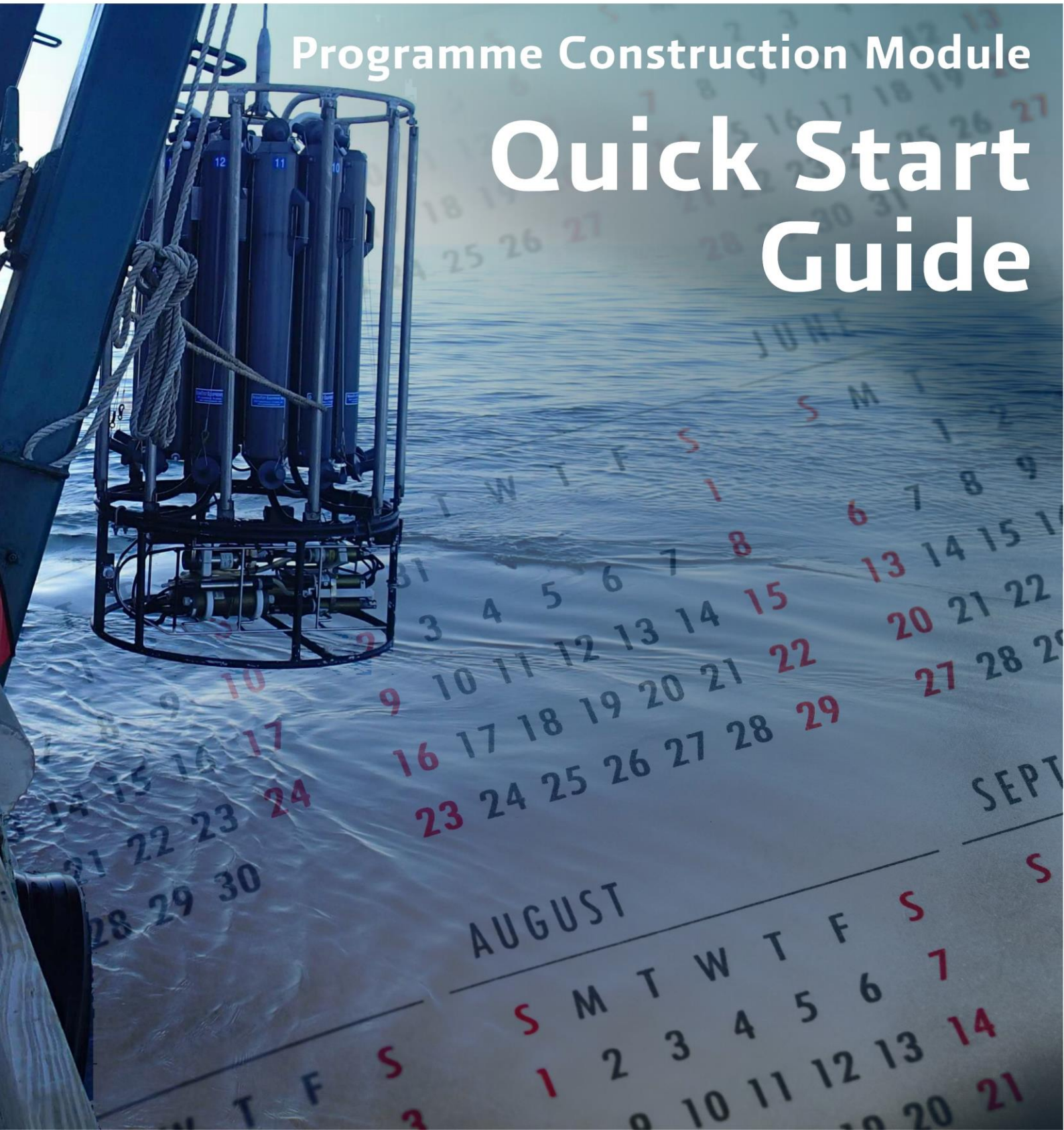
MFP

MAAS
SOFTWARE ENGINEERING



Programme Construction Module

Quick Start Guide

Table of Contents

Introduction 3

1 Grid Timeline View 4

1.1 The Menu Bar 4

1.2 The Timeline 5

1.3 The Applications Section 6

1.4 The Right-Hand Pane 7

1.5 Start a New Draft or Edit an Existing Draft 7

1.6 Add Applications to a Draft/Programme 8

1.7 Publish a Draft 9

2 Map View 10

2.1 The Menu Bar 10

2.2 Scheduling Using the Map View 11

3 Scheduler View 13

4 Review Mode 14

5 The Right-Hand Pane 15

Introduction

Within the Programme Construction module, a planner can create multiple draft programs covering the same time period using the applications from the scientist portal. This enables programme managers to create and test different programme options until the final programme is agreed.

This Quick Start Guide describes the basic functionality and controls of the Programme Construction Module. The module offers four different views: Grid Timeline, Map, Scheduler, Review.

Grid Timeline: Shows a timeline with drafts and published programme by ship, and the applications list. This view is useful for creating (multiple) drafts, due to the easy to use drag&drop functionality.

Map: Shows drafts and the published cruises/voyages on a map. This view is useful for efficient planning, due to its projection of cruises on a world map.

Scheduler: Shows drafts/published programme on a calendar view. This view is useful for detailed planning, due to its day-to-day overview.

Review: Shows multiple drafts on a timeline for comparison.

The Grid Timeline, Map and Scheduler views enable you to view, add or edit draft programmes. The review mode is a read-only view. Editing has to be done in one of the other three views.

1 Grid Timeline View

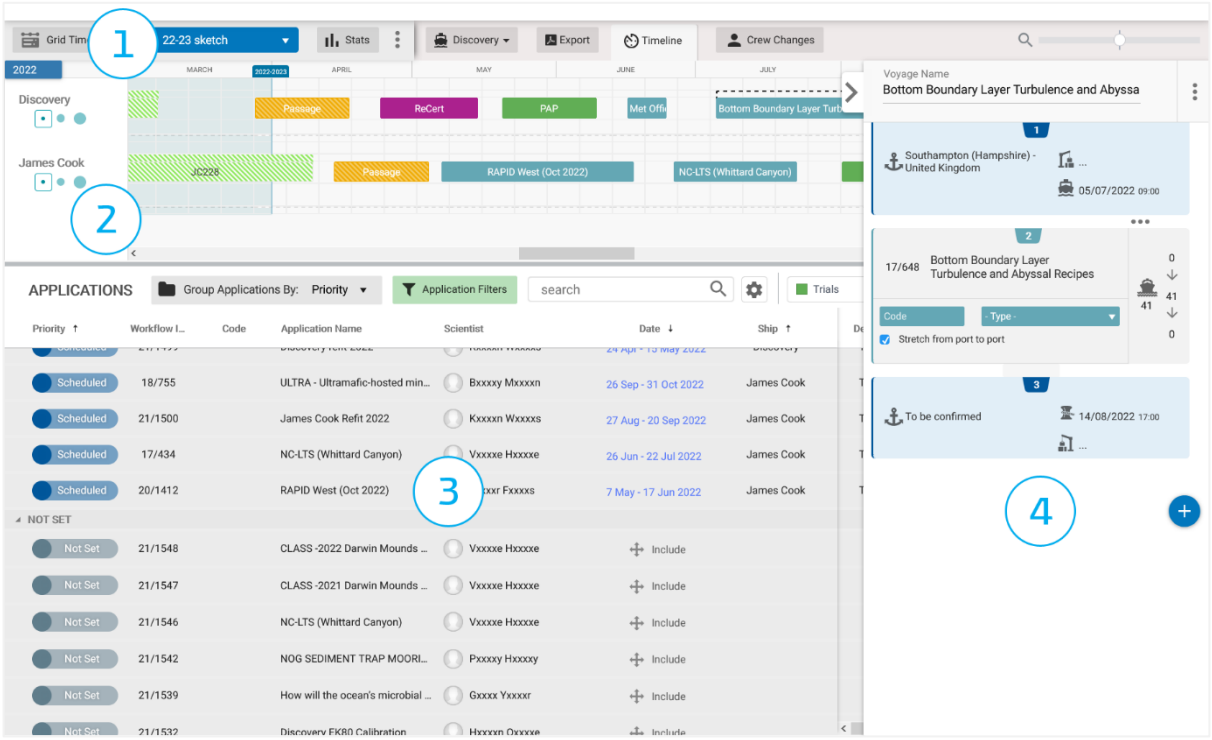


Fig 1. The Grid Timeline view.

1. Menu bar
2. Drafts and published programme timeline
3. Applications
4. Right-hand pane (See chapter 5)

1.1 The Menu Bar

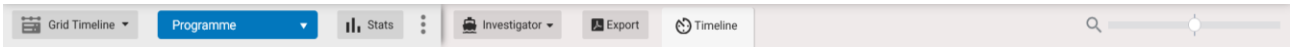
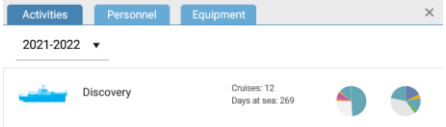


Fig 2. The menu bar in Grid Timeline view.

The menu bar controls from left to right are:

1. Switch between different views: Grid Timeline, Map, Scheduler, Review.
2. Switch between different drafts or published programme.
3. Show statistics for the selected draft or programme.



4. Draft related options such as start a new draft or delete an existing draft.
5. Select ships for which the drafts or published programme are displayed.
6. Export the top draft/published programme to PDF.
7. Show or hide the timeline.
8. Zoom in or out on the timeline.

1.2 The Timeline

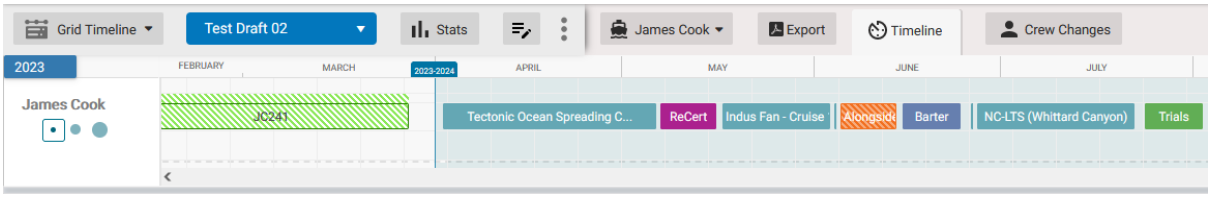


Fig 3. The timeline section in Grid Timeline view.

The timeline shows draft of published programmes by ship. Events on the timeline have their own colors:

- Cruise
- Trial
- In port event (e.g., upkeep or inspection)
- Barter
- Transit
- Alongside
- Published event (on drafts)

The three dots below a ship are used to toggle the information detail level. Detail level 1 shows only the events and event names. Detail level 2 also shows the start date and port. Detail level 3 shows the start and end dates and ports, and the duration of the event in days.

Fig 4. Detail level dots. The bigger the dot, the more details.

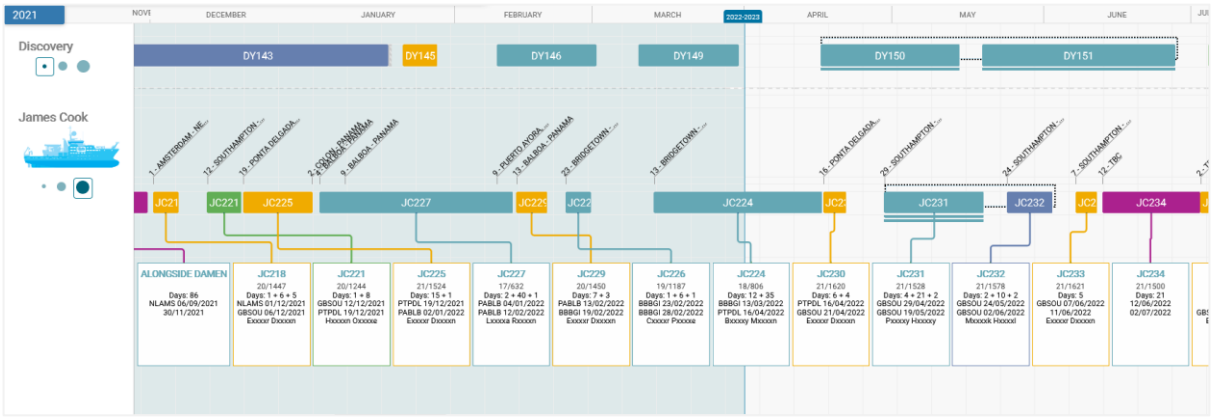


Fig 5. Different detail levels.

1.3 Applications & Filters

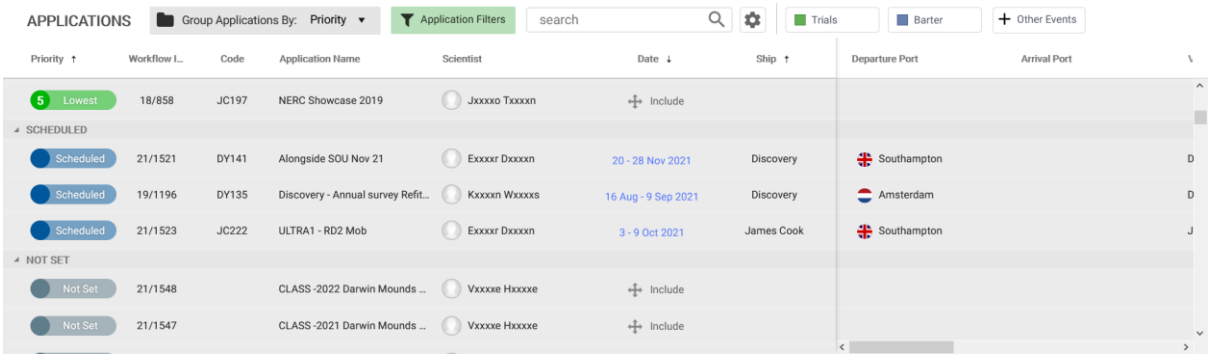


Fig 6. The Applications section in Grid Timeline view.

This section shows a list of applications. To identify suitable applications for inclusion in the selected draft or programme, the scheduler can use the application filters which are accessible from the toolbar. You can combine several filters to narrow down your search.

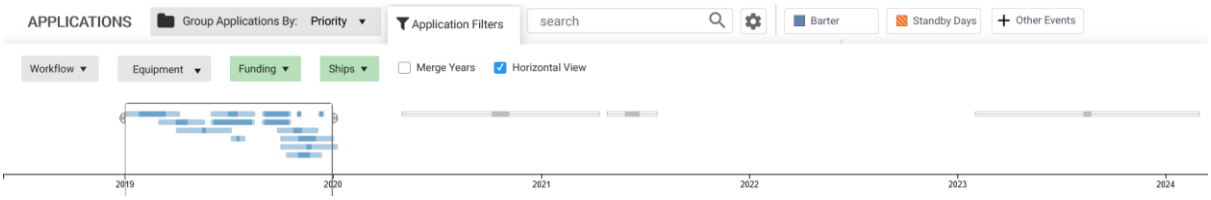


Fig 7. Application Filters.

The dropdown buttons allow the user to filter on information as provided in the application form:

Workflow:	The available project management workflow types
Equipment:	Filter for equipment that was requested by the scientist.
Funding:	What is the funding source of the application
Ship:	By default, the system shows only applications whereby the user requested ship time on the selected ship that is being scheduled. Applications that do not request shiptime on a specific ship are also shown by default. You can show additional applications by selecting additional ships.

Active filters are indicated by the green color. The timeframe filter is always active.

Use 'Merge Years' to project unscheduled applications from previous years on the same dates for coming years.

The timeline in Application Filters shows unscheduled applications with their preferred date range in blue and the range between earliest and latest acceptable date in light blue. Only applications within the timeframe are displayed in the list below. You can move the timeframe from left to right or use the drag handles to make the frame wider or narrower.

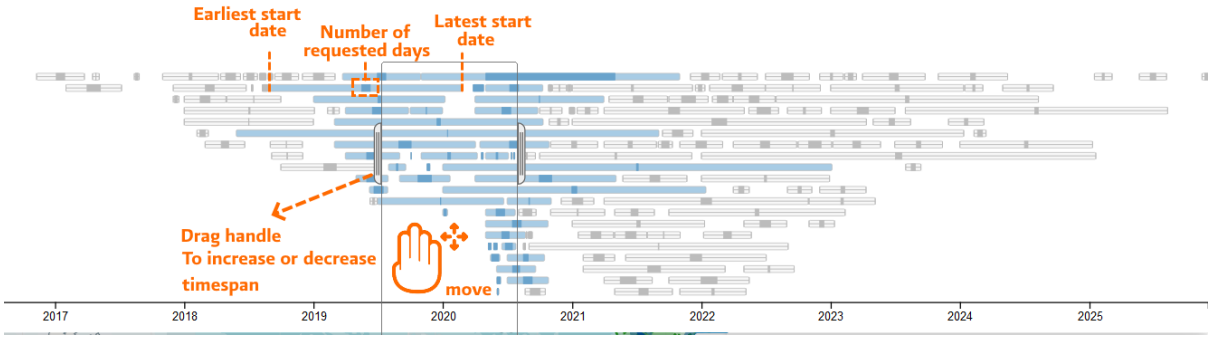


Fig 8. Applications that fall within the time frame displayed in blue.

The search box next to Application Filters can be used to search for applications. Any information from the columns can be used as input (e.g., scientist name or code).

The cogwheel button shows two settings related to the placement of events on the timeline: Stack Mode and Event Positioning.

The settings:

- When an application (or other event) is dragged onto an event already located on the draft, this event is automatically shifted to the right to make room.
- When an application (or other event) is dragged onto an event already located on the draft, this application is stacked on top of the existing event.
- When an application is included to the draft, it is included onto the default ship's draft at the applications preferred date.
- When an application is included to the draft, it is included onto the default ship's draft after the last application on the draft.

1.4 The Right-Hand Pane

The right-hand pane shows project details or cruise/voyage details. Click on a project to show the project details. Click just above a project to show the cruise/voyage details.

See chapter 5 for a more comprehensive guide on the right-hand pane.

1.5 Start a New Draft or Edit an Existing Draft

To start a new draft click on the ⋮ button located on the menu bar and select 'New Draft'.

Enter a name for the draft and indicate if you want to work in 'Sketch Mode' or not. Drafts in sketch mode are only visible to users with the PROGRAMMEPLANER role. Click save to start scheduling on the new draft.

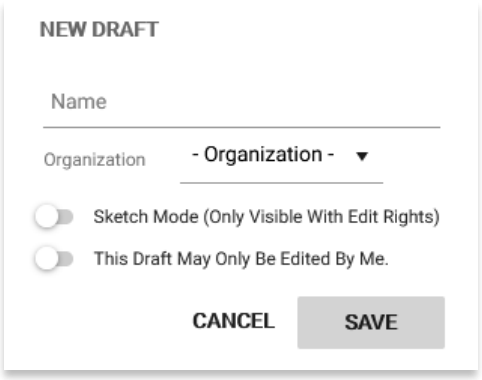


Fig 9. New draft pop-up.

To edit an existing draft, select the draft from the drop-down menu, click the ⋮ button and select 'Edit Draft'.

1.6 Add Applications to a Draft/Programme

There are two ways of adding an application to a draft: drag & drop or include. Use the arrowed cross for drag & drop or click include to add the application to the draft.

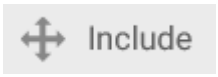


Fig 8. Drag & drop and Include buttons.

Once an application is added to a draft or programme it moves from the 'NOT SET' group to the 'SCHEDULED' group. You can now update dates and ports. Click on the date or departure/arrival port in the list to make changes.

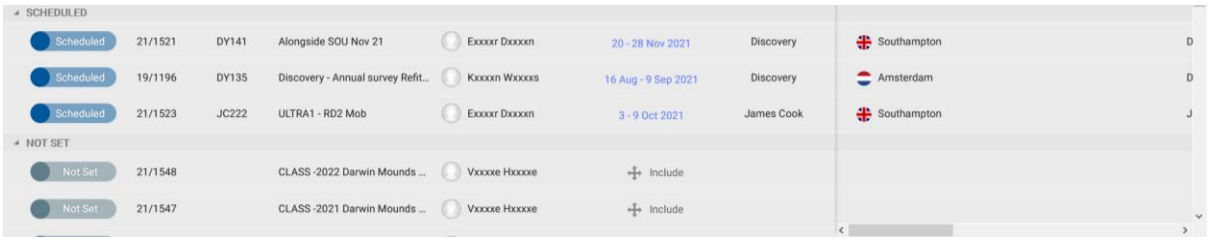


Fig 10. Scheduled and not set applications.

Clicking on or above your scheduled application opens the right-hand pane to view and update project or cruise details.

You can select multiple projects in case you want to move these projects a couple of days to the left or right. Click inline just to the left of the first project, drag the mouse cursor to the right over the projects that you want to select, and release the mouse button.

1.7 Publish a Draft

To publish a draft, select "Publish" from the three-dot menu to publish a selected draft. You can publish a complete draft or parts of a draft. For each ship you have to give the time range to publish. This can be done by manually entering the dates or by selecting a range with your mouse in the timeline. When there are linked drafts in the personnel planning module, a draft of choice can be published as well.

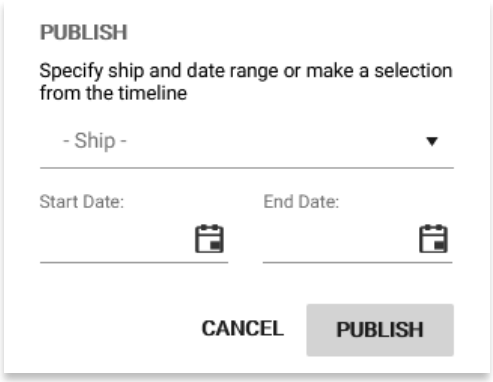


Fig 11. Publish Draft pop-up.

2 Map View

The map view only allows viewing or editing a draft for one ship at a time.

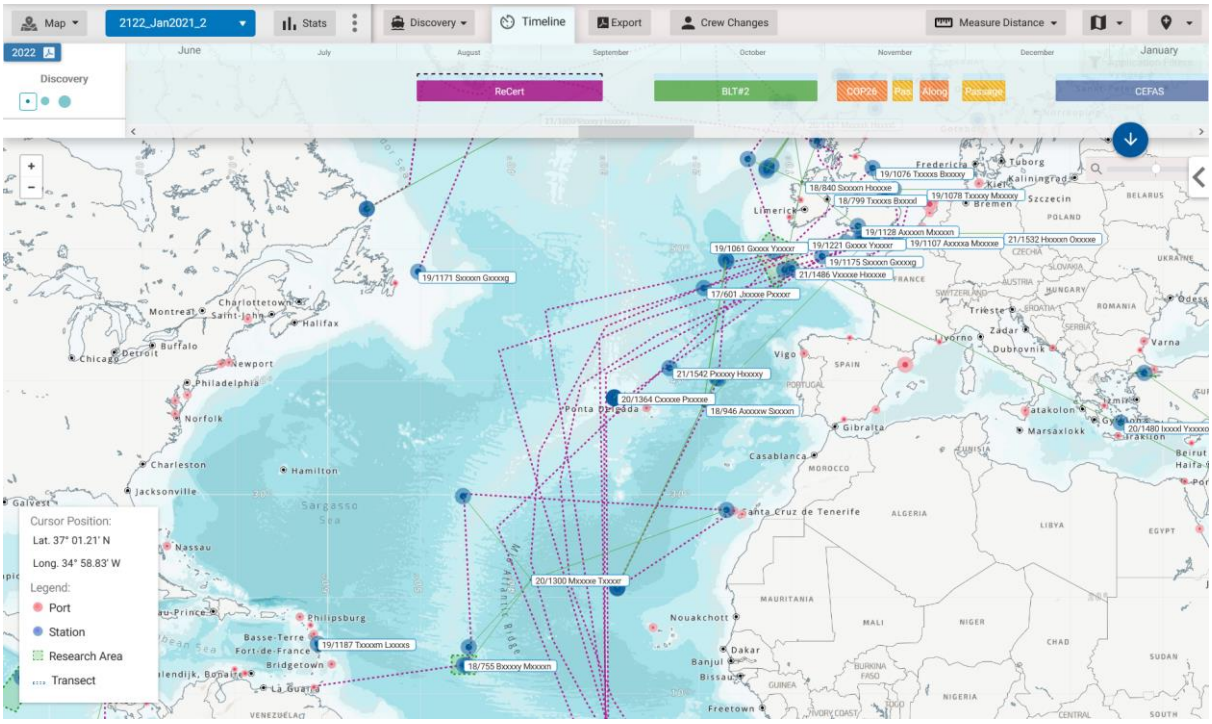


Fig 12. The Map View.

2.1 The Menu Bar

In addition to the controls on the Grid Timeline menu bar, this view offers the following options:

Application Filters Show/hide the application filters. These filters are equal to the filters in the Application section on the Grid Timeline view. See paragraph 1.3 for an overview.

Measure Distance Click 'Start' to equip the measure distance tool. Click on the map to place a start point for the distance measurement. You will now see the distance (in nautical miles) from the start point to the point of your mouse cursor on the map. Click a second time to place an end point on the map and start a new measurement from this point. Click 'Stop' when you are done to save the measurements on the map.

Map Properties Select different map views such as GEBCO or arcGis and control which elements (e.g., ports, ship track, EEZ) are showed on the map.

Draw Map Note Draw Map Note enables you to draw shapes and attach notes to this shape.

2.2 Scheduling Using the Map View

The first step in creating a voyage on the map view is to select a port. Ports on the map are indicated by a red dot. Click on a port and select 'Include in Voyage' to use this port as the departure port for your voyage. This will automatically open the right-hand pane. In the right-hand pane, set a departure date. After the departure date is set, the port's red dot changes to green.

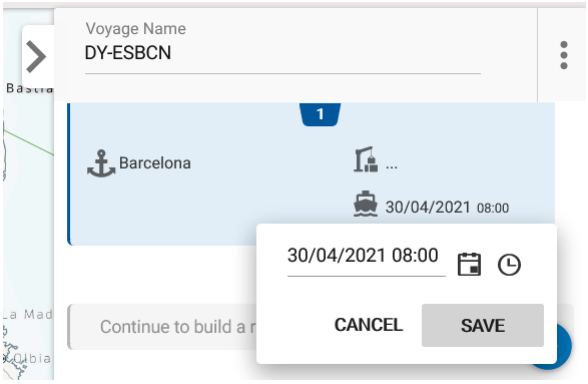


Fig 13. Set departure date in the right-hand pane.

Next, find a suitable application on the map. Hover with the mouse cursor over an application to view its information. Select an application and click 'Show details' to show the full proposal or requested equipment. Click the anchor to show distances to nearby ports and the ship to show distances to other nearby voyages/cruises.

To add the application to your voyage, click the application and select 'Include in Voyage'. The right-hand pane now shows the departure port followed by the application's cruise. To complete this part of the voyage's itinerary, select an arrival port and include this to your voyage. The system will now determine the optimum sailing route and plot your voyage onto the map.

Fig 14. A voyage plotted onto the map.

The numbers shown on the map correspond with the numbers in the right-hand pane. If the cruise contains multiple stations (e.g. sampling stations) then these are assigned a running number based on optimum travel order. The arrival date is automatically calculated based on the required days in the application. First, the time needed to travel to the first station is determined. (3 days in the example below), then the number of preferred science days are added after which the system adds the number of days to travel from the last station to the port of arrival (6 in this case).

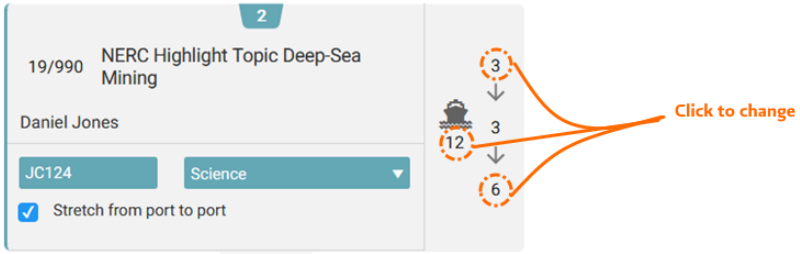


Fig 15. Travel and science days example.

The scheduler can change the days by clicking on one the figures. This will automatically change the planned arrival date of the ship.

The code field on the cruise can be used to assign the alternate ID which will be shown on the timeline views in the MFP. It will also be used in the project management module. The Type dropdown can be used to indicate the type of cruise. The available options depend on your organization's setup.

The default name of the voyage is shown on top of the right-hand pane. It consists of the ship abbreviation, the LOCODE of the port of departure, the name of the cruise and the LOCODE of the port of arrival. Changing the name can be done by removing the default name and typing in your preferred title.

Clicking the 3-dot menu next to the voyage name will give you an option to close the selected voyage (and create a new one or select another), delete the voyage or link the voyage to the previous voyage in the timeline.

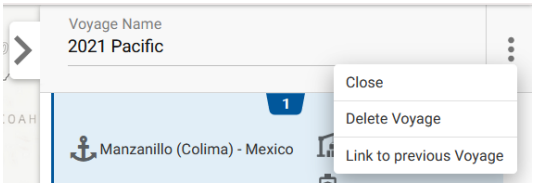


Fig 16. Voyage name and 3-dot menu.

3 Scheduler View

The scheduler view only allows viewing or editing a draft for one ship at a time.

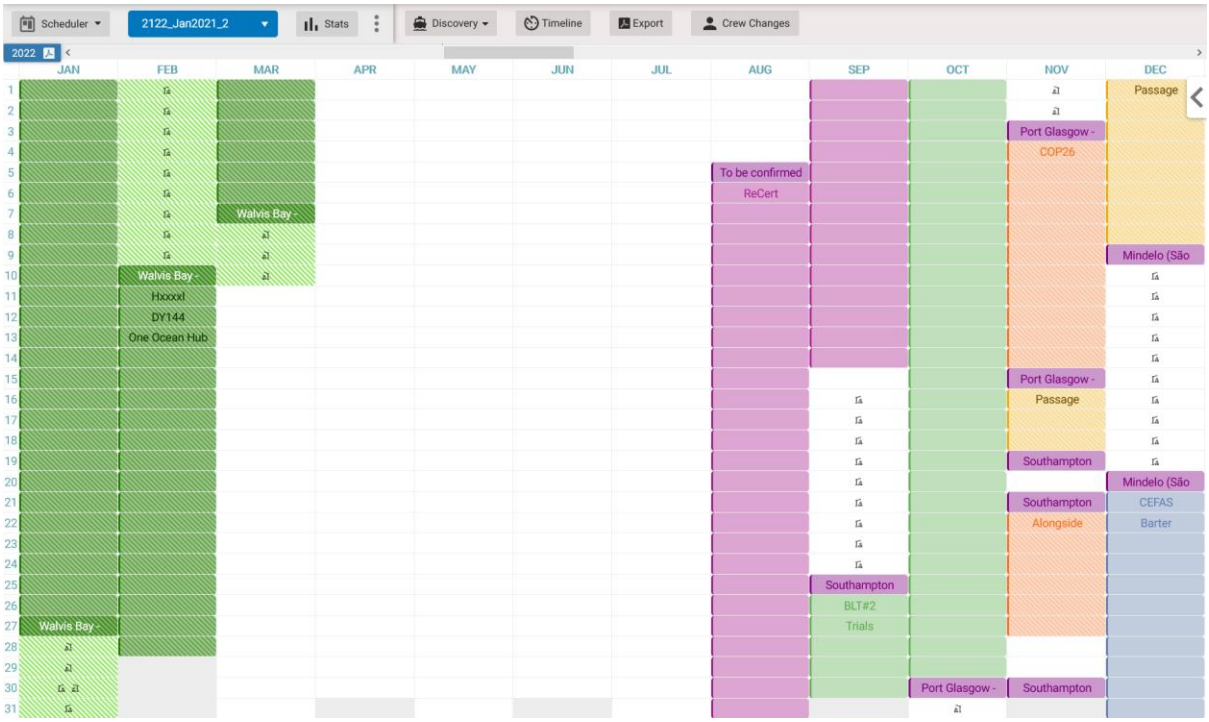


Fig 14. The Scheduler View.

To add an event to the programme, click on an empty date or select an empty date range. A pop-up will appear, offering different options to add.

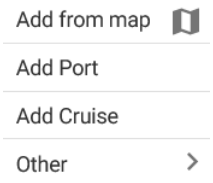


Fig 15. Event add options.

4 Review Mode

Review mode enables you to compare drafts and published programmes. You can compare different drafts for a single ship or view drafts for a number of ships. In review mode you cannot edit drafts.

To start comparing drafts, click the + button to add a ships. Use the draft selector drop-down to select the draft you want to see for each ship.

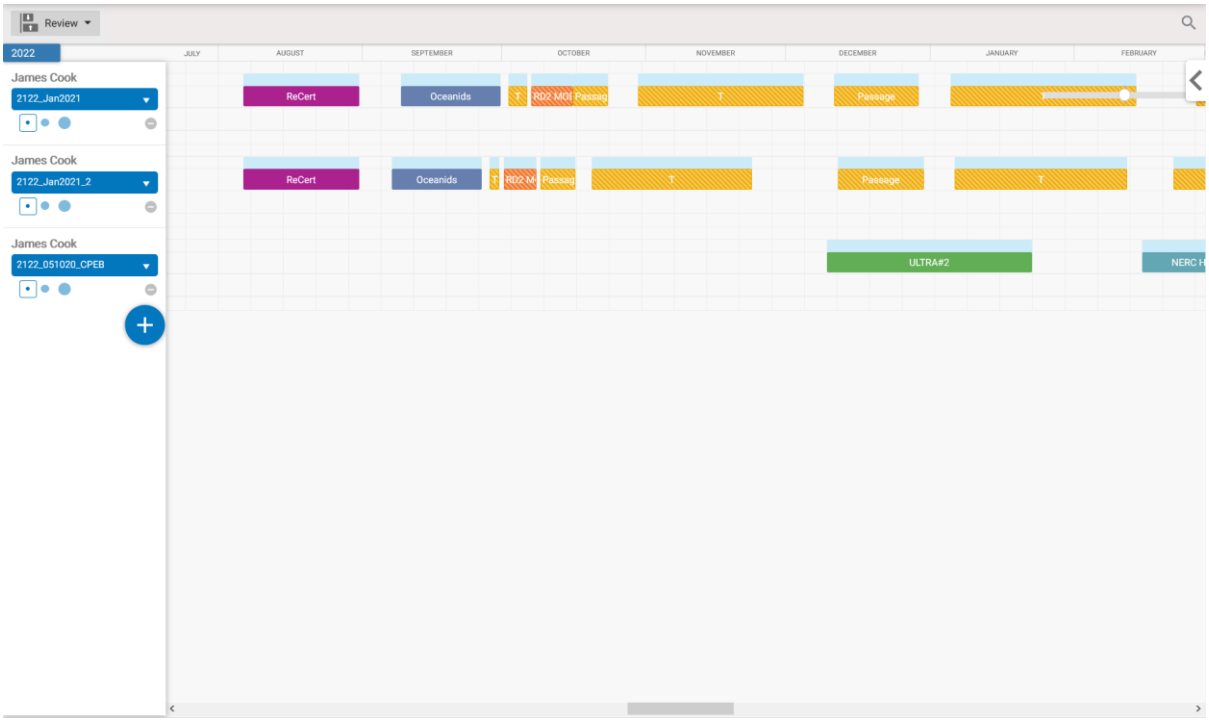


Fig 16. The Scheduler View.

5 The Right-Hand Pane

The right-hand pane can be used to add or change the project structure. For example, by adding a piggy-back project or intermediate port calls.

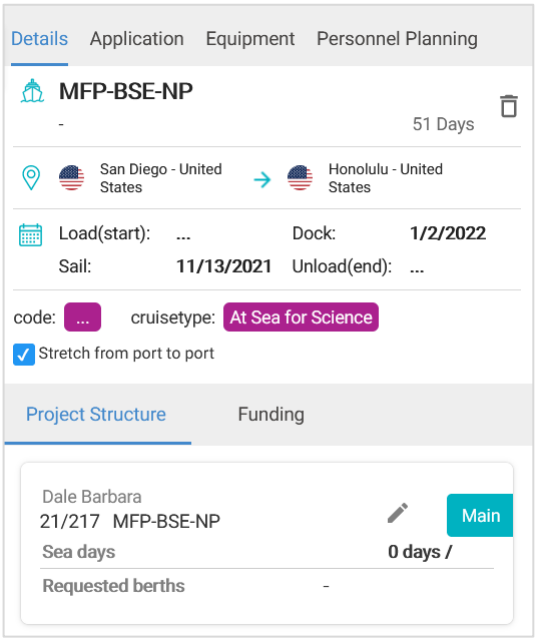
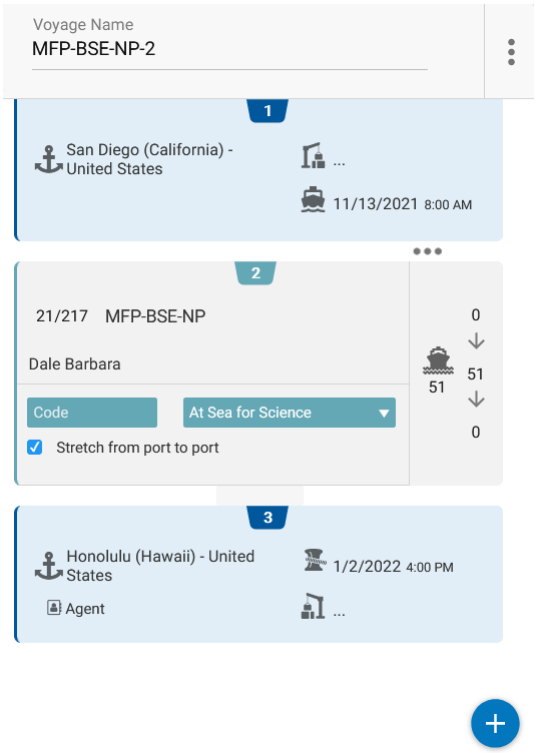


Fig 17. Right-hand pane project details.

It can also be used to add or change cruise/voyage details, such as departure/arrival ports, mobilisation dates or in-port events.



Close or delete the voyage, or link to a previous voyage.

Set port of departure/arrival.

Set mobilisation date.

Set departure date.

Number of days for this project. Below the ship is the total number of days for this cruise. To the right of the ship you see respectively the number of travel days from the departure port to the first station, the number of days at sea and the number of travel days from the last station to the arrival port.

Set arrival date.

Set demobilisation date

3 Click to add In-Port events.

3 Increase or decrease the number of days in port.

Fig 18. Right-hand pane Cruise/Voyage details.