

How to load data using FRI^{PRO} web application

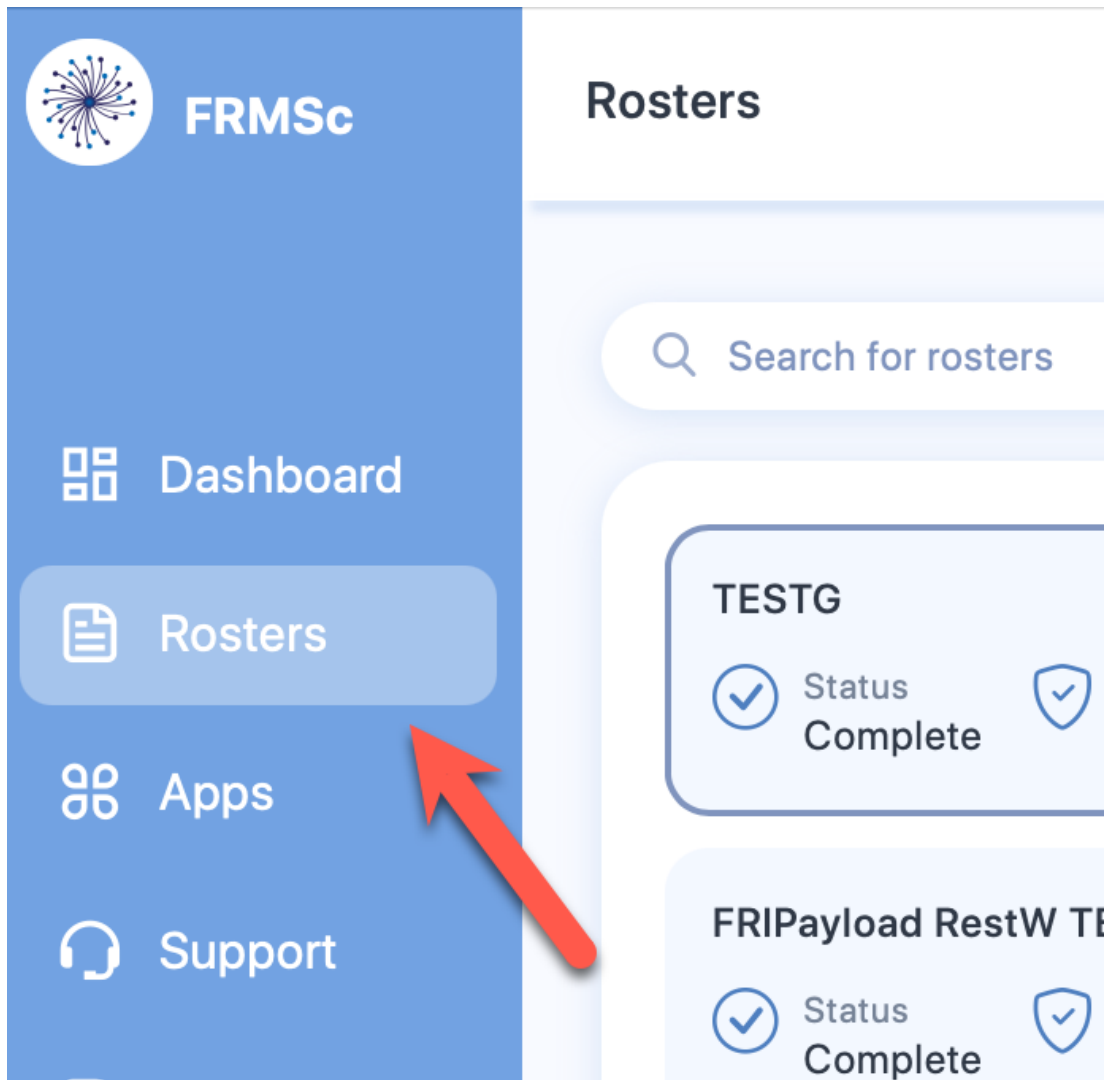
There are multiple ways to upload roster data to FRI^{PRO} model. You can either setup [Apps](#), use FRI^{PRO} web application, or call the [FRI^{PRO} APIs](#) to load data into FRI^{PRO}.

In this guide we will focus on loading roster files in FRI^{PRO} format into FRI^{PRO} using the FRI^{PRO} web application. For this approach, you can choose between two methods - individual entry and bulk upload. This guide will walk you through both those methods in detail.

Individual entry

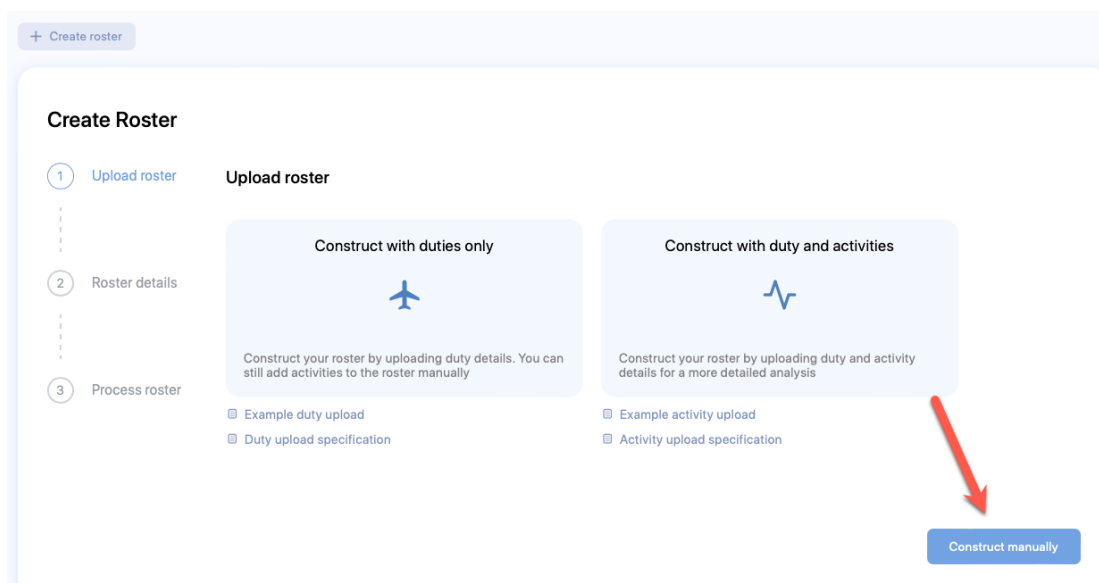
Individual entry is one of the easiest way to submit data to FRI^{PRO} analysis. The step-by-step wizard will allow you to enter the roster data, limiting errors during data input. To manually submit individual roster entry into FRI^{PRO}, follow the steps below:

1. Navigate to the [Rosters](#) screen using the menu panel.

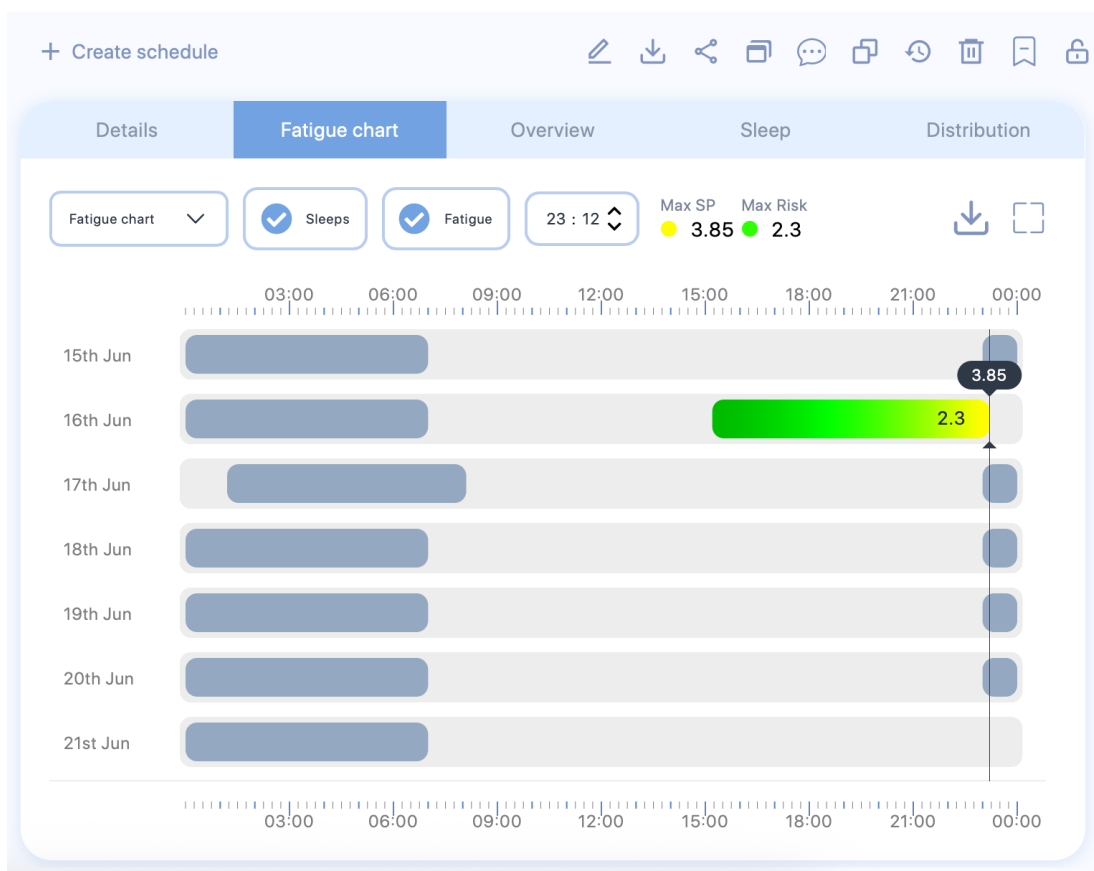


2. Click **+ Create roster**

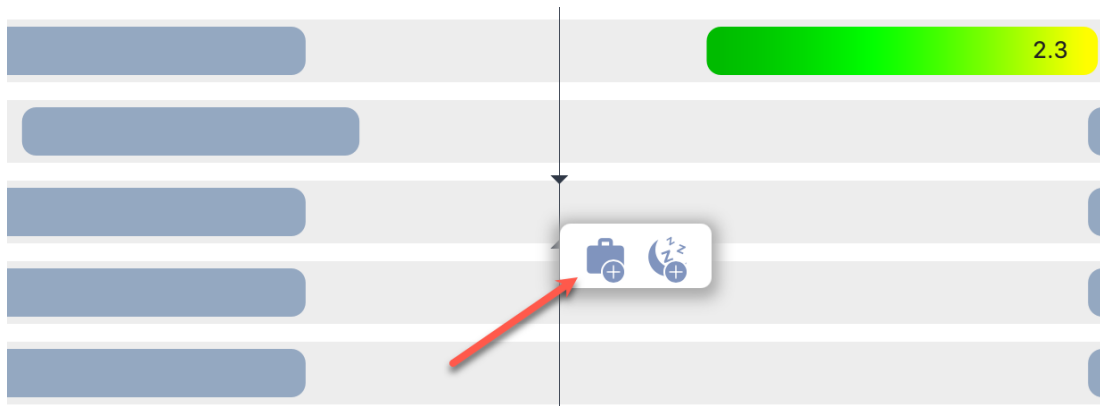
3. Click **Construct manually**



4. The **Create Roster** form will appear. Enter relevant values in the available fields. Refer to the [Tables of properties](#) section below for more information.
5. Click **Next**
6. The **Create Schedule** form will appear. Enter relevant values in the available fields. Refer to the [Tables of properties](#) section below for more information.
7. Click **Submit**.
8. The **Create Duty** form will appear. Enter relevant values in the available fields. Refer to the [Tables of properties](#) section below for more information.
9. Click **Create**
10. The Fatigue chart will start showing the analysis immediately.

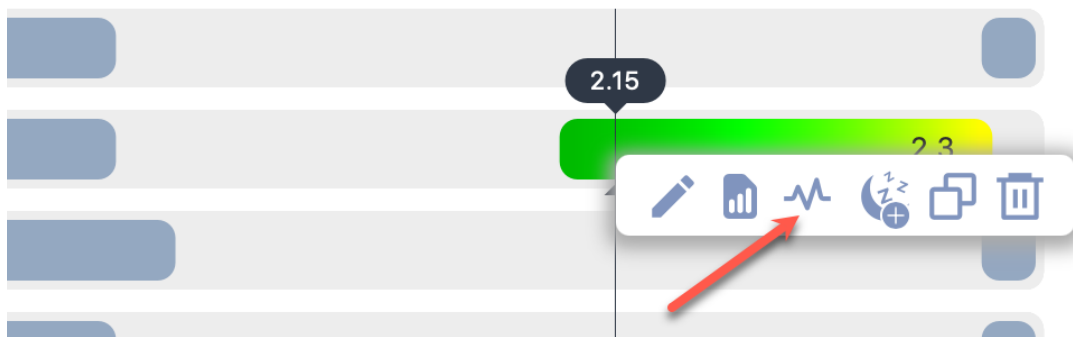


To add more duties to a schedule, right click on area of the fatigue chart where you want to add the duty and select **Create Duty**. Repeat Step 8 to create duty.

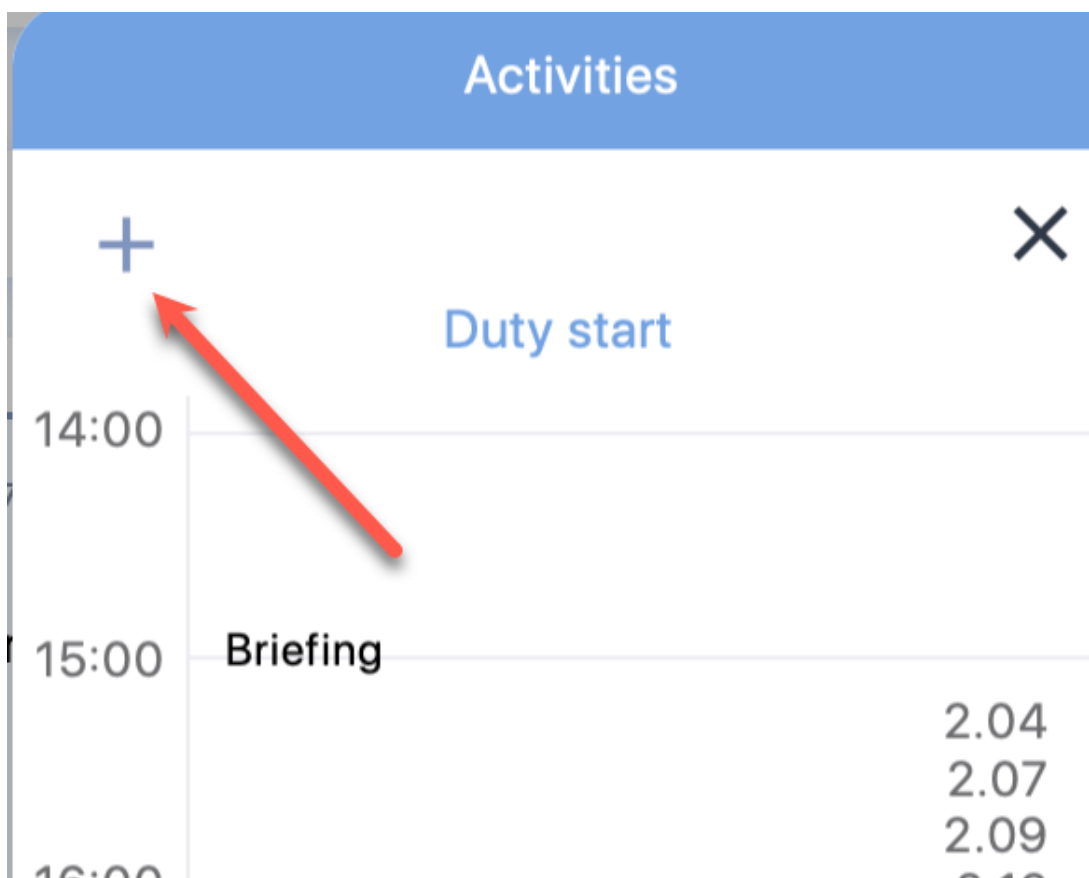


To add additional schedules for more personnel, click **+ Create Schedule** located above the chart.

11. Right click on the duty and select **Activities** to start adding activities to the duty.



12. The **Activities** pop-up form will appear. Click on the **+** icon.



13. The **Create Activity** form will appear. Enter relevant values in the available fields. Refer to the [Tables of properties](#) section below for more information.
14. Click **Create** and close the **Activities** pop-up. The Fatigue chart will update. Continue adding more activities and duty to refine the results.

Bulk upload

Example CSV or Microsoft Excel (.xlsx) files

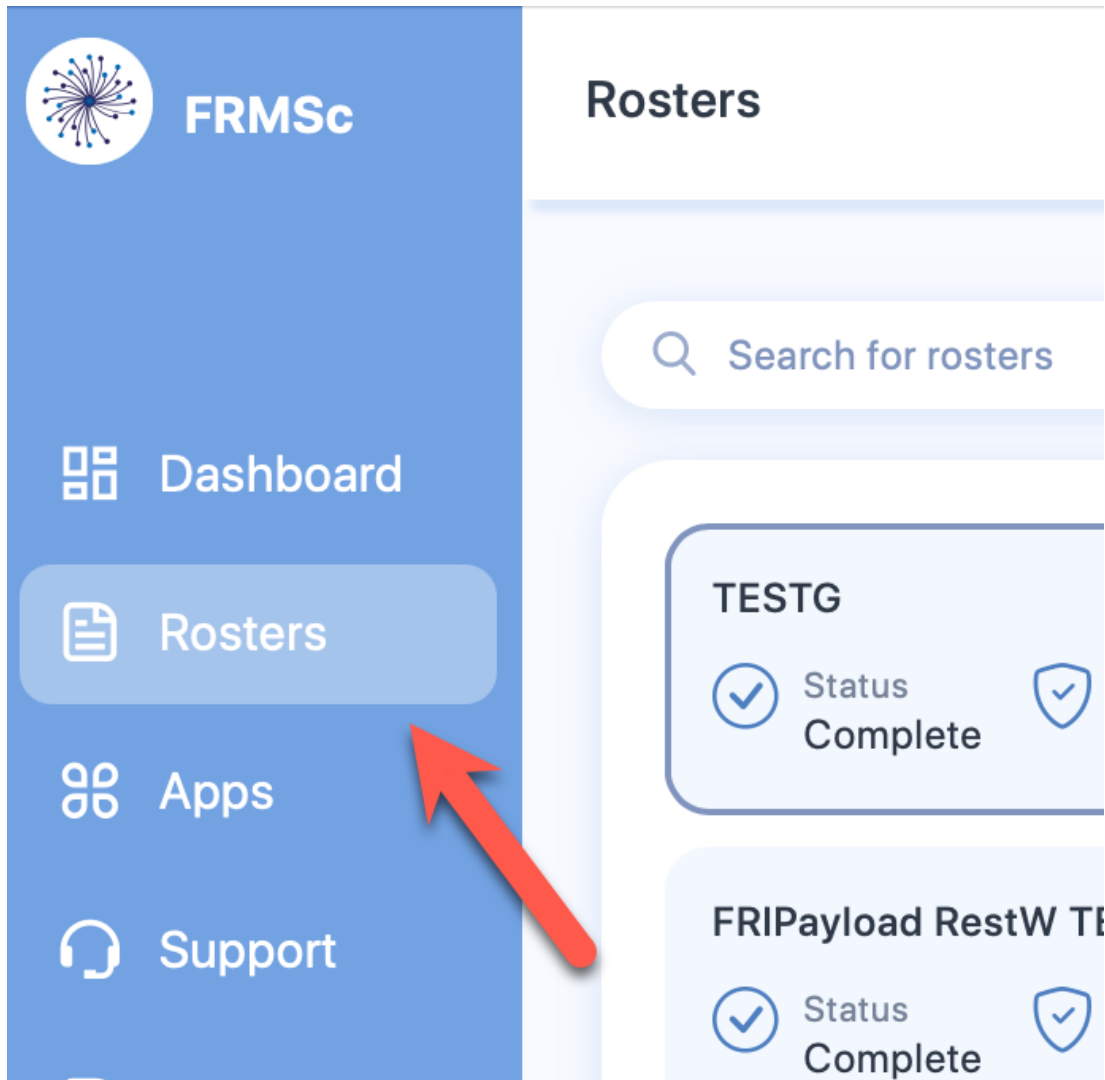
Download the example files for Duty ([csv](#) and [.xlsx](#)) and Activities ([csv](#) and [.xlsx](#)) [here](#).

Alternatively, you can view the order and column names of the files in the [Duty file specification](#) and the [Activity file specification](#) sections. You can also see [Where to get file formats document](#) to learn about additional places you get the file formats from.

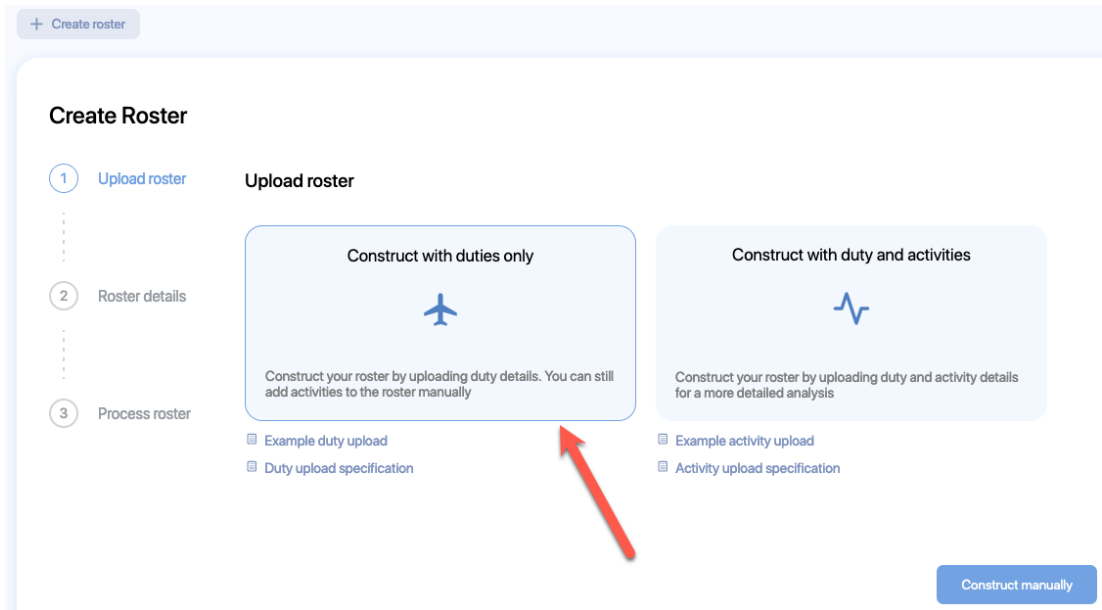
Bulk entry is one of the fastest way to submit data to FRIPRO using the web UI. Using the CSV or Microsoft Excel file, you can submit multiple schedules data at once, reducing the time taken to enter the data manually. To submit bulk roster entries into FRIPRO web UI, follow the steps below:

Construct with duties only

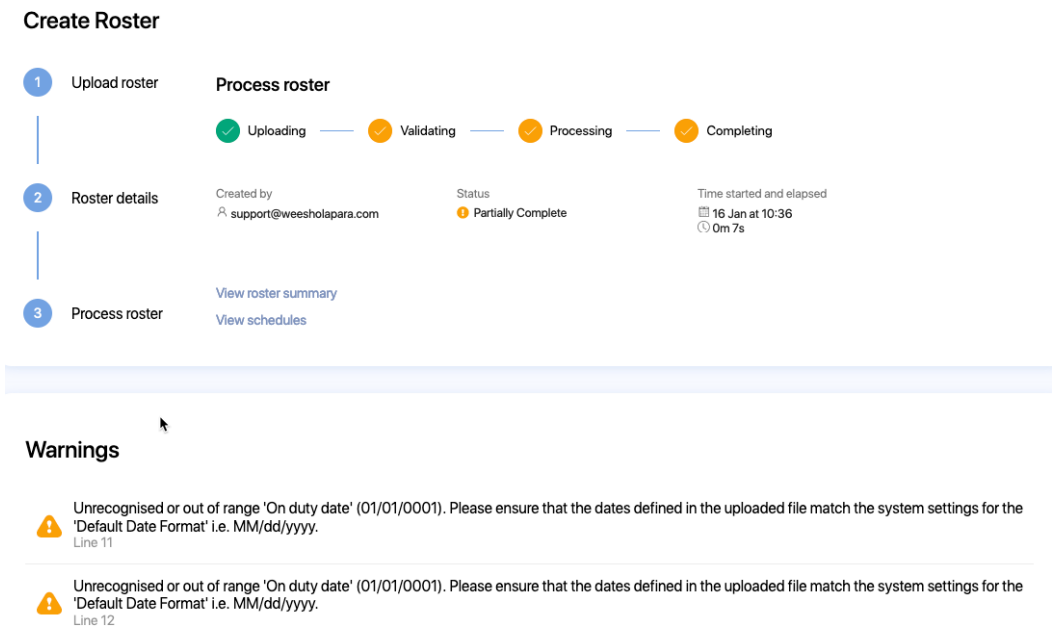
1. Navigate to the [Rosters](#) screen using the menu panel.



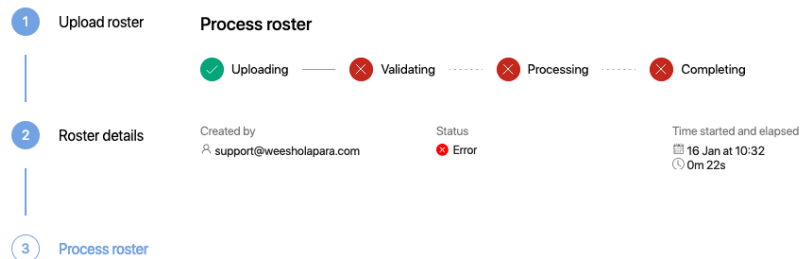
2. Click **+ Create roster**
3. Click **Construct with duties only**



4. The file explorer opens. Navigate to the location of the CSV or Microsoft Excel (.xlsx) file that has roster data with duties and select it.
5. The **Create Roster** form will appear. Enter relevant values in the available fields. Refer to the [Tables of properties](#) section below for more information.
6. Click **Next**
7. The roster data will start processing.
- If any errors or warnings are found on the file, they will be listed at the bottom of the **Process roster** screen. You will also receive an email notification with the list of errors you need to resolve.



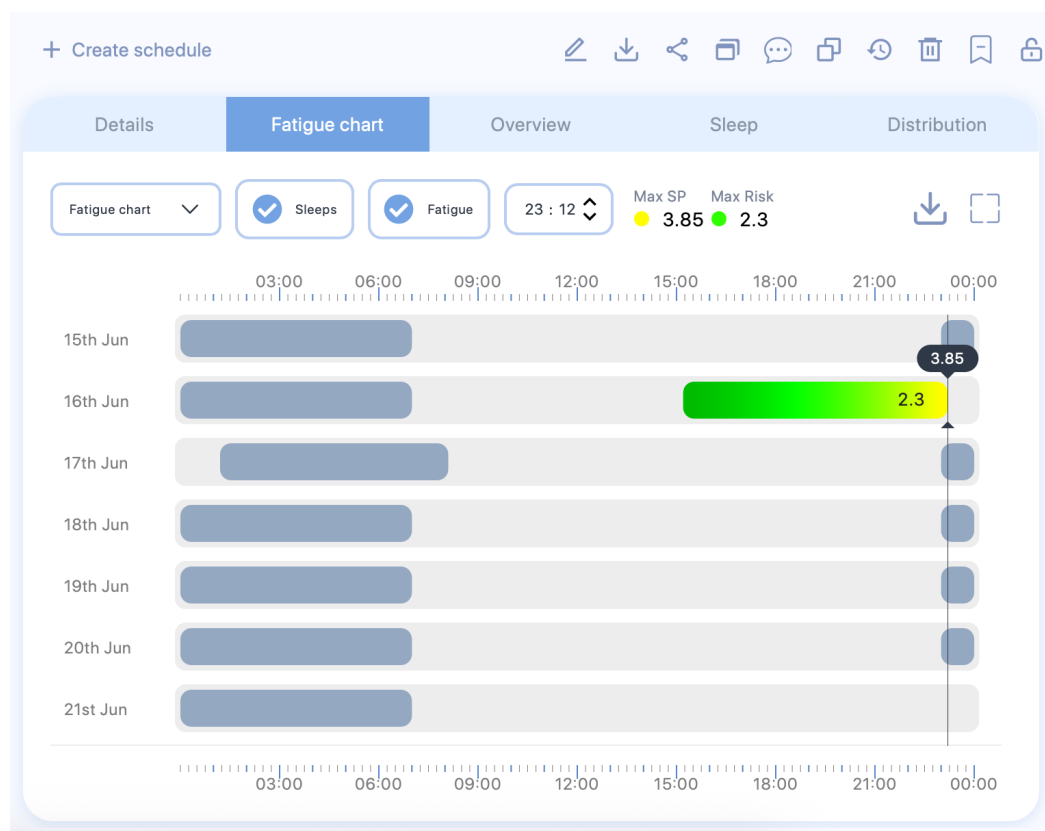
Create Roster



Errors

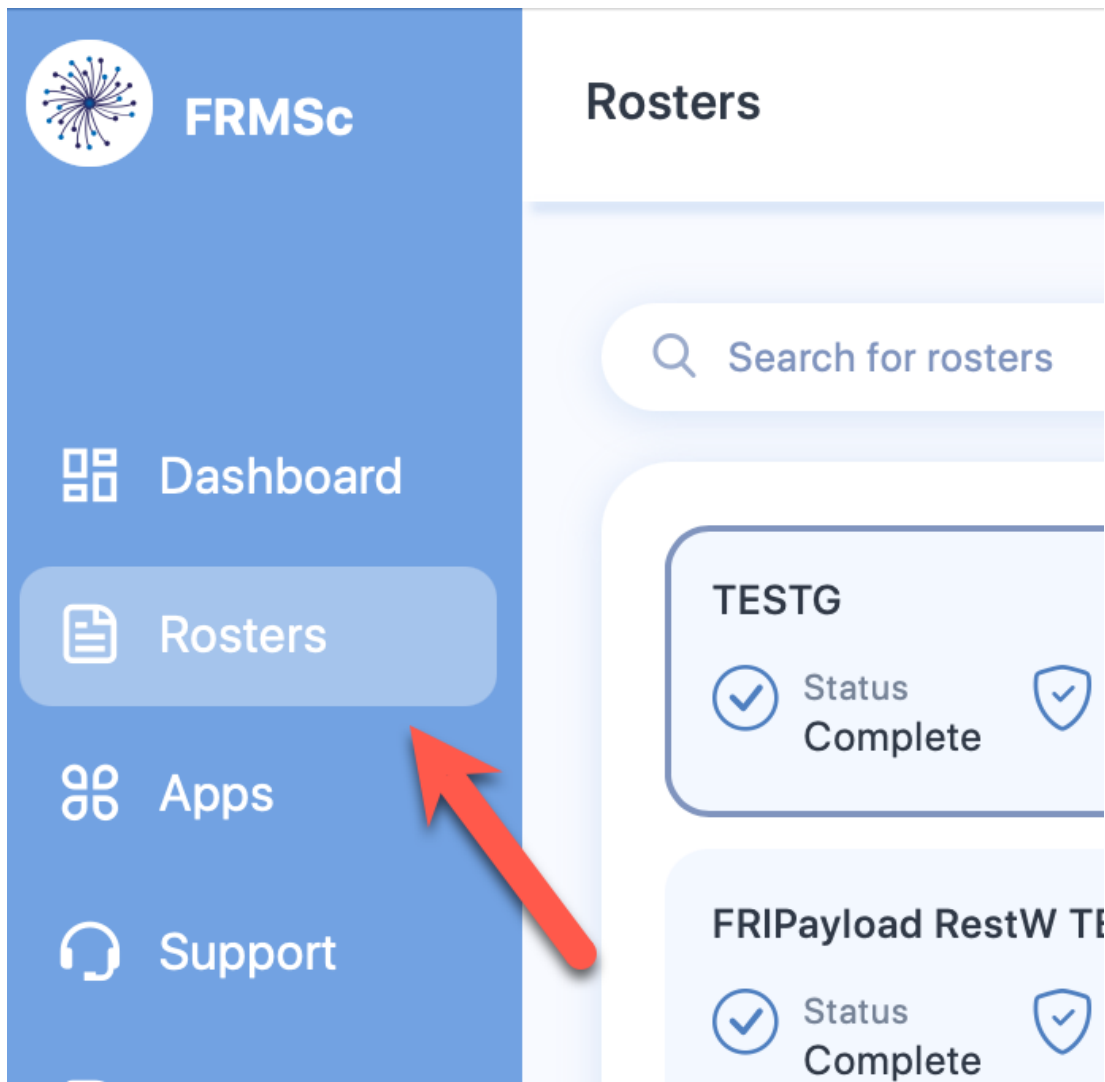
The 'Off duty date' (06/05/2023 04:07 (UTC)) cannot be before the 'On duty date' (15/01/2024 19:45 (UTC)).

- Resolve the errors and warnings and upload again or view the schedules to fix the errors using the web UI.
8. After the processing is complete, a fly-out banner will appear on the top right of the screen. You will also receive an email notification to indicate successful completion. Click
- **View roster summary** to view roster summary
 - **View schedules** to view the schedules and fatigue charts



Construct with duties and activities

1. Navigate to the [Rosters](#) screen using the menu panel.



2. Click **+ Create roster**
3. Click **Construct with duties and activities**

[+ Create roster](#)

Create Roster

- 1 Upload roster
- 2 Roster details
- 3 Process roster

Upload roster

Construct with duties only

Construct your roster by uploading duty details. You can still add activities to the roster manually

[Example duty upload](#)
[Duty upload specification](#)

Construct with duty and activities

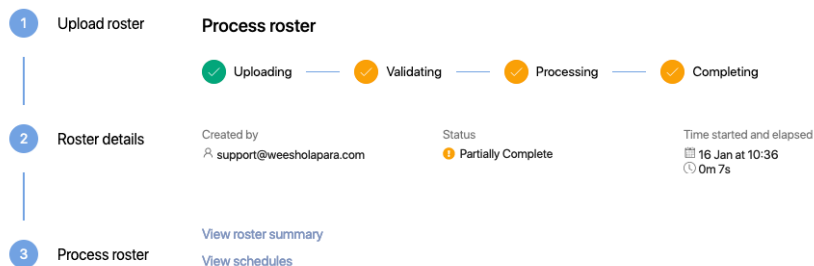
Construct your roster by uploading duty and activity details for a more detailed analysis

[Example activity upload](#)
[Activity upload specification](#)

[Construct manually](#)

4. The file explorer opens. Navigate to the location of the CSV or Microsoft Excel (.xlsx) file that has roster data with duties and select it.
5. The **Activity upload** dialog appears. Click **Ok** to continue.
6. The file explorer opens. Navigate to the location of the CSV or Microsoft Excel (.xlsx) file that has roster data with activities and select it.
7. The **Create Roster** form will appear. Enter relevant values in the available fields. Refer to the [Tables of properties](#) section below for more information.
8. Click **Next**
9. The roster data will start processing.
 - If any errors or warnings are found on the file, they will be listed at the bottom of the **Process roster** screen. You will also receive an email notification with the list of errors you need to resolve.

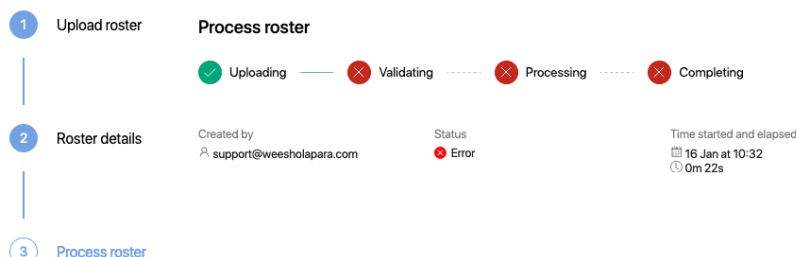
Create Roster



Warnings

- Unrecognised or out of range 'On duty date' (01/01/0001). Please ensure that the dates defined in the uploaded file match the system settings for the 'Default Date Format' i.e. MM/dd/yyyy.
Line 11
- Unrecognised or out of range 'On duty date' (01/01/0001). Please ensure that the dates defined in the uploaded file match the system settings for the 'Default Date Format' i.e. MM/dd/yyyy.
Line 12

Create Roster



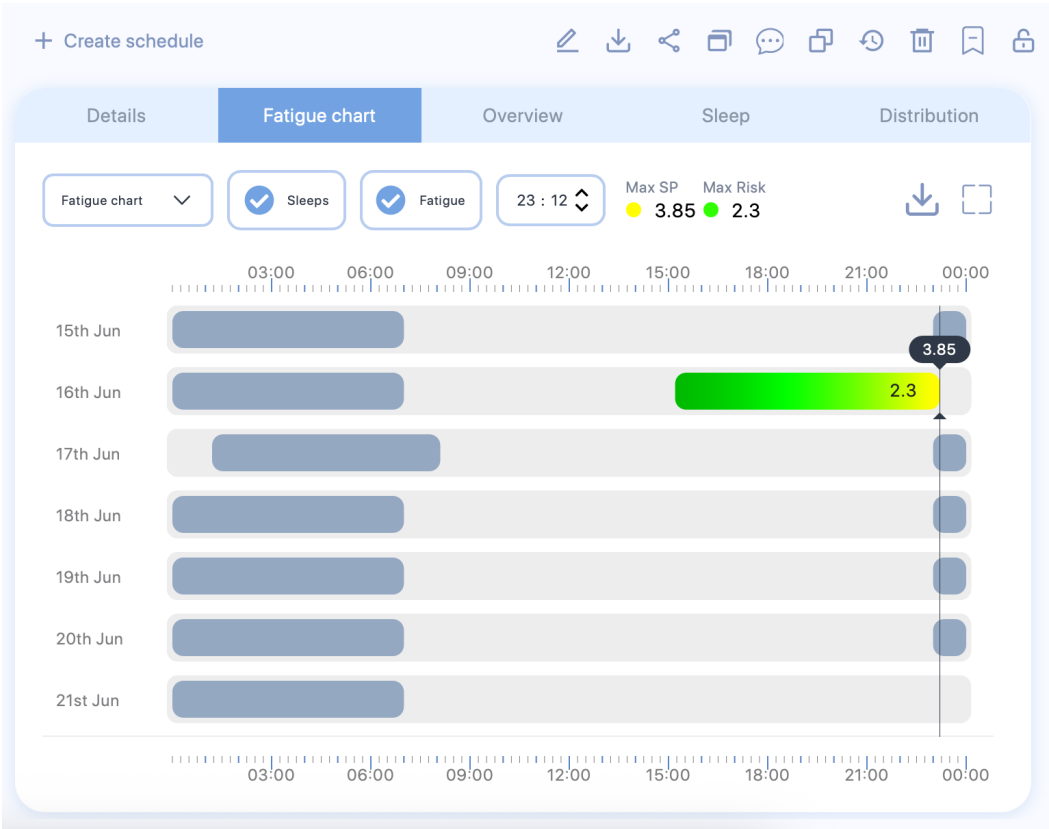
Errors

- The 'Off duty date' (06/05/2023 04:07 (UTC)) cannot be before the 'On duty date' (15/01/2024 19:45 (UTC)).

- Resolve the errors and warnings and upload again or view the schedules to fix the errors using the web UI.

10. After the processing is complete, a fly-out banner will appear on the top right of the screen. You will also receive an email notification to indicate successful completion. Click

- View roster summary** to view roster summary
- View schedules** to view the schedules and fatigue charts



Tables of properties

Roster properties

Create roster form

Property (* required)	Description
Name*	The name of the schedule. Usually the identifier of the pilot or the crew member e.g., employee number
Visibility	If other users should not be able to see the roster, choose Private else choose Public
Tags	The label attached to the Roster which can be used to group rosters together.

Schedule properties

Create schedule form

Property (* required)	Description
Name *	The name of the schedule. Usually the name of the staff.
Role	A label for indicating the role of the staff.
Preparation time *	The time required to prepare after waking from a main sleep.

Duty properties

 Create duty form

Cabin crew properties

Some of the properties shown below are exclusive to Active duty i.e., the **Create Duty** form will not show some of the following properties for "On call" duty. Such properties will have the () symbol next to the property name.

Section	Property (* required)	Description
General	Duty type *	Choose the type of duty from the dropdown.
	Commute Time	Select the time taken to commute to the duty. Default value is 1 hour.
	On duty date and time *	The duty start date. Use the date time controls to set the date and time.
	Off duty date and time *	The duty end date. Use the date time controls to set the date and time.
	Job Workload	Select one of the following job workload types for the staff. - Extremely undemanding, lots of spare capacity - Moderately undemanding, some spare capacity - Moderately demanding, little spare capacity - Extremely demanding, no spare capacity

See Job Workload to learn more.		
Job Attention	Select one of the following job attention types for the staff. • Rarely or none of the time • Some of the time • Most of the time • All or nearly all of the time See Job Attention to learn more.	
Break Frequency Hours and Minutes*	The frequency of the rest/break provided to or taken by the staff. Set how often staff take breaks using the dropdown controls for hours and minutes. You can adjust the frequency in 15-minute intervals.	
Longest Continuous Work Period*	The longest period the staff worked before taking a break. Set the longest continuous time the staff worked using the dropdown controls for hours and minutes. You can adjust this period in 15-minute intervals.	
Average Break Length*	The average length of typical breaks provided to or taken by staff. Set the average break duration for the staff using the dropdown controls for hours and minutes. You can adjust the length in 5-minute intervals.	
Break Length after Continuous Work Period*	The average length of typical breaks provided to or taken by staff after the longest continuous work period. Set this length using the dropdown controls for hours and minutes. You can adjust the frequency in 5-minute intervals.	
Rest Period ()	Sleep Class	The class where the cabin crew slept. Select: • n/a • Class 1 - Bed • Class 2 - Reclining seat with back angle > 40 degrees

	• Class 3 - Reclining seat with back angle < 40 degrees • Class 4 - Upright chair
First Rest Start	The date and time the staff started their first rest. Set the rest period for the staff using the dropdown controls for date and time. See Rest Period for more information on rest period.
First Rest Finish	The date and time the staff ended their first rest. Set the rest period for the staff using the dropdown controls for date and time. See Rest Period for more information on rest period.
Add second rest	Click on this link if you want to add second rest date and times. A click on this link will produce additional properties for second rest. These properties and their selections are very similar to the first rest. See above for details.

Activity properties

 Create activity form

Property (* required)	Description
Activity type *	Choose the type of activity from the dropdown. Click here to see the available types.
Description	Add a short description about or comment on the activity. You can also add the number of staff members who performed the activity.
Activity start date and time *	The activity start date. Use the date time controls to set the date and time.
Activity end date and time *	The activity end date. Use the date time controls to set the date and time.

Duty file specification

The table below shows a list of columns you can include in the CSV or Microsoft Excel file. The columns must be in the same order as listed below.

You can omit the column titles. In such case, the order in which the column titles are listed below will be assumed. You can send multiple rows at a time.



Date format

We have set the date format to DD/MM/YYYY below. This can be changed to MM/DD/YYYY from the [Settings](#) page.

ColumnName (⁺ required)	Format	Description
Reference ⁺	Text	A free-text property usually used to indicate a staff. Use staff's name or ID.
OnDutyDate ⁺	Date (DD/MM/YYYY)	The duty start date.
OnDutyTime ⁺	Time (hh:mm)	The duty start time.
OffDutyDate ⁺	Date (DD/MM/YYYY)	The duty end date.
OffDutyTime ⁺	Time (hh:mm)	The duty end time.
SleepClass	Number (1-5)	Send • 1 for Class 1 - Bunk • 2 for Class 2 - Reclining seat with back angle > 40 degrees • 3 for Class 3 - Reclining seat with back angle < 40 degrees • 4 for Class 4 - Upright chair
FirstRestStartDate	Date (DD/MM/YYYY)	The date on which the pilot or the crew member started their

		first rest.
FirstRestStartTime	Time (hh:mm)	The time at which the pilot or the crew member started their first rest.
FirstRestEndDate	Date (DD/MM/YYYY)	The date on which the pilot or the crew member ended their first rest.
FirstRestEndTime	Time (hh:mm)	The time at which the pilot or the crew member ended their first rest.
SecondRestStartDate	Date (DD/MM/YYYY)	The date on which the pilot or the crew member started their second rest.
SecondRestStartTime	Time (hh:mm)	The time at which the pilot or the crew member started their second rest.
SecondRestEndDate	Date (DD/MM/YYYY)	The date on which the pilot or the crew member ended their second rest.
SecondRestEndTime	Time (hh:mm)	The time at which the pilot or the crew member ended their second rest.
JobWorkload	Number (1-2)	See Job workload and job attention to learn more. The default value is 2. Send one of the following job workload types for the staff. • 1 for Extremely undemanding, lots of spare capacity • 2 for Moderately undemanding, some spare capacity

		• 3 for Moderately demanding, little spare capacity • 4 for Extremely demanding, no spare capacity
JobAttention	Number	See Job workload and job attention to learn more. The default value is 1. Send one of the following. • 1 for Rarely or none of the time • 2 for Some of the time • 3 for Most of the time • 4 for All or nearly all of the time
BreakFrequency (in minutes)	Number	The frequency at which the rest/break is provided to or taken by the staff. Send the duration between last break taken by the staff. The default value is 180.
BreakAverageLength (in minutes)	Number	The average length of typical breaks provided to or taken by staff. The default value is 5.
LongestWorkPeriod (in minutes)	Number	The longest continuous period the staff worked before taking a break. The default value is 360.
BreakLengthAfterLongestWorkPeriod (in minutes)	Number	The average length of typical breaks provided to or taken by staff after the longest continuous work period. The default value is 30.
DutyType	Number (1-3)	The type of duty. The default value is 1. Send

		• 1 for Active duty • 2 for On call duty
Commute (in minutes)	Number	The time taken to commute to the duty. Default value is 60.
PrepTime (in minutes)	Number	The time taken for staff to prepare. Default value is 60.

Activity file specification

The table below shows a list of columns you can include in the CSV or Microsoft Excel file. The columns must be in the same order as listed below.

You can omit the column titles. In such case, the order in which the column titles are listed below will be assumed.



Matching date times

Start and end times for activities should be within the start and end times for the duty.

ColumnName (⁺ required)	Format	Description
Reference ⁺	Text	A free-text field usually used to indicate a Activity. Use staff's name or ID. Ensure that the name of the staff matches the names in the duty file.
ActivityStartDate ⁺	Date (DD/MM/YYYY)	The activity start date.
ActivityStartTime ⁺	Time (hh:mm)	The activity start time.
ActivityEndDate ⁺	Date (DD/MM/YYYY)	The activity end date.
ActivityEndTime ⁺	Time (hh:mm)	The activity end time.
ActivityType ⁺	Text	Send one of the following

• Briefing • Debriefing • Handover • Admin • Monitoring • Transportation • Documentation • Inspection • Dispatching • Maintenance • Driving • Training • Clinical • Operations • Planning • Flight Co-ordination • Extraction • Medical • Office		
Description	Text	A free text field to explain the activity.