ExecutiveDashboard User Guide

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Cherie Elpel	May 23, 2014	1.0	First Draft
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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.

Table of Contents

Welcome

The purpose of the Executive Dashboard User Manual is to assist leaders in utilizing real-time operational statistics and reporting functions within the On-Time Performance and Employees portal of the Executive Dashboard.

This manual can be used as a reference for feature specific information and reporting related functions within the ExecutiveDashboard application.

The layout of the Executive Dashboard User Manual is designed with the end-user in mind. The initial section of the manual familiarizes the user with the suite of merlot applications, the Framework Applications and the ExecutiveDashboard On-Time Performance and Employees interfaces. The main section details menu and tab functionality within the On-Time Performance and Employees portals.

In the last section, an application flow diagram is included to familiarize leaders with an overview of merlot aircraft and crew applications, starting with Configure and ending with the executive-level reporting capabilities in ExecutiveDashboard. A glossary is also included with application specific terms defined, as well as other key crew and aircraft application related terms.

Getting Started

It is suggested that leaders become familiar with the On-Time Performance graphical user interfaces (GUIs), review menu and tabular functionality and target the reporting features of interest.

It is necessary to login to merlot applications, including the ExecutiveDashboard. To access merlot applications, see your Configure administrator for more information.

1) What is the Executive Dashboard?

The ExecutiveDashboard application provides executive level reporting capabilities and real-time operational statistical data in order to measure progress relative to goals in Ground and Flight Operations departments within the airline. The dashboard provides Key Performance Indicator (KPI) related data to help airlines gauge operational and employee success.

2) ExecutiveDashboard Audience

ExecutiveDashboard system users are airline managers, divisional leaders and executive leaders with Flight or Ground Operations oversight.

3) ExecutiveDashboard Prerequisites

There are no prerequisites for the ExecutiveDashboard application. Some familiarization with merlot.aero applications would be helpful for understanding the impact of application configuration settings on performance data in the ExecutiveDashboard. Furthermore, familiarity with merlot crew and aircraft applications provides insight on the way these tools help airlines to maximize aircraft and crew efficiencies.

4) 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

5) 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.
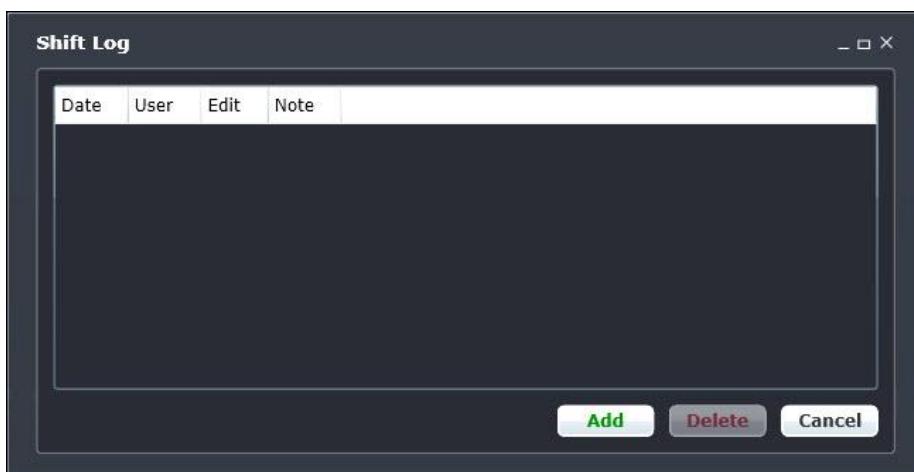
This icon is the signal strength of your connection to the Internet.

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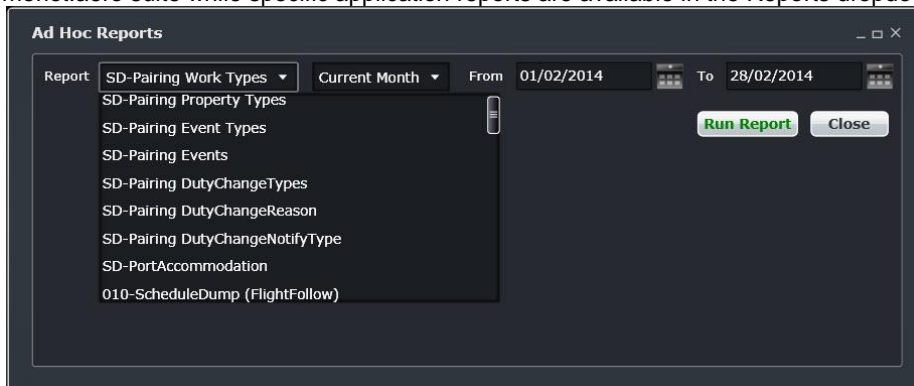
This icon is the Shift Log. You can add notes to the Shift Log for any system user to view.

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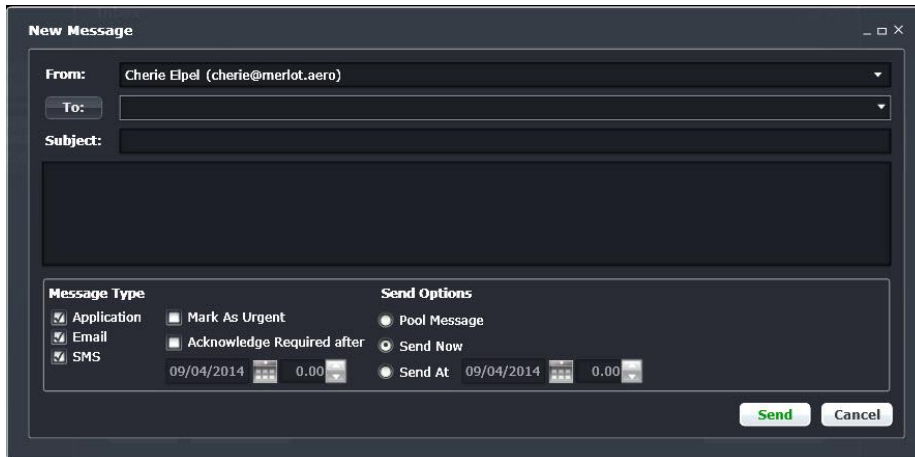
This icon allows you to navigate through the entire merlot.aero suite.

6) Logging into ExecutiveDashboard

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

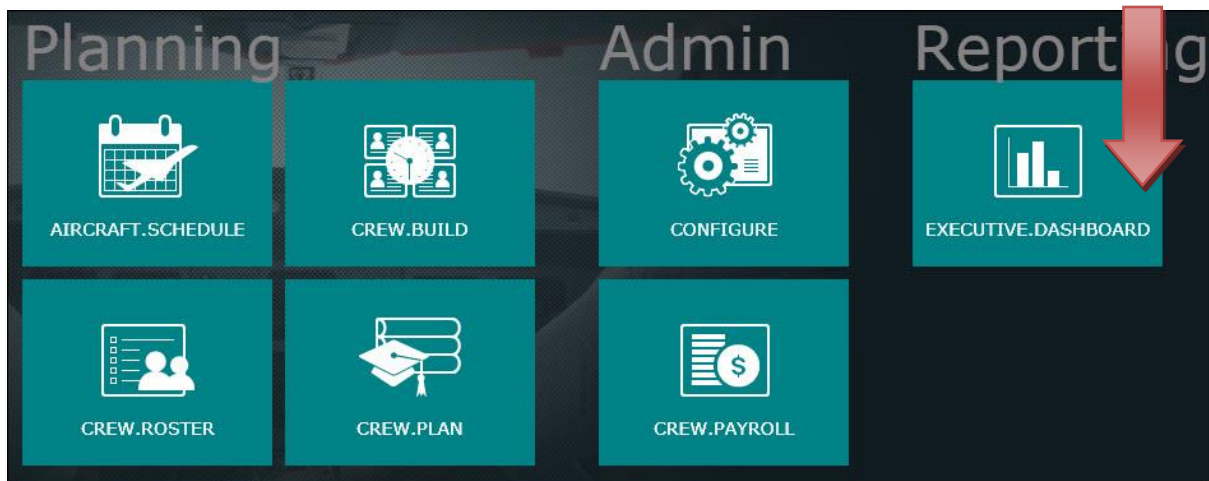## 7) The ExecutiveDashboard Graphical User Interface (GUI)

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

After login, the user can select the On-time Performance dashboard.

The On-Time Performance portal is a gateway to airline operations performance data generated in live operational environments through the use of merlot aircraft applications. It enables operational oversight through real-time statistical information and reporting capabilities.

The statistical data and reports are useful for operations managers as well as divisional and executive leaders. The graphical displays with real-time data can be captured and inserted into presentations and report documents quickly and easily. To access the On-Time Performance portal, click on the On-Time Performance portal, as presented above.

Operations Dashboard
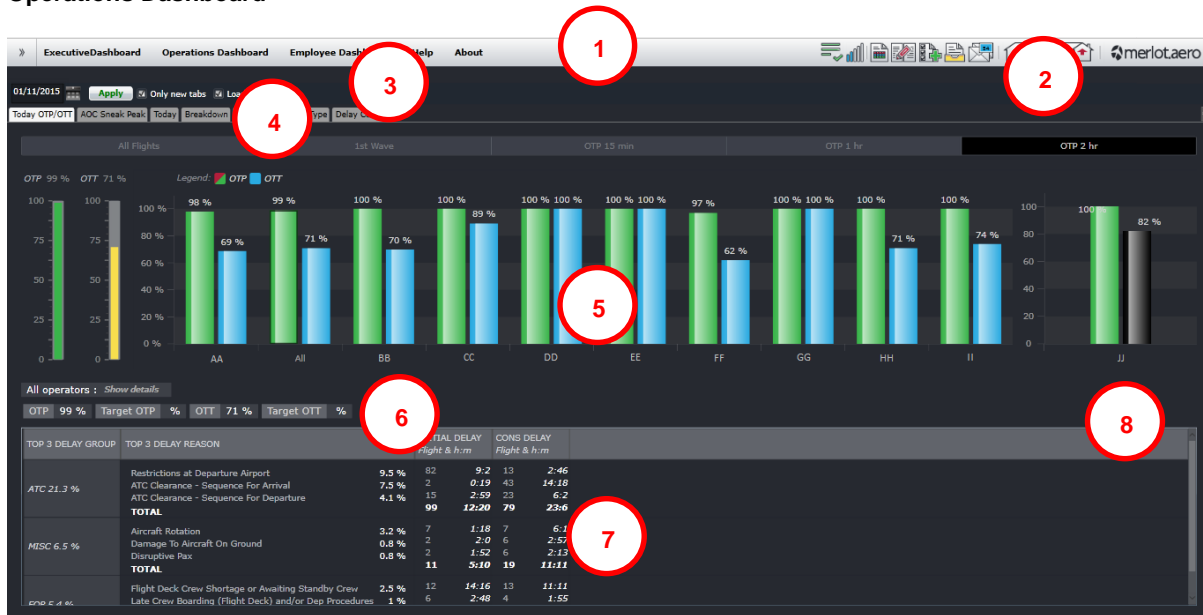
1. **Menu Bar**: Contains Operations and Employee Dashboard commands under the respective tabs for carrying out functions within the application.
2. **Framework Applications**: This common menu bar provides links for some important actions across merlot applications
3. **Filter**: Sets the criteria to find operational statistics
4. **Operations Dashboard Tabs**: View various facets of operation-related statistical data under the respective tabs.
5. **Display Panel:** Display area for the selected tab and time range option. Contains interactive Sneak Peak tabs with different time range options: All Flights, 1st Wave, OTP 15 min, OTP 1 hr, OTP 2 hr
6. **Performance Bar**: A non-interactive bar in which contains statistical data related to the Today OTP/OTT and AOC Sneak Peak tabs.
7. **Delay Bar**: A non-interactive bar in the Operations Display Panel which contains statistical data related to the top three delays in the Today OTP/OTT and AOC Sneak Peak tabs.
8. **OTP/OTT Data Bar:** Displays OTP/OTT data for each bar item in the Operations Display Panel.

8) On-Time Performance Configuration

Setting up OTP properly is important as it impacts the airline's performance ratings. The OTP and delay settings are defined in the **Delay and OTP Configuration** page in **Configure**. In this setting, Configure administrators define how OTP is calculated and what constitutes a reportable delay based on the airline's requirements.

Once OTP settings are defined, aircraft applications are now in-sync and provide real-time information to reflect OTPs and delays. In addition, merlot reporting capabilities capture operational performance statistics.

For reference, a snapshot of the Delays and On-time Performance Settings feature in Configure is displayed below.

Flight Follow Configuration

Delays and On-time Performance Settings   *Flight Follow Time Code*

Flight Range	Client Reference	Non Revenue	Start OTP Stats From	Include	Cancelled Flights	Enforce after*	Active	IgnoreDelay	Major Delay Great
1 - 99	Default	▭	Out from Gate	▭	▭		☑	5	15
100 - 199	Default	▭	Out from Gate	▭	▭		☑	5	15
200 - 299	Default	▭	Out from Gate	▭	▭		☑	5	15
300 - 399	Default	▭	Out from Gate	▭	▭		☑	5	15
400 - 499	Default	▭	Out from Gate	▭	▭		☑	5	15
500 - 599	Shell	▭	Out from Gate	▭	▭		☑	5	15

Consequential Delay Settings   **Other Settings**

Use Consequential Delays ☑   Default delay removal preference [SmallestDelay ▾]   Air return default [20 ▲▼] Ground Return Default [15 ▲▼]

[Save] [Cancel]

On-time Performance Calculations in the ExecutiveDashboard
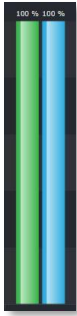
To understand how OTP calculations are determined, the following criteria apply:

- At the start of the day, the OTP statistics are at 100% since no flights have commenced and the operation is on-time as scheduled.
- As operations commence, each delayed flight is deducted from the total number of flights for the day. For example, if there are a total of 100 flights from the start of the day (00:00) to the end of the day (23:59) and 14 flights are delayed, the OTP ratio would be 86/100 or 86%.

Note: The total number of flights excludes those flights that are marked as deleted or cancelled.

To refresh the OTP display, click **Apply** button.

9) Operations Dashboard Menu

To access the Operations Dashboard, select Operations Dashboard menu and then select an option.
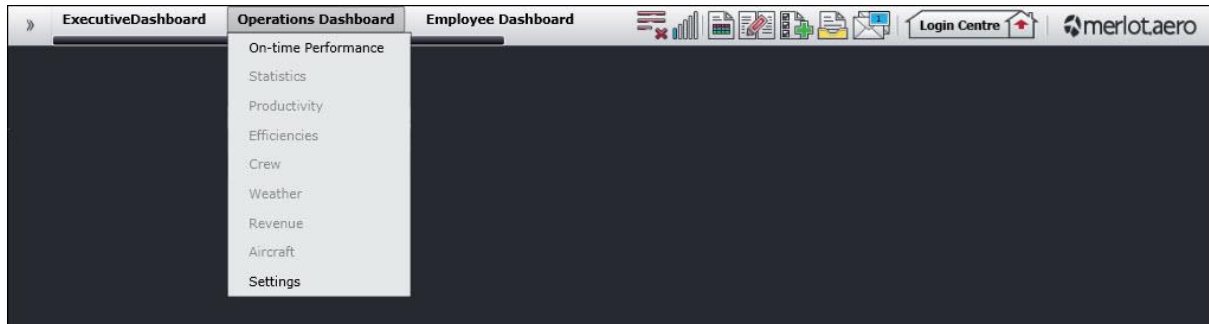
The statistical data displayed in the Operations Dashboard is read-only information. However, the data can be managed in such a way to meet the requirements of the user.

The Operations Dashboard options include:
- On-time Performance
- *Statistics – Future Development*
- *Productivity – Future Development*
- *Efficiencies – Future Development*
- *Crew – Future Development*
- *Weather – Future Development*
- *Revenue – Future Development*
- *Aircraft – Future Development*
- Settings

On-time Performance

To access the OTP option, go to the **Operations Dashboard** menu and click **On-time Performance** menu. The On-Time Performance portal opens.

There are four sections in the OTP portal: a filter section, a series of functional tabs, a multi-faceted display panel and a performance bar displaying real-time operational statistics. Each section will be discussed in detail.

Filter
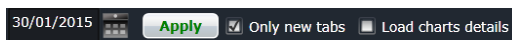
The Filter has three parts:
- Date
- Only new tabs
- Load Chart Details

Date

In order to view date-specific statistics in the Display Panel, users must load the data for a specified date by entering a date into the date control. A dropdown calendar is provided to select the date. If there is no date selected, the date defaults to the current date and displays in the **Today OTP/OTT** tab.

Select the **Load Chart Details** check box to view additional OTP and delay details by operator. This detailed information is accessible by clicking the Show Details bar located near the Performance Bar in the Operations

Display Panel. The Show Details data will default to all operators (i.e.: the first bar), unless the user clicks on an operator bar in the Display Panel.

The user clicks on the **Apply** button to filter results which load in the Display Panel and the Performance Bar.

The OTP statistical data is displayed within 15 minutes of the actual event time based on configured settings. To refresh this OTP data, click the **Apply** button.

By default, the **Today OTP/OTT** tab will display OTP information for all flights regardless of the operator.

In the **Today OTP/OTT** tab, all available operators are always displayed. If the statistics are not yet available in the requested date, the OTP and OTP values of an operator are set to 100%.
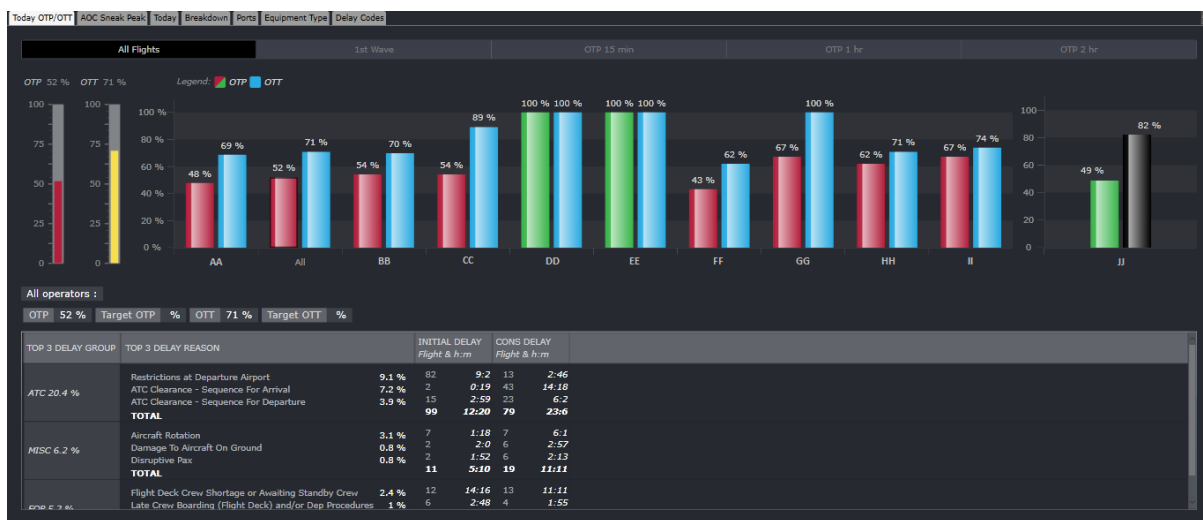
Today OTP/OTT

Click on the **Today OTP/OTT** tab to view the OTP and on-time turnaround (OTT) data. The interactive features of the Today OTP/OTT tab provide a snapshot of OTP and OTT performances for all departure flights based on actual time of departure (ATD).

**Note:** OTT settings are defined in Configure application.

The CreateDashboard job processes flight information to provide information in the statistical table, which is where the actual operational data regarding OTT is retrieved. For example, an airline might have a domestic OTT of 25 minutes for each port. If the turnaround time for domestic flights occurs within 25 minutes, it is valid and is considered on-time in terms of OTT. If a flight arrives early into a port and departs on schedule, it is considered valid and on-time in terms of OTT.

The features of the **Today OTP/OTT** tab in the Display Panel are discussed below.

Interactive Flight Bars

In the **Today OTP/OTT** tab there are five interactive flight bars: All Flights, 1st Wave, 15 Minutes, 1 Hour, and 2 Hours:
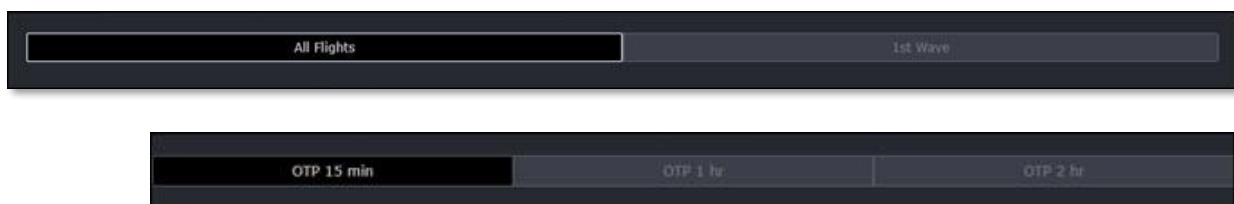
The All Flights interactive bar displays statistical data reflecting all flights for the day. Flights for specific operators can be viewed by clicking on the operator in the bar graph.

The All Flights interactive bars display OTP and OTT information from 00:00 hours for the day up to dashboard runtime. Flights are calculated based on ATD. OTP data is calculated based on scheduled flights only as defined in Configure.

The 1st Wave interactive bar displays flight data per operator for first wave flights, which are based on the first set of flights of the day within a specific window of time for an aircraft stationed at a port. If the last flight into the base departs more than 4 hours after arrival, it is considered a 1st Wave flight. First wave performance is only available for OTP. 1st Wave OTP data is applicable only for designated bases/hubs.

Note: The definition of 1st wave flights may vary per airline as defined in user preference settings, as follows:

Field	Description
MinFistWaveFlightDepartureHour	Start hour of first wave flights.
MaxFistWaveFlightDepartureHour	End hour of first wave flights.
MinFistWaveFlightArrivalDepartureDifference	Minimum number of hours in between flights wherein a flight begins within the range of MinFistWaveFlightDepartureHour and MaxFistWaveFlightDepartureHour values but has a flight prior to it within the same day.

The OTP 15 min, OTP 1 hr and OTP 2 hr tabs display both OTP and OTT data, enabling users to examine the reasons behind extended delays and its impact on passengers. For instance, if 'delays less than one' hour is filtered, you can get an insight on the amount of time the flight was delayed up until departure, as well as the corresponding top three reasons for the delays.

The OTP 15 min interactive bar excludes all delays that are more than 15 minutes and gives a snapshot of 'delayed' data every 15 minutes to 59 minutes.

The OTP 1 hr interactive bar excludes all delays less than 60 minutes and provides a snapshot of delay data from 1 hour or 60 minutes to 119 minutes. When OTP 1 hr is selected, the delay reasons reflect the top three reasons on flights that have more than a one hour delay.

The OTP 2 hr interactive bar excludes all delays less than 120 minutes and gives a snapshot of delay data from 2 hours or 120 minutes onward. The top three delay reasons reflect flights that have more than a two-hour delay.

The OTP 15 min, OTP 1 hr and OTP 2 hr features give users the information to quickly and easily analyze the problems of delays from multiple vantage points. This data can be used to make operational adjustments in order to reduce or eliminate significant delays.

Overall Performance Meters
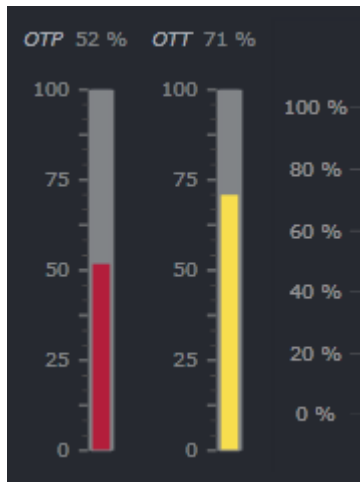
The Overall Performance Meters indicate the latest level of OTP and OTT from 00:00 hours up to dashboard runtime. The Overall OTP performance meter is displayed on the left while the Overall OTT performance meter is displayed on the right. The OTP and OTT statistics are based on the ATD of all scheduled flights for the airline.

Note: With or without a delay code, all delays are displayed.

To easily identify the performance levels, OTP and OTT performance data greater than 85% are highlighted in green, 70-84% are highlighted in yellow, and 69% or less are highlighted in red.

In the example shown here, the OTP is at 52% versus the OTT is at 71% at dashboard runtime.

Operator Performance Meters

The operator performance meters provide in-depth information pertaining to on-time performance. In the illustration below, the display panel is composed of overall OTP and OTT performance meters under **ALL** and the operator-specific performance meters, such as BB, CC, DD, etc.

Note: The **ALL** performance meters are not displayed if there is only one operator available.

In order to quickly identify the performance level, OTP levels greater than 85% are colored green, graph, 70-84% are colored yellow and 69% or less are colored red. The names of the operators are listed at the bottom and the OTP percentage values are at the top performance level meters.

Clicking the performance meters provides additional performance-related data. Until you click on one of the performance bars for a specific operator, the default position of the clickable bar is **ALL** or the entire airline (combined operators).

Bar Graph Details

To view additional performance details, click the performance meter, and then click **Show Details** as illustrated below.
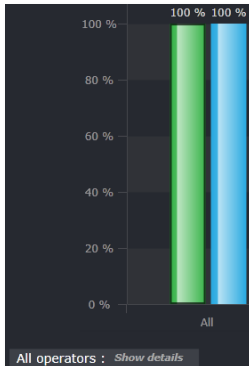
An All details window provides the flight delay data, operations detailed data from AircraftFollow and operations performance detail. The delay, operational and performance data can be exported for further analysis and/or for reporting purposes.
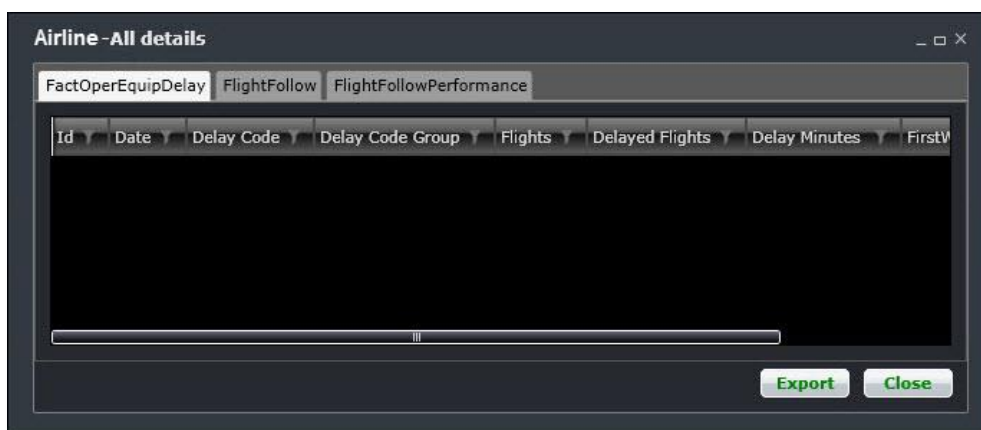
The three tabs on the pop-up window provide the following data:

FactOperEquipDelay Tab: Delay codes for delayed flights, the delay time, first wave flight delay information and operator information. The fields under the Fact Operator Equipment Delay tab are listed below.

Field	Description
ID	Primary Identification key for the table.
Date	Date of flight
Delay Code	Delay code
Delay Code Group	Category or group the delay code falls under
Flights	Number of instances of the flights instance. If greater than 1, the flight returned to base and a new instance was created.
Delayed Flights	Number of delayed flight instances for the delay code
Delay Minutes	Delay minutes per delayed flight
FirstWave Flights	Number of flight instances included in the first wave
First WaveDelayed Flights	Number of delayed flight instances for the delay code in the first wave
First WaveDelayed Minutes	Delay minutes per delayed flight in the first wave
Operator Name	Operator name of the flight

Click the **Close** button to close the window or click the **Export** button to export delay data.

FlightFollow Tab: Displays irregular operations information from AircraftFollow including delayed flights and delayed minutes and estimated and actual departure and arrival times.

The fields under the FlightFollow tab are listed below.

Field	Description
Designator Code	Designator code of the flight
Operator Name	Operator name of the flight
Flight	Flight number
Date	Date of the flight
Actual Equipment Rego	Equipment registration number
Actual Equipment Type Code	Equipment type code
Actual Route Name	Route name
Departure Scheduled	Scheduled time of departure (STD)
Departure Estimated	Estimated time of departure (ETD)
Departure Best	Most recent and accurate time with the following hierarchy: ATD, ETD, STD
Departure Actual	Actual time of departure (ATD)
Arrival Scheduled	Scheduled time of arrival (STA)
Arrival Estimated	Estimated time of arrival (ETA)
Arrival Best	Most recent and accurate time with the following hierarchy: ATA, ETA, STA
Arrival Actual	Actual time of arrival (ATA)
Block Time	The time it takes an aircraft to fly from the departure port to the arrival port
Delays	Delay minutes
Next Flight	Next flight number in the cycle

Field	Description
On Time Arrival	On time arrival indicator (0 for not on time, 1 for on time)
On Time Departure	On time departure (0 for not on time, 1 for on time)
On Time TurnAround	On time turnaround (0 for not on time, 1 for on time)

Click the **Close** button to close the window or click the **Export** button to export flight data.

FlightFollowPerformance Tab: Displays details pertaining to first wave performance.

The fields under the FlightFollowPerformance tab are listed below.

Field	Description
Flight	Flight Number
On Time Arrival	On time arrival indicator (0 for not on time, 1 for on time)
On Time Departure	On time departure (0 for not on time, 1 for on time)
On Time Turnaround	On time turnaround (0 for not on time, 1 for on time)

When using the export feature, the FactOperEquipDelay tab exports delay data, the FlightFollow tab exports all flight data and the FlightFollowPerformance tab exports OTP summary data.

Load Factor

Load factor is a new feature coming soon!

The new Load Factor feature calculates passenger load data. The passenger load data will correspond to the operator bars clicked in the Operations Display Panel. The passenger load is to be calculated from the total number of passengers flown by the total flights per operator.

Passenger load data is applicable for OTP 15 min, OTP 1 hr and OTP 2 hr and OTP 1st wave. A percentage value will display at the base of the graph to represent the group load factor value.

The group load factor is the load factor of the designated operator while load factor represents the entire airline, which may include multiple operators.

Display Panel - Performance Bars

The performance bar header provides OTP/OTT data for bars selected in the bar graph.

In the performance bar header below, the OTP is at 54%, the Target OTP is at 70%, the OTT is at 100% and the target OTT is at 56%.

Delay

The delay group performance bar is divided into four parts: Top 3 Delay Group, Top 3 Delay Reason, Initial Delay and Cons (Consequential) Delay information.   Each column is discussed in detail.

Top 3 Delay Group: Displays the top three delay group codes with delay percentages (for example 27.9% as shown for Reactionary or Miscellaneous delays). OTP delays are calculated as current OTP (54%), so the OTP delay is 46% (100% OTP less current OTP of 54%). The percentages in the Top 3 Delay Group may or may not add up to 46%, as only the top three delay groups are displayed. In this example above, the top three delays total to 41.1%

Top 3 Delay Reason: Displays the top three delay reasons from the delay group expressed as percentages. In the example above, the top three delay reasons are Aircraft rotation (27.9%), no reason (8.2%), Fueling/defueling (1.6%) and headcount cabin crew (3.3%).

Initial Delay: Displays the number of initial flights and hours delayed by the specific delay reason in the Top 3 Delay Reason column. The total of initial flights delayed based on the delay group is at the bottom of the delay reason.

Consequential Delay: Displays the sum total of consequential flights delayed based on the delay group at the bottom of the delay reason. The consequential flights and hours are calculated as of the runtime excluding the delays which will occur far ahead of the day of operations by the aircraft.

Consequential delays are delays incurred by succeeding flights because of the current flight delay. The delay code of the flight that caused the delay is placed on affected flights.

Settings

To access the Settings feature, select the Operations Dashboard tab and click on **Settings**.

This feature enables users to filter and view port specific, delay code specific and equipment type specific information for selected ports. This capacity allows for more detailed analysis regarding select criteria.

The results are reflected in the (Today/Breakdown /Ports/Equipment Type/Delay Codes).
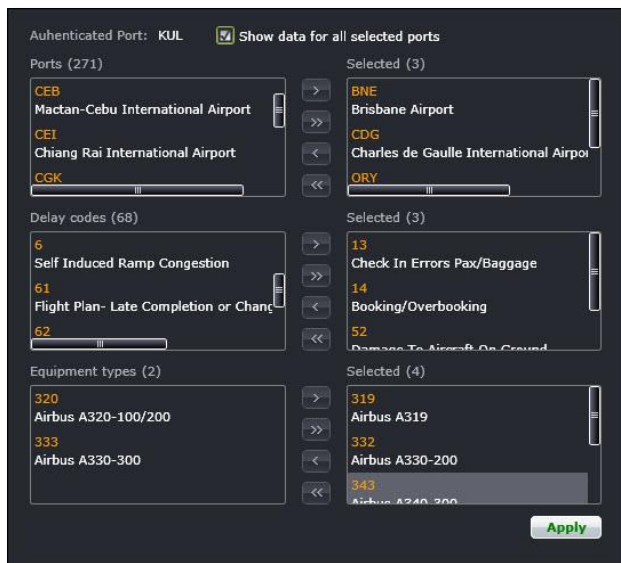
Follow these steps to view select data:
1. Click on the Show data for all selected ports check box.
Alternatively, leave the Show data check box unchecked to view data for the designated authenticated port only.

2. Select a port or ports, click the right arrows (> or >>) to move port(s) to the Selected column.
3. Select a delay code or codes, click the right arrows (> or >>) to move delays codes to the Selected column.
4. Select an equipment type(s), click the right arrows (> or >>) to move equipment types to the Selected column.
5. Click on the **Apply** button to generate the results.

View the results in the respective Ports, Equipment Type or Delay Codes tab.

10) Application Flow Diagram

The flow diagram is an overview of merlot.aero's crew and aircraft applications which comprise the Airline Operations Management System (AOMS). The flow diagram reflects the overall flow from configuration to operational processing to end-user use and executive-level reporting.

Configure	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.
Aircraft.Schedule	AircraftSchedule automates and improves the development of flight schedules while ensuring operational integrity and meeting the needs of airlines for increased efficiencies in scheduling. The application includes a maintenance planning capability.
Crew.Build	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.
Crew.Plan	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.
Crew.Roster	The CrewRoster application allows the user to develop efficient crew rosters that achieve business goals while meeting the needs of crew.
Crew.Follow	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.
Crew.Monitor	CrewMonitor identifies and monitors changes within merlot for disruptions that will impact pairings and pairing allocations to crew members
Crew.Portal	CrewPortal allows the timely dissemination of information to crew providing secure and global access via a standard Internet browser. Crew Portal is the crew's access to the merlot system. It is the way in which the crew can interact with crewing officials such as crew schedulers.
Aircraft.Follow	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.
Aircraft.Portal	AircraftPortal captures aircraft operations data in order to provide ground services at out stations with up-to-date information. Aircraft data is captured via standard Internet browsers for distribution to other merlot systems.
Crew.Payroll	CrewPayroll manages complex pay and allowance calculations for crew.
Executive.Dashboard	The ExecutiveDashboard provides executive level reporting including Key Performance Indicator (KPI) data to help airlines gauge operational and employee success.

11) ExecutiveDashboard Glossary

Term	Definition
Display Panel	Area where operational and employee data is displayed in the ExecutiveDashboard.
On-Time Performance Portal	The On-Time Performance portal in ExecutiveDashboard is a gateway to airline operations performance data generated in live operational environments through the use of merlot aircraft applications.
OTP	On-time performance is based on scheduled departure and arrival times. OTP parameters are defined by the airline in Configure.
OTT	Turnaround is the time it takes after an aircraft arrives at the gate before it is ready to depart the gate again. On time turnaround parameters for domestic and International flight are defined by the airline in Configure.
Revenue per Available Seat Mile (RASM)	Also called unit revenue, this figure is calculated by dividing the airline's total revenue by all the available seat miles.
Revenue Passenger Miles (RPMs)	This is the basic measure of airline passenger traffic. It reflects how many of an airline's available seats were actually sold. For example, if 200 passengers fly 500 miles on a flight, this generates 100,000 RPMs.
Revenue per Employee	One measure to determine an airline's labor productivity. It is calculated by dividing an airline's total revenue by the number of airline employee full-time equivalents as reported to the US Department of Transportation.
User	A person who uses merlot system applications.

Notes