Harmony Web Interface – Agenda Overview

• Lessons in Harmony Web Interface
  • Home Page
  • Work Views
  • Flight List
  • Demand Graph
  • Map Tools
  • Flight Schedule Upload
  • Flight Creation
  • TMI Parameters
  • Alerts
  • Edit Mode
  • System Settings

Harmony Web User’s Guide
Harmony Web Online Help
Home Page
Home Page

Three main components

- Main toolbar
- Module and Element selection
- Work View Preview
Home Page Main Toolbar

- Pause /Start is a toggle button
- Map is a toggle button with the Home page
- Data Tools
  - Flight Data Upload, Reporting, ATFM Measure Parameters Display, Runway Configuration, and Data Source Report
- Settings
  - System Settings, Help, About
- Alerts
  - ATFM Measure, Resource, Flights
• Module & Element Selection
  ▪ Open Module
  ▪ Select Element

• Work View preview
  ▪ Use control in upper, right corner to open Work View
  ▪ Icon identifies module
    ▪ Flight List
    ▪ Demand Graph
    ▪ COBT Compliance
    ▪ Undefined panel (magnifying glass)
Work Views
Work Views

• Saved layouts of Flight Lists, Demand Graphs, and COBT Compliance Windows for any combination of airports

• Can include up to four elements

• Functionality
  • Select Flight Lists, Demand Graphs, and COBT Compliance Windows
  • Save new and existing Work Views
  • Save default Work View to open when you log in
  • Rearrange (move) panels
  • Add and remove panels using Layout Configurations tool
  • Rename panel titles
Creating a Work View

Select layout and define panels

Select layout of Work View

Define element for each panel

Work View toolbar has additional buttons

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Flight List Overview

• Lists flights for the selected airport
• Refreshes flight data at an interval configured in System Settings
• Provides flight summaries and flight details for each flight

Flight List Tools functionality
• Configure which columns are displayed
• Filter flights by different data types
• Export the Flight List to a CSV file
• Open Edit Mode
• Reset Panel
### Flight List Screen

Open Flight List from Home page or Work View

![Flight List Screen](image)

- **Open Flight List Tools**
  - Search for ACID
  - Set number of records to display
  - Record count

- **Legend**
  - Active
  - Completed

- **Page controls to navigate data**
  - Refresh data

- **Legend**
  - Active
  - Completed

- **Record count**

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**Flight Summary**

Click the expand/collapse control to show/hide Flight Summary

<table>
<thead>
<tr>
<th>YBBN (509 flights)</th>
<th>Info</th>
<th>Stat...</th>
<th>ACID</th>
<th>CNX</th>
<th>ADEP</th>
<th>ADES</th>
<th>AC Type</th>
<th>SOBT</th>
<th>EOBT</th>
<th>ETOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>VLE381</td>
<td>N</td>
<td>YBBN</td>
<td>YBTL</td>
<td>UNKN</td>
<td>18/1537</td>
<td>A18/1530</td>
<td>A18/1530</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td>ADEP / DRwy / DFix</td>
<td>YBBN / 19 / ZZ / ZZ</td>
<td>VLE381</td>
<td>UNKN</td>
<td>ADES / ARwy / AFix</td>
<td>YBTL / ZZ / ZZ</td>
<td>A18/1530</td>
<td>E18/1659</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td>Major</td>
<td>UNKN</td>
<td>AC Reg</td>
<td>VLE381</td>
<td>AC Type</td>
<td>UNKN</td>
<td>AC Type</td>
<td>UNKN</td>
<td>E18/1659</td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td>EOBT</td>
<td>A18/1530</td>
<td>ETOT</td>
<td>A18/1530</td>
<td>ELOD</td>
<td>E18/1659</td>
<td>E18/1659</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td>FPL Route</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Click the information control (i) to open the Flight Details

1. Flight Information
2. Flight Leg Information
3. Flight Event Times
4. ATFM Measure Information
   - Controlling ATFM Measure is outlined in green
   - Slot Time, Runway (for Runway GDPs) is listed
   - As you click an ATFM Measure, the Slot Time, Runway information updates for the selected ATFM Measure
   - This section is not displayed for uncontrolled flights
### Flight List Tools: Manage Columns

Drag and drop columns between Available Columns and Displayed Columns

#### Available Columns
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Reg</td>
<td>Aircraft Registration</td>
</tr>
<tr>
<td>AC Type Group</td>
<td>Base Aircraft Type Group</td>
</tr>
<tr>
<td>AEET</td>
<td>Actual Elapsed En Route...</td>
</tr>
<tr>
<td>AENTRY</td>
<td>Actual FCA Entry Time</td>
</tr>
<tr>
<td>AEXIT</td>
<td>Actual FCA Exit Time</td>
</tr>
<tr>
<td>AFx</td>
<td>Arrival Fix</td>
</tr>
<tr>
<td>AIBT</td>
<td>Actual In Block Time</td>
</tr>
<tr>
<td>ALDT</td>
<td>Actual Landing Time</td>
</tr>
<tr>
<td>AOBT</td>
<td>Actual Off Block Time</td>
</tr>
<tr>
<td>ARwy</td>
<td>Arrival Runway</td>
</tr>
<tr>
<td>Airborne Max Delay</td>
<td>Airborne Max Delay</td>
</tr>
<tr>
<td>BEntry</td>
<td>Base Estimated Entry Time</td>
</tr>
<tr>
<td>BExit</td>
<td>Base Estimated Exit Time</td>
</tr>
<tr>
<td>BIBT</td>
<td>Base Estimated In Block...</td>
</tr>
<tr>
<td>BLDT</td>
<td>Base Estimated Landing...</td>
</tr>
<tr>
<td>BOBT</td>
<td>Base Estimated Off Block...</td>
</tr>
<tr>
<td>BTOT</td>
<td>Base Estimated Take Off...</td>
</tr>
<tr>
<td>CAFT</td>
<td>Calculated Arrival Fix Time</td>
</tr>
<tr>
<td>CEET</td>
<td>CLDT - CTOT</td>
</tr>
<tr>
<td>CIIBT</td>
<td>Calculated In Block Time</td>
</tr>
</tbody>
</table>

#### Displayed Columns
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Flight Status</td>
</tr>
<tr>
<td>ACID</td>
<td>Aircraft ID</td>
</tr>
<tr>
<td>CNX</td>
<td>Cancelled</td>
</tr>
<tr>
<td>ADEP</td>
<td>Departure Airport</td>
</tr>
<tr>
<td>ADES</td>
<td>Arrival Airport</td>
</tr>
<tr>
<td>AC Type</td>
<td>Aircraft Type</td>
</tr>
<tr>
<td>ETOT</td>
<td>Estimated Take Off Time</td>
</tr>
<tr>
<td>ATOT</td>
<td>Actual Take Off Time</td>
</tr>
<tr>
<td>EENTRY</td>
<td>Estimated FCA Entry Time</td>
</tr>
<tr>
<td>EEXIT</td>
<td>Estimated FCA Exit Time</td>
</tr>
<tr>
<td>ELDT</td>
<td>Estimated Landing Time</td>
</tr>
<tr>
<td>FPL Route</td>
<td>Flight Plan Route</td>
</tr>
<tr>
<td>CII TMI ID</td>
<td>Controlling TMI Identification</td>
</tr>
<tr>
<td>CII Slot Hold</td>
<td>Controlling Slot Hold Flag</td>
</tr>
<tr>
<td>Elem TMI ID</td>
<td>Element TMI Identification</td>
</tr>
<tr>
<td>Elem Slot Hold</td>
<td>Element Slot Hold Flag</td>
</tr>
</tbody>
</table>
Flight Tools: Filter

- Filter data by Aircraft, Route, and Times data
- Select values from dropdown lists
- Select AND/OR operators
  - The OR statement consists of the multiple values within the “includes” or “does not include” fields. That is, the data does not have to meet all the listed criteria.
  - The AND statement is a joining of the set of “includes/does not include” criteria within an individual data element group (i.e., Aircraft, Route, and Times). That is, the resulting data needs to satisfy both the inclusion and exclusion criteria.
  - As you add new filters within a data element group, the filter criteria is joined by AND to the other data element groups.
Demand Graph
• Monitor the overall demand of an airport or FCA
• Set capacity for an airport
• Select types of data with graphs that are colored by (Status, Data Source, AC Type Group, Carrier, AFix and DFix)
• Display bars for Arrivals, Departures, or both
• Display time bins in minutes (15, 30, 60)
• Show capacity and cancelled flights (roll mouse over bar)
• Display aircraft count (roll mouse over bar)
Add New Graph

Select types of data with bar graphs that are colored by:
• Status, Data Source, AC Type Group, Carrier, AFix, and/or DFix

1. At top of graph, click + plus sign

2. Select Color By data type

3. Data type above bar graph. Click the Data Type button (e.g., Status) to display the corresponding data.
Map Tools
Map Tools

- Configure map layers
- Create and manage range rings
- Display weather
- Manage locations (map views)

Airports represented by circles

Range rings

Right-click airport to
- Show Flight List
- Show Demand Graph

FCAs displayed
Flight Schedule Upload

- The Flight Schedule Upload component is used to upload your flight data into the Harmony system.

- The Flight Schedule data includes ACID, ADEP, ADES, OBT, IBT, AC Type, CNX, and AC Reg.

- OBT and IBT will be entered as Aircraft Operator times, which have an L prefix.
1. From Data Tools menu, select Flight Data Upload

2. From the Data File dropdown, select Scheduled Flights

3. Click Browse to navigate to CSV file location

4. After CSV file loads, click Upload
Creating a Flight

- Super Users, Flow Managers, and Aircraft Operators can create a flight using information from an existing flight.

- An Aircraft Operator can only create/update flights in its own major and subcarriers

1. Open Edit Mode Flight List
2. Select flight in Flight List
3. Click Create Flight From button
4. Complete fields
5. Click Submit

Or
1. Open Edit Mode Flight List
2. Select manage page drop down
3. Click Create Flight button
4. Complete fields
5. Click Submit
Alerts Overview

• Alerted to changes to:
  • ATFM measure (e.g., addition, revision, purge, expiration)
  • Flight (e.g., compliance threshold is not met, a flight is bridged, pop-up flight)
  • Resource (e.g., an airport’s runway configuration).

• Notified of new events that occur after you log in (i.e., alerts are not displayed for activities that occurred before you logged in)

• Alerts displayed in toolbar and pop-up

![Alerts Displayed in Toolbar and Pop-up]
Click alert icon to open Alerts window
Each alert type has window with alert-specific data

- Tab for each Alert type
- Blue-colored tab indicates selection

X deletes specific alert

Acknowledge All
- Acknowledges alerts
- Keeps alerts in list

Clear All removes alerts from active tab
The Edit Mode All Flights View provides a view of the uncontrolled and controlled flights for airports for the selected airport.

The Edit Mode – ATFM measure View provides a view of airport-specific controlled flights and slots for ATFM Measures.
Edit Mode provides the following capabilities to update flights:
- Update flight data (ACID, AC Type, AC Reg)
- Update flight contact information (email address, phone number, mobile carrier)
- Cancel a flight
- Reinstate a flight
- Update a flight’s LOBT (the LIBT is calculated from the LOBT)
- Update a flight’s ATOT, ALDT
- Update a ELOBT (the ELIBT is calculated from the ELOBT) with an option to resume the auto-management of the EL time
- Add flights (non-controlled or controlled) to an ATFM measure (Super Users only)
Edit Mode – TMI Measure View

- Edit Mode – ATFM Measure View includes much of the functionality found in Edit Mode – All Flights View as well as the additional functionality:
  - Cancel a flight with slot hold
  - Reinstate a controlled flight
  - Perform an ISE request on a pre-departure, controlled flight
  - Free controlled slots in an TMI (Super Users only)
  - Cancel any controlled flight (Super Users only)
  - Swap two flights
  - Swap a flight with an unassigned slot

- Some of this functionality will be addressed in the Slots Substitution training module
System Settings
System Settings

- Configure settings such as data update intervals, layout configurations, alert expirations, compliance thresholds.

- System Settings dictate the configuration of components created in the future. That is, the updates do not dynamically change the existing components.

- System settings for following components:
  - General
  - Flight List
  - Demand Graph
  - Work Views
  - Map
  - Substitution List
  - Alerts
Update the data update interval, and the default layout, position, and module
System Settings: Flight List

- Configure the default number of records per page
- Select which airport or airspace columns are displayed
Configure airport and airspace:
- Data type
- Time Bin
- Whether to show capacity or cancelled flights
System Settings: Work Views

- Set a default Work View
- Delete Work Views
System Settings: Map

- Set refresh rate
- Set default view
Select which airport and airspace columns are displayed.
**System Settings: Alerts**

- Set duration of pop-up alerts
- Set alert expiration
- Set alerts to display only those belonging to the user’s Major
- Set flight compliance threshold to generate an alert
- Set flight compliance threshold for the COBT Compliance Window