

The Freeciv Client User's Guide

The Freeciv client program is your window into the world of Freeciv. It is through this window that you will view your empire and the surrounding regions, direct the movement of your legions, and command the workings of your cities. In Freeciv, you are the near-absolute immortal ruler of your empire, but you can only control what you can observe and know to order. The client is the doorway from your throne room to the rest of the world.

This document reflects the Freeciv client programs for the 1.8.0 build. The general concepts involved, and many of the windows, will also help in using Freeciv 1.7.2 and earlier versions.

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1. A Tutorial Introduction to the Client

In this section you will start a solitaire game of Freeciv and learn the basic concepts of controlling your race. All of this document assumes that Freeciv is installed in its default directories, and that the executables are in your PATH.

There are at present two versions of the client. One is called the "Xaw Client", made to use the Athena widget set that comes with the X window system. It is the default client since the Athena widgets are nearly always available. The other is called the "GTK Client", made to use the Gtk+ widget set. They have the same windows and controls, but the Gtk client has better looking windows. It is not part of the standard 1.8.0 distribution, but is available at the Freeciv site ftp.freeciv.org. Either one or the other will be installed, mostly depending on whether your system has Gtk+ installed. For the most part, this tutorial will have examples from the Xaw client.

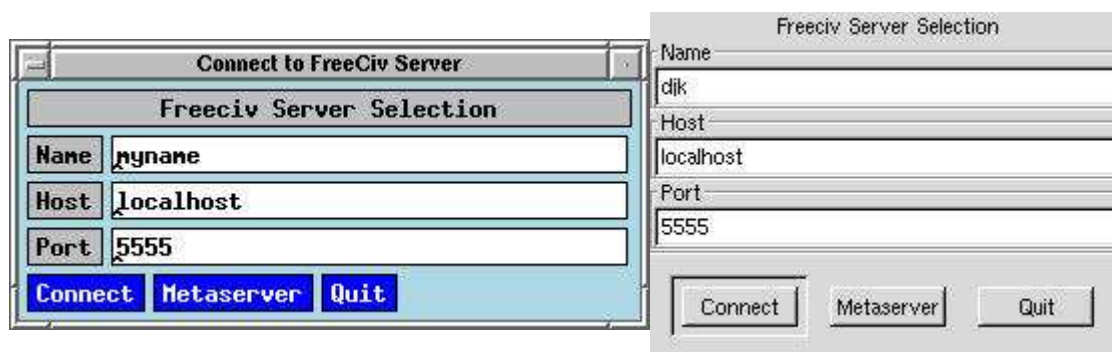
1.1 Starting Up

In an xterm or other window, start the server and give it some parameters:

```
civserver --nometa
Freeciv version 1.8.0 server
1: Now accepting new client connections
Get a list of the available commands with 'h'.
> set seed 5
> set randseed 5
> set aifill 7
```

Those parameters will produce an environment which will match this tutorial. Leave that running for now, go to another xterm, and type

```
civclient &
```



There are options that you may use later, but for now leave them out. The client will start, display the main client window, and along with it the connect window. (Here is the one place in the tutorial in which both the Xaw client, on the left, and the Gtk client, on the right, are shown. As you can see, they show the same information but in different styles.) You may leave all of the fields at their default values this time; just **click on "Connect"**. (Throughout this manual, "click" means a single left click.)

Go back to the xterm with the server running; you will see a message indicating your client connecting. **Type the "s" command** to the server to start the Freeciv game. Look back at the client window; you won't need to look at the server window again until you are done with the game. The client will now display the race selection window. **Click on "Roman."** "Caesar", the default ruler name for that race, will appear in the box at the bottom; if you don't like it, click on it and replace it. **Click on the "Ok" button.**



1.2 A Look at the Main Window

Now the main client window will be filled in with the world as you know it. We'll go through it part by part. The first thing you should do, however, is click and hold on the "Help" menu button on the top line; you will see a wealth of topics for which there is online help. Move the cursor down to the topic of your choice and that help window will appear. There is online help for essentially all of the game's concepts and features.



The Map

The upper right is a scrollable map of the world around your initial units. The default world is 80 squares across and 50 squares high, but this viewport only shows a segment 11 by 8 squares. Each square you see filled in contains a representation of the terrain in that portion of the world's surface.



The flashing square in the middle is alternating between the terrain of that square and the icon of the currently active unit. The terrain types which you see are a sample of those in the world; your initial units are on a Grassland square, with Plains squares just to the south, east, and southeast of your units, and one north of the middle of the river. Just to the north of your units is a River square, with two more Rivers to its east. Off to the far southeast is a Tundra square. Surrounding your coast to the west is a number of Ocean squares.

Many map squares have special resources; in this case, there is one. The Plains square just to the east of your units has a Horses symbol; such a square has higher food productivity than an ordinary Plains square. How can you tell what the squares contain if you aren't familiar with the symbols? Put the cursor over the Horses square, and press and hold the middle mouse button; you will see a tiny window saying "Terrain: Plains (Horses)". Do the same in the square with your units; you will get a line describing its terrain, another identifying the unit on the top of the stack there, and another giving the unit's critical statistics (attack, defense, firepower, and hit points).

But first, note that much of the map is black, apart from the 21 squares in the center. These are squares of which you know nothing; you will not see what is in them until you have a unit close enough to report on them. What of the world beyond your 11x8 viewport? Move your cursor to the horizontal scrollbar below the map, and **single left click**. This shifts the map one square to the left, exposing more black squares on the right. A single right click will shift the map one square to the right. A single middle mouse click on the scrollbar will jump the map to that relative position on the entire world map. The vertical scroll bar adjusts the map height similarly. Or, instead of using the scrollbar, you can simply point to a square on the map and use a single right click; the map will be recentered around that spot. At present, there is little to see.

Find your way back to where your units are. A shortcut for this is the "c" key, which will move the map to place the active unit in the center of the map. This and other shortcut keys you will use a lot. We'll leave the units for later.

The Overview Map

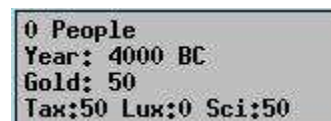
In the top left corner of the client window is an area which is mostly black, with some colored squares within. This is a map of the entire world, in a resolution so small that individual terrain squares are indistinguishable. It has a yellow dot flashing in time with your current unit. At this point it has no value, other than showing that your starting location is at the far south of the "middle" of the world.



Once you have a world-spanning empire it will come in handy. On the real Earth map, if you have the detail map showing Europe, for instance, you would need many scroll clicks to adjust it to look at South America. But one click on the corresponding place in the overview map will shift the detail map to centered on the selected position.

Economic Information and Other Controls

Immediately below the overview map is the initial economic summary for your empire. It shows your total population, the current year, your treasury, and the percentages you have allocated to taxes, luxuries, and science.



Below that is a row of ten tiny boxes. They represent the division you have between luxuries, research, and taxes. The default rates are no luxuries, 50% research, and 50% taxes, so what you see are pictures for five researchers and five tax collectors. If you reduced taxes to 40% and increased luxuries to 10%, the pictures would show one entertainer, five researchers, and four tax collectors.



Let's change things to do research a bit faster. There is no need for taxes at this point. There are two ways to change the distribution of effort in your empire. One is through the "Game" menu item called "Rates". The other is through this icon bar. **Click on the first tax collector.** That will change it to an entertainer, and move it to the far left of the line (since it always shows entertainers, then scientists, then tax collectors). **Click on that far-left entertainer,** and it becomes a scientist. You can also look at the information box above and see the new percentages.

What if you try to exceed the maximum amount of research (or any other choice) allowed for in the rules? Try it: **Click on another tax collector** to make it an entertainer, then click on the new entertainer. The icon doesn't change, and you get an error at the bottom of the window: "Game: Science rate exceeds the max rate for Despotism." This is how you get errors returned from the server; your client tried to make the change, but the server rejected it. **Change a scientist** into a tax collector, and you can **change the entertainer** back into a scientist.

Below the economy line is a line with five items. The first is a button labeled "Turn done". You will click on this to indicate that you have made all of your moves for a turn. The next is a lightbulb, which indicates the progress in your research efforts towards the next civilization advance; the lightbulb gets brighter from turn to turn to show this. Next to it is a sun, which is presently clear and bright; once you have industry and pollution, episodes of pollution will make it brighter to warn of the approach of global warming. Next is a symbol representing the form of government you presently have, which is Despotism. Last is a number, which in multiplayer games shows the time left in the turn.



Unit Information

Next lower on the left column is information regarding the currently selected unit. It shows the kind of unit, whether it is a veteran, the number of movement points it has left to use, and the terrain on which it is presently standing.

Below the textual information is an icon of the kind of unit it is. At this point you should have two Settlers and an Explorer; one Settler is currently selected. Below the icon of the current unit is a row of icons, one for each of the other units stacked in the same square; in this case they are the Explorer and the other Settler. As you see, your unit icons are made up of a few parts: a picture, in this case a covered wagon for a Settler and an outdoorsman with a walking stick for an explorer; and your national flag, in this case the green-white-red of modern Italy. You will use the flags to recognize friends and enemies in the game. Superimposed on the bottom center of the picture is a green rectangle; this is the unit's health status, the green showing complete health.

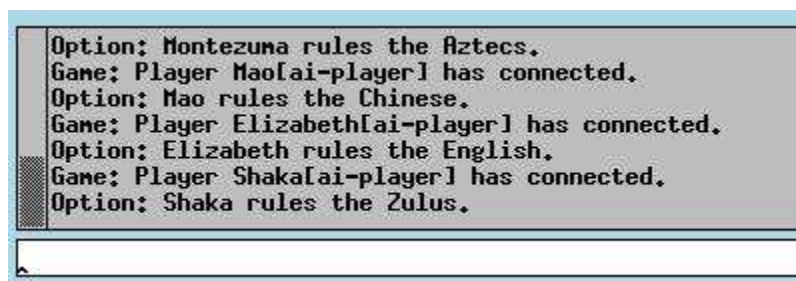


Menubar and Information Window

At the top of the Freeciv window is a row of menu buttons; on each one, point to it, press and hold the left mouse button, and you will see the kind of controls each deals with. Move the cursor away from the menu and release the mouse button to dismiss the menu.



Near the bottom of the window, below the unit icons, is a large rectangular area with messages. It contains all messages sent to you from the server. It has a scrollbar to allow you to scroll back to see older messages than those which fit in the window.



At the very bottom is a single line. This is the multiplayer "chat" line, to communicate with other players. It will be left for the reference section.

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1.3 The Founding of Your Capital City

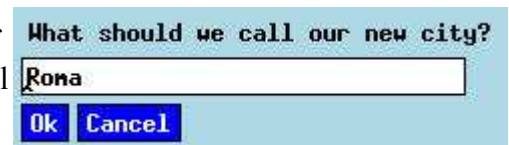
Turn your attention back to the main map window, where the current unit should still be patiently flashing. If it is not on the screen, **press "c"** to center it. What you will do first is to build your first city, then start the other units exploring.


The current unit is probably the Explorer. Let's switch the current unit to be one of the Settlers (even if it is already, try this out): **Click on the stack** of units on the map, and you will see a menu of units pop up. **Click on one of the Settlers**. Now the Settler is the one flashing on the map. The row of units in the bottom left should now show the Explorer and the other Settler.

In later games you may do a bit of hunting for a perfect city site, but for this game the starting point is quite good. You've been wandering for hundreds of years, and it's time to settle down.

Take a look at the second menu button, marked "Orders"; that menu lists commands relevant to the selected unit. **Press and hold** the left mouse button on the Orders button; you will see a list of menu options pop up. Some of them will be grayed out; they aren't available to the selected type of unit, or aren't available for the terrain it is in, or are otherwise not appropriate. One of the available options is "Build City". Notice that next to the name is the shortcut "b"; you could have done this by just pressing the "b" key. This was just to show you the menu.

Move the cursor down to the "Build City" line and **release** the mouse button. You will get a dialog asking how you want to name the city; it will already have a default name, taken from a list of built-in names of cities suitable for that race. **Click OK**. The dialog box and the unit will disappear, and in its place on the map will appear a new city. At the same time the city window will appear, so that you can give your first commands to the new city.



The left column of the window shows, first of all, a row with one icon in it, representing the one citizen of the city. It is the icon of a "content" citizen; as the game progresses, and the city's population grows, this line will lengthen with other citizens, happy, content, unhappy, and specialists. 

Below is a box containing the critical raw productivity statistics of the city. The first line describes the food production of the city; in the example the city will produce four units of food, which is a surplus of two over the amount needed to feed the one citizen. The second line describes the industrial production; the city will produce two "shields" of output, and the second number is the surplus over the amount required to support units. The third line describes raw trade; the first number is the raw trade including the amount lost by corruption, and the second is the real, effective trade, after corruption takes its toll.

Food:	4 (+2)
Prod:	2 (+2)
Trade:	1 (+1)

Note that most of the statistics on the window are predictions based on the current state of things; actions you can perform (such as reallocating workers) can change the amounts of food, production, and trade the city produces in the next update.

The next box shows the trade output of the city, as divided by your tax rates, and taking into account special buildings and specialists. The "Gold" line shows the number of gold coins of taxes the city will collect, followed by the surplus it will contribute. The "Luxury" line gives the coins of luxuries produced for the city's citizens, and the "Science" line the coins worth of research points contributed by the city. Since you have the science rate set at 60%, the one coin worth of trade will go to science; once the city produces two coins, the second will go to taxes.

Gold:	0 (+0)
Luxury:	0
Science:	1

Below that is the city's food storage (called a "Granary" whether or not you have built a Granary building in the city). It gives the number of stalks of food stored, and the size of the city's food store. The latter number is the point at which the city increases its population. It appears as if in five turns you should have a full food store. Next is the city's pollution level, which is zero.

Below that is a list of unit icons, representing the units which are supported by the city, regardless of whether they are present within the city or are elsewhere on the map. Depending on the government you have, cities have differing requirements to spend production and food supplying units. At this point in your game, the city supports no units; the two units you have are not owned by any city. Later in the game, beneath each unit icon which requires support will be a tiny shield and/or a tiny food stalk to show the resources that the unit is draining from the city.

Last on the left column is a row of icons representing the units physically present in the city, regardless of what city supports them.

In the middle of the window is a map of the area immediately surrounding the city, showing only the 21 squares which are considered within the "radius" of the city. Each square shows the terrain of the square, with any modifications such as roads and irrigation, just as shown on the main map. The central square is the city itself; the tiny "1" in the upper right shows the size of the city. The three small numbers "2 1 1" below it show how much the square is producing in food, production, and trade, respectively. Note the square to the right, with the horse; it also has the three numbers under it, "2 1 0", showing that it is where the city's one citizen is working, and how much it is getting from its work.

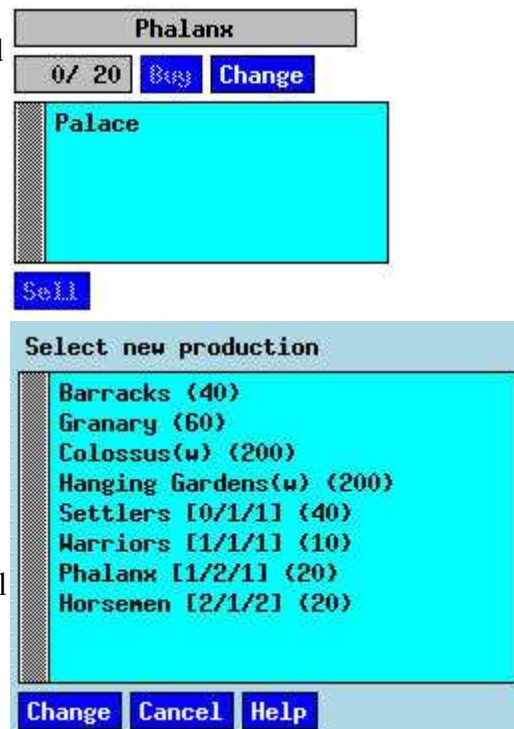


You will use this map to move citizens from working one square to another, or to take them out of the fields entirely to become specialists in the city. At this point the city is too small to have specialists be worthwhile, but you can move workers around, and they become specialists while in transition. See where the worker is;

new workers are automatically placed where an algorithm thinks they will do good. Perhaps that river square to the north of the city might be a better place. **Click on the "horse" square** and the worker will disappear from where it was; notice that the citizen's picture in the top left is now an entertainer. Now **click on the river square** just north of the city. You will see that the worker will now produce the same two food, but one trade instead of one production. Also see that the second box on the left now shows one "gold" and one science. The plains square with the horse is probably the best place; **click on the worker in the river, and again on the plains square.**

The right third of the window deals with production. A city is created automatically producing some sort of defensive unit, but at this point in your game growth may be a better idea. The city is producing a Phalanx; next to it the numbers "0/20" show that it is will take 20 production points to make it, and no work has been done yet. The "Buy" button (grayed out now) allows you to rush production on something.

The "Change" button lets you redirect production; **click on it.** A list will pop up, showing all of the units and buildings which you may order the city to produce at this time in the life of the city and your empire. Beside each one in parentheses is the number of production points needed to make it. Beside the units are three numbers, such as the Phalanx's "[1/2/1]"; these are the unit's ability to attack, defend, and move, respectively. **Click on the Warriors** line, and the line will turn black; **click on the "Change"** button and the selection is made; now see on the main city window you will need ten points to build the Warriors.



Below the current production line is a box containing all of the buildings current built in the city; though small now, in time you may need to scroll it to see all of them. At this point it contains only your Palace. Below that is the "Sell" button, which you can use to sell buildings. Don't sell your Palace; you won't really have a capital city and will lose some vital advantages.

At the bottom of the window are some control buttons: Close, Rename, Trade, Activate Units, Unit List, and City Options. These will be dealt with in the reference. For now, **click on the Close button.**

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1.4 Beginning Your Exploration

Now the city window is gone, and so is the Settler unit; in its place is a terrain square showing a city of size one. The Explorer is now the selected unit.

Let's start exploring, by moving the Explorer one square to the northeast. How do you move there? Your keypad (the array of 17 keys usually at the far right of modern keyboards) is the tool to move units. Consider the 5 key to be where the unit is now. The right keys around it move the unit one square in the corresponding direction. So to move the Explorer northeast **press the 9 key**.



(It may be that nothing happens when you press it, and the unit stays put. Don't say "this stupid program doesn't work" until you look further. In the X window system the keyboard is connected to only one of the windows on the screen at a time, usually but not always the one where the cursor is. The units are controlled by key presses inside the map window only. When you closed the city window, the cursor may well have been outside of the map, somewhere else on the Freeciv client window. Key presses there go to the multiplayer chat line at the bottom of the window; you may find the number you pressed there. To get back to moving units, move the cursor back into the map window and press the keypad key again.)

The unit icon on the map disappears from its original spot and appears in the terrain square to the northeast. In doing so, the terrain of more of the world is revealed. Also, the Explorer's information box now says "Moves: 2/3"; an Explorer only has one movement point per turn, but uses only one third of a movement point per square, so it has two squares remaining. **Move it two more steps** in the same direction. More of the world is exposed.

Also, that movement used all of the Explorer's movement points, so the client automatically picks some other unmoved unit (in this case, the Settler), selects it, and flashes a red square around it to attract your attention to it. The information box on the left now refers to the Settler, which still has one movement point left. Perhaps a road would help to improve trade; **move the Settler one square to the east**.



That is all you can do this turn with your units. You could do things with your city, or with the other empire-wide controls, but for now just **click on "Turn Done"** to allow the server to do an update.

Another Turn

The server will have performed all of the background functions that take place in a "turn". You probably

won't see anything noteworthy changed on the map, but the city has changed. **Click on the city** in the map window and the city window will open.

At the end of the last turn, the city's food storage was empty; now it should have increased by two. The list of units present at the bottom will now be empty; the Settler and the Explorer have moved away. The Warriors are now 2/10 along to being complete. At this rate it will take four more turns to complete. **Close the city window** and look at your units.

Your Explorer should be the active unit; since it has reached the northern coastline, **move it three steps southeast** to expose more of the world.

If your Settler is selected, **order it to build a road**; you may use either the menu or the "r" shortcut. That one order will use all of the Settler's movement points for this turn, and will also give it work to do next turn. To indicate that, the Settler's symbol will have a tiny "R" on it, to remind you both now and next turn that this Settler is busy building a road. There are several such markers used to remind you of what motionless units are doing.



Now **click on "Turn Done"** for another update.

The Third Turn

Nothing important happened again. The Settler is still busy building the road. **Move the Explorer two more squares to the south**; it will hit the ocean, so move one square to the east. **Press "Turn Done"** again.

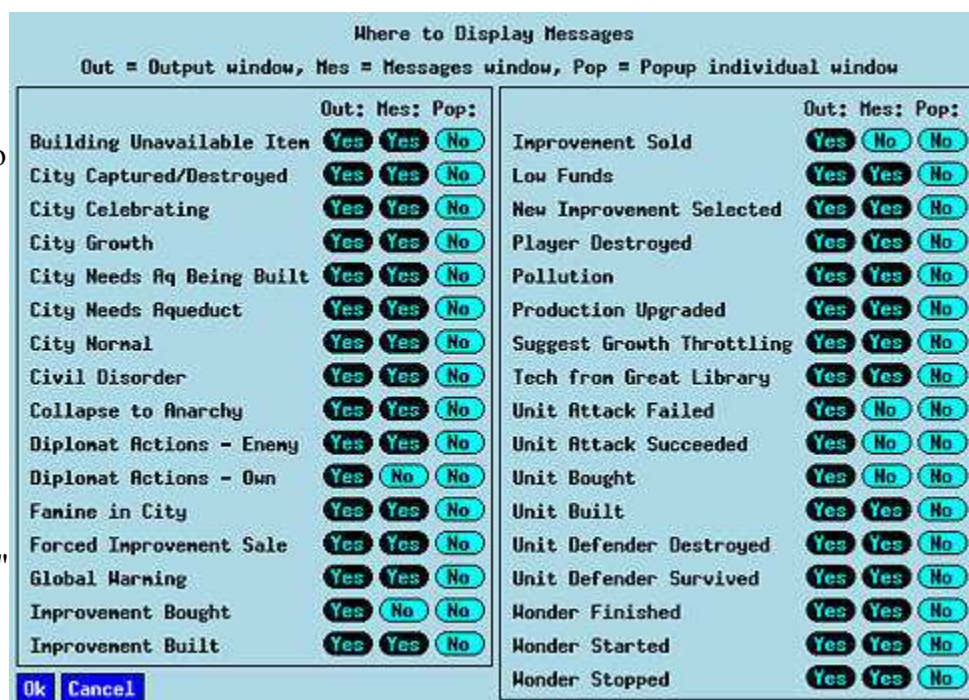
1.5 Meeting the Neighbors

When you clicked on "Turn Done", the AI players got a chance to play. For one thing, you see a message box appear, telling you that the French have started building the Pyramids. Also, you saw a new unit appear on the map and move around!



The same message appears in the scrollable message list at the bottom of the main window. By default, many such messages are shown to you in both ways, allowing you to make decisions based on the new information. It may be important to you, for instance, that a city has finished building a building, so you would want to be forced to deal with the news. You can customize how the client informs you of the many events that can take place.

Click on the "Close" button on the message popup and it will go away. Now go to the "Game" menu button, pull down the menu, and select "Message Options". This shows the many kinds of messages from the server, and what the client will do with each. The event that just happened was a "Wonder Started" event; next to it are options "Yes," "Yes", and "No." This means that such messages will go to the "Output window" (the scrollable window at the bottom of the main window), the "Messages window" (the popped up window which you just saw), but not to an "Individual window" (dealing with just this event and no other). You will have your own preferences in this matter. For now, click on the second "Yes" for this event, to turn it to a No, and click on the Ok button to close the window.



On the main window, you can now see that you have a neighbor on this continent. From the flag, it appears as if it is the Greeks; or, if you can't recognize the flag or the unit type picture, middle-click on it to see what it is. Unfortunately, you can't talk to such a unit; only Diplomats do diplomacy, and you don't have the civilization advancements needed to make them, and AI players don't do diplomacy at all anyway. For now, all you can do is watch where that Explorer goes, and try to find the Greek cities. **Move your Explorer one square to the northeast, then move it two to the north.**



Now your Settler has finished its road. **Open the city window** for Rome and look at the map. The square where your one citizen is working has changed its productivity; where before it produced 2 food, 1 production, and no trade, it now produces one trade as well. This doubles the trade output of your city. **Close the city window** and **move the Settler a square to the northeast**; perhaps we'll build a new city in that direction. **Click "Turn Done."**



Another Turn

The Greek Explorer moved another three squares, and now you see it has a "G" in the top right corner, like your Settler had an "R" while building the road. That is the "Goto" marker; it means it is ordered to go

somewhere.

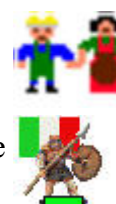
Tell your Explorer to **move three squares to the north**, and your Settler **one square to the northwest**. Then **click "Turn Done."**

One Last Turn

Several things just happened, and we'll go through them one by one. The first thing in front of you is probably this message box. These are three more of the usual events that you can control. The first and last are not very critical, and you may want to suppress them appearing in this message box. But completion of buildings and units is worth attracting your attention; the city needs to be told to do something else. **Click on any of the lines referring to Roma**, and the "Popup City" button will become available. **Click on it** and the Roma city window will open.

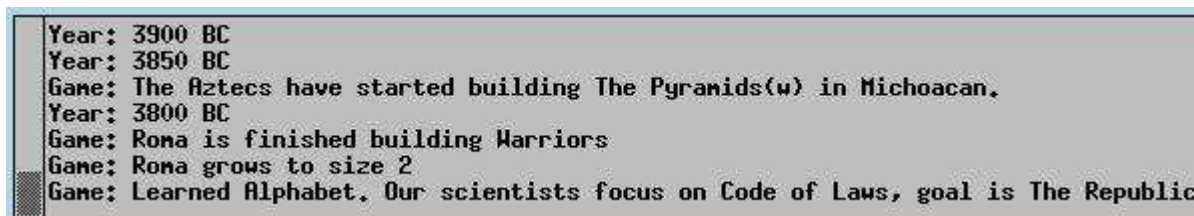


Several things are worth noticing here. For one thing, there are now two citizens shown. Enough food has been stored to yield new citizens; the food store is empty again, but there is a new citizen working the river square north of the city. That increases the food and trade coming into the city.

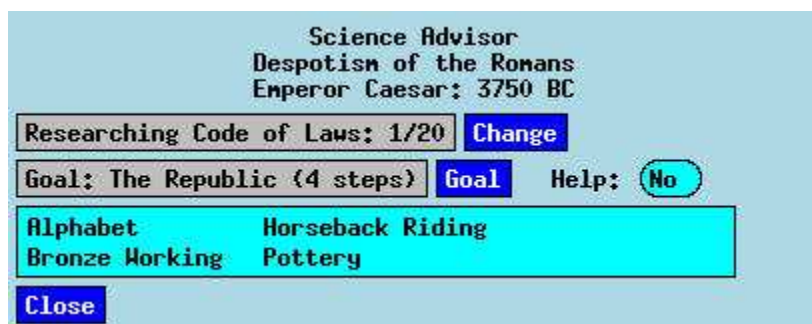


There is also a new Warrior unit, present in and supported by the city. While you are here, it is time to change future production. This time **select a Granary**, then **close the city window**.

You also completed a civilization advance; your main window message list shows that you completed The Alphabet.



A separate window popped up for you to select further research goals. At the start, the game assigns you a research goal of The Republic. With this window you can change both your immediate target (presently Code of Laws, on the first line) and your longer-term goal (presently still The Republic). **Press and hold the Change button**, and you will see the advancements that are available for you to research at this point; **move down to Writing and release**, and it will become the immediate goal. Pressing and holding on the Goal button will show the same sort of long-term goal list. The two selections need not be related; as the



window is now, what you are researching is not relevant to The Republic. The game allows you to make such independent selections. **Click on Close** to store your settings.

On the main map, you now have a new Warrior blinking for attention. You may notice that the unit information box on the left has a new line filled in at the bottom, with the name "Roma". That tells you that the unit has Roma as its home, and would get support from there if required by the government you have. You can **press the "s" key** to tell it to go to sentry mode.

That ends this tutorial introduction. You have seen the fundamental workings of the client and performing the tasks necessary to get the game started. Next you should at least skim the reference section to see what sorts of things the client will do for you.

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2. A Reference of the Client Features

2.1 Reference of the Windows

2.1.1 Connect Window

This was shown in the tutorial, but there some additional facts worth mentioning. To connect to the server on your own computer, the default host name of "localhost" is sufficient. For a multiplayer game you will need to have from the person running the server the Internet address of the server, either a numeric address such as 11.22.33.44 or a name such as mysystem.mynetwork.net. The Name field is the name by which you identify yourself to the server operator; for an initial connection to a game it may as well be your ordinary name or user name (e.g., "david"), but if you are reconnecting to an existing game it needs to be the ruler name of the empire ("caesar").

The Connect button will make the connection to the server. The Metaserver button will open the [Metaserver Window](#).

2.1.2 Metaserver Window

This is opened from the Metaserver button of the [Connect Window](#). When it is opened, the client sends a request across the network to the metaserver, which replies with status information for all running Freeciv servers on the Internet. The window then displays the information received. If you click on a server's line, its name/address and port number are copied into the [Connect Window](#). The Update button re-requests the data from the metaserver.

Server Name	Port	Version	Status	Players	Comment
204.171.3.3	5555	1.7.2	Running	2	(default)
narnia.idsi.net	5555	1.7.2	Running	3	n's playground
cable-noden40.11.kabelnet.net	5555	1.7.2	Running	1	(default)
uluru.sinegen.com	5555	1.7.2	Running	1	(default)
CDR16-24.accesscable.net	5555	1.7.2	Running	4	ick
c005.student-zw.fh-kl.de	5555	1.7.1	Pregame	0	New game at 1 am (MET)
zenc.dorn.duke.edu	5555	1.7.2	Running	2	(default)
orthanc.campus.luth.se	5555	1.7.2	Running	3	Just testing...
cx38958-a.elc.jnl.sdca.hone.com	5555	1.7.2	Running	3	(default)
proxy.nonterey.edu	5555	1.7.2	Running	2	(default)
vader.rowan.edu	5555	1.7.2	Running	2	(default)
hivapa.unice.fr	5555	1.7.2	Running	4	(default)
YOSHI.MIT.EDU	5555	1.7.2	Running	5	(default)
rnld-01-04.dialup.uinco.net	5555	1.7.2	Pregame	1	I want to play!

Update Close

2.1.3 Main Window

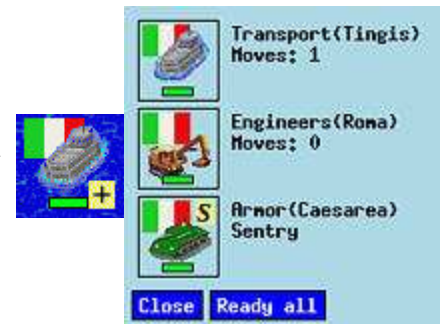
The main window is described at length in the tutorial, but there are a few elements that were not covered at that time.

The line at the bottom was referred to as the "multiplayer chat line." It is to be used to communicate with other human players. During play, move the cursor into the main window or click on it and type, for instance,

```
caesar: stay on your side of the river
```

The player with that ruler name will see your message appear in the scrolling message box.

In the event that there is more than one unit in the same square on the map, the stack is marked with a small plus sign in the lower right. This can be the case for land units or, as in this case, sea units with land units as passengers. To select one of the units in the stack, click on the stack and a unit list window will appear. Click on the unit of your choice to activate it, or the "Ready all" button to activate them all.



The "Turn Done" button does not truly end your turn, although in a solitaire it has that end result. In the solitaire game your "Turn Done" causes the AI players to make their moves and signal their completions; after all players have signaled "Turn Done" it performs the turn update and all players start anew. In a multiplayer game, the button likewise sends the turn completion signal, but that does not prevent you from continuing to use the windows to control your game. Until the last player has pressed "Turn Done", all players are free to do whatever they wish, from reading help, to examining units, to making changes in cities, even to making new attacks. Players do run the risk of not being able to make all of the orders they wish before the update takes place; it is best to signal Turn Done when you have entered what you think are the important orders, and do only unimportant maintenance tasks in the delay before the update.

It is possible to use the main map window to rearrange workers, as you can from a city's window. Use the 't' key to cause the map to mark worked squares in a different color; in this mode, shift-left click to adjust workers in the same manner as the city's map.

A grid may be added to the main map, showing exactly where the squares are. With the pointer in the map window, press Control-G to toggle the grid on or of.

2.1.4 City Window

The list of citizens can include happy, content, and unhappy citizens, followed by any entertainers, tax collectors, and scientists. You cannot directly change the morale of working citizens, but you can shift between specialists and workers, and change specialties. Changing between worker and specialist was shown in the tutorial; until your city reaches size 5, it cannot have scientists or tax collectors. To change a specialist's job, click on its icon; an entertainer will change to a scientist, a scientist to a tax collector, and a tax collector to an entertainer.

While a building or unit is being produced, you may rush its completion by pressing the Buy button. That will cause it to be completed in the next update, at an immediate cost in gold. You can also change from producing one thing to another, by clicking on the Change button as you did for new production; there will be some costs and constraints enforced by the server.

You may sell an unwanted building by clicking on it in the list of buildings, and clicking on the Sell button.

The Rename button opens a window to allow you to change the city's name.

The Trade button opens the [Trade Window](#).

The Activate Units button awakens every unit within the city.

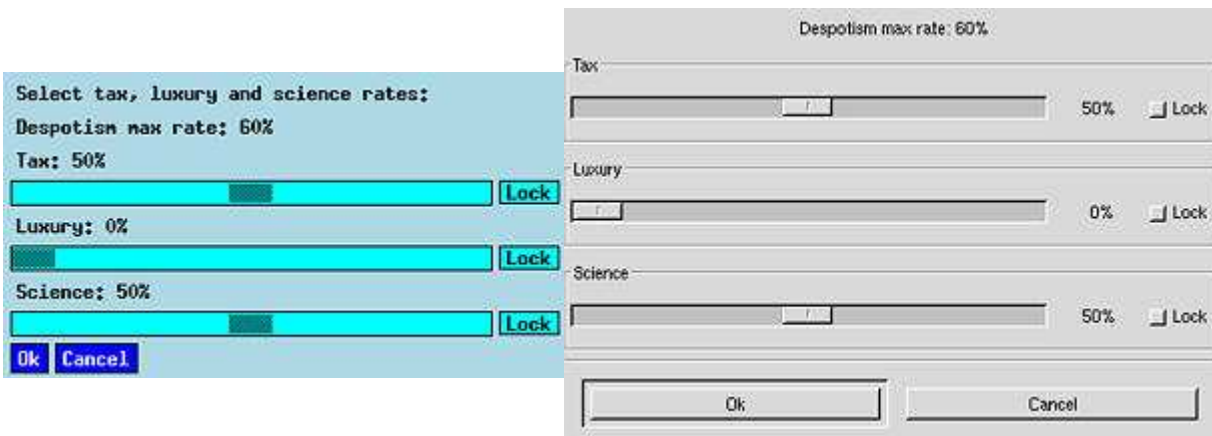
The Unit List button opens a small window showing each of the units present in the city; each is given with its home city, its movement status, etc. It is the same window as shown earlier for selecting one of several units in a square. You may click on the icons to activate the unit, or click on "Ready all" to activate them all.

The City Options button opens the [City Options Window](#).

Clicking on the central square of the map window causes the server to reallocate all of the workers as it sees fit.

2.1.5 Rates Window

The rates window shows you the current division of your trade into taxes, luxuries, and science. You may use this to adjust your rates, up to the limit allowed by your government type. In any of the scroll bars, using the Xaw client, you may single left click to reduce that rate, or single right click to increase that rate. Using the Gtk client, use single left clicks either to the left or the right of the scrollbar to move it. Reducing the rate a step increases some other rate a step, and likewise when you increase one rate. You may set the Lock button on any rate which you don't want this automatic adjustment to change.



2.1.6 Trade Window

This is brought up from the "Trade" button on the [City Window](#), which is only active if the city has established trade routes. It shows all of the trade routes and how much money each route earns.



2.1.7 City Advisor Window

City Advisor Republic of the Romans President Caesar: 60 AD						
Name	State	Workers H/C/U	Surplus F/P/T	Economy G/L/S	Food Stock	Currently Building (Stock,Target,Buy Cost)
Arminum	Peace	0/2/0	5/1/6	+1/0/5	5/20	Temple(4/40/72)
Brundisium	Peace	0/5/0	2/4/10	+1/0/8	8/50	Library(63/80/22)
Caesarea	Peace	0/4/0	3/4/5	+0/0/4	24/40	Library(68/80/24)
Capua	Peace	0/5/0	2/8/11	-1/0/13	10/50	Freight(7/90/178)
Chartago	Peace	0/5/0	2/4/8	+0/0/7	2/50	Engineers(34/40/13)
Durcotorum	Peace	0/4/0	1/7/3	-1/0/3	15/40	Armor(23/80/276)
Ierusalem	Peace	0/4/0	1/5/4	+0/0/3	4/40	Barracks III(21/40/38)
Leptis Magna	Peace	0/4/0	1/7/5	+0/0/4	1/40	Library(3/80/142)
Lyon	Peace	0/3/0	2/1/4	-1/2/9	40/60	Library(35/80/90)
Mediolanum	Disorder	0/3/1	0/0/6	+0/0/0	16/40	Temple(32/40/16)
Messana	Peace	0/4/0	0/4/5	+0/0/4	10/40	Harbour(3/60/102)
Neapolis	Peace	1/3/1	0/3/10	+0/2/12	0/60	Women's Suffrage(w)(524/600/304)
Nova Carthago	Peace	0/5/0	3/5/10	-1/0/12	33/50	Barracks III(37/40/6)
Nunantia	Peace	1/2/1	0/2/9	+0/2/10	10/60	Engineers(20/40/60)
Perusia	Peace	1/1/1	2/2/6	+1/2/5	12/40	Temple(35/40/10)
Ravenna	Peace	0/5/0	2/6/5	-1/0/6	6/50	Armor(28/80/239)

Close Center Popup Buy Change Refresh Configure

This is opened from the main window Reports menu option City Report. It shows all of your cities and one line of summary data about each. The "State" field is "Rapture", "Peace", or "Disorder" for the morale states "I Love The President Day", ordinary morale, and uprising, respectively; see that Mediolanum is in Disorder. The "Workers" field shows a count of the happy, content, and unhappy workers; notice that Mediolanum and Neapolis have unhappy workers, though Neapolis probably has an entertainer. If there are specialists, the numbers of entertainers, scientists, and tax collectors are shown. The "Surplus" field is the surplus counts in food, production, and trade; a glance at this will warn you of cities with negative net food supply. The "Economy" field is the trade division into gold, luxuries, and science; many cities have negative gold because taxes are low. If there are trade routes or pollution, they are shown in other columns. The "Food Stock" column shows the contents and size of the food store. The building or unit under construction is shown last, with its production points already complete, target production points, and "Buy" cost.

The Center button centers the map on the city. The Popup button opens the [City Window](#) for that city. The Buy button is the same as pressing the Buy button on the selected city's window. The Change button is the same as pressing the Change button on the selected city's window; this means that you see a list of buildings or units, and must select one. The Refresh button requests that the server update the data in the list. The Configure button opens a window to configure this window. It allows you to regulate which of the possible columns are shown, or to what level of conciseness.

Set columns shown	
Size	<input type="radio"/> No
Rapture/Peace/Disorder	<input checked="" type="radio"/> Yes
Concise *=Rapture, X=Disorder	<input type="radio"/> No
Workers: Happy, Content, Unhappy	<input checked="" type="radio"/> Yes
Entertainers, Scientists, Taxmen	<input type="radio"/> No
Surplus: Food, Production, Trade	<input checked="" type="radio"/> Yes
Economy: Gold, Luxuries, Science	<input checked="" type="radio"/> Yes
Number of Trade Routes	<input type="radio"/> No
Food Stock	<input checked="" type="radio"/> Yes
Pollution	<input type="radio"/> No
Currently Building	<input checked="" type="radio"/> Yes
Close	

2.1.8 Players Window

The Players window is opened from the main window menu. It shows all of the players in the game by ruler name and empire name; an asterisk beginning a ruler name indicates that it is an AI. Players will show up here even if you have not seen them within the game. If you have an embassy with that race, that column will have an X and the Intelligence and Meet buttons will activate those windows. The State column indicates whether, with regard to the current turn, that player is still moving or is done. Players currently connected by clients have their IP address listed; those not connected show how many turns they have been offline. The "Intelligence" button opens the [Intelligence Window](#). The "Meet" button opens the [Meeting Window](#).

Name	Race	Embassy	State	Host
Caesar	Roman		moving	localhost
*Hannurabi	Babylonian			---,---,---,---(idle 17 turns)
*Alexander	Greek			---,---,---,---(idle 17 turns)
*Montezuma	Aztec			---,---,---,---(idle 17 turns)
*Rameses	Egyptian			---,---,---,---(idle 17 turns)
*Shaka	Zulu			---,---,---,---(idle 17 turns)
*Hao	Chinese			---,---,---,---(idle 17 turns)

Close Intelligence Fleet Space Ship

2.1.9 Trade Report

This is brought up from the main window menu bar. It gives a summary of the empire-wide income and outflow of money. First it lists all of the types of buildings you have built, their count and their maintenance costs. Then it summarizes your tax income from all cities and your total building costs. The "Sell Obsolete" button goes through every city and sells the selected type of building, but only if the building is obsolete (for instance, as an ancient Barracks is made obsolete by the development of Gunpowder) or superseded by a Wonder of the World (as the Pyramids makes all Granaries unnecessary). The "Sell All" button sells all of that type of building, obsolete or not.

Trade Advisor Republic of the Romans President Caesar: 580 AD			
Building Name	Count	Cost	Total
Barracks III	2	1	2
Factory	1	4	4
Harbour	9	1	9
Library	13	1	13
Marketplace	1	1	1
Palace	1	0	0
Temple	25	1	25

Income: 64 Total Costs: 54

Close Sell Obsolete Sell All

2.1.10 City Options Window

This is brought up from a city's city window. It allows you to set some server-maintained options relating to city operation and defense. By default, new citizens in a city become workers; you may change this to make them scientists or tax collectors. You may change whether or not a size-one city building a settler results in the disbanding of the city. By default, units within a city will remain there; if attackers come, the units will stand and defend as they are. This window allows you to set some criteria under which units within the city will automatically attack enemy units near the city, if the units have also been placed in "auto-attack" mode.

Rona	
Make new citizens into:	Workers
Disband if build settler at size 1:	No
Auto-attack vs land units:	No
Auto-attack vs sea units:	No
Auto-attack vs air units:	No
Auto-attack vs helicopters:	No

Ok Cancel

2.1.11 Active Units Report

This is brought up from the main window menu bar. It lists what type of units you have and how many of each you have; in the example it also shows an asterisk for Legion, Musketeers, an Galleon, showing that they can be upgraded. The "Upgrade" button offers you the chance to upgrade some or all of the selected unit types for a price, if units of those types are present in the city. Upgrading is possible for many units based on the rules, when the ability to make the better unit has been discovered (for instance, Settlers may be upgraded to Engineers once Explosives have been discovered). You might check this to be sure you don't have forgotten fortified ancient units in the modern age; for instance, that Legion is just wasting support with Armor units around.

Active Units Republic of the Romans President Caesar: 580 AD		
Unit Type	U	Total
Engineers	-	4
Legion	*	1
Musketeers	*	5
Armor	-	4
Cannon	-	1
Galleon	*	2
Cruiser	-	1
Transport	-	1

Total units: 19

Close Upgrade

2.1.12 Demographics Report

This is brought up from the main window menu bar. It lists several empire-wide statistics, and gives you a ranking by which your empire compares with the other empires.

Demographics Report	
Research Speed	:34% (1st)
Literacy	:23% (1st)
Production	:70 H. MFG (1st)
Economics	:154 H. BNP (1st)
Military service	:21 Months (1st)
Pollution	:0 Tons (1st)
Close	

2.1.13 Top 5 Cities Report

This shows the five greatest cities in the world.

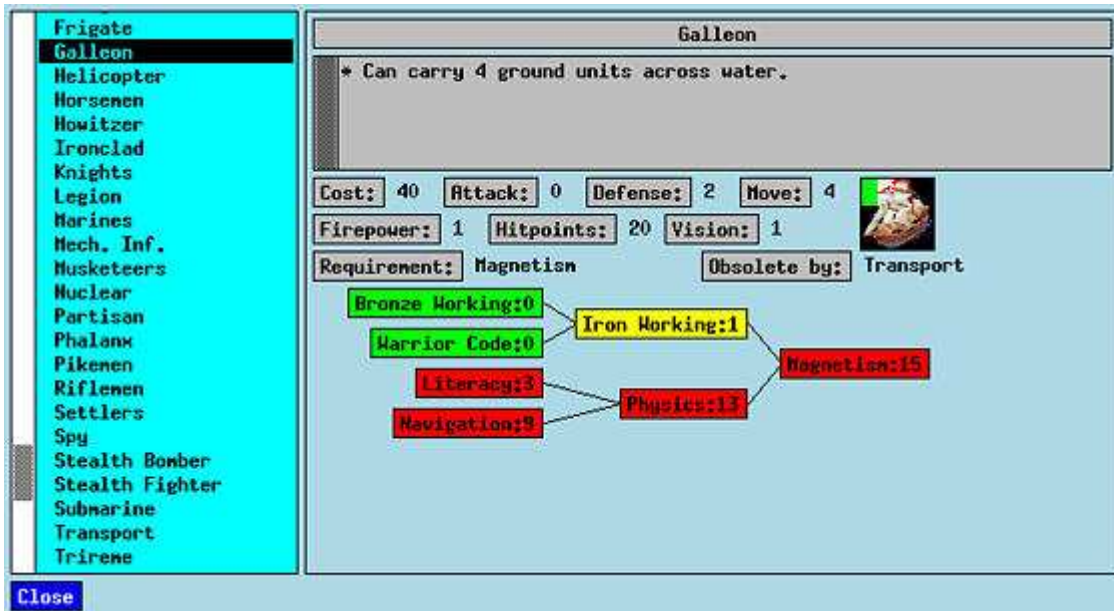
The Five Greatest Cities in the World!	
1:	The French City of Paris of size 10, with 1 wonders
2:	The French City of Lille of size 9, with 1 wonders
3:	The Roman City of Neapolis of size 6, with 1 wonders
4:	The French City of Angers of size 11, with 0 wonders
5:	The Roman City of Rona of size 5, with 1 wonders
Close	

2.1.14 Wonders of the World Report

This shows all of the Wonders of the World.

Wonders of the World	
Rona (Roman)	has the Magellan's Expedition(B)
Lille (French)	has the Michelangelo's Chapel(B)
Paris (French)	has the Pyramids(B)
Neapolis (Roman)	has the Women's Suffrage(B)
Close	

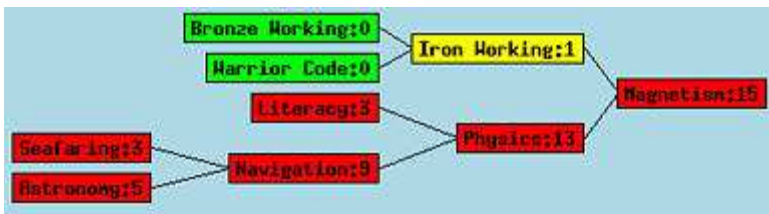
2.1.15 Help Window



The help window is displayed from the main window menu bar. There is help available in many categories, from units and buildings to concepts such as combat and happiness. Regardless of which category you select, the left edge scrollbar lists all of the help which is available, in all categories. Click on a unit name, building name, form of government, or whatever your interest is, to bring up its help page. The help pages themselves may contain scrolled data, as this does (note the scroll bar). Help pages for units and buildings list their critical statistics and technological prerequisites.

The help pages for buildings, units, and civilization advances include a map of the advances required to produce the item. Note that for the Transport you must have Magnetism, displayed in red, meaning that you don't know that advancement and aren't close enough to have it listed as an option for research; it is 15 research steps away from what you have researched already. Its predecessors are Physics and Iron Working; Physics is 13 steps in the future, but Iron Working is only one research step away, and indeed is marked yellow to say that it can be researched right now. The advances Bronze Working and Warrior Code have already been discovered.

You may use this interactively to plan your research. One of the prerequisites for Physics is Navigation; the graph shows that it is 9 steps away, but doesn't show what you need to get to it. A click on the Navigation box redisplay the window to expand its prerequisites. If showing the earlier advances would exceed the space in the window, the later ones are pushed off to the right; to get them back, click again on an intermediate advance (such as Navigation); its prerequisites will disappear, leaving room for those displaced.



2.1.16 Intelligence Window

This is opened from the Intelligence button on the Players window, only for a civilization with which you have an embassy. It shows some useful data about the race, mostly about the state of its civilization advances. Note the asterisk with Monotheism; that is an advancement that the other race has and you don't, so you know something you might want to bargain for.

Intelligence Information for the French Empire

Ruler: President Napoleon Government: Republic

Gold: 112 Tax: 70% Science: 30% Luxury: 0%

Researching: Steam Engine(209/290)

Capital: Paris

Alphabet	Iron Working	Polytheism
Astronomy	Literacy	Pottery
Bronze Working	Masonry	Seafaring
Ceremonial Burial	Mathematics	The Republic
Code of Laws	Medicine	The Wheel
Construction	Metallurgy	Trade
Currency	Monotheism*	University
Engineering	Mysticism	Warrior Code
Gunpowder	Navigation	Writing
Horseback Riding	Philosophy	
Invention	Physics	

Close

2.1.17 Meeting Window

The Roman offerings

Maps
Advances
Cities
Gold(max 54)

This Eternal Treaty
marks the results of the diplomatic work between
The Roman Emperor Caesar
and
The English Emperor Elizabeth

The following clauses have been agreed upon:

Roman view: English view:

Erase clause

The English offerings

Maps
Advances
Cities
Gold(max 62)

Accept treaty Cancel meeting

The Meeting Window comes up from the Meet button of the Players window; recall that this is only available between human players, as the AI players don't do diplomacy. It automatically comes up for both players involved in the meeting, and both will then use his or her window to negotiate a treaty. The left column of the window has buttons with which the window user may offer gifts to the other player; the right column has buttons to request gifts from the other player. The center contains all of the clauses so far offered by either player.

Let's suppose the Romans want to make a few offers and see what happens. Each of the blue buttons is a menu. Caesar would use the "Maps" menu and select the option to give the entire worldmap as known to him. He might then use the "Advances" menu, which pops up all of the advances that the Romans have and the English don't; in this case he offers Map Making. The box in the center on both player's windows now shows these two clauses.

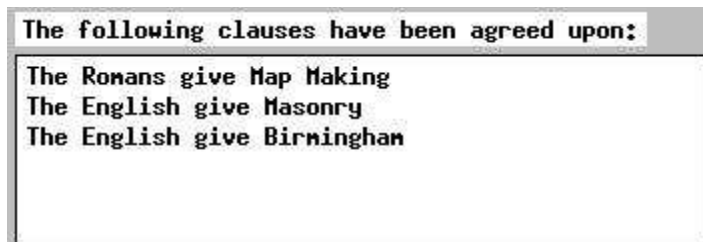
The following clauses have been agreed upon:

The Romans give their worldmap
The Romans give Map Making

Elizabeth has the chance to examine the Roman generosity and come up with a counter-offer. She could accept the gift as it is by pressing "Accept treaty", but the Romans would probably not accept it as is and would demand changes. They could do so by using their right-side buttons to add clauses offering English assets to Rome. She will make some offers of her own instead, using the Advances and Cities buttons to offer Masonry and Birmingham.



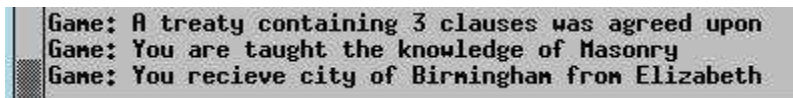
Caesar can see that the English are overcome with his magnificence, and will try to see how far he can go. Selecting the first line of the treaty clauses and clicking on "Erase clause", the Roman offer of the world map disappears from both player's windows.



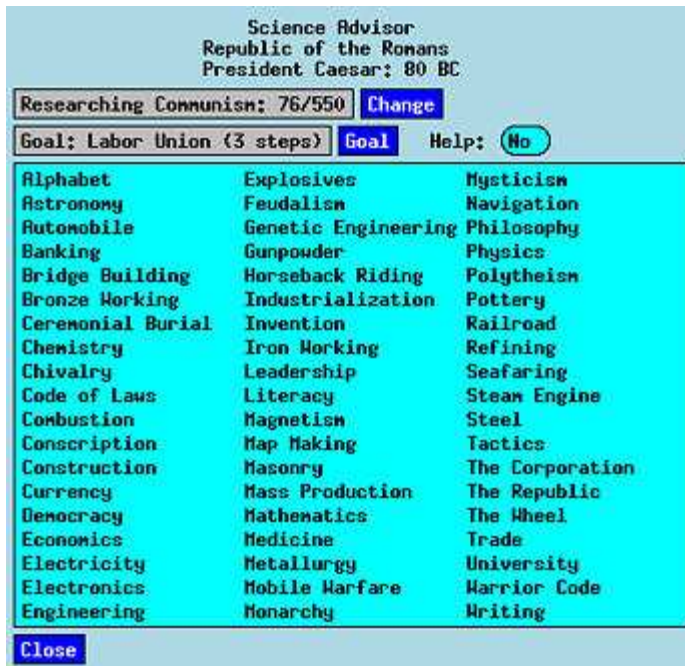
Elizabeth could use the right buttons to add clauses of Roman gifts, or could delete clauses from the treaty, or end the meeting entirely. Instead, she clicks on "Accept treaty", which causes the "English view" red thumbs-down symbol to change to a green thumbs-up symbol on both windows.



Caesar sees an entirely acceptable treaty, and clicks on "Accept treaty" also. The meeting window disappears from the view of both players, and the server will implement the transfers given in the treaty. They will both immediately see in their message lists messages informing them of the changes that took place.



2.1.18 Science Report



The Science Report comes up from the Science Report menu option, or when an advancement has been completed. It has the same controls in both situations. Notice that the player is currently researching Communism, which is necessary for the goal of Labor Union. There is no need for the current research and the goal to be related; you may change either of them at any time. The goal is only used when one advancement is completed and the server automatically starts the next advancement towards that goal.

Also note the "Help: No" button. Switching this to "Yes" will give you a help window on any advancement on which you click in the lower list, and also on any advancement you select in the Researching or Goal lines.

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2.2 Main Menubar Options

The main client window has four menu buttons in a row along the top of the window. They each deal with different aspects of user interface.

2.2.1 Game Menu

This menu deals with empire-wide game controls and user interface controls.

Find City

This is to help when you have a large empire and have forgotten where one of your cities is. A window will open giving a list of all of the cities whose names you could know, whether yours or of other empires. Click on a name and the map will center on that city. Click on "Center" and the window will close, leaving the map on that city. Click on "Cancel" and the window will close, leaving the map where it was before Find City was selected.

Options

This sets a number of the client's user interface options.

- "Solid unit background color", when set, uses a solid color to identify each race's units, instead of the default background containing a national flag.
- "Sound bell at new turn", when set, rings the bell when the new turn begins. This may be useful in multiplayer games with a timeout set, since you may be away from the computer waiting for others to move.
- "Smooth unit moves", defaulted to Yes, gives to unit moves a bit more of the feel of moving pieces on a board. Instead of just having the unit disappear and reappear in a new place, it is shown for an instant part way in between the old and new positions.
- "Flags are transparent", defaulted to Yes, has the race flag behind units be transparent, which allows the underlying terrain to show through. When set to No, a fixed background color is used. Some sets of tiles (see Customization) may work better with non-transparent flags.
- "Popup dialogs in AI mode", defaulted to No, allows messages to pop up in the client when the race is being controlled by an AI.
- "Manual Turn Done in AI mode", defaulted to Yes, enables the "Turn Done" button when the AI has finished its work. This allows you to control the race in addition to having the AI make the moves.
- "Auto Center on Units", defaulted to Yes, makes the main window automatically center on the unit when a new unit is activated.
- "Focus on Awakened Units", defaulted to Yes, controls units that have awakened out of Sentry. When set, such units become active automatically.
- "Draw Diagonal Roads/Rails", defaulted to Yes, shows small roads between squares in a diagonal relationship which both have roads. This is simply a visual effect, not a game issue of what squares have roads.

Message Options

As shown in the tutorial, this opens a window with controls for the messages which the server can send. For each message, you can set whether or not it is to be added to the scrolled message list, to be presented in a message window with other messages so marked, or to be presented in its own message window.

Save Settings

This writes out to file `.civclientrc` in your home directory a listing of your personal preferences, as defined by the other options in this menu bar. It will be automatically read whenever you run the client.

Rates

This opens the [Rates Window](#).

Revolution

This allows you to start a revolution, which eventually will allow you to change your form of government.



Players

This opens the [Players Window](#).

Messages

This opens this turn's messages window, which contains the urgent messages from the server.

Server options initial and ongoing

These open read-only windows listing the server's game options. For descriptions of the server game options see the server documentation, especially the server's online documentation via the "explain" command. These are to allow you to find out what the rules are in this universe.

Export log

This writes the current game log out to the file `civgame.log` in the current directory. The material written is what appears in the main window's scrollable message list.

Clear log

This clears the main window's scrollable output list. This may be necessary if you find the window's content has become so long that it is difficult to scroll.

Disconnect

This disconnects the client from the server, and brings up the **Connect window** so you can reconnect.

Quit

Exits the client.

2.2.2 Orders Menu

These give orders to the currently selected unit. Most of them are traditional orders from Civilization; see the online help for details on the orders given to units. A few are new to Freeciv:

Auto Settler

This tells the game to assign AI control to the selected Settler. Thereafter it will do what AI player's Settlers do as far as building roads, irrigating, for the purpose of improving the area around the Settler's city.

Auto-Attack

This marks a unit, if it is in a city, as operating under that city's auto-attack options; see the [City Options Window](#). When so enabled, when a designated enemy unit comes close to the city, such units will leave the city, attack the enemy, and return to the city.

Auto-Explore

This tells the game to assign AI control to the selected unit as an exploration unit. Thereafter it will search the map and uncover new territory in the manner of AI players.

2.2.3 Reports Menu

Each of these brings up the corresponding report window; most of these were shown in the windows section. The only window now shown there is Spaceship window. This shows a picture of the spaceship under construction, and gives a summary of its statistics.

2.2.4 Help Menu

The online help contains information on all areas of the game system, buildings, units, concepts, etc.

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3. Customizing the Client

The client can be customized in many ways to reflect your tastes for its user interface. The game system, rules, units, and such are not controlled by the client and are beyond customization at the client level; they are defined by the server. But many issues dealing with graphics features can be changed.

3.1 Alternate Graphics Tilesets

The graphics used for Freeciv are defined in XPM (X Pixmap) files in the distribution; there are separate files for terrain squares, units, roads, the small symbols used on various windows, and the spaceship elements. The default tilesets are a set of 45x45 tiles by Ralf Engels. Other tilesets exist which are different both in style and in size; many people prefer using 30x30 tiles to fit more of the map on the screen (17 across and 11 high).

The Freeciv distribution comes with one alternate tileset, a 30x30 tileset, which was the standard tileset in Freeciv 1.7.2. By default, it is stored in the directory `/usr/local/share/freeciv/classic`, so you may use it with the `-tiles classic` option added to your invocation of the client. Additional popular tilesets have been contributed to the Freeciv effort, and can be found in `ftp.freeciv.org/pub/freeciv/contrib/tiles`. You would typically download and unpack them into a new directory in `/usr/local/share/freeciv` for general use.

3.2 X Resources and Command Options

A great many features of the Xaw client are defined as X resources, and as such may be set by you; this is not presently the case with the Gtk client. Typically, you would add such definitions to your `.Xdefaults` file, or whatever file you use to customize your X environment. All Xaw client Freeciv resources start with the name `Freeciv`, so to change your customary player name (as shown in the table below), you would add

```
Freeciv*player: Honorius
```

to your file of X settings.

All Xaw client command line options are available with either one or two hyphens before the name (that is, `-name` and `--name` yield the same effect). The Gtk client requires two hyphens. All but two of the command line options are also X resources (for the Xaw client only). The two exceptions are `-help` (which lists the command line options) and `-version` (which displays the Freeciv client version).

X Resource	Command line	Results
log	-log	Defines the name of a log file to be produced as the client operates. The amount of information logged is controlled by the <code>debug</code> resource.
name	-name	The player name you wish to use; this is copied into the Connect Window for you.
server	-server	The Internet address (e.g., 11.22.33.44) or name (e.g., myhost.mynet.net) at which the Freeciv server is to be found; this is copied into the Connect Window .
port	-port	The port number on the server system at which the Freeciv server is to be found; this is copied into the Connect Window .
debug	-debug	Sets the level of debugging information logged, a number from 0 to 2. Zero logs fatal errors; 1 additionally logs warning errors; 2 additionally logs normal debugging messages.

tileset	Provides the directory name of an alternate tileset to be used for graphics. This should be a name relative to the base of the Freeciv data area, by default <code>/usr/local/share/freeciv</code> .
---------	---

Those are the X resources which a typical user might wish to modify. The Xaw client, however, uses the X resource system to control vast amounts of the user interface's presentation, such as the color of every field, the ways in which the fields of a window are linked together, and the words on each button. You can find the default settings for all of these resources in the file `/usr/local/share/freeciv/Freeciv`. If you wished to, for instance, you could change the "Turn Done" button with the line

```
Freeciv*turndonebutton.label: Next Turn
```

in your X resources file.

3.3 Files and Environment Variables

The client depends on certain files to initialize itself. The standard distribution places these files in `/usr/local/share/freeciv`, and the code is compiled to use that directory. The files used from the Freeciv directory are:

Freeciv

The default X resources for Xaw client

helpdata.txt

The database of help data used for the Help menu.

default

The directory containing the graphics files required:

tiles.xpm

the map terrain tiles

units.xpm

the unit symbols

roads.xpm

roads of various sorts

small.xpm

small graphics for various windows

space.xpm

spaceship components

treaty.xpm

treaty agreement graphics

The environment variable `FREECIV_DATADIR`, if specified, gives the full path of an alternate directory.

The environment variable `HOME` is used to find the user's home directory. The file `.civclientrc` is ready from and written to in that directory.

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