

SHIPMOOR Quick Start Guide

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Section 1 – adding and managing data

How to log in

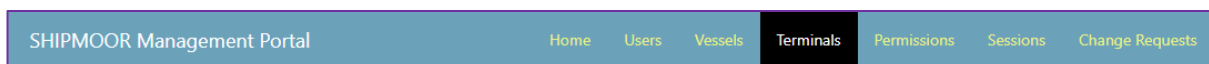
1. Go to www.shipmoor.com
2. Select 'admin' from the top panel:



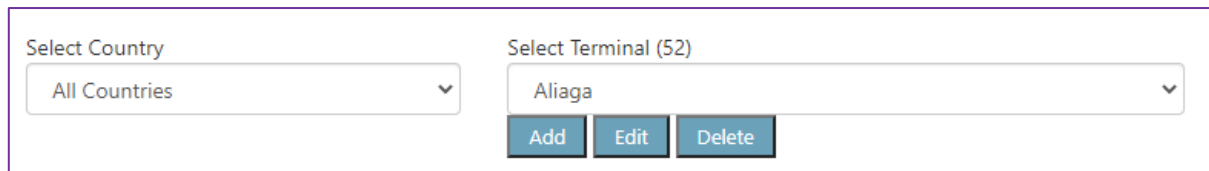
3. Enter your username and password when prompted. You will then be shown the main page of the management portal.

How to add a terminal or berth

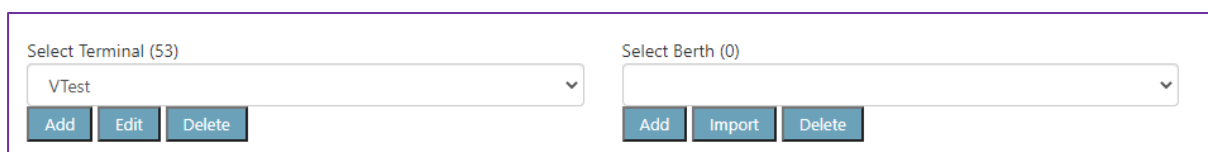
1. Log in to the 'admin' section of www.shipmoor.com as described above.
2. Click on 'Terminals' at the top of the screen:



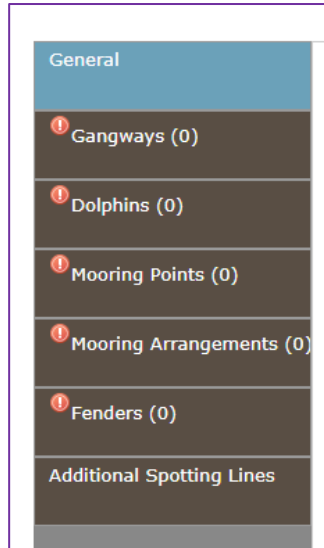
3. To add a terminal, click on the 'Add' button underneath the dropdown list of terminals:

A screenshot of a form for adding a terminal. It features two dropdown menus. The first is labeled 'Select Country' and has 'All Countries' selected. The second is labeled 'Select Terminal (52)' and has 'Aliaga' selected. Below the second dropdown are three buttons: 'Add', 'Edit', and 'Delete'.

4. When prompted, give the terminal a name and select the country where it is located. This creates a terminal.
5. To add a berth, first select the desired terminal from the dropdown list (as shown above). If this is a newly created terminal, you will see that no berths are currently available to select in the berth list. Click the 'Add' button underneath the dropdown list of berths to add a new berth:

A screenshot of a form for adding a berth. It features two dropdown menus. The first is labeled 'Select Terminal (53)' and has 'VTest' selected. The second is labeled 'Select Berth (0)' and is empty. Below the first dropdown are three buttons: 'Add', 'Edit', and 'Delete'. Below the second dropdown are three buttons: 'Add', 'Import', and 'Delete'.

6. Fill in the general berth data when prompted.
Please note that the general berth data must be complete before the berth can be saved.
7. Click through each tab in the left column to add more detailed data about gangways, dolphins, mooring points, and fenders.

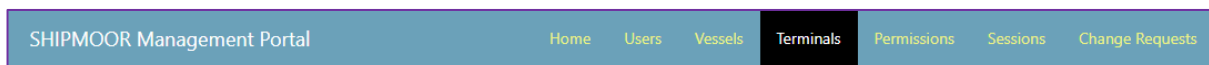


8. If any data have not been verified, you can add a note to indicate the data quality by clicking on the square button with three dots in it that will appear next to each item of information. Once clicked, this will bring up a list of quality options. If a piece of data has a quality level other than 'highest – validated', it will be shaded in a different colour, representing the assigned quality, e.g., the blue shading of the 'Central jetty height' indicates it is 'Good – not validated'.

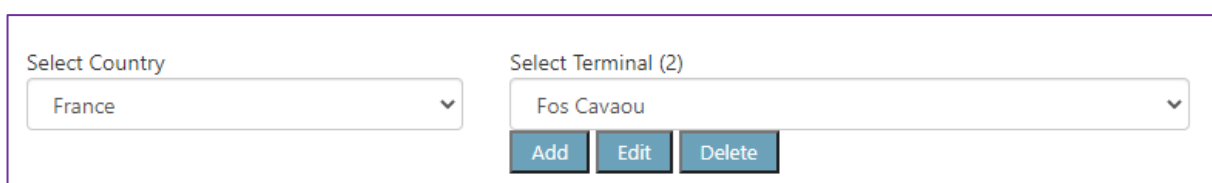
Berth full length incl. dolphins (m)	340 ...
	Quality Highest - validated ▾ Highest - validated Good - not validated Unknown Source Estimated data Data missing
Central jetty (with loading arms) length (m)	
Central jetty height (m)	5 ...

How to edit a terminal or berth

1. Log in to the 'admin' section of www.shipmoor.com as described above.
2. Click on 'Terminals' at the top of the screen:

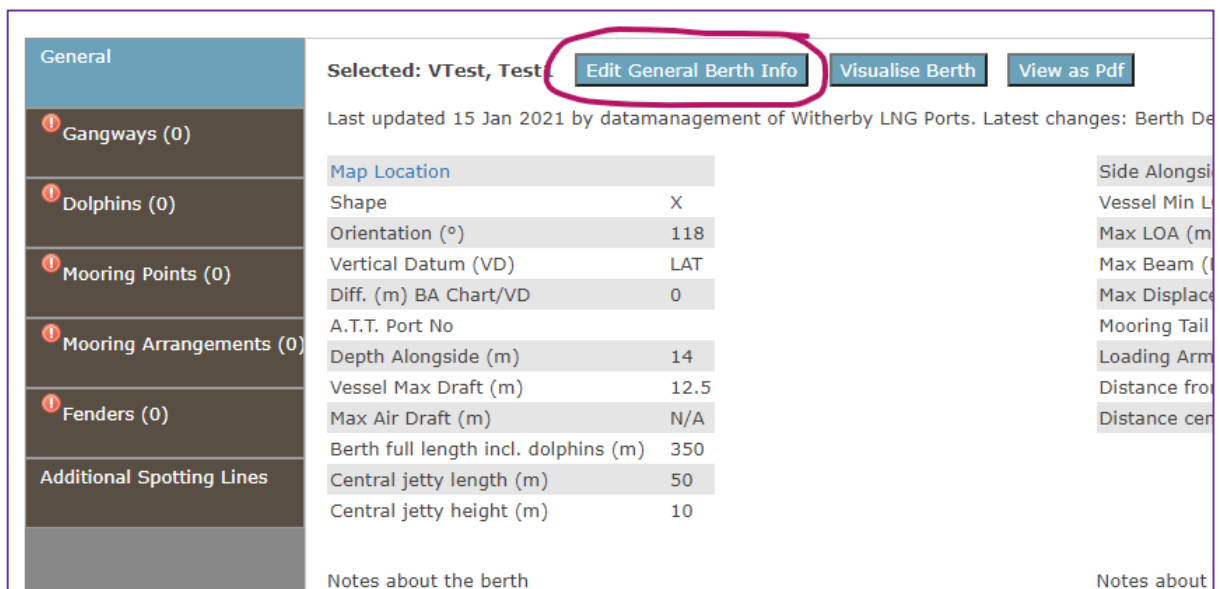


3. Select the desired terminal from the dropdown list. To make it easier to find the right terminal, you can first select a country, which will filter the available terminals accordingly, but this is optional.
4. To edit a terminal's name or country, click on the 'Edit' button underneath the dropdown list of terminals:



The screenshot shows a form for selecting a terminal. It features two dropdown menus: 'Select Country' with 'France' selected, and 'Select Terminal (2)' with 'Fos Cavaou' selected. Below the second dropdown are three buttons: 'Add', 'Edit', and 'Delete'.

5. To edit details of a specific berth, use the left-hand data menu to select the items you wish to edit and then click the edit button in the main section. For example, to edit general berth information, click on 'General' in the left menu and then 'Edit General Berth Info' as shown in the image below. Similar buttons are available on each page of data.



The screenshot shows the 'General' page for a specific berth. On the left is a sidebar menu with categories like Gangways (0), Dolphins (0), Mooring Points (0), Mooring Arrangements (0), and Fenders (0). The main content area shows 'Selected: VTest, Test' and an 'Edit General Berth Info' button circled in red. Below this is a table of berth details:

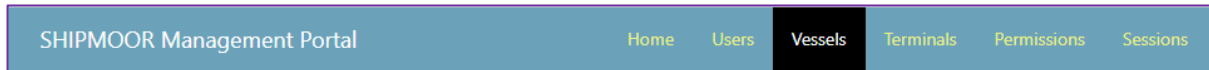
Map Location	
Shape	X
Orientation (°)	118
Vertical Datum (VD)	LAT
Diff. (m) BA Chart/VD	0
A.T.T. Port No	
Depth Alongside (m)	14
Vessel Max Draft (m)	12.5
Max Air Draft (m)	N/A
Berth full length incl. dolphins (m)	350
Central jetty length (m)	50
Central jetty height (m)	10

Additional information on the right includes 'Side Alongside', 'Vessel Min L', 'Max LOA (m)', 'Max Beam (m)', 'Max Displacement', 'Mooring Tail', 'Loading Arm', 'Distance from', and 'Distance centerline'. At the bottom, there are sections for 'Notes about the berth' and 'Notes about'.

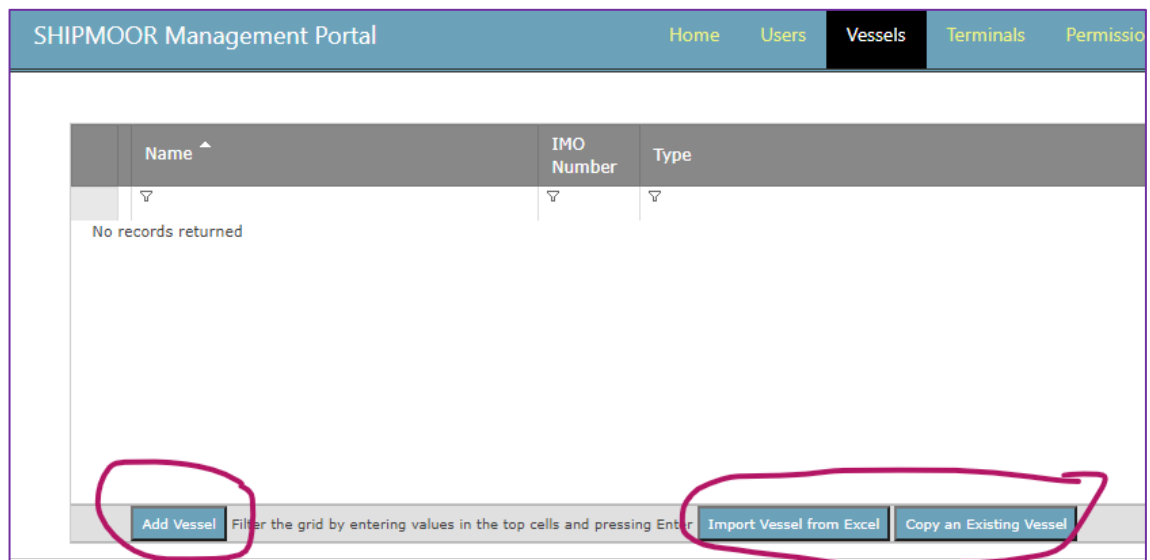
Note that the edit button may be at the bottom of a page of data and you may need to scroll down in order to see it.

How to add and edit a ship

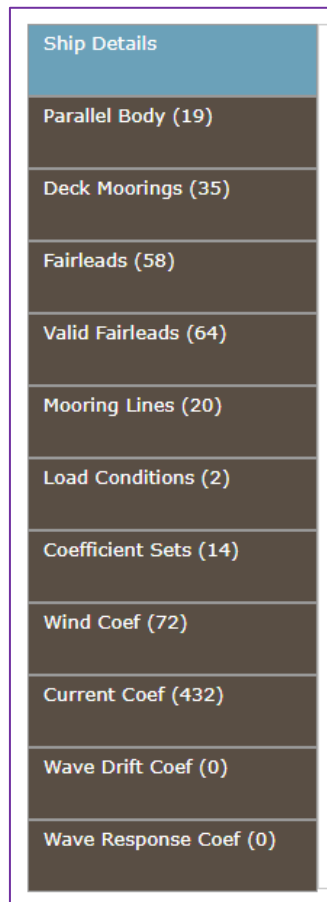
1. Log in to the 'admin' section of www.shipmoor.com as described above.
2. Click on 'Vessels' at the top of the screen:



3. To add a ship, choose one of the three available options and click the appropriate button in the ship list. If this is the first ship you have added this grid will show 'no records returned' as in the image below. New ships may be added in the following ways:
 - a. Add a new ship from scratch – this will create a new blank template, requiring you to manually enter the data. A General Arrangement (GA) overlay, to quickly and easily add deck mooring points and fairleads.
 - b. Import ship details from Excel – this will ask you to upload an Excel sheet containing the ship's data. To ensure this is in the correct format, please use one of the Excel data entry sheets available at www.shipmoor.com/excel
 - c. Copy an existing ship – this will allow you to create a new ship using an existing ship as a starting point. This option creates a copy of the template ship you select from a dropdown list and saves it to your account to allow you to edit it. Please note that the new ship will require a new name and valid IMO number in order to be saved.



4. To add and edit the ship's data, first select it in the ship list as shown above. Then click on the section of data you want to edit in the menu on the left-hand side of the main screen:



This will open the relevant data section in the main window and allow you to add and edit all data in that section by clicking on the 'Edit' button in that section.

5. To add deck moorings and fairleads you can the values manually or use the GA overlay. The GA can be added by clicking 'Edit Deck Layout' button in Deck Moorings.

Ship Details	Nr [▲]	Ref. Name
Parallel Body (53)	1	
Deck Moorings (6)	2	
	4	
Fairleads (60)	6	
	102	
Valid Fairleads (6)	104	
Mooring Lines (24)		
Load Conditions (2)		
Coefficient Sets (20)		
Wind Coef (72)		
Current Coef (648)		

Add Deck Mooring
Delete Deck Moorings
Edit Deck Layout

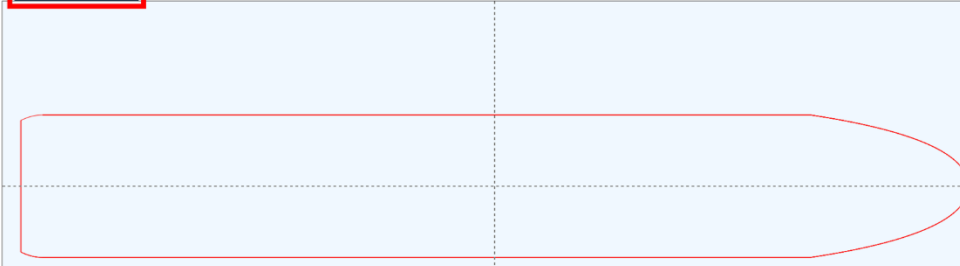
Edit Deck Layout

Edit Existing Fairleads/Moorings Mode Switch to Add New Fairlead/Mooring

Click on any deck mooring or fairlead to view its position and properties. These values can be edited - Save and Cancel buttons will appear allowing you to confirm or undo your changes. You can also cycle through them using the Previous/Next Fairlead and Previous/Next Mooring buttons. Hover over a mooring or fairlead and press **Delete** or **Backspace** to delete it.

You can zoom in/out around the cursor location using the mouse wheel. You can also click the Stem, Ship or Bow button to reset the zoom to a default position.

Add General Arrangement Overlay



Section 2 – setting up and running the mooring analysis

How to set up a mooring analysis

Part A: Logging in to a session

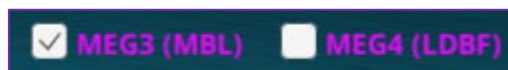
1. Go to www.shipmoor.com
2. Select 'mooring analysis (3D)' from the top panel:



3. Enter your username and password when prompted.
4. To begin a mooring analysis, you will then also need to select either an existing session (requiring an 8-letter session tag) or a berth and ship from a dropdown list before you can enter the 3D mooring environment.

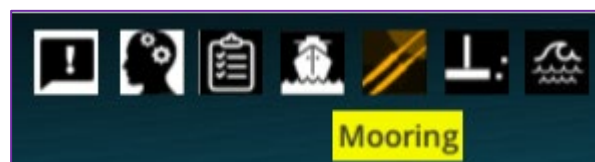
Part B: Adding mooring lines

Before adding mooring lines, it is important to ensure that you have selected either MEG3 or MEG4 from the top right toolbar:

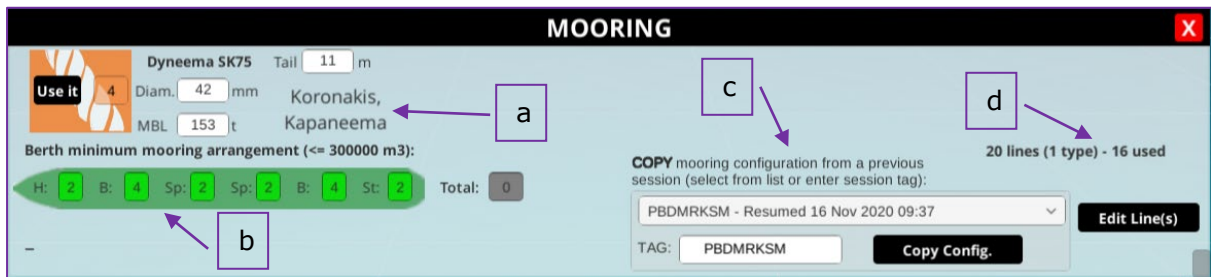


This selection affects the way in which options are displayed when setting up the ship and mooring lines because the program will highlight compatible options and missing data for the MEG calculations selected.

6. Once logged in, you will see a 3D visualisation of the ship and berth selected and you can now add mooring lines by clicking on the 'mooring' icon at the top of the screen:



7. This brings up the following input box:



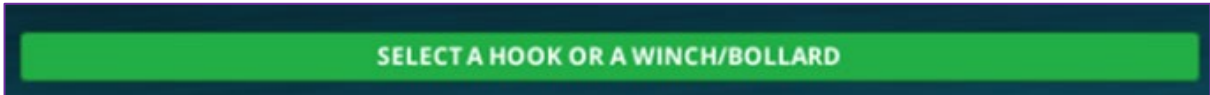
It shows:

- a. How many lines are available for use (next to the 'Use it' button) and what type of lines they are.
 - b. Any minimum mooring requirements specified by the terminal (green ship outline). If a terminal has not specified either a total number of lines or a minimum configuration, the relevant box(es) will display in grey. *Note that the minimum requirements are for information only and a mooring analysis can be run even if the requirements are not met.*
 - c. The option to copy an existing mooring configuration from another session.
 - d. How many lines are currently in use and the total number available on board.
8. If you want to copy a configuration from a previous session, select that session in the relevant box and click 'Copy config'. This will add the mooring lines in the same configuration as the selected session. Make sure to check the configuration is correct before running an analysis in case any of the mooring points or lines were unavailable in the current session.
 9. To add mooring lines directly within the session, first select the line type you want to use by clicking on it and then click 'Use it':



Note that the number to the right of the 'Use it' button shows the number of lines of this type remaining. If this number is zero you will not be able to add this type of line until you have deleted one from use elsewhere.

10. After clicking, this message will appear:

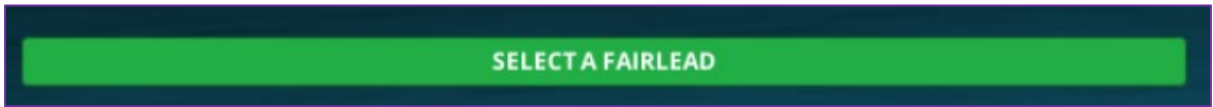


You can now left click on any winch or hook to select it. The selected mooring point will be highlighted with a green box:



Please note that if you have not clicked the 'Use it' button to add a line, clicking on a mooring point will bring up its properties and not select it for use.

11. After selecting either a mooring hook or winch, you will be prompted to select a fairlead:

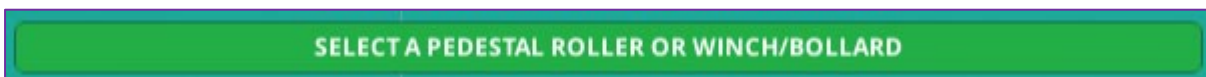
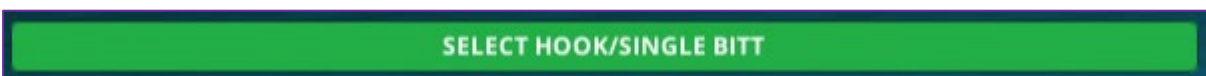


Suggested fairleads will be highlighted in blue:



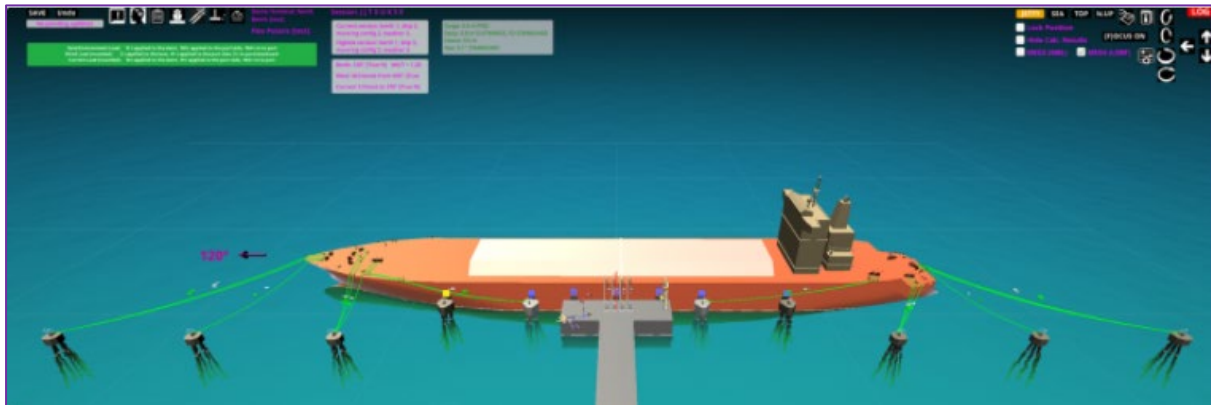
Left click on the desired fairlead to select it. If you wish to zoom in to see the ship's deck more clearly, you can do so with the mouse wheel/middle button (click and drag to move, scroll to zoom). *Note that clicking on anything other than a fairlead at this point will reset your selection.*

12. Finally, you will be prompted to 'select a pedestal roller or winch/bollard' if you began with the mooring hook, or 'select hook/single bitt' if you started by selecting a mooring point on the ship.

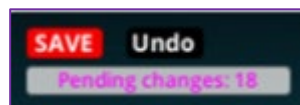


Left click on the desired winch/hook to fix the line to that point. You have now added your first mooring line.

13. Repeat this process (i.e., click 'Use it' again to start adding a second line) until you have all desired lines added. At this point, your 3D view should show something like this:

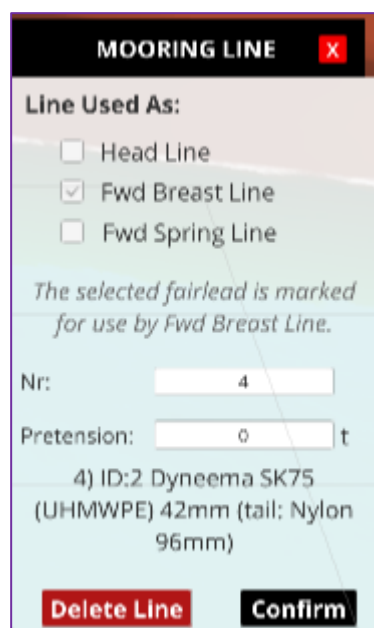


14. Make sure to save your configuration once completed. You may wish to save more frequently than this, but the system does not require you to save after every change. The number of changes currently unsaved (addition of one mooring line will be recorded as one change) is shown at the top left of the



SHIPMOOR screen, next to the save button.

15. If you wish to delete a line after it has been added, click on the line name (e.g., H-1) and you will see a pop-up box that gives you the option to delete that line:

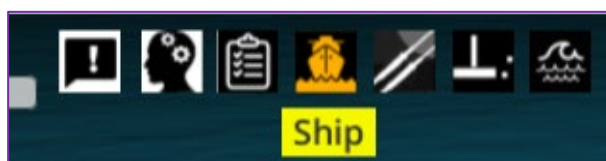


Part C: Setting up ship conditions

Most details of ship conditions are pre-populated from the ship template, but there are a few things you will need to add (or may wish to change) before you can run an analysis.

Note that even though the data are pre-populated, you may change any value for your personal use in an individual mooring session without affecting the master data. If you think a value is wrong, you should submit a change request to the data owner (see the manual for further details) or select 'Update Master Record' if the details are for your own ship.

First, click on the 'ship' icon at the top of the screen:



This will bring up the 'ship conditions' pop-up box where you can view and change three sets of values:

1. General conditions – this will be automatically populated based on the ship dimensions entered in the ship's record, though you may wish to change which side of the ship is alongside.

Parameter	Value	Unit
IMO Number	TP20725	
LOA	285	m
LBP	274	m
Breadth	43.4	m
Depth	26	m
Max. Hull Pressure	20	t/m ²
Capacity	160,500	m ³
Head-on Wind Area	690	m ²
Broadside Wind Area	2500	m ²
Port Manifold X	-1.2	m
Port Manifold Y	18.37	m
Port Manifold Z	5.3	m
Stbd Manifold X	-1.2	m
Stbd Manifold Y	-18.37	m
Stbd Manifold Z	5.3	m
Fore castle Level	0	m
Fore castle Length	36	m
Poop deck Level	-5	m
Poop deck Length	18.4	m
Poop deck Transom	21.57	m

2. Load condition – loaded or ballast condition can be selected from a dropdown list. The other values in this box will update automatically once a condition has been selected.

SHIP
X

General
Load Condition
Coefficients
Update Master Record

LOAD CONDITION:

Loaded

Loaded

Draft: m

Trim: m

Displacement: t

Block Coef:

CoGx: m

CoGy: m

CoGz: m

GMx: m

GMy: m

GMz: m

Ixx: t.m²

Iyy: t.m²

Izz: t.m²

Wind Force Front

X: m

Y: m

Z: m

Wind Force Side

X: m

Y: m

Z: m

3. Coefficients – this section allows you to pick the wind and current coefficients from a dropdown list of pre-populated coefficient sets. Coefficients that do not match the MEG version you have selected on the main screen will be shown in red and matching options are shown in green. A caution will also be displayed if a non-matching coefficient set is selected.

SHIP X

General
Load Condition
Coefficients
Update Master Record

WIND COEFFICIENTS:

MEG ✓ MEG4 SIGTTO 2007 Prismatic ▼

MEG4. LNG Carrier.

The wind coefficient values are based on a comprehensive set of wind tunnel tests conducted on prismatic and spherical gas carriers for SIGTTO's Prediction of Wind Loads on Large Liquefied Gas Carriers (2007).

*Model tests covered the following sizes:
Prismatic 75,000, 135,000 to 155,000, 210,000 and 260,000m³*

Applicable from ballasted to fully laden. Zero trim assumed.

No specific draft validity indicated.

No specific Wd/T validity indicated.

CURRENT COEFFICIENTS:

MEG ? MEG3 Tanker Ballast 1.5 ▼

MEG ? MEG3 Tanker Ballast 1.3

MEG ✓ MEG3 Tanker Ballast 1.5

MEG ? MEG3 Tanker Laden 1.1

MEG ? MEG3 Tanker Laden 1.2

MEG ? MEG3 Tanker Laden 1.5

MEG ? MEG3 Tanker Laden 3.0

MEG ✓ MEG3/4 Tanker Laden 6.0 and over (deep water)

MEG ✓ MEG4 LNG Carrier 1.05

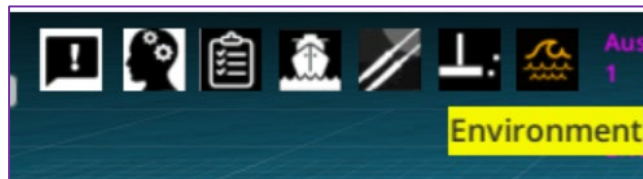
CAUTION: incorrect MEG version?

Ship draft is 9.2 m
Wd/T = 1.74

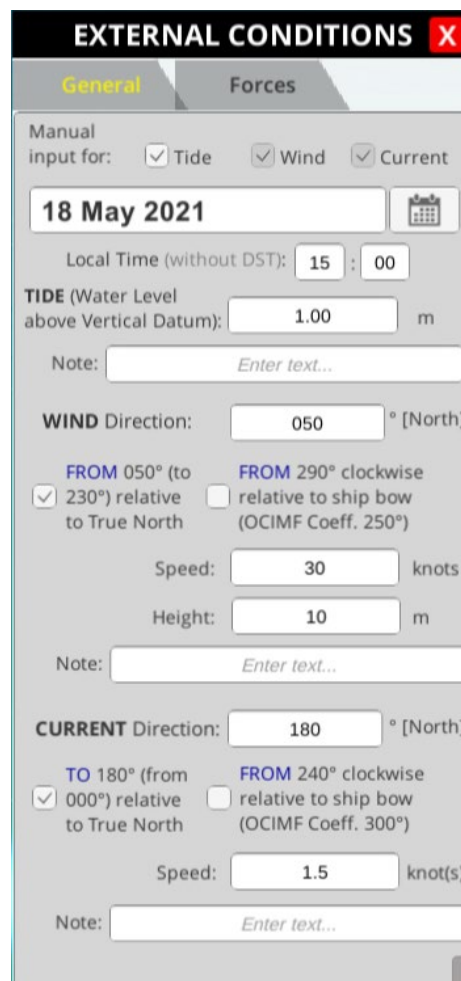
Once you have filled in all three sections, you should save your changes using the 'save' button to the top left of the SHIPMOOR screen.

Part D: Setting up external conditions

1. To start setting up the external conditions for your mooring analysis, please click on the 'Environment' icon at the top of the SHIPMOOR screen. This icon shows an image of some waves:



2. You should now see a pop-up box with the title 'external conditions', as shown in the image below:

A screenshot of the 'EXTERNAL CONDITIONS' pop-up box. The title bar is black with white text and a red close button. The box has two tabs: 'General' (selected) and 'Forces'. Under 'General', there are checkboxes for 'Tide', 'Wind', and 'Current', all of which are checked. Below these is a date field set to '18 May 2021' and a local time field set to '15:00'. The 'TIDE' section has a 'Water Level above Vertical Datum' field set to '1.00 m' and a 'Note' field. The 'WIND' section has a 'Direction' field set to '050 ° [North]', a checkbox for 'FROM 050° (to 230°) relative to True North' which is checked, and a 'Speed' field set to '30 knots'. The 'CURRENT' section has a 'Direction' field set to '180 ° [North]', a checkbox for 'TO 180° (from 000°) relative to True North' which is checked, and a 'Speed' field set to '1.5 knot(s)'. Each section also has a 'Note' field.

Enter the values you wish to use for wind, current and tide in the first tab ('General'), and any other external forces in the second tab ('Forces'), and you can then close this box.

Note that to enter the current and wind directions relative to the ship's bow instead of relative to North, you should first check the box next to that statement and then enter the direction in the relevant box.

3. Save your values by clicking on the 'save' button to the top left of the SHIPMOOR screen.
4. You are now ready to run a static mooring analysis.

Part E: Setting up Dynamic calculation conditions

1. In the 'external conditions' pop-up box you should see the third tab 'Dynamic' if you have the appropriate subscription level. There are five available configurations:
 - Gust winds (dynamic) only
 - Primary waves only
 - Primary and secondary waves
 - Gust winds and primary waves
 - Gust winds, primary and secondary waves

EXTERNAL CONDITIONS X

General Forces **Dynamic**

Primary Wave (e.g. Wind Waves)

Direction: ° [Ship]

FROM 000° (to 180°) relative to True North FROM 270° clockwise relative to ship bow (OCIMF Coeff. 270°)

Period: sec

Significant Height: m

Spectrum: Gamma:

Secondary Wave (e.g. Swell)

Direction: ° [Ship]

FROM 230° (to 050°) relative to True North FROM 140° (rounded) clockwise relative to ship bow (OCIMF Coeff. 040°)

Period: sec

Significant Height: m

Spectrum: Gamma: (peak-enhancement factor)

Wind (dynamic)

20 knot(s) from 180° [North] 1-hour mean (see General - Wind)

Gusts Wind Spectrum:

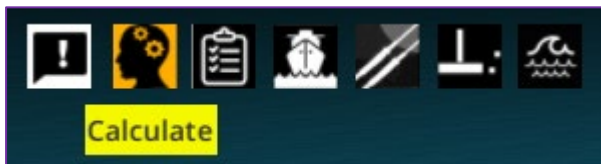
2. If you select waves, enter the wave period and the significant wave height. If gust winds are selected no additional actions are required. API (American Petroleum Institute) is the default gusts wind spectrum, but there are three other spectra you can select.
3. Save your values by clicking on the 'save' button to the top left of the SHIPMOOR screen.
4. You are now ready to run the dynamic mooring analysis.

How to run a mooring analysis

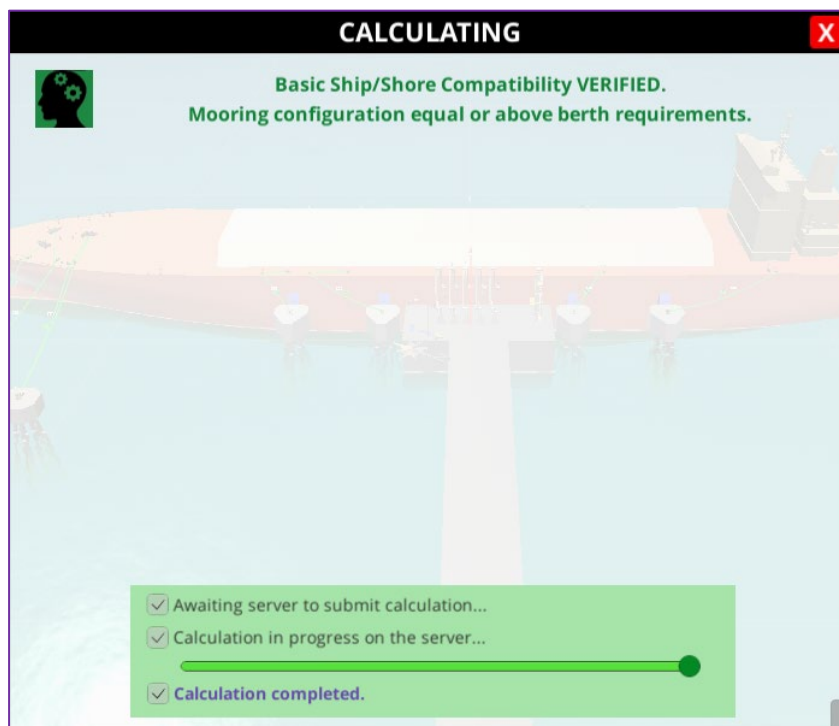
Part A: Running the calculations

Before a report can be generated, you must run one or more calculations.

1. First click on the calculate icon at the top of the SHIPMOOR screen:

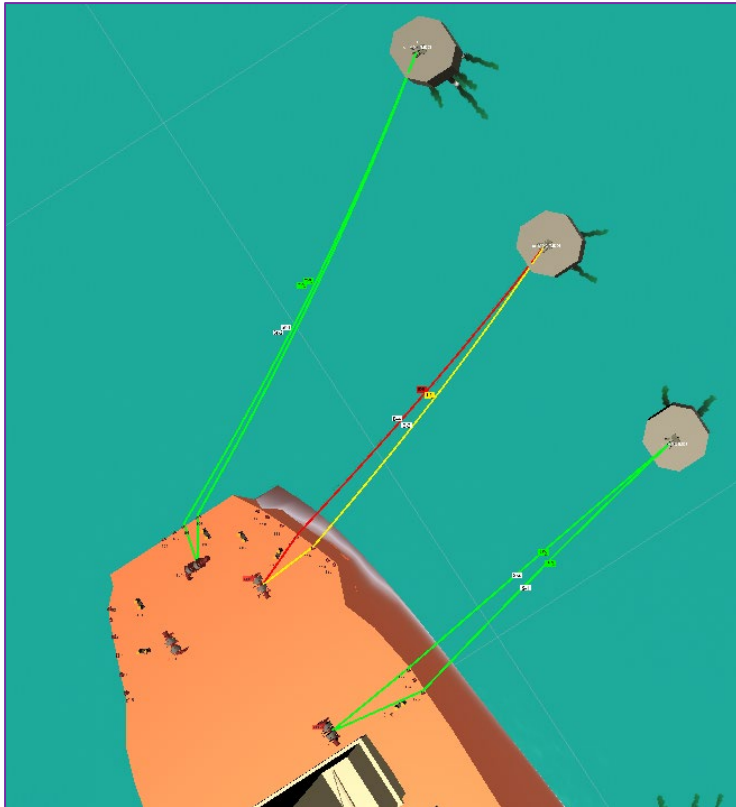


2. This will bring up a pop-up box with the heading 'calculating'. If there are any unsaved changes at this point you will be prompted to save them before a calculation can be performed. Otherwise, after a few moments this will show a check in the box at the bottom to indicate the calculations are complete:

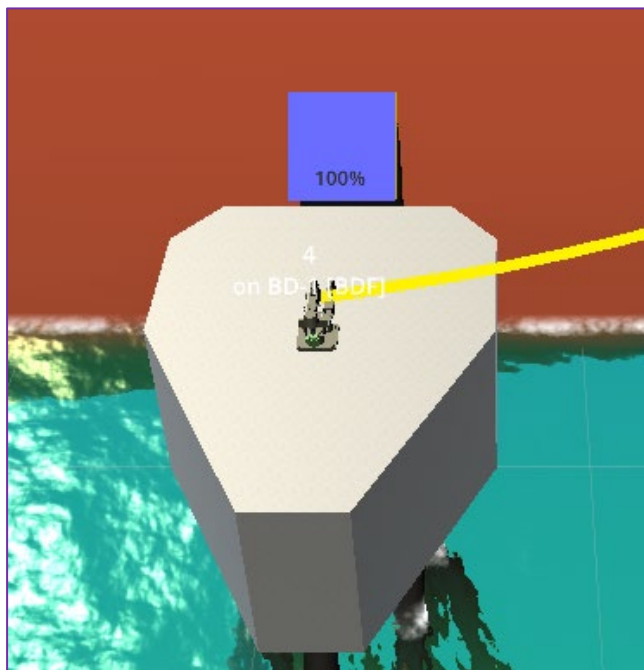


Note that if the mooring configuration does not meet any terminal requirements for number of lines, it will not prevent you from running a calculation but will show a warning and ask if you wish to proceed.

3. If you close this box, you will be able to look at each mooring line individually to see if the loads on them are within acceptable ranges. Values shown are the loads on each line as a percentage of its MBL or LDBF, depending on whether MEG3 or MEG4 has been selected. The lines will be coloured green for loads up to 40%, yellow if the load is greater than 40% and red if the load exceeds 50% for synthetic lines or 55% for wire lines.



You can also check the fender contacts, shown as a percentage of the fender in contact with the ship's hull.

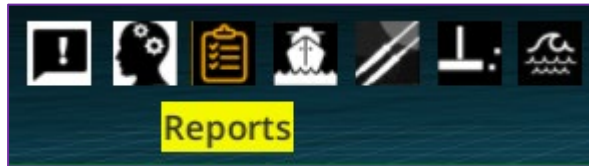


4. If you are satisfied with the mooring loads, you can now go on to generate a report.
Note that if you make any changes to the mooring configuration, ship conditions or external conditions at this point, you will need to save your changes and re-run the calculations before you can generate a report.

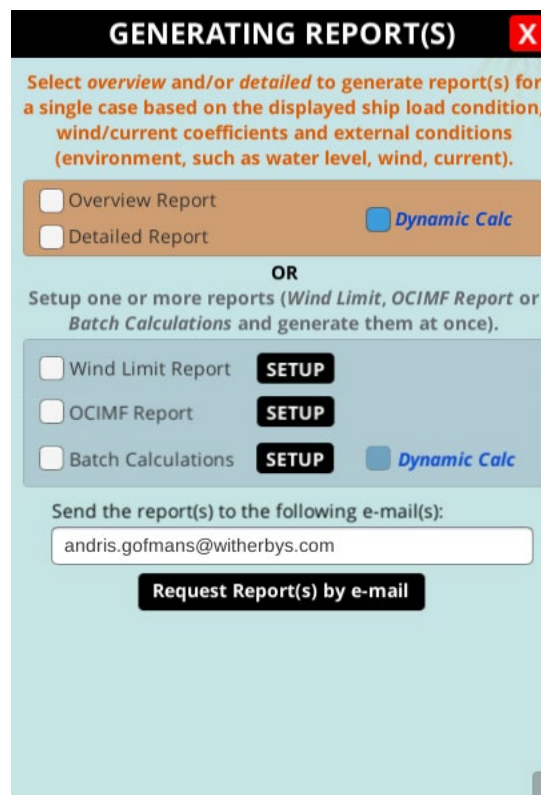
Part B: Generating reports for mooring analysis

There are several different reports available. This guide will not go into detail of what they contain, but a full explanation can be found in the manual.

1. To generate a report, you first need to click on the 'Reports' icon at the top of the SHIPMOOR screen:

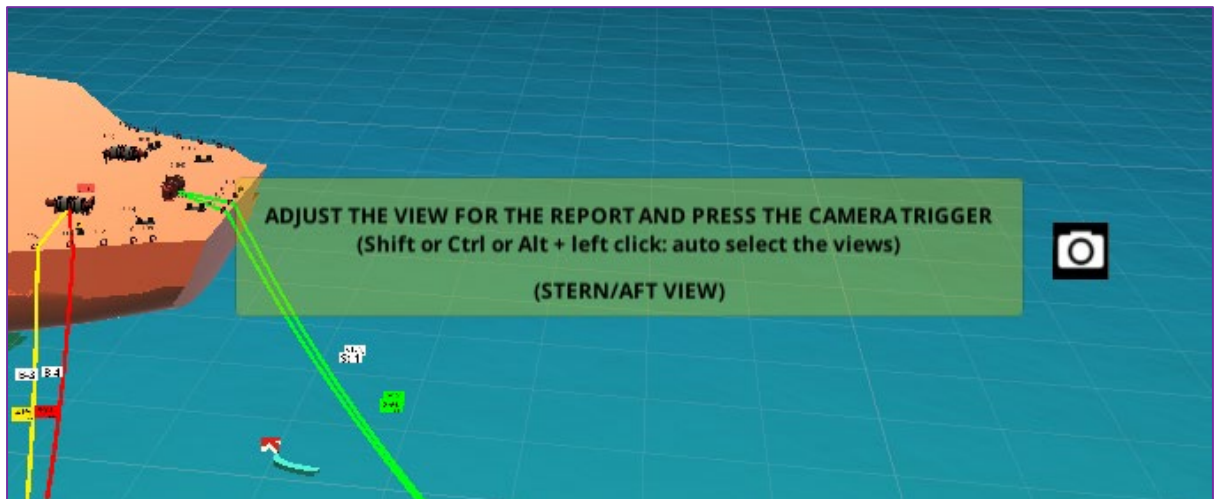


2. This will bring up a pop-up box that allows you to select from the range of reports available by clicking in check boxes for the report(s) you wish to run. You can select more than one report to generate at a time, but please note that you can only run reports from one section at a time:
 - a. Section 1 – Overview report and detailed report, shaded orange. For dynamic mooring analysis tick the 'dynamic calc' and 'detailed report'
 - b. Section 2 – Wind limit report, OCIMF report and batch calculations, shaded blue/grey. Click 'setup' and fill in any required fields to be able to run these reports.

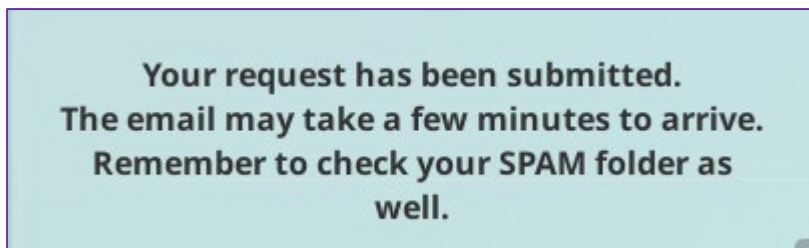


3. Enter the email address(es) where you would like to receive the reports and click 'Request report(s) by email'. Multiple email addresses may be entered and should be separated by a semicolon.

4. You will then be prompted to adjust the view of the ship/jetty you would like to see in the report images. Move the display area using the arrow keys or by clicking and dragging the view using the middle mouse button (often the scroll wheel). When you are happy with the view, click on the camera icon. There are three view areas to select. The report will only be generated once all three views have been confirmed.



5. Once all views have been confirmed, you will see a confirmation stating that your request has been submitted.



6. If you wish to run further reports, close this dialogue box, and click on the 'reports' icon to start the process again.

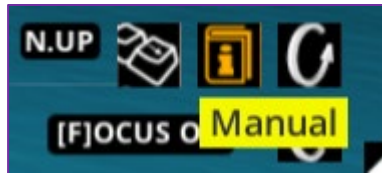
Section 3 – How to get help

The SHIPMOOR Manual

The SHIPMOOR manual contains more detailed explanations of the different functions available in SHIPMOOR and how to use them. It is available for download from:

<https://www.shipmoor.com/3d/manual/3dusermanual.pdf>

This link can also be opened directly from within a 3D session by clicking on the 'Manual' icon in the top left of the SHIPMOOR screen:



The online copy is regularly updated and we would suggest accessing it here instead of saving a local copy to your PC or laptop.

Online FAQs

A selection of the most frequently asked questions is available at:

<https://shipmoor.atlassian.net/servicedesk/customer/portals>

This includes a number of 'how to' guides, solutions for common technical issues and information about both the 3D environment and the management portal.

Video tutorials

There is a curated SHIPMOOR playlist available on the Witherby YouTube channel. It contains a series of 'how to' video tutorials to help you get started with SHIPMOOR and can be found here:

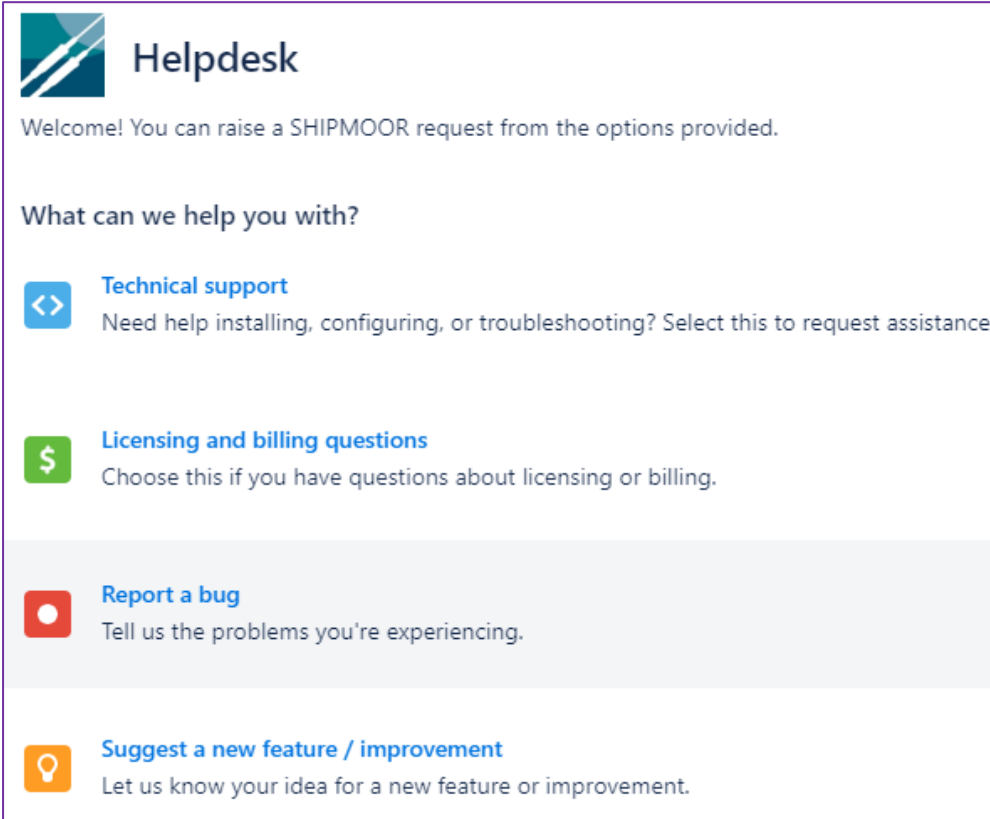
<https://www.youtube.com/playlist?list=PL4sH7C0SDC-Emt5OzMmowfDY80HNdM-HB>

Helpdesk

If you cannot find the answer to your question in the manual or online FAQs, you can submit a query or comment to the SHIPMOOR team through the online helpdesk, available at:

<https://shipmoor.atlassian.net/servicedesk/customer/portal/1/group/-1>

You will be prompted to choose what your request relates to, which allows the team to direct your query to the most appropriate person.



The screenshot shows the SHIPMOOR Helpdesk interface. At the top left is the SHIPMOOR logo, a stylized 'S' in a blue square. To its right is the word 'Helpdesk' in a bold, dark blue font. Below the logo and title is a welcome message: 'Welcome! You can raise a SHIPMOOR request from the options provided.' Underneath this is the question 'What can we help you with?' followed by four options, each with a colored icon and a brief description. The options are: 'Technical support' (blue icon with '<>' symbols), 'Licensing and billing questions' (green icon with a '\$' symbol), 'Report a bug' (red icon with a white circle), and 'Suggest a new feature / improvement' (orange icon with a lightbulb). The 'Report a bug' option is highlighted with a light grey background.

Helpdesk

Welcome! You can raise a SHIPMOOR request from the options provided.

What can we help you with?

- Technical support**
Need help installing, configuring, or troubleshooting? Select this to request assistance.
- Licensing and billing questions**
Choose this if you have questions about licensing or billing.
- Report a bug**
Tell us the problems you're experiencing.
- Suggest a new feature / improvement**
Let us know your idea for a new feature or improvement.

You do not have to create an account to submit a request to the helpdesk, but if you do you will be able to log in and view your requests and any responses from the SHIPMOOR team. Responses to requests will also be sent by email to the email address provided when you submit the request.