Ports of Call XXL TM
The Maritime Simulation Game

Ports of Call XXL (C) 1994-2003
Rolf-Dieter Klein and Martin Ulrich

Preface
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Ports Of Call has a long tradition, first developed for the AMIGA (in 1986) it was ported to PCs later on and was many years online as a DOS game. Now we decided to do a complete redesign and use more features and modern techniques to do all which we originally could not implement. Also the time changed the ship broker business which we can implement also.

Ports Of Call XXL can be enhanced by a 3D shipsimulation program called POC sim3d which allows for three-dimensional ship view. The program POC sim3d need a special license to work with POC XXL. If POC sim3d is not used a classic 2d simulator can be used, with a view on top of the scene, closer to the classic version of Ports Of Call.

At www.portsofcall.de you find the latest updates for the game, which is continuously developed, please take a look from time to time at this place. There is also a discussion forum (www.rdkleinform.de) for all playing the game to discuss certain topics on the game.

The current version of POC XXL is still in BETA that means the details of the game principle can change also some parts are not implemented as for example harbour scenes and more ships on both we work. But you can upgrade all the time to the latest version.

About the Game

Ports Of Call is a trade simulation game with some action parts. But the goal is to trade freight and transport them using ships. We now also have passenger ships and tanker, which are not pure tramp ships of course, but currently can be used similar, as a wish of many people. In future they will have more distinct behaviour, like car carrierers getting car freight.

A Background on Tramp Shipping

The traffic of goods by sea is organized in accordance with international agreements and contracts between individual countries. About 80% of the goods (called "cargo volume") transported between two countries is handled by ships registered under the flags of the countries concerned. The remaining 20% are open to the free competition of ships under other flags. These ships, called "tramp" ships, are usually prepared to transport all kinds of goods. This aspect of the shipping business is the focus of Ports of Call XXL.
Whether a tramp ship owner makes a profit depends upon: on the one hand, the laws, regulations and subsidies of his country, and on the other, the rules of supply and demand. If, for example, there has been a good coffee harvest, coffee prices will drop, and since there is a lot of coffee to be shipped, the freight charges will rise. Now, if a lot of owners start to compete for the business, the freight capacity will start to increase, with a consequent drop in freight rates.

If the coffee harvest was bad, the freight rates will drop even though the coffee price has risen, because the shipping capacity is now in excess.

If the business is exceptionally poor, it may be necessary for the ship owner to temporarily lay his ships up. In this situation, the ships cannot be sold profitably because the ships' prices have dropped (supply and demand). Also it is not economically viable to operate the ships because the income nowhere covers the overhead fixed costs, such as maintenance and finance, still have to be earned. This is now the time to buy good, used ships at a low price. Apart from the economic aspects, life aboard a tramp ship can be pretty exciting and that's no "old sailor's yarn"!

**The Object of the Game**

Each player founds his own shipping company, with a starting capital of $1 .. $4 million to buy ships (depends on the year of start and the player level). Freight and ports of call can be chosen continuously from offers on the market. Then the captain chooses an economic travelling speed and casts off to encounter many adventures on the high seas.

After unloading his cargo, the captain is credited with the agreed payment. Then he may refuel, make necessary repairs, and so on. The next job is to find a new, lucrative cargo, buy further ships, and/or repay his mortgages; in other words, he must have a more productive company than his competitors.

The strategy of the game is flexible. A rogue will try to make a quick buck by using cheap ships and juggling the freight rates to force his competitors into bankruptcy. The careful player, in contrast, will build a solid financial foundation. The superior speed of his high-tech fleet will enable him to snap up the more lucrative contracts.

Any strategy is deemed to fail if you don't have a good captain to bring your ship across the world's stormy seas. The formulas for ship movement have been calculated so that ships respond to changes in speed and movements of the rudder as in the real world. It is recommended that the beginner does not start with ships that are too large. These are slow to respond and, as such, require a more experienced captain.

The ship's movement at sea is accelerated. The captain, however, must select the correct speed. Fuel consumption depends on the time at sea and the weather conditions. Determination of the economic travelling speed depends on fuel prices and freight rates. Hence, you can see that a captain's decisions also have an influence on the success of the company.

The credit rating of an enterprise is very dependent on its social status. The more ports served by a line, the higher the status. And an owner who is operating modern, expensive ships has a naturally better standing than the owner of a rusty, floating wreck. The captain's conduct also affects a company's credit.

A player's chances of success improve the more he knows about international shipping. All data for the game originated from actual developments in the maritime world: the fluctuation of freight rates, refuelling costs, port charges, and ship operating costs. The ship operating costs include amounts payable for tax, management, crew expenses, safety precautions, and other costs these vary significantly from country to country. These general costs are calculated for each individual ship and are reduced in accordance with the subsidies, tax reductions, etc., that are valid in the country of registration. The accounts are then automatically debited periodically, without on screen display to the owner.

Ship prices are the same for all ship owners. However, in reality, ship building is subsidized differently in each country; therefore, a compensatory figure is included in the basic costs.
In summary, Ports of Call has been developed with this motto in mind: "Software with Hard Facts."

**Getting started**

What You Need to Run Ports of Call
You need a windows computer running Win98, Windows ME, Windows NT, Windows 2000 or Windows XP. As CPU a speed of more than 300 MHz is recommended (for the POC sim3d more than 800 MHz). A fast Graphic card is recommended to use the 2d simulator and a 3d acceleration card like Nvidia Geforce or Redeon for the POC sim3d and 3D parts.
VERY IMPORTANT: use the latest graphic drivers for the graphic card – also see www.macromedia.com for a list of drivers and links to be compatible with Shockwave and Flash which we both use.
An old driver will result in strange error messages during the game!
Main memory 128 MB .. 256MB is helpful, the resolution of the graphic card should be switched to 1024x768 with 24bit or 32 bit colour depth. You can use 800x600 but some parts may be clipped. Also switch to SMALL FONTS if the text seems to be too large or parts are missing.
Good to have a soundcard to get all effects we have.

**To start Ports of Call XXL:**

After installation you can start the game Ports Of Call XXL directly using the windows menu (Ports Of Call), also the desktop icon can be used to start the game.

**Fill out the Registration Form**

You can play the game for one hour each time, this should be enough to check whether you like Ports Of Call XXL, if you like it and want to play more, you need to get a license code.

Silver is for the POC classic users, they are allowed to play 2 hours POC XXL.
Gold is for unlimited playing time using POC XXL, you can purchase this license online at www.portsofcall.de (click on registration),
The license has three items:
1. Name (which is Gold for POCGOLD) check the option box
2. Town (use the given value not your own town)
3. Serial number (enter all digits exactly as printed)

After this clock on „enter your registration info“ then the fields should be greyed to indicate a valid license.
Platinum: This is the full unlimited upgradeable version. Here you can use POC sim3d in addition to the basic features of POC XXL and the REAL modus, also you can get an entry in the Hall Of Fall in the next update of POC XXL.

Platinum School license: This is equivalent to a platinum license, but for educational institutions like schools, the license need to be upgraded regularly in some cases.

If you click on “request a serial number” you can open your browser and go to our shop to get a license code.

ATTENTION: If you also want to use POC sim3d and have a Platinum License, you also need to enter your registration data using the Register in the POC sim3D Windows Menu to get it enabled.!

Hint: Soon we change the license system, you might need to get a new serial number and special code, via email, but we will inform you in time for this procedure. You can then copy this code into the installation directory.

Updates

Updates can be done automatically by the game, if you use the “online update” the computer compares the current files to the files on the server and downloads new and changed files automatically and verifies the content. You can also load the whole package always from www.portsofcall.de, but due to the file size using the online update feature is strictly recommended. Also after an interrupt of the download, the online update function can resume, and collects all until the update is complete – this saves a lot of download time.

Start the updater using the “OnlineUpdate”-button. Then you can choose between a manual update or automatic update with periodically checks. After download the game restarts automatically and you can continue playing using the new features.

Usually you don’t need to install anything after this, a restart of the game is done automatically if necessary.

The Game

In this menu you can also choose the playing duration – at least 1 hour, the other options are greyed until you have the proper license code.

You can also load an old game, if you have saved it before, and continue playing this game. Use “load a previous GAME”.

If you have a playing time limit, then after it expires, you get a chance to save the game or quit.
On the right side there are some options. With the checkbox “Slow refresh for worldmap” you can disable
the redraw of the ships every hour, instead the positions in the map are updated once a day. This helps
with slow CPUs / graphic cards.
With the “auto save options” you can enable an automatic saving of the game. This will be done in the
world map, when the time changes either per day, per week or per month.
You can set a base name for the saved game also. If you check the “append game date to the filename” the
date and time will be append to the saved game. This can produce a lot of game files, so we also provided
a new button the delete the files, in the list left, you can mark all files you want to delete and then press
this button.

With the following window, you can choose the level of difficulty. Choose between “Beginner”,
“Advances” and “Expert”. If you play for the first time, “Beginner” is recommended. This also determines
the freight results you can get.

You can also choose the date to start the game, this determines which ships are available. The default is
1980, which is a good time to start. You can go to 1975, which is more tough, don’t use the current year, if
you plan to play for a long time, because you might run out of new ships (about 2006 we don’t know how
future ships will look like).

In the next menu you get some additional options to choose from.
You can play POC XXL also without a ship simulation, then if there is a strike, the ships is manoeuvred
automatically, but this might result in a damage also. Some events cannot be switched of like the collision
event.

With the 3d simulation you get a three dimensional ship simulation, but only for Platinum License users.

The option „stock market“ enables a stock market but only if the proper status is reached (will be available
in one of the future updates of POC XXL. - NOT YET AVAILABLE IN THE CURRENT BETA).
Now choose the number of players, up to eight are possible:

In this menu you also find to options to activate a network game, BUT IT IS CURRENTLY NOT FUNCTIONAL IN THIS BETA VERSION.
Later you can choose a group name for the workstation, this is displayed to identify the group on all network stations. The IP must be same for all in one group (more than one group is possible). Then click on “join network” and the group name appears on all machines (they must be at the same menu position). Each clicks on this to become member of the game Then you can continue.

Now you have to get into business, use a name for the captain and a company name. Click into the name fields.

You can also choose to play yourself or use a computer player (NOT IMPLEMENTED IN THE CURRENT Versions).

After registering, you must choose a home port. Select any of the ports listed.
.A screen will then appear with a picture of the globe, showing you the location of your port. On the right side you can see the exact location of the harbour marked on the globe. You can rotate the globe using the mouse, just left click on the globe and drag it. If you press on CTRL on the keyboard at the same time, you can zoom in and out by moving the mouse left or right.
The harbour selection is very important and determines currently costs of the office and for many properties also. You can move to a different harbour later on, but this might cost a lot (so call register change). Ships are delivered to the current homeport.

The entire registration and port selection process will be repeated for each player then the main menu appears.

You can move the world view by click and drag, or zoom in and out be moving the mouse with a click and CTRL key hold.
The Ports Of Call XXL main screen

This is the central pace for the whole game, you can see all ship positions and you can start actions from within this screen.

The actions:

On the right side you find buttons for the general control, to click on a button the simulation must be in STOP condition (that is like above the START button is displayed).

About
A window opens about copyright and version information.

New
You can start a new game and enter all information again.

Load
You will get a windows with loading option, there you can load a previous saved game and continue to play.

Save
The current game is saved, and you can choose a name for this (according the windows rules), later you can continue this game. We suggest you regularly save you game and also use different names (append a number for example), then if you get bankrupt or ships sink, you can go back a game and try from this point, also if windows crashes you have a saved game in this case which helps.

Quit
Ends the game.
Options
You can change the current game options, for example decide to use the 3D simulator etc.

Join
This is for the upcoming network game to join after the intro screen has been through – not yet implemented.

Hall of Fame
Here you find all names which got a Platinum License to support us and wanted to be listed there.

The world simulation display
It shows a map of the world (and you can zoom into this), with all positions for all ships.
You need to buy a ship to see it. Also ships which sink are displayed (as dark red ship).
The colour is different for each ship owner.
Before a ships requires an action is blinks several times, then a message is displayed or action requested.
On the map you can see also the wind strength (beauford symbols 8..12) they are calculated by our weather simulation system. The higher the value the stronger the wind.
You can display the harbour position, if you move the mouse over an harbour the name of the harbour is displayed also the number of available berths is shown.

If you click on the Zoom-Button, you toggle through 1x,2x and 4x for the worldview. You can also drag and click the mouse on the worldview to pan the display. Press the STOP Button before, for better performance.

The action field on the left lower side shows the text „START“ if you click on it the name changes to „STOP“ and the simulator starts running. Select STOP to do an action. Its not recommend while the simulator runs to do anything on the screen (also please don’t move the POC window while running – might hang due to a general window problem).
The field with “TIME” shows the current date and time, currently actions are done in a 24 hour cycle.

On the right upper side you find statistic information.

The following actions can be done (after STOP is clicked):

OFFICE, STOCKMARKET, SHIPRBROKER, WORLDVIEW

SHIPRBROKER

Select a player before you enter this menu, so the player is determined to do the action. (see list of all player on top of the game screen).

In the elevator you can select a level you want to go and do the action at the shipbroker.
In the first level you get special ships like car carriers, tanker and so on, in the 2nd level you get the high-tech ships, they are really good but expensive. Each year new ships appear in this level (most every year). Some older ships are in the 3rd level “preowned ships”, they are ok to use, but not new and you might do repair more often. But you also don’t need to fully pay them because you will get mortgage on them by the bank, but you also need a little bit status to get them.

So as a beginner you need to start with the “low cost ships”, they are really old and cheap, do there job, but often need to be repaired, so you might need to get rid of them sooner or later.

In the 5th level you get liners that’s is for passengers, you need a good status to buy them but the also have good freight rates.

In the 7th level there is the “ship seller market“, you can also sell your ships, if the are too old for example. But if there is mortgage on the ship you might not be able to sell the ship, if the revenue is less than the mortgage or the ship condition is too low.

The offer depends on the current economic situation, so maybe you have to wait some weeks and then try again to sell a ship.
Here you can see an example of a “low cost” ship, which you may buy.

Important is the year of built on the top line, the closer the date is to the current date, the more expensive is the ship. But a new ship has a better condition and less corrosion.

The ship condition and corrosion is also listed in this windows. The best condition is 100% with high-tech ships, here we have a condition of 69.4%, that’s not that good, a ship with 50% may even sink already, so you might do some repair after you get the ship to increase the condition. There is also a maintenance option in the office, a good maintenance on the fleet helps keeping up the ship condition but is also expensive.

Important data of the ships are also length beam and draught. A big and long ship is difficult to manoeuvre but on the other side can carry more freight. A small ship is easy to navigate but cannot carry so much which drops the revenue.

Very big ships with a big beam might not fit into the Panama canal, so called PANAMAX ships, they need to travel around (which is done automatically by Ports Of Call).

Very important is also the GT (or BRT) information, this determines the inertia of the ship for example. For the load the TEU number is important (for container ships only), it’s the number of containers which can be carried (TEU means twenty foot equivalent unit, there is also FEU = forty foot equivalent unit). A TEU is the standard container unit size. Here 804 containers fit onto the ship. Important is also the “reefers” this means space for refrigerated containers with a special equipment they need. Here 24 containers of the total 804 can be cooled. Some freight can be only taken if refferer space is available. Most this number is much smaller than the total number of places for containers.

A very important factor for the freight is also the DWT, that is the tonnage which can be carried by the ship. Here we have 11938 ton maximum load. Both values the TEU and DWT determine which freight you can take. You cannot place more containers than TEUs available, but the containers might contain heavy
freight, like Nickel, and you might reach the maximum number of tonnage before you fill all container space. You easily run into the danger of overloading a ship, which might sink if you overload by 20% already (you will get a warning). An overloaded ship will also not reach the maximum speed anymore.

As for the speed, it's displayed in kn (knots), which are sm/hour (sea miles per hour). One sea mile is 1852 meters. That is the 16.5 kn speed of the ships = 16.5 * 1852 m/hours = 30,566 km/h. As per m/s it's 8.5 m/sec important for the real modus in the 2d and 3d sim. This ship can pass its own length in 17.2 seconds.

“Bunker” is the amount of fuel the ship can carry, together with the fuel usage it determines the range the ship can reach.

The fuel usage is measured in tons/day at maximum speed. If the ship operates with less speed, then it does not use that much fuel.

Further information varies on the ship selected, for example the number of passengers, also for container ships often there are passenger cabins most for about 12 passengers, of your special passenger ships (Liners) have much more space.

The operation cost are measured in Dollar per day and include common operating costs for the personnel cost and other current costs also insurance etc.

The corrosion factor determines how fast a ship gets aged and needs to be repaired. If it gets aged its factor gets higher. Also the freight determines the ship condition, for example chemical freight decreases the ship condition.
Selecting OFFICE also lets you select a company name to take you into that company's office. This is where your books are kept, statistics are analysed, mortgages and bank overdrafts are applied for and repaid, profit and loss statements are prepared and business developments are kept track of. You can also change the location of your home port from within your office if you think it is more economical to operate under a different flag.

You can also change the ship destination while the ship operates, and also set a new speed for travel. There is an interesting feature also, you can reserve freight, then you might get much better freight rates, but you need to fetch the freight in time, otherwise a high penalty is due.

Hint: Checking your office periodically will prevent theft.
The freight market

There is an important new feature in POC XXL, the freight market. Here you get an overview on all available freights, worldwide. You can filter the freights, by source and destination harbours, by continent, or by town. Then you can reserve a freight, you get money immediately, but if you don’t fetch the freight in time, you get a huge penalty. You can reach this freight market also from within the captain’s cabin when chartering a new freight.

WORLDVIEW

Selecting GLOBE allows each player to determine the location of his ships, the ship’s route and Estimated Time of Arrival (ETA). You can rotate the globe with mouse click on it and then drag. If you Hold the CTRL Key while dragging the mouse left or right, you can zoom in or out.

After all ship owners got their first ship, you click onto „START“ in the main view. You will see all ships in the colour of the ship owner. Before a ships shows an action it starts blink several times.

The captain’s cabin

You will now be presented with a screen showing the captain’s cabin, you can see your port through the porthole, there either the town is displayed or an animation. The chalkboard contains information regarding the city and country of your port. The captain’s log lists the last port visited, cargo, profits, bank balance, ship condition and available fuel (in tons). The clipboard contains options which you can activate by selecting them.
Repairing Your Ship

If you have bought a used ship, chances are that it needs a little minor repair. After selecting REPAIR, you will be presented with a requestor showing you the damage and repair status of your ship. You can select the level of repairs you want or can afford. Not all towns have a dry-dock fitting your ship, so you might travel to a bigger port to get a suitable dry-dock. The price of repairs differs and depends on the location.

Refuelling Your Ship

To refuel your ship, select REFUEL. This will bring up the refuelling screen, where you can select how much fuel to put in your ship. By clicking the select button on any of these buttons: 25%, 50%, 75% or 100%, the fuel will rise in the tank to that level.
Chartering Your Ship

CHARTER is the most important button. Here you can select your freights to carry with the ship, and you determine the next harbour you want to travel to. You can load multiple freights, but you need to take care of the maximum number of available places for containers (TEUs for container ships only), and the maximum load (determined with the DWT value of your ship). A ship which is overloaded might sink quickly. If for example you only load Nickel which is very heavy, you might not be able to use all available container space, or you will overload it. You can also only take a part of the offered freight, but only if you did not reserve the freight already, then you have to take all to avoid a penalty, but you can split it on more than one ship. (In reality all the freight must be taken, but here we simplify the process a little bit).

All freights have maximum time to be delivered, some freights have very long times, others have a short deadline to be delivered, the give you more revenue, but you get a high penalty if you are too late.

As a beginner, always add some days to the time needed for the next harbour, which you can see in the menu also, the estimated times can differ from the real one by having storms, strikes, harbour delays etc.

You can pan the worldview using the mouse (click and drag), or zoom in and out (use CTRL plus click and drag). You can see the harbour selected and also the route if calculated.

You can enter the freight market from here and reserve a good freight in the next harbour if available.

You can also bunker from within this place.

Laying Up

Laying up means to anchor your ship for a short time. You may want to wait until the laws of supply and demand command a higher price for your cargo. As a ship owner, it may become necessary to temporarily...
"lay up" the ship for a week or so, because it is not economically viable to operate the ship when the income doesn't cover the overhead.

**Loading Your Cargo**

When you are ready to embark, select LOAD CARGO. The screen will turn blank indicating an action is taking place and you will return to the World Simulation Display. Your ship will appear in your company colour. When it blinks on and off, you are ready to navigate through the harbour on the way to your port of call.

**Navigating Your Ship**

Navigation is the most important aspect of being a successful Captain. The ship must be manoeuvred in and out of different harbours and oftentimes through difficult obstacles. The Navigation Control Panel is made up of the following components: the Power Regulator, Speed Indicator, and Rudder Regulator. Each one must be mastered to successfully navigate your ship. You might have additional controls for the side stream rudders.

**The Power Regulator**

The power regulator functions similar to a gas pedal in a car. To go faster, hold the select button down and drag the speed regulator up to go forwards, and down to go backwards. Actual ship acceleration is simulated, so it takes time to gain speed. With the regulator positioned in the exact centre (represented by a horizontal line) the ship's engine is at idle. The ship might not reach full speed when travelling backwards. The acceleration also is determined by the load. A heavy fully loaded ship is much slower in acceleration than a small and empty ship. In the arcade modus (default), the max speed is about 2x to 4x the real speed and the acceleration is less. If you choose the real modus, then you also need more time to manoeuvre the ship. We suggest using the arcade modus for the game, unless you want to see you ship as in reality (you need for a 200 m long ship about 20 sec to pass by in this case).

**The Speed Indicator**

The speed indicator is represented by a small horizontal line directly to the right of the power regulator. It functions similar to a speedometer by showing you how fast you are moving. If your ships speed is high, you have a lot of momentum and it will take longer to slow down or change direction. Beginning ship captains should take time and experiment with the navigation control panel until they are familiar with manoeuvring techniques.

**The Rudder Regulator**

The rudder regulator is identical to a steering wheel. When the ship is moving forward, dragging it to the left will turn the ship left and dragging it right will steer the ship right. When the ship is travelling backwards it functions the opposite. Some ships have one or two side stream rudders this helps manoeuvring also, you can turn on both to get a parallel sideward movement of the ship, if only one is present, also use the normal rudder in addition to get a side effect. This works only with low speeds.

**Entering a Harbour**

The goal when entering a harbour is to safely dock your ship and park it inside the blue target (called the berth). The ship must be motionless and parallel to the dock inside the blue target (this gets you a status point with every new port you master) You can use tugboat assistance if you feel it is too difficult, but tugs cost you a lot of money. If you are low on funds, you will be forced to steer by hand.
Leaving a Harbour

You successfully leave a harbour by navigating your ship through the blue target window. You aren't penalized for exiting backwards. The goal is to safely exit without crashing or going beyond the time limit shown in the hourglass. You can use tugboat assistance if you feel it is too difficult, but tugs cost you a lot of money. If you are low on funds, you will be forced to steer by hand.

On the Open Sea

When you have successfully left the harbour, a screen will appear containing information on your destination, freight on board, distance to travel (in nautical miles), and the deadline for delivery (if any). Also, you may choose your travelling speed (in knots). Remember, the higher the speed, the more fuel is consumed; on the other hand, a long journey results in a high total of fixed operating expenses. After making your choices, you must challenge the cold, cruel sea, you may STOP the ACTION at any time during the voyage to catch up on office work, buy ships, and so on. Bon Voyage!

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