



AircraftSchedule User Manual

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merlot.aero
smart airline solutions | future ready technology

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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

Crew applications include:

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

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.

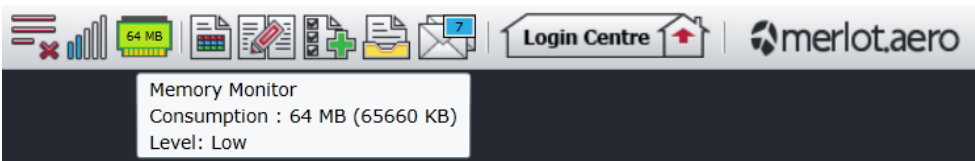


Memory utilization is displayed in three different levels:

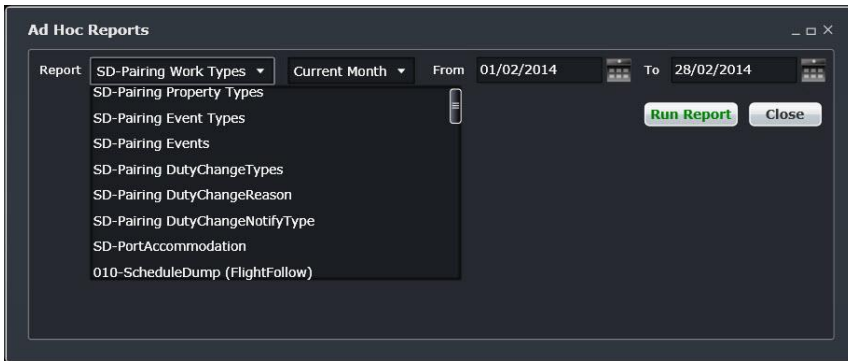
Icon	Level	Range
	Low (Green)	0MB-700MB
	Moderate (Yellow)	701MB - 1000MB
	High (Red)	1001MB and above

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

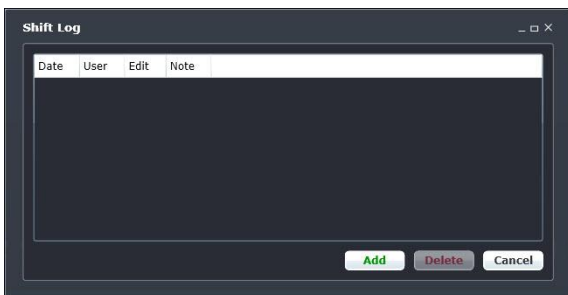
- Icon label - Memory Monitor
- Memory consumption in MB with KB conversion e.g. 64 MB (65660 KB)
- Level of memory consumption e.g. Low



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 dropdown menu.



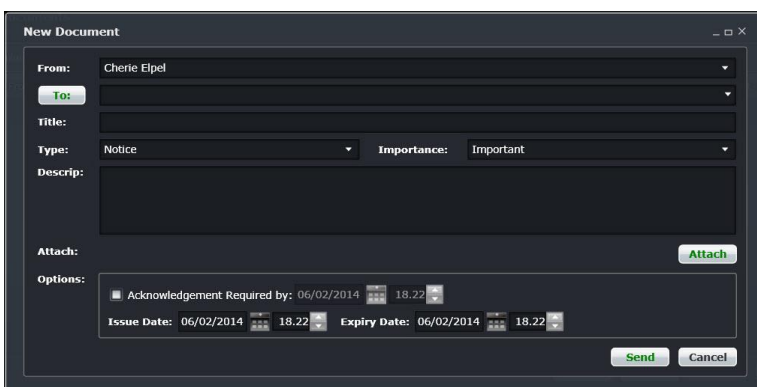
This icon is the Shift Log. You can add notes to the Shift Log for any system user to view.



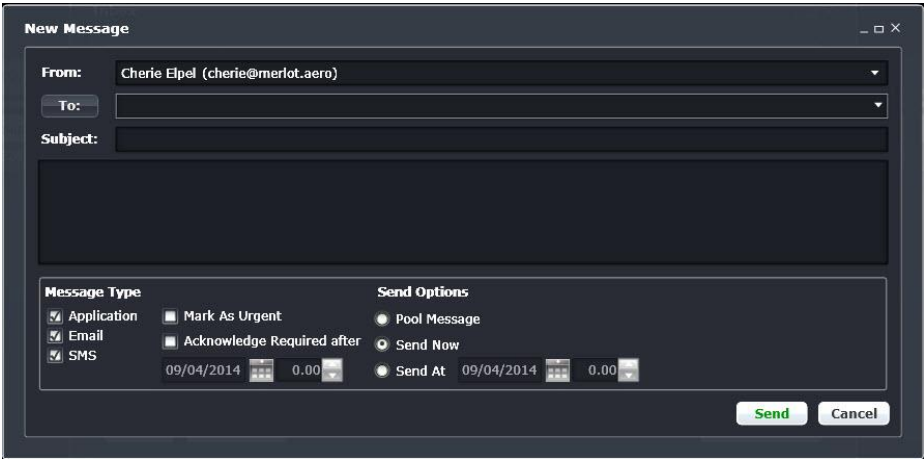
This icon is to Add Task. Set a daily or one time reminder for everyday activities (i.e.: Accommodation Check).



This icon is to send documents. Send a document to a crew member or to a fellow merlot.aero user.



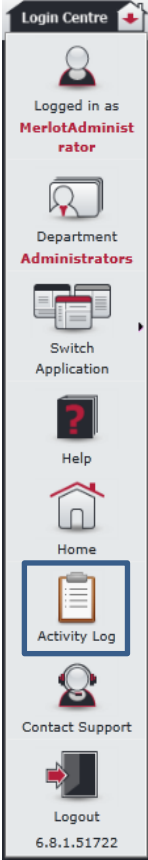
This is the mail icon. Send messages to crew or co-workers via SMS, email or directly within the merlot.aero suite.



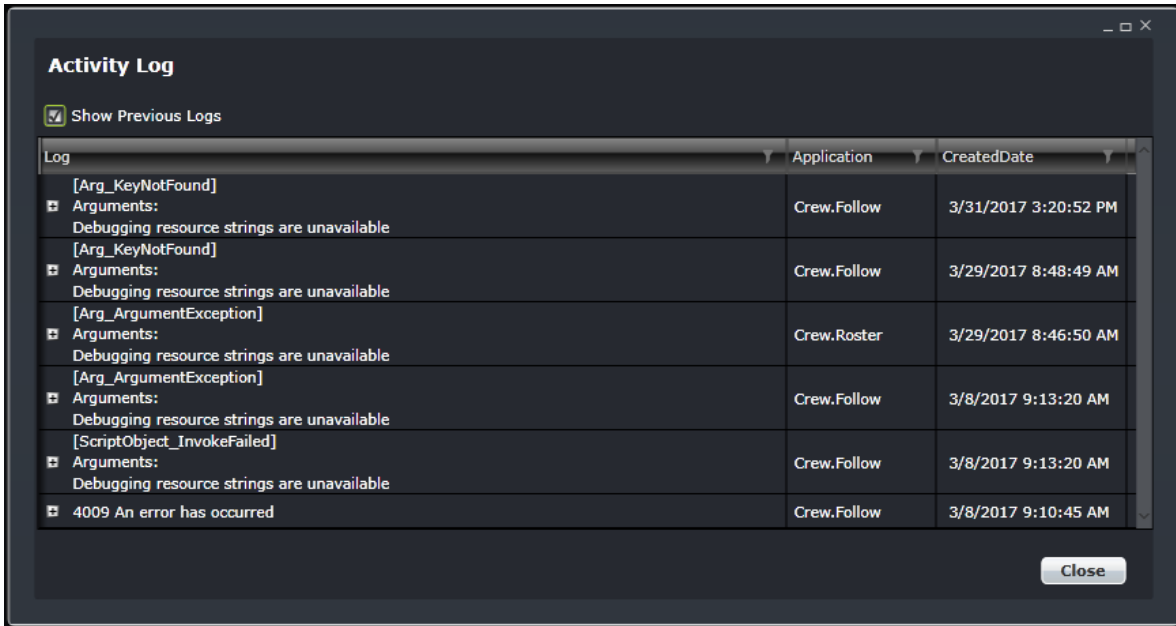
This icon allows you to navigate through the entire merlot.aero suite.



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*.

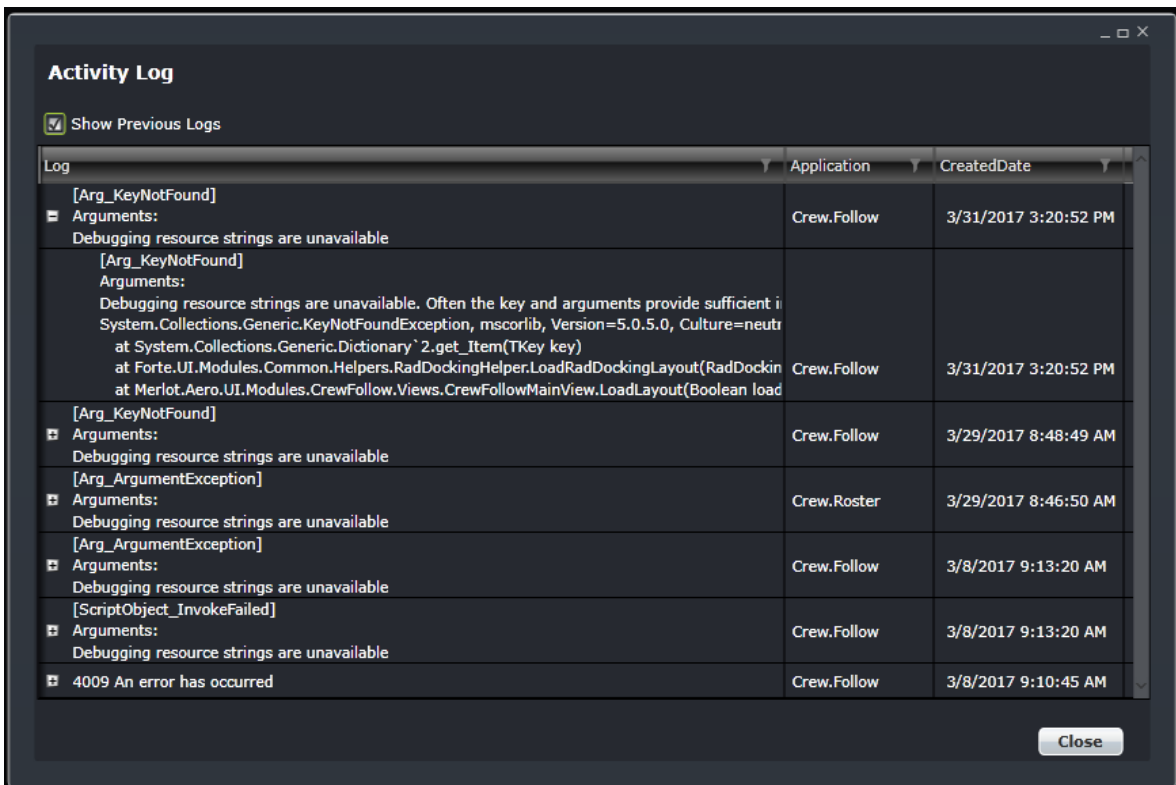


Example of a collapsed Activity Log form:



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:



What is AircraftSchedule?

AircraftSchedule is part of the merlot suite of planning applications. AircraftSchedule improves the development of flight schedules, meeting the needs of airlines for increased efficiency in scheduling while ensuring operational integrity. The application includes a maintenance planning capability.

In AircraftSchedule, system users either import a Standard Schedules Information Manual (SSIM) or create a new schedule. Once all the flights are in the schedule, the schedule is marked active and is ready for next stage development of pairings in CrewBuild.

AircraftSchedule Audience

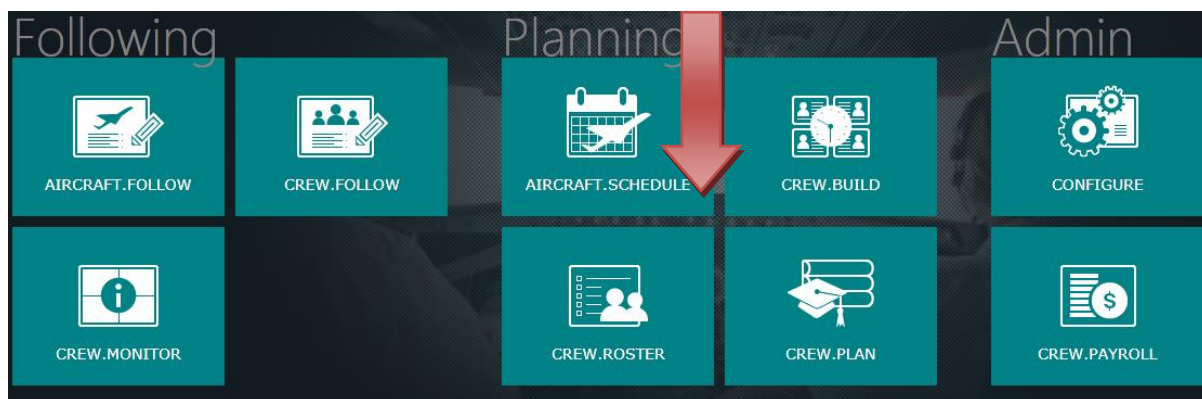
AircraftSchedule system users are airline employees who work as flight schedulers and flight planners at scheduled airlines. AircraftSchedule users are actively involved in the process of schedule planning; either creating and/or importing flight schedules for a specified time period.

AircraftSchedule Prerequisites

Prior to undertaking tasks in AircraftSchedule, it is first necessary to define the route structure in the Configure application. In addition, Configure is where equipment types, equipment registration and turnaround times are defined as well as ports and on time performance (OTP) parameters. See the Configure User Manual for more information.

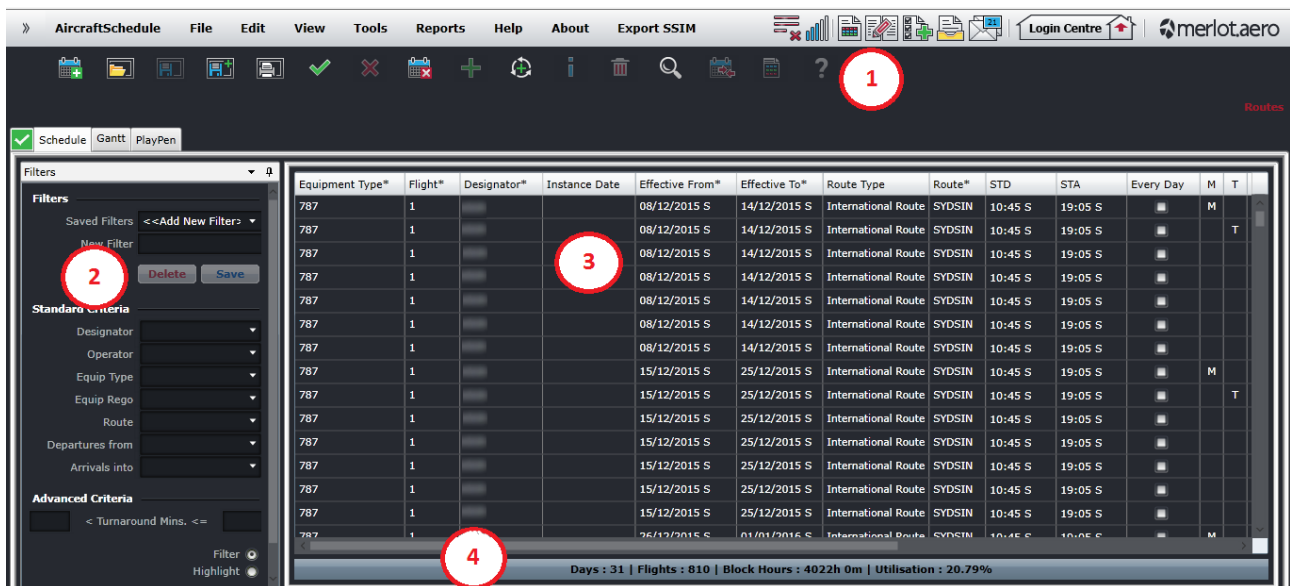
Logging into AircraftSchedule

With your merlot.aero credentials simply log in and select AircraftSchedule.



The Graphical User Interface (GUI)

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



The following features of the GUI are available only after a schedule has been created:

- 1. Tool Bar:** Contains application icons that give you access to commonly used AircraftSchedule functions.
- 2. Filters Panel:** Sets the criteria to find flight instances from within the flight schedule in the Schedule Display Panel.
- 3. Schedule Display Panel:** Display the schedule where you can view, add and edit flight instance schedules, either in grid or Gantt view, and tests schedule alternatives in the PlayPen with an option to save the changes.
- 4. Application Footer:** A non-interactive bar at the bottom of the Schedule Display Panel which contains information relating to open schedule data in the Schedule Display Panel.

Scheduling Functions

This section provides users with an overview of merlot.aero application panel functionality in order to perform AircraftSchedule tasks detailed later in this manual. The panels that are displayed include the Filters Panel and the Schedule Display Panel as well as AircraftSchedule toolbar.

AircraftSchedule Toolbar



The AircraftSchedule toolbar is located immediately below the menu bar. The toolbar allows you to access commonly used functions. Details each icon are listed below.

Icon	Used for	Icon	Used for
	Create New Schedule		Add Flight
	Open Schedule		Add Cycle
	Save Schedule		Flight Information
	Save Schedule As		Delete Flight
	Print Schedule		Find
	Mark as Active Schedule		Schedule Conflict
	Delete Schedule		Reports – Application specific A future development feature in AircraftSchedule.
	Close Schedule		Help - Same as the help resource in Login Centre A future development feature in AircraftSchedule.

The application toolbar quickly facilitates task completion in AircraftSchedule. Some of the same functionality is also available in the menu bar (such as File, Edit and View), giving users the flexibility to access features based on user preference.

Filter Panel

The purpose of the Filter Panel is to enable users to find flight instances in the schedule by searching for flight schedule components such as ports, equipment, routes and operators, and display these instances in the Schedule Display Panel.

The Filter for the Schedule Display Panel is grouped into the following subsections:

- Filter Management
- Standard Criteria
- Advanced Criteria
- View the Data

Filter Management

Filter Management is used to manage new and existing filters. You can choose an existing filter, save a new filter criteria, or delete an existing filter.

- Saved Filters List: Selects an existing filter criteria.
- New Filter Textbox: Accepts the name of the new filter criteria.
- Save Button: Saves the new filter criteria.
- Delete Button: Deletes the selected filter in Saved Filters menu. A confirmation is required before the filter is deleted.

Standard Criteria

The Standard Criteria filter section is used to determine the data to be displayed in the Schedule Display Panel. The section is composed of the following options:

- Designator List: Displays airline designator codes. If a carrier has more than one airline in their group, the menu shows all active airline codes.
- Operator List: Displays airline operator codes. If a carrier has more than one airline operator certificate, the menu shows all active operator codes.

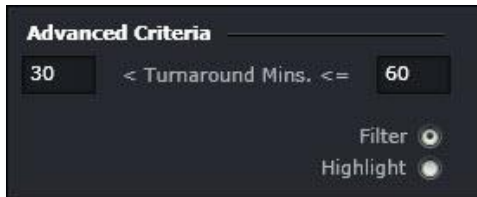
Note: Designator and operator codes and ports can display either IATA or ICAO codes. By default, IATA codes are used. If your company requires using the ICAO codes, please contact Customer Support.

- Equip Type List: Displays the active aircraft type(s).
- Equip Rego List: Displays the active aircraft registration(s) or tail numbers.
- Route List: Displays the airline's active routes.
- Departures from List: Displays departure ports.
- Arrivals into List: Displays arrival ports.
- Reset Button: Clears and restores the filter options to default.
- View Button: Displays filter data based on the filter options in the Schedule Display Panel. This enables the user to make multiple modifications to filter criteria and then have them applied to displayed data at the same time.

NOTE: Leaving a field blank in any filter panel includes all options for that field.

Advanced Criteria

The Advanced Criteria section contains the following options:



Advanced Criteria

30 < Turnaround Mins. <= 60

Filter

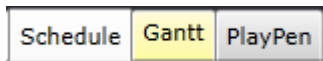
Highlight

- Turnaround minutes: The turnaround times (TAT). To filter a TAT, enter the time values in minutes.
- Filter: Selecting this option will display only the flights that adhere to the filter criteria above. All other flights will not be displayed.
- Highlight: Visibly highlights flight instances in the Schedule Display Panel based on user selected criteria

Schedule Display Panel

The Schedule Display Panel displays flight schedules. The Schedule Display Panel enables airline schedulers and flight planners to create and edit flight schedules.

Schedule Display Panel Tabs



Schedule Gantt PlayPen

The Schedule Display Panel consists of three views:

- Schedule: Displays flights in a tabular layout.
- Gantt: Displays the flights in a Gantt chart.
- PlayPen: This mode is used to draft flight schedule changes before saving them. This will be developed in the future.

Schedule View

Equipment Type*	Flight*	Designator*	Instance Date	Effective From*	Effective To*	Route Type	Route*	STD	STA	Every Day
320	182			02/07/2016 L	01/08/2016 L	International Route	HKGRMQ	07:55 L	09:35 L	<input type="checkbox"/>
320	182			02/07/2016 L	01/08/2016 L	International Route	HKGRMQ	07:55 L	09:35 L	<input type="checkbox"/>
320	182			01/07/2016 L	31/07/2016 L	International Route	HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>
320	182			01/07/2016 L	31/07/2016 L	International Route	HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>
320	182			01/07/2016 L	31/07/2016 L	International Route	HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>
320	182			01/07/2016 L	31/07/2016 L	International Route	HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>
320	182			01/07/2016 L	31/07/2016 L	International Route	HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>
320	183			01/07/2016 L	31/07/2016 L	International Route	RMQHKG	10:45 L	12:20 L	<input type="checkbox"/>

Days : 31 | Flights : 1504 | Block Hours : 4915h 55m | Utilisation : 1.81%




Route*	STD	STA	Every Day	M	T	W	T	F	S	S	Onward flight	Cycle number	Turn Arou
Route HKGRMQ	07:55 L	09:35 L	<input type="checkbox"/>							S		94	<input type="checkbox"/> <input type="checkbox"/>
Route HKGRMQ	07:55 L	09:35 L	<input type="checkbox"/>					T				286	<input type="checkbox"/> <input type="checkbox"/>
Route HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>				W					244	<input type="checkbox"/> <input type="checkbox"/>
Route HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>	M								148	<input type="checkbox"/> <input type="checkbox"/>
Route HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>		T							197	<input type="checkbox"/> <input type="checkbox"/>
Route HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>					F				8	<input type="checkbox"/> <input type="checkbox"/>
Route HKGRMQ	11:20 L	12:55 L	<input type="checkbox"/>						S			51	<input type="checkbox"/> <input type="checkbox"/>
Route RMQHKG	10:45 L	12:20 L	<input type="checkbox"/>				T					293	<input type="checkbox"/> <input type="checkbox"/>

Days : 31 | Flights : 1504 | Block Hours : 4915h 55m | Utilisation : 1.81%

The Schedule view displays flight instances within the flight schedule and facilitates the efficient creation and modification of flight instances. Each row in the table represents one flight and its instances within the schedule period.

The following are the columns in the Schedule Display Panel:

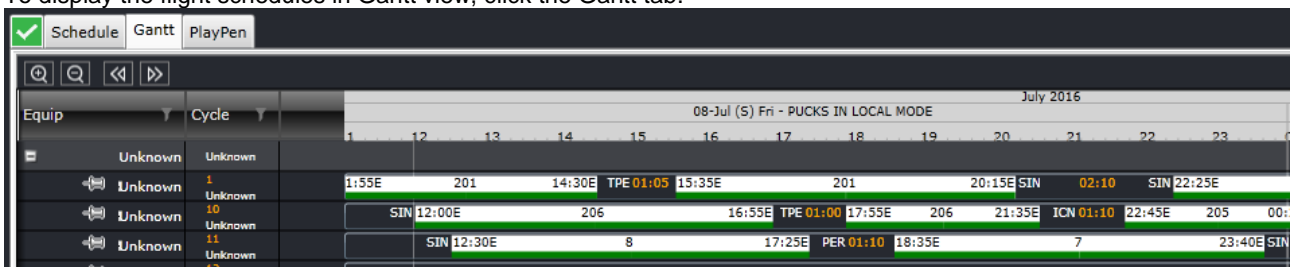
Column	Description
<i>Equipment Type</i>	Aircraft model
<i>Flight</i>	Flight number
<i>Designator</i>	Airline designator
<i>Instance Date</i>	Date of flight, if only one instance is required in the period
<i>Effective From</i>	First date of scheduled flight instance, if recurring within the period
<i>Effective To</i>	Last date of scheduled flight instance, if recurring within the period
<i>Route Type</i>	Defined route type such as Domestic, International or Charter
<i>Route</i>	A course between two ports

Column	Description
STD	Scheduled time of departure (STD)
STA	Scheduled time of arrival (STA)
Every Day	When the checkbox is selected, the flights operate every day of the week.
MTWTFSS	Days of the week Monday – Sunday Individual days of the week are selected by pressing the check box in the designated day of the week column. This indicates the days during the period when the flights are recurred.
Onward Flight	Next flight in the flight sequence
Cycle Number	The cycle number represents a complete line of flights for one aircraft within the schedule period
Turn Around	Turnaround time between arriving flight and departing flight. This is automatically filled out if the flight has an onward flight.
View Flight Information icon	View Flight Information. Displays more details on the selected flight. 
Add Cycle icon	Add Cycle. Adds a row for a new cycle or line of flight. 
Add Flight to Cycle icon	Add Flight to Cycle. Adds a row for a succeeding flight. 

Note: The column order can be reorganized according to your preference. Simply drag the columns to your preferred position in the tab.

Gantt View

To display the flight schedules in Gantt view, click the Gantt tab.



The Gantt view presents flights graphically in a Gantt or bar chart format. Flights are displayed as rectangular objects, or pucks, which are aligned along a horizontal axis called the Cycle Line. To view the flight schedules in detail, hold the **Ctrl**

key and drag the timeline header either to the left or to the right. You can also use the icons below the header to zoom in or zoom out, or to move through the times/dates displayed in the Gantt view.

Flight Data Elements



Note: Start reading from left to right.

Data Element	Description
<i>Departure Port</i>	The departure port of the sector (for example: PER).
<i>Turnaround time</i>	Amount of time on ground between two flights (for example: 01:10)
<i>Departure Time</i>	Scheduled time of departure (STD)
<i>Flight Designator/Flight Number</i>	The operating airline designator followed by the flight number (for example: TZ 7). The designator can be configured to be displayed or not.
<i>Arrival Time</i>	Scheduled time of arrival (STA)
<i>Arrival Port</i>	Arrival port of the sector (for example: YPA).

Routes

To access routes, click on the red Routes link under the Application Icon tool bar in the Schedule Display Panel. This comes in handy when flights for a new route will be scheduled but the route has not been created yet in Configure.

From the Route form, users can find routes as well as add and delete them.

Route

Route: Route Type: Charter

A B C D E F G H I J K **L** M N O P Q R S T U V W X Y Z ALL

Show Active

	Route	Departure Port	Arrival Port	Route Type	Primary	Active
<input checked="" type="checkbox"/>	LAXTUS	Los Angeles International Airport	Tucson International Airport	Charter	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	LBBMAF	Lubbock Preston Smith International Airport	Midland International Airport	Charter	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	LSEGRB	La Crosse Municipal Airport	Austin Straubel International Airport	Charter	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	LSESRST	La Crosse Municipal Airport	Rochester International Airport	Charter	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Users must have security rights to add and delete routes in the system.

Find Route

To locate a route using the Route form:

1. Enter the Route name and select Route Type from the dropdown field.
2. Select the Show Active check box to display active routes

View the corresponding routes from the designated departure port (i.e., airport) in the grid as shown above.

Alternatively, select a letter corresponding with the name of the departure port from the alphabet (A-Z), or select All and view the corresponding routes in the grid.

Click **Cancel** to close the form.

Add Route

To add a route using the Route form:

1. Click on the **Add** button at the bottom of the Route form

A new row is inserted in the grid, as shown in the example above.

2. Enter the following fields:

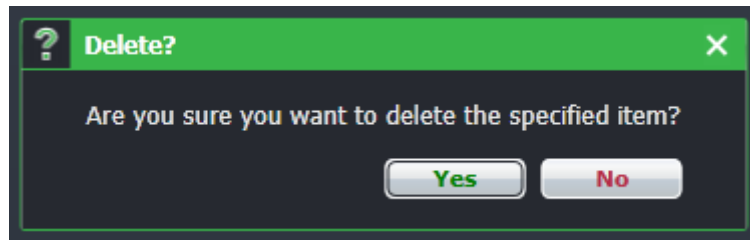
Field	Description
<i>Route</i>	Enter the departure and arrival codes as one word, for example ATLLAX
<i>Departure Port</i>	The departure port will automatically populate with the name of the airport
<i>Arrival Port</i>	The arrival port will automatically populate with the name of the airport
<i>Route Type</i>	Select a defined route type i.e. domestic, international or charter from the dropdown field
<i>Primary</i>	Primary checkbox, leave as unchecked

Active	Select the Active check box, if this is an active route
--------	---

3. Click the **Save** button to save the route or the **Cancel** button to close the form without generating action

Delete Route

To delete a route, locate the route for deletion. Click on the row for deletion and click on the **Delete** button.



A delete dialog box will ask you to confirm the deletion. Click on the **Yes** button to delete or the **No** button to close the dialog box without generating action.

Flight Display Panel Application Footer

The Application Footer is a fixed, non-interactive bar at the bottom of the Schedule Display Panel which contains information relating to the data open in the Schedule Display Panel, including number of flights in the schedule and flight frequency information, block hours and utilization statistics.

Days : 31 | Flights : 810 | Block Hours : 4022h 0m | Utilisation : 20.79%

The Application Footer fields are as follows:

Field	Description
<i>Days</i>	Number of days in the schedule period
<i>Flights</i>	Number of flights operating during the defined schedule period
<i>Block Hours</i>	A measure of the total flight hours for the given schedule period
<i>Utilization</i>	A measure of aircraft productivity calculated by dividing block hours by number of aircraft assigned to service.

Flight Information



The Flight Information window is a pop-up window that gives users access to flight details from the Schedule Display Panel. In this window, users can add, delete and edit flight information.

The screenshot shows the 'Flight Information' window with the following fields and options:

- Equipment Type*: B787-900
- Client: [Dropdown]
- Service Type: [Dropdown]
- Effective From*: 07/12/2015
- Route Type: International Route
- STA [L]: 01:35
- Departure Gate: 0
- Rule Classification: International
- Operating RuleSet: [Dropdown]
- Arrival Gate: 0
- Flight*: 2
- Onward Flight: 1
- Seat Config: [Dropdown]
- Effective To*: 06/01/2016
- Route*: SINSYD
- FrequencyTime: 0
- Departure Terminal: [Dropdown]
- Days of Week*: [M T W T F S S] with checkboxes for T, F, S
- Designator*: [Dropdown]
- Instance Date: dd/MM/yyyy
- Non Revenue: [Checkbox]
- Information Only: [Checkbox]
- STD [L]: 17:45
- Cycle No: 1
- Arrival Terminal: [Dropdown]

Buttons at the bottom include: Prev Flight in Sequence, Prev Instance of Flight, Next Flight in Sequence, Next Instance of Flight, Port Requirement, Route Requirement, Save, and Cancel.

The Flight Information Window (FIW) can be accessed as follows:

- Double click a sector or flight leg in the Flight Gantt
- Select a flight in the grid, click on the **Flight Information** icon  in the Application Tool Bar
- Click on the **View Flight Information** icon  in the Schedule Display Panel – Schedule View
- Click **Flight Information** from the Edit menu tab

Flight Information Links

[Schedule Leg Complement Delta](#) | [Schedule Leg Flag](#) | [Schedule Leg Known As](#) | [Schedule Leg Comment](#)

There are a number of links available at the top of the FIW. All of these links provide useful information about the flight and access to editable data fields. The links and link descriptions from left to right are described below.

Schedule Leg Complement Delta

The Schedule Leg Complement Delta form allows the user to add and delete the required crew complement for the flight. This adjusts the required number of crew if it deviates from the default requirement like in long haul flights.

Effective From*	Effective To*	Days of Week							Equipment Rank Complement	Complement	Is Delta	Complement Delta
		M	T	W	T	F	S	S				
07/12/2015	06/01/2016	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	B787-900 - Cabin Crew	7	<input type="checkbox"/>	1

The field descriptions are as follows:

Field	Description
<i>Effective From</i>	The Effective From date is the date the schedule starts. This information is prepopulated from the Schedule Display Panel, when a new row is added
<i>Effective To</i>	The Effective To date is the date the schedule ends. This information is prepopulated from the Schedule Display Panel, when a new row is added
<i>Days of Week</i>	The days of the week the flight operates, if in a recurrence. This information is prepopulated from the Schedule Display Panel, when a new row is added
<i>Equipment Rank Complement</i>	The list of ranks associated with the equipment type of the flight.
<i>Complement</i>	Displays the default flight crew complement for the selected equipment rank complement
<i>Is Delta</i>	Select the Is Delta check box to make a change in the complement default number.
<i>Complement Delta</i>	Enter the value of the complement change, either a positive or negative number to reflect the change in the number of crew required for the flight. The outcome of the above example is one additional cabin crew.

To complete the Schedule Leg Complement Delta form:

1. Click the **Add** button to add a new row.
The Effective From/To dates and Days of the Week are automatically added based on the flight schedule.
2. Select a rank from the dropdown Equipment Rank Complement menu
In the Complement field, the default number of crew will display.
3. If changes to the complement are required, select the check box in the Is Delta column.
4. Indicate the required number change in the Delta Complement field by using the up/down arrows.
5. Click the **Save** button.

To delete information in the Schedule Leg Complement Delta form, select a row with complement data and click the **Delete** button. Click the **Yes** button to confirm the deletion and the row is removed from the form.

Schedule Leg Flag

The Schedule Leg Flag form allows users to add an informational flag against a flight. For instance, a flight may be flagged as a training flight. These flags will be displayed in AircraftFollow and AircraftPortal.

Effective From*	Effective To*	Days of Week							Flag	Comment
		M	T	W	T	F	S	S		
07/12/2015	06/01/2016	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	ETOPS

To complete the Schedule Leg Flag form:

1. Click the **Add** button to add a new row.
The Effective From/To dates and Days of the Week are automatically added based on the flight schedule.
2. Select the number of flags from the Flag column, using the up/down arrows.
3. Add applicable comments in the Comment field.
4. Click the **Save** button, followed by the Cancel button to return to the Flight Information window.

To delete information in the Schedule Leg Flag form, select a row with existing flag data and click the **Delete** button. Click the **Yes** button to confirm the deletion and the row is removed from the form.

Schedule Leg Known As

The Schedule Leg Known As form allows the users to create another reference to the flight. This form is often used for codeshare flights.

Effective From*	Effective To*	Days of Week							Flight Reference*
		M	T	W	T	F	S	S	
07/12/2015	06/01/2016	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SQ454

To complete the Schedule Leg Known As form:

1. Click the **Add** button to add a new row.
The Effective From/To dates and Days of the Week are automatically added based on schedule dates.
2. Enter flight reference information in the Flight Reference column, such as training flight for crew or codeshare flight.

3. Click the **Save** button.

To delete information in the Schedule Known As form, select a row with existing flag data and click the **Delete** button. Click the **Yes** button to confirm the deletion and the row is removed from the form.

Schedule Leg Comment

The Schedule Leg Comment form allows users to add and delete comments from the scheduled leg.

Effective From*	Effective To*	Days of Week							Comments
		M	T	W	T	F	S	S	
07/12/2015	06/01/2016	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Place comment here

Add **Delete** **Save** **Cancel**

To complete the Schedule Leg Comment form:

1. Click the **Add** button to add a new row.
The Effective From/To dates and Days of the Week are automatically added based on the schedule dates.
2. Enter flight comment information in the Comments column, such as flight requested by civil authority.
3. Click the **Save** button, followed by the Cancel button to return to the Flight Information window

To delete information in the Schedule Leg Comment form, select a row with existing flag data and click the **Delete** button. Click the **Yes** button to confirm the deletion and the row is removed from the form.

Flight information – Main View

The Flight Information window (FIW) is a pop-up window that gives users access to all information related to a flight. Users can also edit flight information from this window. Required fields are marked with an asterisk. The presence of a down arrow in a field indicates there is a dropdown menu with options for the user to choose from. The up/down arrows in a field enable users to edit numerical values.

The screenshot shows the 'Flight Information' window with the following fields and values:

- Equipment Type*: B787-900
- Flight*: 2
- Designator*: [Dropdown]
- Client: [Dropdown]
- Onward Flight: 1
- Instance Date: dd/MM/yyyy
- Service Type: [Dropdown]
- Seat Config: [Dropdown]
- Non Revenue: [Checkbox]
- Effective From*: 07/12/2015
- Effective To*: 06/01/2016
- Information Only: [Checkbox]
- Route Type: International Route
- Route*: SINSYD
- STD [L]: 17:45
- STA [L]: 01:35
- FrequencyTime: 0
- Cycle No: 1
- Departure Gate: 0
- Departure Terminal: [Dropdown]
- Arrival Terminal: [Dropdown]
- Rule Classification: International
- Days of Week*: [MTWTFSS grid]
- Operating RuleSet: [Dropdown]
- Arrival Gate: 0

Buttons at the bottom: Prev Flight in Sequence, Prev Instance of Flight, Next Flight in Sequence, Next Instance of Flight, Port Requirement, Route Requirement, Save, Cancel.

The main area of the FIW displays the following flight specific information (left to right):

Field	Description
Equipment Type	Aircraft model
Flight	Flight number
Designator	Airline designator
Client	Reference to client name, if applicable
Onward Flight	Next flight in flight sequence, if applicable
Instance Date	Date of flight, if only one instance is required in the period
Service Type	Service type such as passenger normal service, military, non-revenue, training
Seat Config	Seating configuration on board the aircraft (F/C/Y)
Non Revenue	Select if the flight is non-revenue i.e. a ferry flight or deadheading flight
Effective From	First date of scheduled flight instance, if recurring within the period
Effective To	Last date of scheduled flight instance, if recurring within the period
Information Only	Displays aircraft in schedule as an informational instance only. It allows users to track a flight in AircraftFollow, not to manage the flight. This feature is helpful for example with deadhead flights.
Route Type	Defined route type such as Domestic, International or Charter
Route	A way or course between two ports
STD [L]	Scheduled time of departure (STD) in local time
STA [L]	Scheduled time of arrival (STA) in local time

<i>Frequency Time</i>	How many times in a week this aircraft operates
<i>Cycle No</i>	Cycle number representing a sequence of flights
<i>Departure Gate</i>	Departure gate in the terminal, if available
<i>Departure Terminal</i>	Departure terminal, if available
<i>Arrival Terminal</i>	Arrival terminal, if available
<i>Arrival Gate</i>	Arrival gate in the terminal, if available
<i>Days of the Week</i>	Select days of the week the flight operates by selecting applicable check boxes (M T W T F S S)

Once flight instances are updated, click on the **Save** button, followed by the X button to return to the Schedule Display Panel.

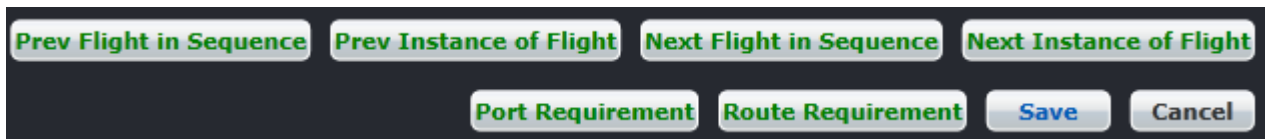
Conflict icons are displayed beside some of the fields if conflicts are found. In the flight displayed above, these are the corresponding conflicts:

The image shows three sequential screenshots of the 'Flight Conflicts' dialog box. Each dialog box contains a table with the following columns: Flight, Day/Date Range, Conflict Type, Description, and Conflict Type. Below the table are 'Delete' and 'Cancel' buttons.

- Top Screenshot:** Shows a conflict for flight -2 from 07/12/2015 to 06/01/2016. The Conflict Type is 'NonStandardFlightTimes' (indicated by an orange icon), and the Description is 'NonStandardFlightTimes'. The Conflict Type column contains a red link 'View flight information'.
- Middle Screenshot:** Shows a conflict for flight -2 from 07/12/2015 to 06/01/2016. The Conflict Type is 'OnWardFlightConflict' (indicated by a purple icon), and the Description is 'OnWardFlightConflict'. The Conflict Type column contains a red link 'View flight information'.
- Bottom Screenshot:** Shows a conflict for flight -2 from 07/12/2015 to 06/01/2016. The Conflict Type is 'BelowMinimumScheduledTurnArounds' (indicated by an orange icon), and the Description is 'BelowMinimumScheduledTurnArounds'. The Conflict Type column contains a red link 'View flight information'.

The Non-standard flight time conflict is raised if the flight time is not the same that is set up for the Route. The Onward flight conflict is raised if the onward flight is incorrect, like when the onward flight is scheduled before the current flight. The Below Minimum Scheduled Turnaround conflict is raised if the turnaround time between the current and next flight does not reach the minimum requirement.

There are a number of buttons in the Flight Information window to assist users with editing flights. This feature of AircraftSchedule enables users to view other flight instances for reference.



The button functionality is as follows:

Button	Description
<i>Prev Flight in Sequence</i>	Moves to display the previous flight in sequence in FIW and the Schedule Display Panel
<i>Prev Instance of Flight</i>	Moves to the earlier instance of a flight, if recurred
<i>Next Flight in Sequence</i>	Moves to display the next flight in sequence in FIW and the Schedule Display Panel
<i>Next Instance of Flight</i>	Moves to the next instance of a flight, if recurred
<i>Port Requirement*</i>	Displays Port Requirement form to view or edit requirements for the departure or arrival port
<i>Route Requirement*</i>	Displays Route Requirement form to view or edit requirements for the route
<i>Save</i>	Saves information in the FIW and in the Schedule Display Panel
<i>Cancel</i>	Cancels without saving information entered in the Flight Information window

* See below for sample Port Requirement and Route Requirement forms with instructions on how to complete the forms.

Port Requirement

The Port Requirement Equipment form allows users to view, add and delete equipment requirements at a specified port. The default set up for port requirements takes place in Configure. Required fields are marked with an asterisk in the column header.

To add a port requirement:

1. Click **Add** to insert a new row
2. In the Condition column, choose Must Have, Must Not Have or No Condition, as configured
3. Select the Equipment Profile from the dropdown menu. 787 Stairs is displayed in the example above.
4. Select Active From/To dates from the dropdown calendar, if different from the auto-populated dates.
5. Choose the applicable Rule Level selection including Critical, Critical Planning or Allow Override.
6. Add any comments in the Comment field.
7. Select the Active check box to indicate an active port requirement.
8. Click on the **Save** button.

To delete information in the Port Requirement form, select the row for deletion and click the **Delete** button. Click the **Yes** button to confirm the deletion and the row is removed from the form.

Criticality Level Definitions

<i>Allow Override</i>	User with supervisor or management rights has the ability to override a warning or violation
<i>Critical</i>	Cannot be overridden or avoided
<i>Critical - Planning</i>	Same as critical, however occurs during the planning stage only

Route Requirement

The Route Requirement Equipment form allows users to add and delete equipment requirements for designated routes.



The default settings for route requirements are setup in Configure. Permissions are also set up in Configure and determine which system users can add and edit route and port requirements. Configure administrators determine for instance, if duty managers can update route or port requirements.

See the Port Requirement form for detail on how to complete this form.

AircraftSchedule Specific Tasks

AircraftSchedule tasks occur after the flight planning stages, after routes, ports and equipment are all defined within Configure. Schedules are manually created or imported by system users.

This section provides an overview of AircraftSchedule tasks in a step-by-step format.

1. Create a new schedule for a specified date range. Name the schedule.
2. Create flight instances and frequencies in the schedule based on flight cycles.
3. Optional: Plan for scheduled maintenance events by reviewing the information in the Maintenance Display or Manage Maintenance feature.
4. Verify flight rules via the green tick mark. If not green, fix flight errors.
5. Mark the schedule as active.

It is suggested that systems users carefully review the schedule to make sure the flights are correct, because once the schedule is marked active you cannot change the flights in AircraftSchedule. All changes must be done in AircraftFollow by fixing flights one at a time.

6. Optional: Export SSIM file

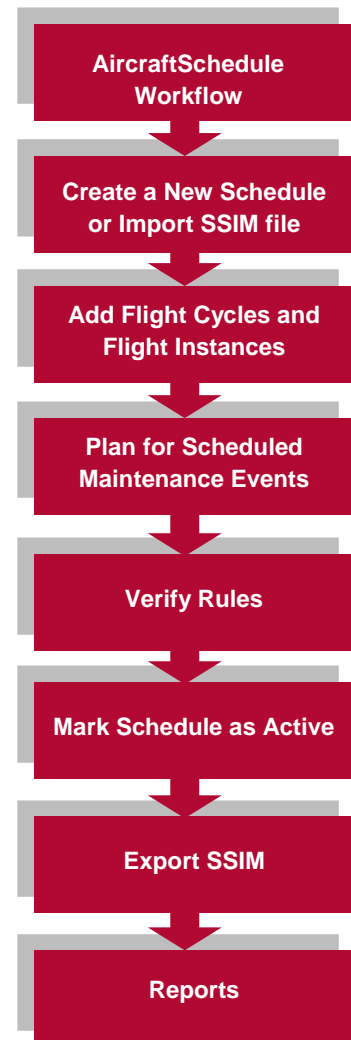
This feature is only used if system users need to distribute SSIM schedules to other people. This job runs in the background and is exported to an FTP file to a location designated by the user.

7. Pull AircraftSchedule specific reports, as required.

Alternative Steps (based on importing an SSIM file):

1. Import an SSIM file.
2. Review imported flight schedule for accuracy.
3. Mark schedule as active.
4. Optional: Export SSIM file.

The next section will review options available under the File, Edit, View and the Tool tabs in AircraftSchedule to assist with aircraft scheduling.



Modifying Active Schedules

Changes to active schedules can be saved and reflected in AircraftFollow. The steps to update active schedules are as follows: via Ad hoc Scheduled Message (ASM) export.

1. Open the active schedule.
2. Modify the schedule as needed.
3. Save the schedule.
The Export Schedule Changes form appears.

Process	Actions	Equipment Type	Flight	Designator	Effective From	Effective To	Route	STD	STA	Onward Flight
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	01/10/2015 L	08/10/2015 L	NKGDMK		918
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	01/10/2015 L	08/10/2015 L	NKGDMK		88
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	08/10/2015 L	14/10/2015 L	NKGDMK		88
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	08/10/2015 L	14/10/2015 L	NKGDMK		88
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	08/10/2015 L	14/10/2015 L	NKGDMK		918
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	15/10/2015 L	21/10/2015 L	NKGDMK		88
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	15/10/2015 L	21/10/2015 L	NKGDMK		918
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	22/10/2015 L	24/10/2015 L	NKGDMK		182
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	22/10/2015 L	24/10/2015 L	NKGDMK		182
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	01/10/2015 L	11/10/2015 L	NKGDMK		88
<input type="checkbox"/>	<input type="checkbox"/>	D	777	87	XW	12/10/2015 L	24/10/2015 L	NKGDMK		88

4. Expand each flight recurrence by clicking the (+) at the leftmost column.
5. Select the Process tick box for the flights that need to be exported to AircraftFollow.
6. Click Process to proceed with the changes, or click Cancel to discard changes.

When the user clicks the "Process" button, the flights will be sent to a configured ASM Export job within the JobEngine. The job will process the changes and generate the IATA ASM schedule messages required for processing.

A corresponding IATA ASM Import Job configured in the JobEngine will then pick up the changes and import them into the live schedule in AircraftFollow. Once completed, the selected changes will now be visible in AircraftFollow without the need to manually update individual flights.

Menu Options in AircraftSchedule

File Menu

Key AircraftSchedule functions are located under the File menu, including creating, opening and saving schedules as well as marking schedules active. These functions will be discussed in detail.

Create New Schedule

The Create New Schedule feature enables users to create a new flight schedule. Start by clicking on the **Create New Schedule** feature from the File menu. The fields marked with an asterisk are required fields to complete.

Create New Schedule

Name* Test Schedule Version* 1.0

Effective From* 01/01/2017 Effective To* 31/01/2017

Master

Comments

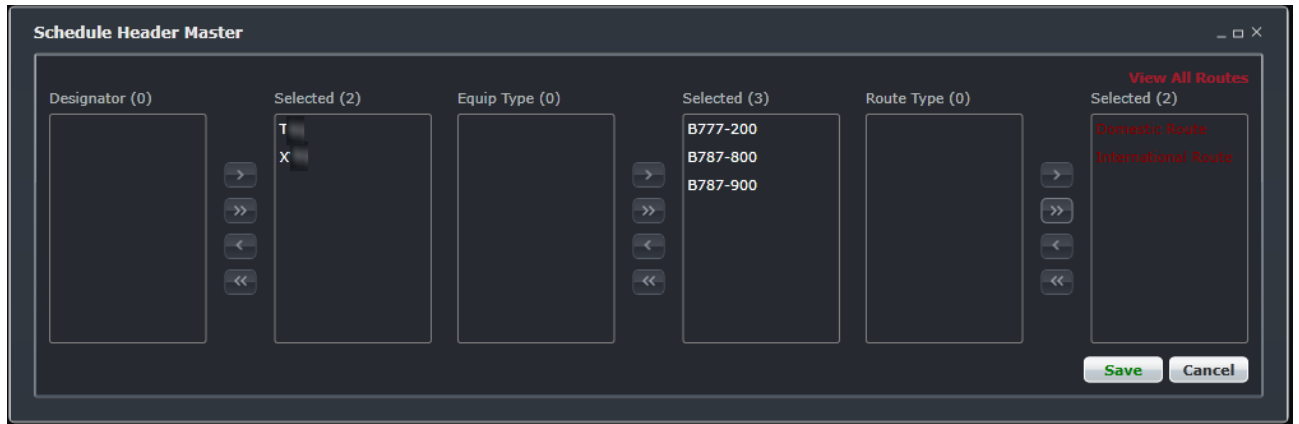
Save Cancel

To complete the Create New Schedule form:

1. Enter a schedule name in the Name field. This field is a free form text field.
2. Enter the version of the schedule in the Version field. This field is a free form text field.
3. Select Effective From/To dates using the dropdown calendars.
4. Select the Master check box to indicate that a Master schedule is being created.

By selecting the Master check box, the application applies default airline values from the operator and company tabs in Configure.

If the Master check box is not selected, the Schedule Header Master will display, which is useful when there are multiple operators, or when the user wants to hand select components in the schedule. Select all the necessary options that the schedule requires.



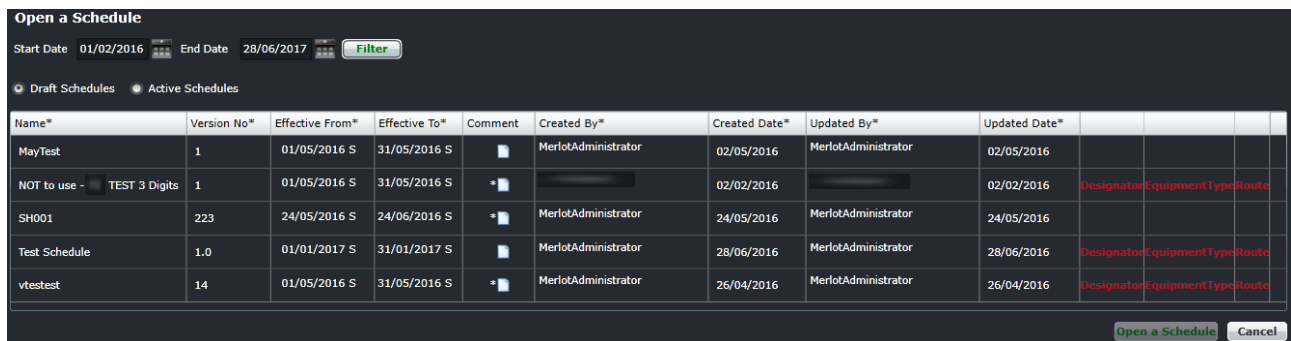
5. Enter comments related to the schedule in the Comments field. For example, high season schedule
6. Click the **Save** button to create a new schedule or the **Cancel** button to close the form without generating action

Note: If an airline typically operates a repetitive schedule, users can import a previous schedule and update the changes.

The Schedule Display Panel will appear. Users can start adding cycles and flights at this point.

Open Schedule

The Open Schedule feature enables users to open a schedule. Start by clicking **Open Schedule** from the File dropdown menu. This form includes a filter to enable users to quickly find draft and active schedules.

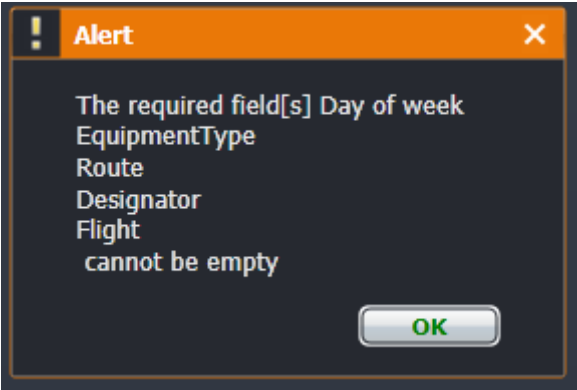


To utilize the Open Schedule form:

1. Select Start and End dates to search for a schedule using the dropdown calendars then click the Filter button.
2. Select the Draft or Active Schedules radio button.
Draft schedules are schedules in progress that have not been activated (marked active). Draft schedules once marked active are displayed as active schedules. Active schedules have been marked active.
The displayed schedules are included in or overlap with the filter dates selected in step 1.
3. To open a schedule, select the schedule row, then click the **Open a Schedule** button or the **Cancel** button to close the form without generating action.
The open schedule displays in the Schedule Display Panel.

Save Schedule

The Save Schedule feature in the File menu saves schedules in the Schedule Display Panel. If any required fields in the Schedule Display Panel are incomplete, the following alert will display:

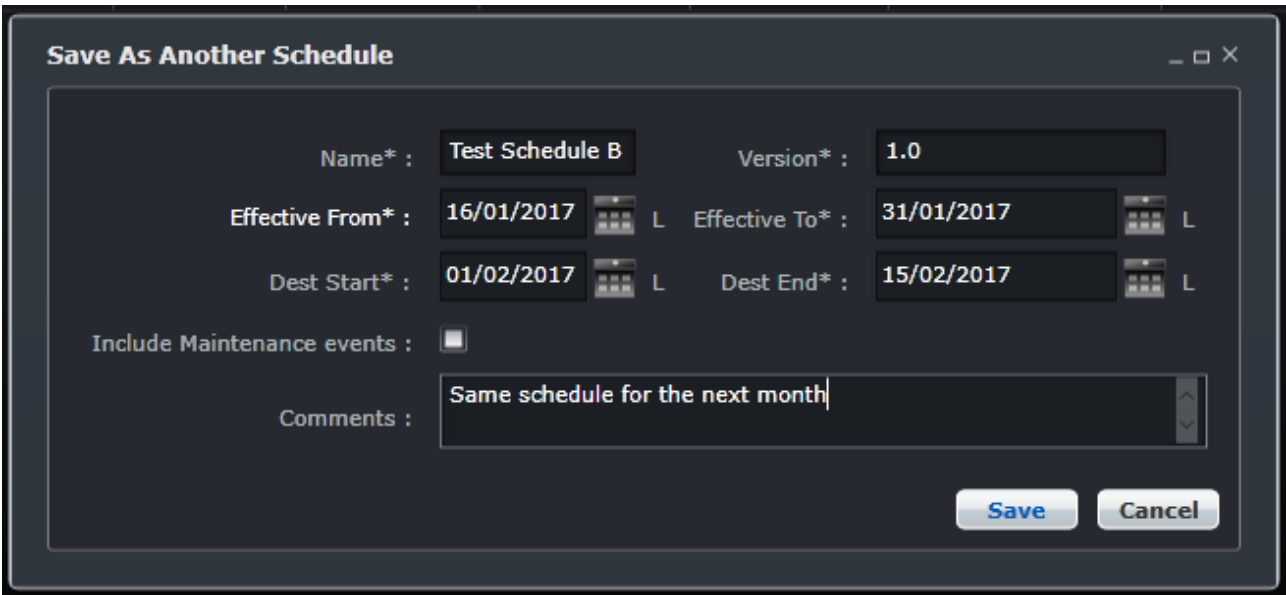


Once the designated fields are complete, the user clicks **Save Schedule** from the File menu and the flight schedule is saved.

Save As Another Schedule

The Save as Another Schedule feature enables users to reuse a part of an existing schedule. For example, if the user has a July schedule open and wants to save a subset of the July schedule, from July 25th to July 31st, then the destination start and end dates can be adjusted accordingly and saved.

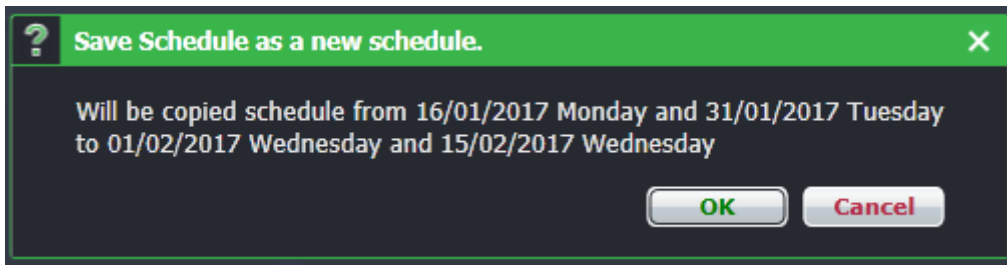
This feature is accessed by clicking the **Save as another Schedule** feature from the File dropdown menu. The steps for using the form are enumerated below. Fields marked with an asterisk are required fields.



To utilize the Save as Another Schedule form:

1. Select a schedule from the Schedule Display Panel.
2. Click on **Save As Another Schedule** from the File dropdown menu.
3. Modify the schedule name by entering a name in the Name field.
4. Update the version by entering the version number in the Version field.
5. The Effective From/To dates reflect the dates of the original schedule.
6. Select Destination (Dest) Start/End dates for the new schedule that will have the same flights on the effective dates.
7. Enter any comments related to the new schedule in the Comments field.
8. Click on the **Save** button to save as another schedule or the **Cancel** button to close the form without generating action.

The Save as a new schedule dialog box displays.



9. Click the **OK** button after reviewing the dates to save as another schedule, or click **Cancel** to close the dialog box without generating action.

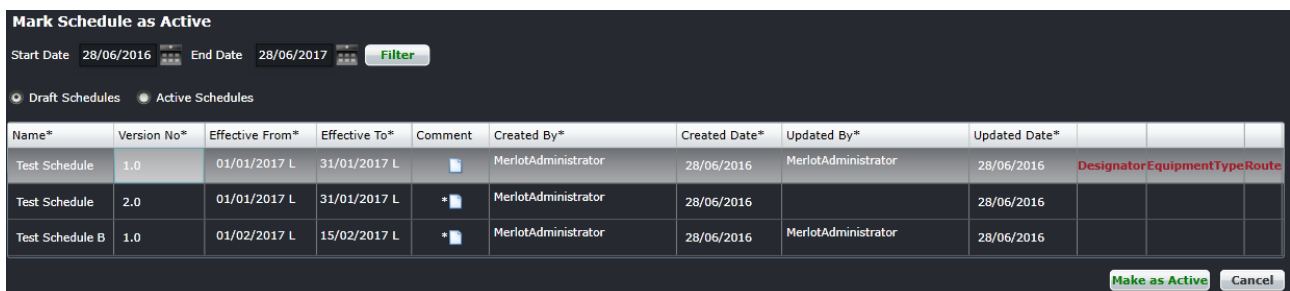
Close the form and the current schedule. Go to Open Schedule to view the new schedule.

The Effective From/To dates are the dates of the original schedule. These dates cannot be changed outside of the original constructed schedule dates. The Destination Start/End dates are the dates of the schedule being saved as a new schedule.

Mark as Active Schedule

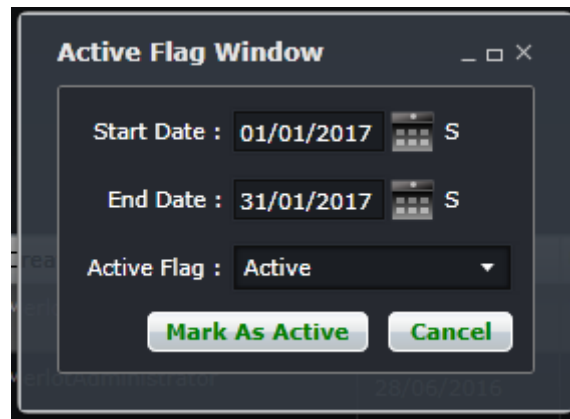
The Mark as Active Schedule feature enables users to activate a flight schedule which makes the schedule accessible for next stage development in CrewBuild and AircraftFollow.

The Mark as Active Schedule can be accessed in AircraftSchedule from the File menu under Mark as Active Schedule. The form includes a filter function to locate the schedule for activation.



To complete the Mark as Active Schedule form:

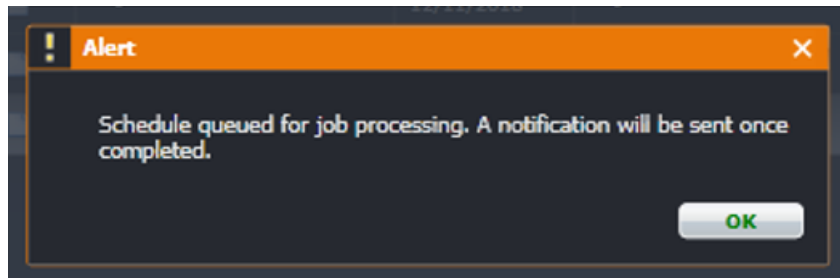
1. Filter for the schedule to be marked as active. Follow the same steps in Open Schedule.
2. To mark a schedule as active, select the desired row. Click the **Mark as Active** button or the **Cancel** button to close the form without generating action.
The Active Flag Window displays.



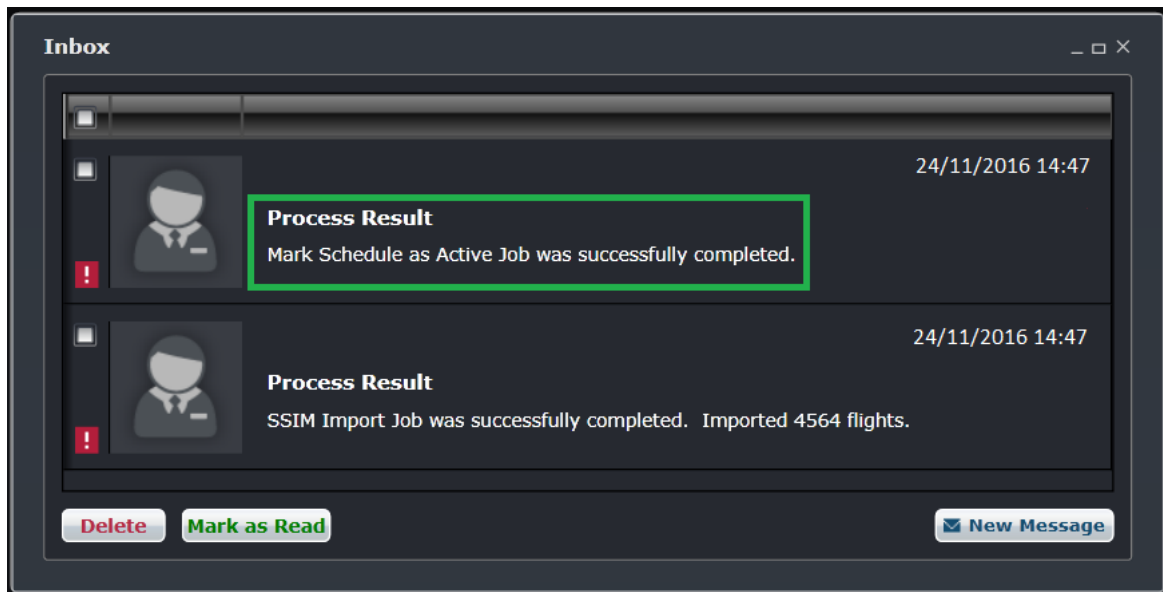
The image shows a dialog box titled "Active Flag Window". It contains three input fields: "Start Date" with the value "01/01/2017", "End Date" with the value "31/01/2017", and "Active Flag" with the value "Active". Each date field has a small calendar icon to its right. Below the input fields are two buttons: "Mark As Active" and "Cancel".

3. Enter the Start/End Dates of the active schedule using the dropdown calendars.
4. Choose Planned, Active or Provisionally Active from the dropdown menu.
5. Click on the **Mark as Active** button to activate the schedule or the **Cancel** button to close the form without generating action.

The following alert displays:



Click **OK**. A message will be sent in the user's inbox when the job is finished processing.



The schedule now displays as an active schedule in AircraftSchedule, and flight sectors are now accessible in CrewBuild and AircraftFollow.



Administrator Note

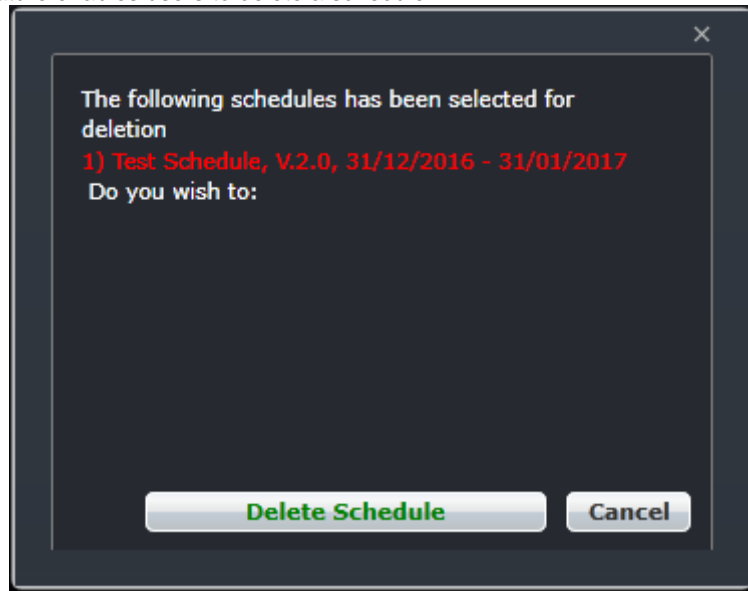
The *Mark Schedule as Active Job* (*MarkScheduleActiveJob*) must be set to active and has the correct database credentials. Also, the user preference *EnableScheduleActivationUsingJob* must be set to True.

Print Schedule

The Print Schedule feature can be accessed from the File menu under Print schedule.

Delete Schedule

The Delete Schedule feature enables users to delete a schedule.



To delete a schedule:

1. Select a schedule for deletion from the Open Schedule view.
2. Click on Delete schedule from the File menu.
3. Click the **Delete Schedule** button after verifying the correct schedule for deletion, or click the **Cancel** button to close the form without generating action.

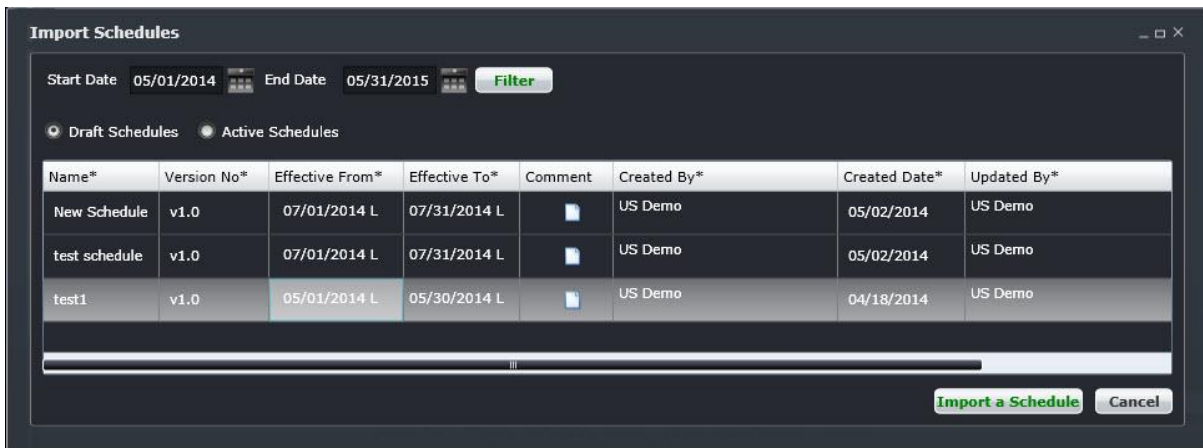
The schedule is permanently removed from the list of schedules as well as the Schedule Display Panel.

Note: *Only draft schedules can be deleted.*

Import Schedule

The Import Schedule feature enables users to import from an existing schedule. For instance, a user may create a new schedule for July, then import some flights from the May schedule into the newly created schedule for July. This saves the user a lot of time from recreating the same flights.

Start by clicking on **Import Schedule** from the File dropdown menu while working in the Schedule Display Panel.



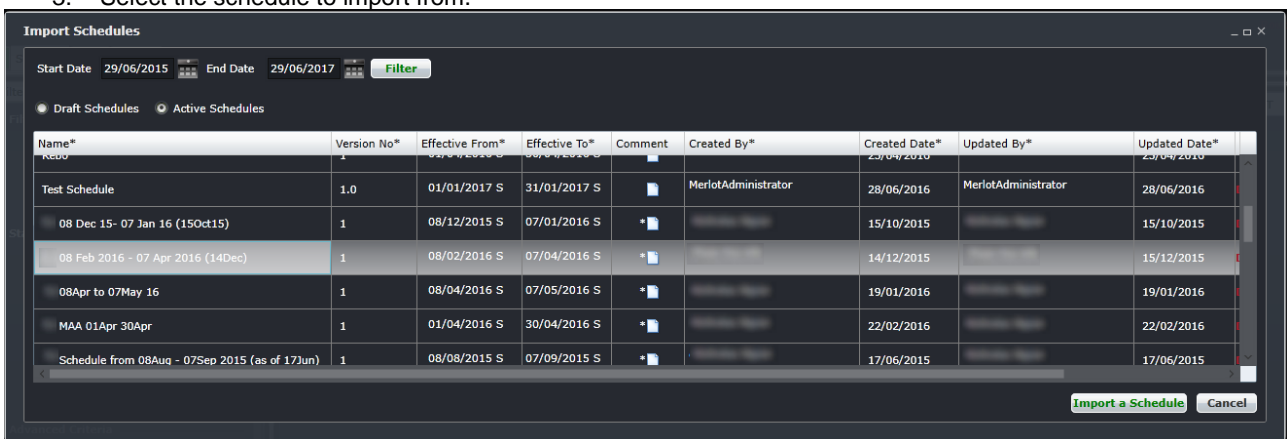
To locate the schedule to import and start the import process:

1. Select Start/End Dates of the schedule to be imported from the dropdown calendars.
2. Select the Draft or Active Schedules radio button.
3. Click on the **Filter** button.
4. Select a schedule to import from the displayed schedules.
5. Click on **Import a Schedule** button.

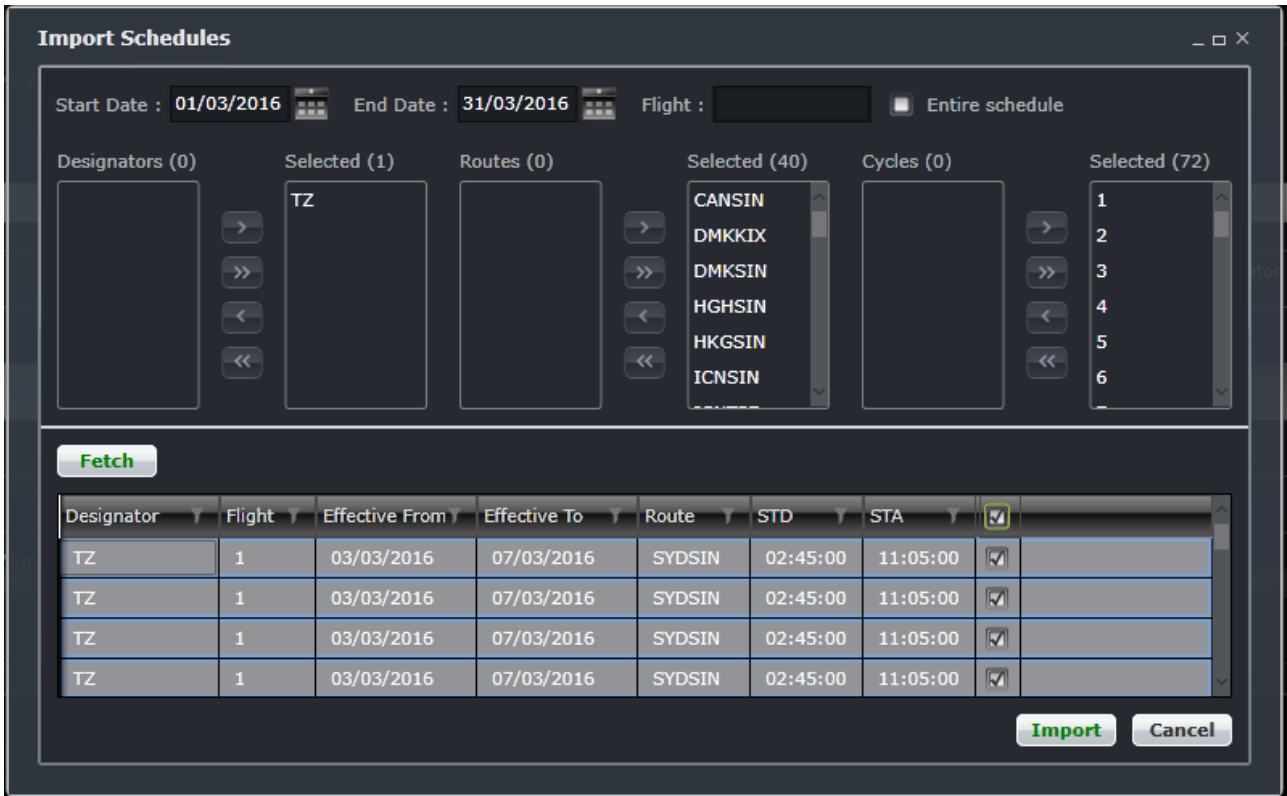
The Import Schedules pop up window includes a filter to enable system users to import specific components of the schedule and/or the entire schedule. Designators, Routes and Cycles auto-populate from the imported schedule as shown below.

Complete the following steps to finish importing a schedule:

1. Create a schedule.
2. Go to the File menu and select Import Schedule.
3. Select the schedule to import from.

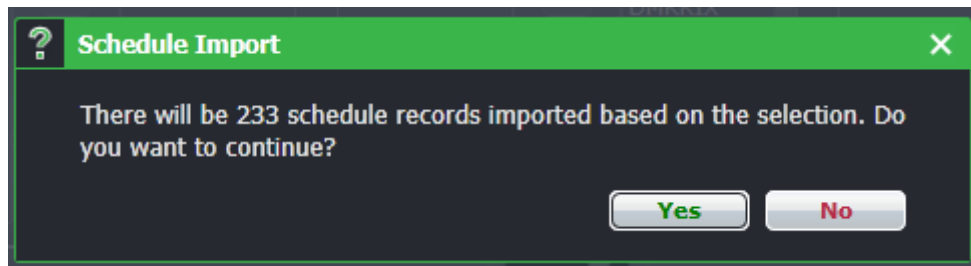


4. Click the Import a Schedule button.

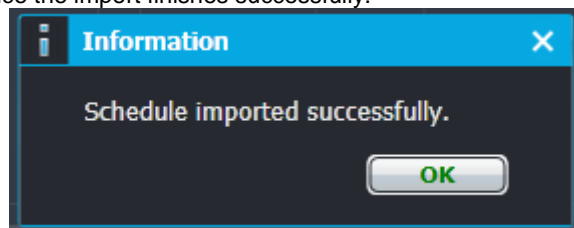


5. Choose the Start/End Date of the schedule to import using the dropdown calendar menus.
6. Enter the flight number to display by flight number. Alternatively, select the Entire Schedule check box to import the full schedule; or select the designators, routes and cycles to be imported then use the arrows to move designated items to the Selected columns .
7. Click on the **Fetch** button to find the selected criteria.
8. Select the flights to import by checking the boxes.
9. Click on the **Import** button to import the schedule or the **Cancel** button to cancel without generating action.

The following confirmation prompt will display. Click Yes to continue or No to disregard.



The prompt below will appear once the import finishes successfully.



It is suggested that the user select a day prior to the start of a schedule and a day after the end of the schedule to encompass the whole schedule period. Otherwise, not all flights will be included in the schedule.

Close Schedule

The Close Schedule feature enables users to close a schedule.

Edit Menu

Add Flight to Cycle

This can be used as an alternative to the Add Flight button in the toolbar and Schedule View.

Add Cycle

This can be used as an alternative to the Add Cycle button in the toolbar and Schedule View.

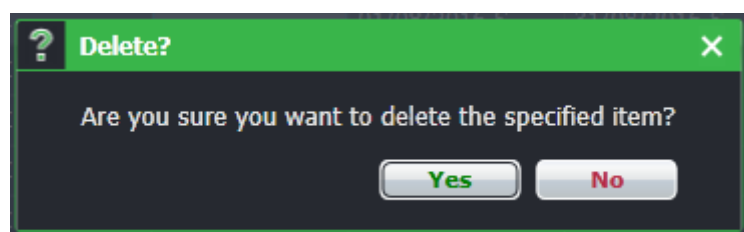
Flight Information

This can be used as an alternative to the Flight Information button in the toolbar and Schedule View.

Delete Flight

To delete a flight using the Delete Flight feature in the Edit menu:

1. Select the designated flight row for deletion in the Schedule Display Panel.
2. Click on **Delete Flight** from the Edit menu.
A dialog box will appear asking the user to confirm the deletion.



3. Click on **Yes** to confirm the deletion or **No** to close the dialog box without generating action.
A second dialog box will appear if there is more than one instance of the flight in the schedule.

Start Date	End Date	Days of week
31/07/2016	28/08/2016	M T W T F S S
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>

4. Select the applicable radio button from the following:
 - Just this flight instance
 - Selected instances of this flight
 - All instances of this flight
5. Click on the **OK** button to delete or the **Cancel** button to close the form without generating action.

Find

The Find tool enables the user to search for a flight within the schedule. The keyboard shortcut **<Ctrl + F>** generates an abbreviated Find Flight form as a time saving convenience.

To use Find Flight, enter a flight number in the Flight field and click **Find**.

Flight	<input type="text"/>	
Find	Detailed Search	Cancel

For a more detailed search, click the **Detailed Search** button and the Search Criteria form displays.

To find a flight/aircraft, fill out any of the Search Criteria fields as follows:

Field	Description
<i>Pre-Saved Search</i>	Click the down arrow to access a dropdown menu of pre-saved flight searches, if applicable
<i>Add New Search</i>	Enter a name for the new search if the criteria will be saved
<i>Equip Type</i>	Enter the aircraft model
<i>Flight Designator</i>	Select the flight designator from the dropdown menu
<i>Flight</i>	Enter the flight number
<i>Operator</i>	Select airline operator from dropdown menu
<i>Departure Port</i>	Enter a departure port and a list will generate
<i>Arrival Port</i>	Enter an arrival port and a list will generate
<i>STD</i>	Enter the schedule time of departure using the up/down arrows
<i>Time Margin</i>	Adjust the time margin as a threshold of hours before and after the STD
<i>Client Reference</i>	If applicable, enter the client name

Click the **Search** button to initiate the search, results will be displayed under Search Results in the form, or click **Cancel** to clear the form.

Other search button options include:

Field	Description
<i>Save Search</i>	Saves the search criteria for future use
<i>Set Default Search</i>	Saves the search as the default search
<i>Delete Save Search</i>	Deletes the saved search from the pre-saved search menu
<i>View Flight Information</i>	Displays the Flight Information window for the selected flight
<i>Display in Flight Entry</i>	Displays the search results in the Schedule Display Panel Grid view

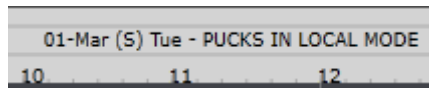
View Menu

Time Mode

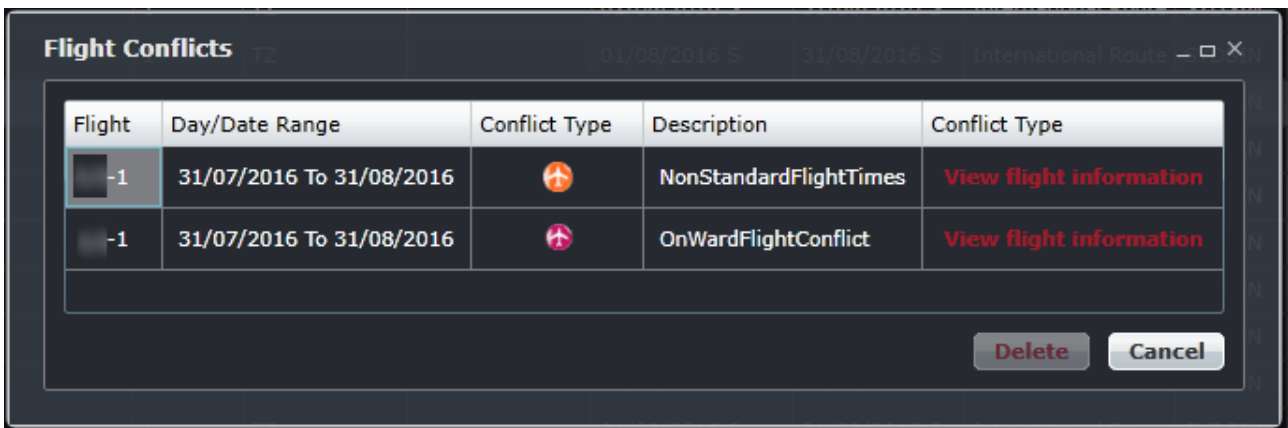
To change time modes, select Time Mode and select one of the options below:

- Zulu (Z): Zulu time is known as Greenwich Mean Time (GMT)
- Port (L): Port time is local time in your time zone
- Standard (S): Standard time is local time at your company headquarters

The selected time mode is displayed at the top of the Gantt.



Schedule Conflict



The Flight Conflicts form contains the following information:

Field	Description
<i>Flight</i>	Designator and flight number
<i>Day/Date Range</i>	Effective from/to dates of the flight schedule
<i>Conflict Type</i>	Displays the Conflict Type icon
<i>Description</i>	Description of the conflict type, in this case there is a duplicate flight instance
<i>Conflict Type</i>	Advises user to view flight information to fix the error or see if it is an informational flight.

After reviewing items listed in the Flight Conflicts form, click **Cancel** to close the form and return to the Schedule Display Panel.

Tools Menu

Manage Maintenance

To access the Manage Maintenance feature, select Manage Maintenance from the Tools dropdown menu.

Manage Maintenance

Operator: <<ALL>> Equipment Type: <<ALL>> Equipment Rego: <<ALL>>

Start Date: * 14/01/2016 End Date: * 14/01/2017 Planned:

Fetch

Equipment Rego	Equipment Type	Event Type	Start Date	Start Time	End Date	End Time	Duration (Days)	Max Hours	Max Cycles	Port	Location	Comment	Created By
946	Q400	A Check	14/01/2016	04:30 L	14/01/2016	08:30 L	0.167	100	10	YYZ	Hanger		MerlotAdministrator
945	Q400	A Check	21/01/2016	05:00 L	21/01/2016	09:00 L	0.167	100	10	YYZ	Hanger		MerlotAdministrator

Aircraft maintenance involves the overhaul, inspection, modification or repair of an aircraft or a component of an aircraft. Maintenance may include the installation or removal of a component from an aircraft.

Aircraft maintenance checks are periodic inspections that have to be done on all commercial/civil aircraft after a certain amount of time or usage. The AircraftSchedule application includes the functionality to view scheduled maintenance events and to add, edit and delete these events.

The following maintenance management options are available in the Manage Maintenance tool:

- Find maintenance events for an aircraft
- Maintenance Template
- Add maintenance event
- Edit maintenance event
- Delete maintenance event

Find Maintenance Event

To find a maintenance event, using the search function in the Manage Maintenance form:

1. Select an applicable Operator, Equipment Type and/or Equipment Rego (Registration) from the dropdown menus.
2. Select the Start Date and End Date from the dropdown calendars to define a search period.
3. Click on the **Fetch** button.

Manage Maintenance

Operator: <<ALL>> Equipment Type: <<ALL>> Equipment Rego: <<ALL>>

Start Date: * 14/01/2016 End Date: * 14/01/2017 Planned:

Fetch

Equipment Rego	Equipment Type	Event Type	Start Date	Start Time	End Date	End Time	Duration (Days)	Max Hours	Max Cycles	Port	Location	Comment	Created By
946	Q400	A Check	14/01/2016	04:30 L	14/01/2016	08:30 L	0.167	100	10	YYZ	Hanger		MerlotAdministrator
945	Q400	A Check	21/01/2016	05:00 L	21/01/2016	09:00 L	0.167	100	10	YYZ	Hanger		MerlotAdministrator

A list of the selected aircraft's maintenance events will display in a user selectable form. This list will display only the maintenance events that fall within the date range selected.

- If no further action is required, click **Cancel** to close the form without generating action.

Maintenance Template

The Maintenance Template holds the different required maintenance types that an aircraft needs. Some basic information for each maintenance type can be defined in this form. To add a template:

- Click the **Add New Maintenance Event** button at the bottom of the Manage Maintenance form.
- Click the **Maintenance Template** link at the top right corner.

The Maintenance Template form appears.

Description	Equipment Type	Duration	Max Hours	Max Cycles	Comments	Text Color	Background Color	Bottom Color
A Check	Q400	04:00	100	10				
B Check	Q400	23:30	500	50				

- Complete each field.

Field	Description
<i>Description</i>	The maintenance type required for an aircraft
<i>Equipment Type</i>	The aircraft model requiring this type of maintenance
<i>Duration</i>	Amount of time required to perform this maintenance type
<i>Max Hours</i>	The maximum number of hours the aircraft can fly before requiring this maintenance type again
<i>Max Cycles</i>	The maximum number of cycles the aircraft can perform before requiring this maintenance type again
<i>Comments</i>	Free text field that can hold notes or reminders whenever a maintenance of this type is scheduled
<i>Text Color</i>	Text color of the maintenance event in the Schedule Display Panel and the Gantt view
<i>Background Color</i>	Color of the maintenance puck
<i>Bottom Color</i>	Color of the bottom half of the maintenance puck

- Click Save when finished, or Cancel to discard changes.
- To add another row, click Add and complete each field, then Save.
- To delete a row, click on the row and then click Delete. Click Yes when asked to confirm, then click Save.

Add Maintenance Event

To add a new maintenance event from the Manage Maintenance form:

1. Click the **Add New Maintenance Event** button at the bottom of the Manage Maintenance form.
2. Complete the required fields on the Maintenance Template.
Required fields are marked with an asterisk.

Field	Description
Maintenance Event Type	Select the type of maintenance required. The options are taken from the Maintenance Template.
Operator	Select the airline operator from the list of registrations in the dropdown menu.
Equipment Rego	Select equipment registration from the list of registrations in the dropdown menu.
Equipment Type	Select equipment type from the list of types in the dropdown menu.
Start Date	Select a start date for the maintenance event from the dropdown calendar .
End Date	Select an end date from the dropdown calendar .
Start Time	Enter start time in hh:mm format.
End Time	Enter end time in hh:mm format.
Max Hours	Maximum number of flying hours before another maintenance of the same type is required. This is automatically populated as defined in the Maintenance Template.
Max Cycles	Maximum number of cycles before another maintenance of the same type is required. This is automatically populated as defined in the Maintenance Template.
Title	Name for the maintenance event.
Location	Location where the maintenance will be done, for example a hangar or ramp.
Duration	Automatically calculated by the start and end times.

Route Restrictions	If applicable, select the check box to apply route restrictions.
Port Restrictions	If applicable, select the check box to apply port restrictions.
Port	Select the port where maintenance will take place.
Planned	Indicates if this is a planned maintenance event, if selected, or ad hoc, if not selected.
Comments	User entered text field for MEL related comments.

3. Click on the **Save** button to save the event or the **Cancel** button to close the form without generating action.

When an event is saved, the form flushes all fields to enter another event.

Maintenance events are displayed in the Schedule Display Panel along with flights.

Equipment Type*	Flight*	Designator*	Instance Date	Effective From*	Effective To*	Route Type	Route*	STD	STA	Every Day	M	T	W	T	F	S	Onward flight	Cycle
DH4	A Check - YYZ			21/01/2016 L	21/01/2016 L	Hanger		05:00 S	05:00 S	<input type="checkbox"/>								39
DH4	7501	ZX		04/01/2016 L	05/02/2016 L	Domestic Route	YULYZ	06:30 L	07:40 L	<input type="checkbox"/>	M						7504	19
DH4	7501	ZX		04/01/2016 L	05/02/2016 L	Domestic Route	YULYZ	06:30 L	07:40 L	<input type="checkbox"/>		T					7504	20
DH4	7501	ZX		04/01/2016 L	05/02/2016 L	Domestic Route	YULYZ	06:30 L	07:40 L	<input type="checkbox"/>			W				7504	16

In Gantt view, maintenance events are located at the bottom of each equipment group unless they are linked with flights in a cycle.

January 2016
21-Jan (S) Thu - PUCKS IN LOCAL MODE

Equip	Cycle	0 Jan	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
Unknown	29																		
Unknown	30	YUL																	
Unknown	31																		
Unknown	32																		
Unknown	33																		
Unknown	34																		
Unknown	35																		
Unknown	36																		
Unknown	37																		
Unknown	38																		
Unknown	4																		
Unknown	5																		
Unknown	6																		
Unknown	7																		
Unknown	8																		
Unknown	9																		
Unknown	945 (??)																		
Unknown	Unknown																		

Edit Maintenance Event

To edit an existing maintenance event from the Manage Maintenance form:

1. Select the desired maintenance event in the grid (i.e., Maintenance events shown in Fetch results).
2. Click on **Edit selected maintenance event** button at the bottom of the Manage Maintenance form.
3. The system will open the same Add Maintenance form used to add maintenance events (shown on previous page).
4. Make required changes in the Add Maintenance form.
5. Click on the **Save** button to save the changes or the **Cancel** button to close the form without generating action.

Delete Maintenance Event

To delete an existing maintenance event from the Manage Maintenance form:

1. Select the desired maintenance event in the grid (i.e., Maintenance events shown in Fetch results).
2. Click on the **Delete maintenance event** button in red at the bottom of the Manage Maintenance form.

A dialog box will appear, asking the user to confirm the deletion.

3. Click on the **Save** button to save changes or the **Cancel** button to close the form without generating action.

The system deletes the Maintenance event.

Run Rules

The Run Rules feature in the Tools menu is part of future development in AircraftSchedule.

Options

User Preferences

The User Preferences form allows system administrators to set up visual preferences in AircraftSchedule based on individual airline specifications. For instance, it is possible to change the order of fields displayed in the Schedule Display Panel through this template.

The screenshot shows the 'User Preferences' form with three radio buttons: 'Master Template', 'Department Template', and 'User'. Below these are input fields for 'Department', 'Id', and 'Name'. The main part of the form is a table with the following data:

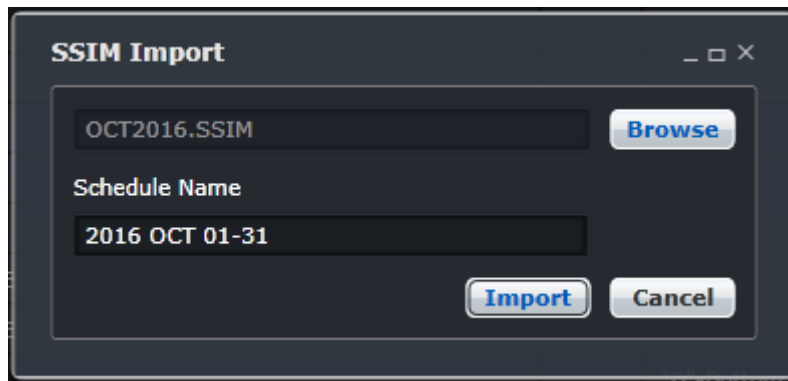
Application	Preference Group	Preference	Value*	Description
Aircraft.Schedule	FieldPosition	RoutePosition	8	
Aircraft.Schedule	FieldPosition	STDPosition	9	
Aircraft.Schedule	FieldPosition	STAPosition	10	
Aircraft.Schedule	FieldPosition	DaysOfWeekPosition	11	
Aircraft.Schedule	FieldPosition	OnwardFlightPosition	12	
Aircraft.Schedule	Grouping	GroupByDesignator	TRUE	

At the bottom of the form are buttons for 'Add', 'Delete', 'Save', 'Reset', 'Apply to User', and 'Cancel'.

User preference editing is restricted to administrator access. To edit preferences, click a row to select the row, modify the value as needed and click **Save** to save changes or click on **Cancel** to close the form without generating action. Click on **Reset** to return the user preferences to the default state. This subject is discussed in detail in the Configure User Manual.

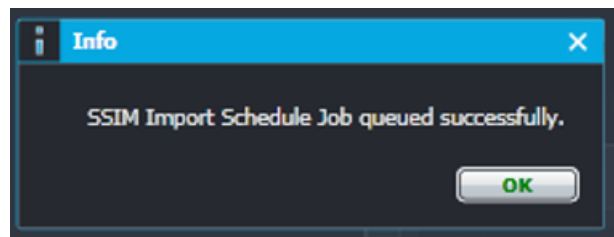
Import SSIM

The Import SSIM feature in the Tools menu allows system users to import existing schedules in IATA's industry standard format known as the Standard Schedules Information Manual (SSIM) and to have these schedules populate in the Schedule Display Panel. The final schedules are marked active.

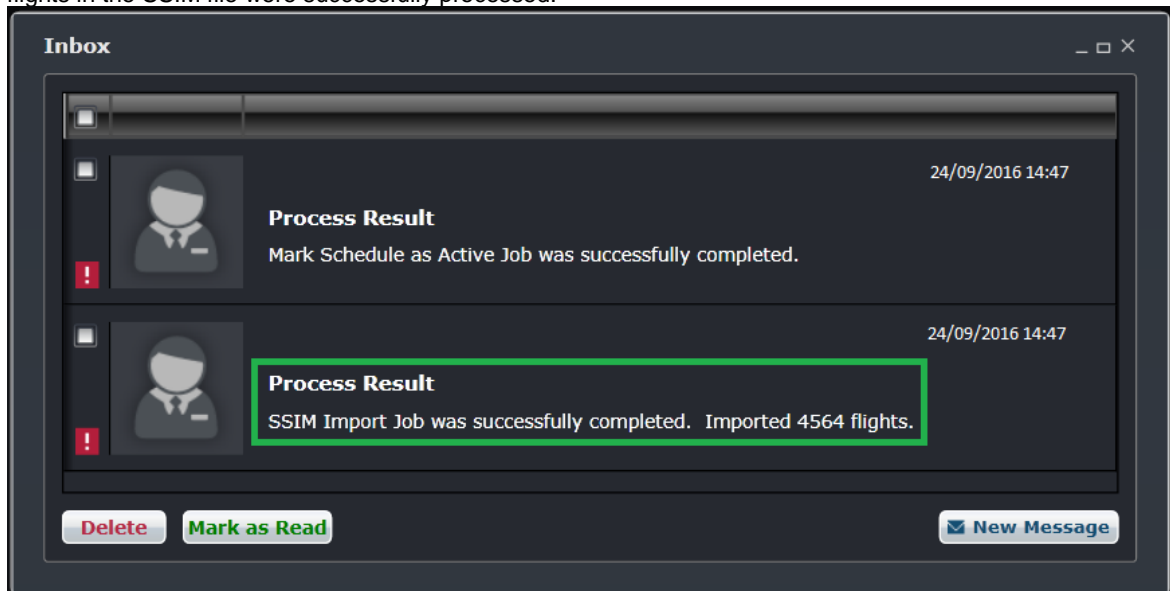


To import an SSIM file, select Import SSIM from the Tools menu.

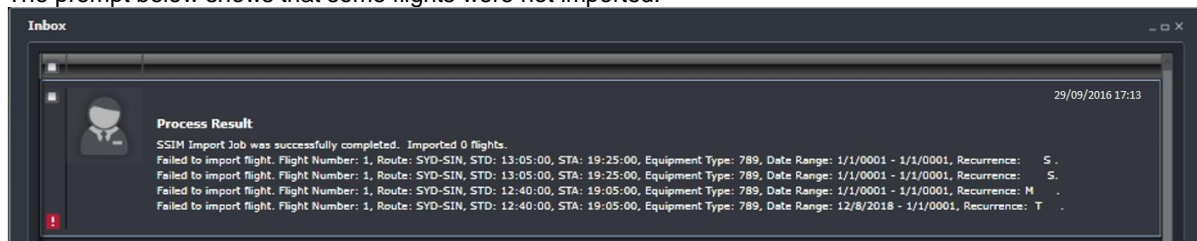
1. Click the **Browse** button, locate the SSIM file.
2. Click on the **Import** button to import the SSIM file, alternatively click **Cancel** to close the form without generating action.
3. The dialog box below indicates that the SSIM file has been queued for processing. Click **OK**.



4. A message will be sent in the user's inbox when the job is finished processing. The image below shows that all flights in the SSIM file were successfully processed.



The prompt below shows that some flights were not imported.



Administrator Note

The *SSIM Import Job* (*Import.SSIMImportJob*) must be set to active and has the correct database credentials.

Cycle Flights

The Cycle Flights feature in the Tools menu is part of future development in AircraftSchedule.

Import OAG Schedule

The Import OAG Schedule feature in the Tools menu allows system users to import an Official Airline Guide (OAG) schedule into AircraftSchedule. The OAG contains published airline schedules.

Refer to the import process detailed above for SSIM files. The same import process applies for OAG files.

Reports

Schedule Cycle Report

(2015-10-12 22:28:42Z)

merlot.aero-AircraftSchedule- Schedule Cycle Report

Equipment	Cycle Number	From	Departure	To	Arrival
B777-200					
	70	15-12-2014	2:45	25-01-2015	11:5
	13	01-12-2014	2:45	14-12-2014	11:5
	112	26-01-2015	2:45	08-02-2015	11:5
	138	10-02-2015	2:45	28-02-2015	11:5
	142	02-03-2015	2:45	02-03-2015	11:5
	66	14-12-2014	17:45	24-01-2015	1:35
	4	30-11-2014	17:45	13-12-2014	1:35
	110	25-01-2015	17:45	07-02-2015	1:35
	137	09-02-2015	17:45	27-02-2015	1:35
	141	01-03-2015	17:45	01-03-2015	1:35
	20	30-11-2014	17:45	13-12-2014	1:35
	24	01-12-2014	2:45	14-12-2014	4:5
	26	01-12-2014	5:15	14-12-2014	13:20
	113	25-01-2015	17:45	01-03-2015	1:35
	116	26-01-2015	2:45	02-03-2015	4:5
	117	26-01-2015	5:15	02-03-2015	13:20
	92	11-01-2015	23:25	24-01-2015	7:20
	9	30-11-2014	23:25	13-12-2014	7:20
	69	14-12-2014	23:25	10-01-2015	7:20
	111	25-01-2015	23:25	05-02-2015	7:20

Schedule Summary Report

(2015-10-12 22:28:42Z)							
merlot.aero-AircraftSchedule - Schedule Summary Report				30/Jan/2015 to 07/Mar/2015			
Equipment Name	Aircraft Used	Flights	Block Time	Flight Time	Aircraft Utilisation	% of Scheduled Flights	
Schedule Name: 31Jan15-07Mar15(05Jan15) ,Ver: 1 Imported by the merlot.aero-IntegrationService							
B777-200	16	541	2533:35	674:21	17.832092	86.25	
B787-900	3	98	426:30	103:30	16.009768	13.75	
Total:	19	639	2959:65	777:51	16.92	100.00	

14-Jan-2016-8:34:28 PM-v6.6.0.46030

powered by www.merlot.aero

Page 1 Of 1

Timetable Report

(2015-10-12 22:28:42Z)							
merlot.aero-AircraftSchedule - Time Table Report							
Route	Flight	Equipment	Departure Scheduled	Arrival Scheduled	DOW	Effective From	Effective To
Schedule Name : 31Jan15-07Mar15(05Jan15) Version No : 1							
Date/time range :		30-01-2015	07-03-2015				
SYDSIN							
	1	B777-200	09:45 C	18:05 C	1	31-01-2015	06-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . 5 . .	31-01-2015	06-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 6 7	31-01-2015	06-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 6 .	07-02-2015	08-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 7	07-02-2015	08-02-2015
	1	B777-200	09:45 C	18:05 C	1	10-02-2015	21-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . 5 . .	10-02-2015	21-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 6 .	10-02-2015	21-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 7	10-02-2015	21-02-2015
	1	B777-200	09:45 C	18:05 C	1	22-02-2015	28-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . 5 . .	22-02-2015	28-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 6 .	22-02-2015	28-02-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 7	22-02-2015	28-02-2015
	1	B777-200	09:45 C	18:05 C	1	02-03-2015	05-03-2015
	1	B777-200	09:45 C	18:05 C	. . . . . 6 .	07-03-2015	07-03-2015
SINSYD							
	2	B777-200	00:45 C	08:35 C	. . . 4 5 6 7	30-01-2015	07-02-2015
	2	B777-200	00:45 C	08:35 C	. . . 4 5 6 7	09-02-2015	27-02-2015
	2	B777-200	00:45 C	08:35 C	. . . . . 7	01-03-2015	04-03-2015
	2	B777-200	00:45 C	08:35 C	. . . . 5 . .	06-03-2015	06-03-2015
	3	B777-200	00:45 C	08:35 C	1	02-02-2015	02-02-2015

Export SSIM

Export SSIM

Schedule Name: Test Schedule

Date From: 01/01/2017

Date To: 31/01/2017

Time Mode: L - Port

Export To* : ftp://destination.merlot.aero/JAN2017.SSIM

Please specify path with file name

OK Cancel

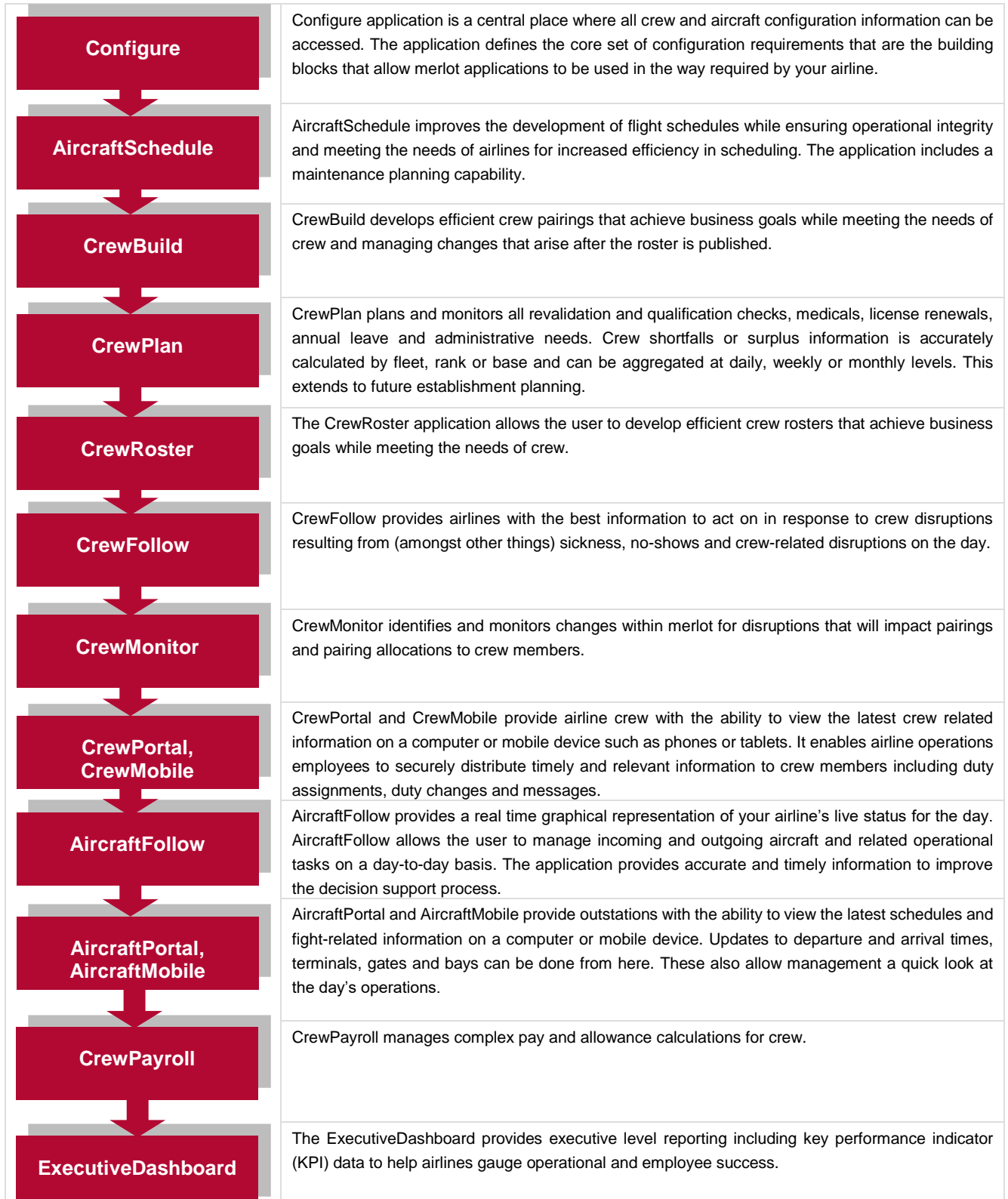
The steps to complete the Export SSIM dialog box are as follows:

The Schedule Name is pre-populated based on the last schedule worked on.

1. Enter Date From and Date To dates using the dropdown calendars.
2. Select Time Mode either L-Port or Zulu time (GMT) time from the dropdown menu.
3. Enter the FTP address with file name in the Export To field.
If the export path is not entered, the job will fail;
If the export path does not have a file name, the job will add a file name based on the current date and time;
If the export path has a file name but no file extension (.ssim), the job will fail since it will assume that only a path is given;
If the export path has a file name and file extension, the job will run successfully.
4. Click on the **OK** button to export the SSIM file. Alternatively, click **Cancel** to close the form without generating action.

Note: The *ExportSSIMJob* needs to be activated and configured with the FTP server credentials.

Application Flow Diagram



AircraftSchedule Glossary

Term	Definition
Aircraft Utilization	Measure of aircraft productivity calculated by dividing aircraft block hours by the number of aircraft days assigned to service on air carrier routes. Typically presented in block hours per day.
AOC	<i>Air Operator's Certificate</i> <i>Also referred to as Operator or Operator Code</i> 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.
Arrival Time	The time the aircraft arrives at the specified port. There are three sets of arrival times used in the system: <ul style="list-style-type: none"> Scheduled time of arrival (STA) - the original arrival time Estimated time of arrival (ETA) - the expected time of arrival. This can change depending on the performance of the previous flights. Actual time of arrival (ATA) - the exact time the aircraft stops
Base	The port to which crewmembers are expected to commence and finish their tasks / activities.
Block Hour	<i>Also called block time, blocks or flight hours</i> 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.
Cargo	Goods carried by the airline not associated to a passenger.
Company Time	This refers to the time at which the pairing or event is occurring converted to the company's base or headquarters location
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.
Currency Requirements	<i>Also called recency requirements</i> 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.
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	<p>The time the aircraft departs from the specified port. There are three sets of arrival times used in the system:</p> <ul style="list-style-type: none"> 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
Designator	Unique alphanumeric code given to distinguish each airline, or operations within an airline
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	<p>The grouping of a similar set of equipment types. For example, a 737 which could be comprised of 733 and 734 equipment types.</p> <p>This can also be used as a reference to indicate the equipment types that a crewmember is legal to operate on as part of his rating.</p>
Equipment Type	<p><i>Also called aircraft type.</i></p> <p>Model of the aircraft. A specific type of aircraft that has distinct characteristics, for example a 733 or 734.</p> <p>This can also be used as a reference to indicate the equipment types that a crewmember is legal to operate on as part of his rating.</p>
Flight	<p><i>Also called sector</i></p> <p>The transport taken from a departure point to an arrival point.</p>
Flight Complement	The number and types of crew required to operate a flight.
Flight instance	A specific flight on a specific date. This term is used for flights that are recurred through a specified period.
Flight sequence	A series of flights in a chronological flow for one equipment type or an aircraft/tail
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.
Gate	The location at the airport where passengers embark and disembark.
GMT	<p><i>Greenwich Mean Time</i> <i>Also called Zulu time</i></p> <p>The time at location at which the pairing or event is occurring converted to Greenwich Mean Time (GMT) value.</p>
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.
Mark as Active	<p><i>Also called Activate Schedule</i></p> <p>Defines the schedule as able to be used within the rest of the merlot application suite. Similar to publishing a schedule in order to be used across the system.</p>

Onward flight	A field where users can link one flight to another to form a chronological sequence of flights. The onward flight may occur on the following day, but never before the flight's date.
Port	An airport or station
Puck	The graphical representation of a flight or pairing in a Gantt chart.
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.
Recurrent flight	A flight that operates the same flight number, route and timings on more than one day
Route	A course between two ports, for example BNE-SYD
Schedule	A timetable of flights
Standard Schedule Information Manual	A message file that contains a flight schedule for several months. This is commonly used to send a seasonal schedule from one system to another.
System	The merlot.aero software application.
Turnaround	<i>Also called Actual Turnaround, Scheduled Turnaround, Turnaround Time</i> Amount of time between the arrival of a flight and its departure from a port. This is also the time taken to unload passengers, baggage, cargo, etc. upon arrival and to board passengers and load baggage, cargo, etc. before departure
User	A person who has access to view and/or modify data in the system
Violation Behavior	This determines what can be done to a violation once it is flagged. This works in conjunction with violation severity. <ul style="list-style-type: none"> • 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 Override	This determines how a violation should be overridden <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Critical - the violation must be addressed. Otherwise, the crew is illegal to fly

	<ul style="list-style-type: none">• 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
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Notes