	Also called unpaired flight
	A flight that has not been assigned to a pairing.
Open Time Drop	A type of trade where a crew member is able to "drop" a pairing from his roster into a list of open pairings and replace that pairing with a day off
Open Time Pickup	An under-complemented pairing that a crew member is able to "pick up" (exchange for a day off or reserve) or swap with (exchange for another operating pairing)
Paired Flight	A flight that has been added or assigned to a pairing.
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.
Pairing Complement	The required number of employees of each rank that are needed to fully operate that pairing.
Port	An airport or station
Port Currency	Also called port recency

	Some ports are categorized to have a more difficult method of landing and takeoff. For these ports, pilots are required to operate to and from the port more frequently, thus they need to be current for the port. In some cases, they need to land and takeoff once every 90 days.
Problem	Non-rule based exceptions generated by the Problem Detection Engine (PDE), such as incorrect report/release times, illogical flight/pairing data, and crew complement issues.
Puck	The graphical representation of a flight or pairing in a Gantt chart.
Rank	The core qualification that an employee holds which defines the level/type of tasks and activities they can perform. For example Captain, First Officer, Flight Attendant.
Rating (or Type Rating)	Defines the combination of equipment and position that personnel can legally operate. In merlot, the characteristics that define a rating are: Rank, and Equipment Group.
RDO	Rostered Day Off
	A day in a roster period that an employee doesn't have to work. An employee's day off can be paid or unpaid, depending on how RDOs are set out in an award or registered agreement.
Roster	A roster is simply a defined period of time within which the crew member's work and non-work assignments are defined.
Roster Period	The date range in which a set of work and other activities is to be performed
Route	A course between two ports, for example BNE-SYD
Route Currency	Also called route recency
	Some routes are categorized to have a more difficult operation. For these ports, pilots are required to operate the route more frequently, thus they need to be current for the port. In some cases, they need to operate the route once every 90 days.
System	The merlot.aero software application.
User	A person who has access to view and/or modify data in the system
Violation	Any breach of a configured rule that has been generated by the merlot <i>RulesEngine</i> . Rules are generally configured to enforce published regulatory requirements from government agencies and other company rules as defined in the airline's operations manual.
Violation Behavior	 This determines what can be done to a violation once it is flagged. This works in conjunction with violation severity. Inviolate - does not allow the assignment to push through no matter what Override - if the user has the appropriate security rights, he can override the violation Override Disrupt - if the user has the appropriate security rights, he can override the violation only if the flight is in disrupt Track - the user can proceed with the roster changes but the violation is retained for tracking purposes. The violation will not have a pop up, but will be visible in the Violation Panel. Ignore - the violations are retained in the Violation Panel

Violation	This determines how a violation should be overridden
Override	 Management - the credentials of a management-level user must supply his credentials when overriding the violation
	 Supervisor - a supervisor must supply his credentials when overriding the violation Extension - a user with override rights must supply his credentials when overriding the violation which consequentially allows an extension to the flight hours, duty hours and/or flight duty period Discretion - signifies that the violation will be overridden based on the captain's discretion
Violation Severity	This determines how a violation is presented • Critical - the violation must be addressed. Otherwise, the crew is illegal to fly
Seventy	Ignorable - the violation can be addressed later and will not prevent the crew from reporting for a duty
	 Informational - the rule breach is for informational purposes only
	 Passed - the rule is not breached and nothing has to be done

Notes