

THE
UNOFFICIAL
SPRING
MANUAL

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1. Introduction

The Spring Project is an open source engine designed for the development of real time strategy (RTS) games. As Spring is open source, anyone is free to contribute to its development or use it as the basis for developing a game. In most RTS games, the aim is to develop and command an army against opposing forces, often on large scale battlefields.

Spring has been actively developed for several years and has a thriving community with over ten commonly played games and a large player base. Features include 3D graphics and support for up to 5000 units in game at one time. Compared to many commercial RTS games, Spring has relatively low hardware requirements. The basic requirements for Spring are as follows:

- 1 GHz CPU,
- GeForce4 MX or equivalent with latest supported driver .
- 256 MB RAM
- Internet access.

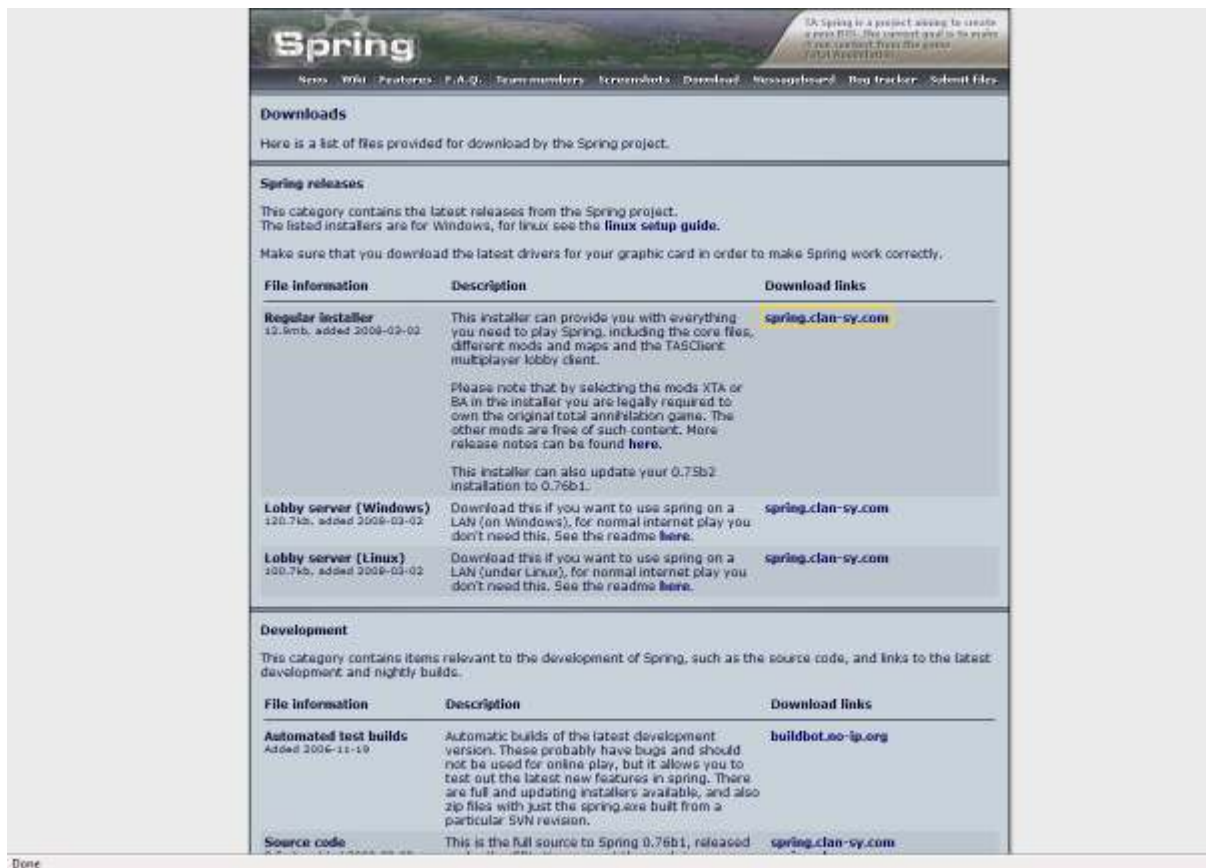
This unofficial manual shows how to get Spring running, covers the basics of playing Spring and gives some information on the most popular games or 'mods'.

2. Installing Spring

Hi there, welcome to Spring!

To install Spring, the first thing you need to do is to get the installer.

Go to spring.clan-sy.com and go to the downloads section:



The screenshot shows the 'Spring' project website. At the top, there's a navigation bar with links: News, Wiki, Features, FAQ, Community, Screenshots, Downloads, Messageboard, Bug tracker, and Submit file. The main heading is 'Downloads', with a subtext: 'Here is a list of files provided for download by the Spring project.'

Below this is the 'Spring releases' section. It states: 'This category contains the latest releases from the Spring project. The listed installers are for Windows, for linux see the [linux setup guide](#).' It also includes a note: 'Make sure that you download the latest drivers for your graphic card in order to make Spring work correctly.'

A table follows with three columns: 'File information', 'Description', and 'Download links'.

File information	Description	Download links
Regular installer 12.9mb, added 2009-02-02	This installer can provide you with everything you need to play Spring, including the core files, different mods and maps and the TASClient multiplayer lobby client. Please note that by selecting the mods XTA or BA in the installer you are legally required to own the original total annihilation game. The other mods are free of such content. More release notes can be found here . This installer can also update your 0.75b2 installation to 0.76b1.	spring.clan-sy.com
Lobby server (Windows) 120.7kb, added 2009-02-02	Download this if you want to use spring on a LAN (on Windows), for normal internet play you don't need this. See the readme here .	spring.clan-sy.com
Lobby server (Linux) 100.7kb, added 2009-02-02	Download this if you want to use spring on a LAN (under Linux), for normal internet play you don't need this. See the readme here .	spring.clan-sy.com

Below the table is the 'Development' section. It states: 'This category contains items relevant to the development of Spring, such as the source code, and links to the latest development and nightly builds.'

Another table follows with the same three columns:

File information	Description	Download links
Automated test builds Added 2006-11-19	Automatic builds of the latest development version. These probably have bugs and should not be used for online play, but it allows you to test out the latest new features in spring. There are full and updating installers available, and also zip files with just the spring.exe built from a particular SVN revision.	buildbot.so-lp.org
Source code	This is the full source to Spring 0.76b1, released	spring.clan-sy.com

At the bottom left of the page, there is a 'Done' button.

Click on the highlighted link and wait for download to complete, then run the installer. Agree to the agreement. For now, tick every box in the screen 'Choose Components', unless you already know what maps and mods you want.

Select your installation directory. After that, wait.. This process can take a long time. After the installation is finished, it is time to proceed to Part 2!

3. Starting a game (multiplayer)

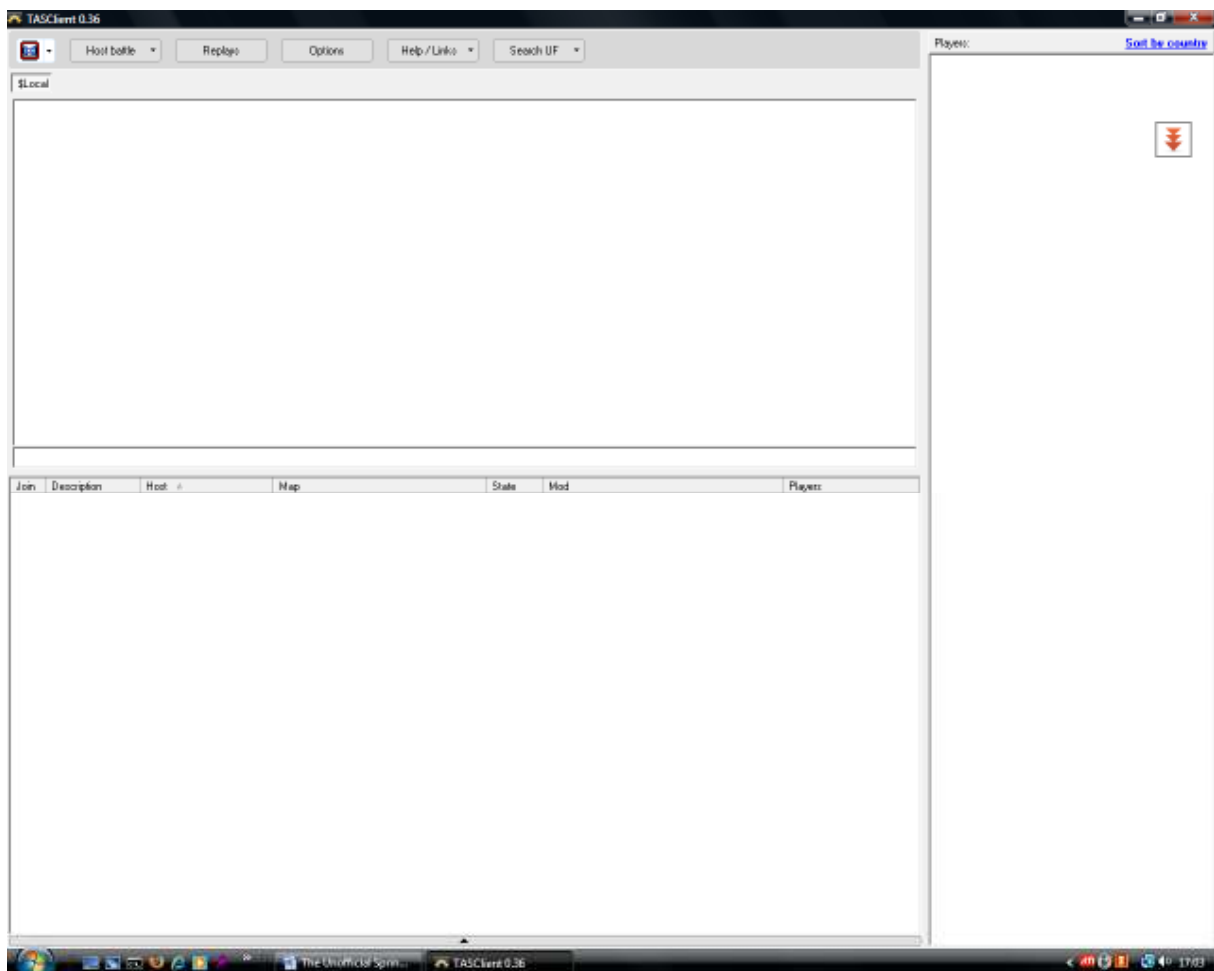
First, open your Spring Multiplayer Lobby:



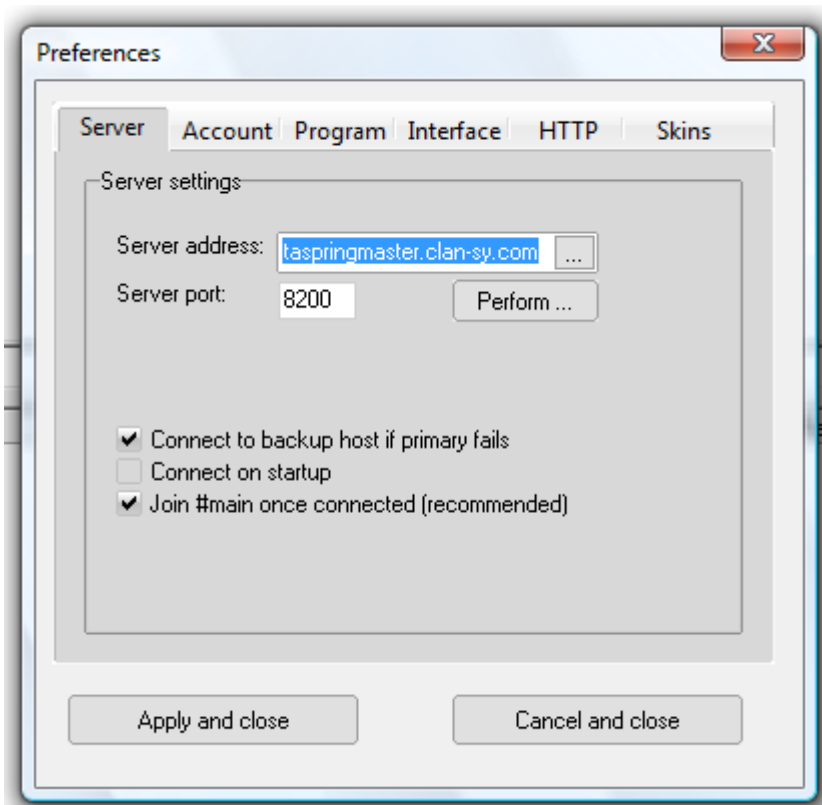
The lobby icon should look like this.

If you have one or more mods installed, the lobby will load. If not you will see an error, but don't panic. You can easily download mods from Spring file hosts such as spring.jobjol.nl, www.unknown-files.net/spring or by using the 'Spring Downloader' program.

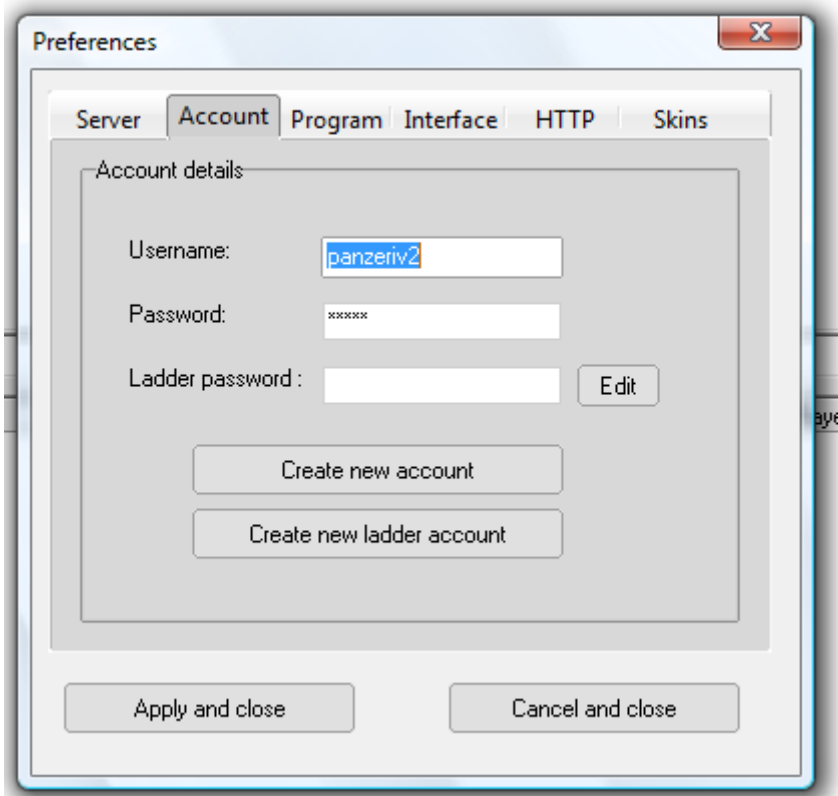
Okay, so we have the program booted:



To play multiplayer games, you first need to create an account. To do this, click on the options button. You should see:



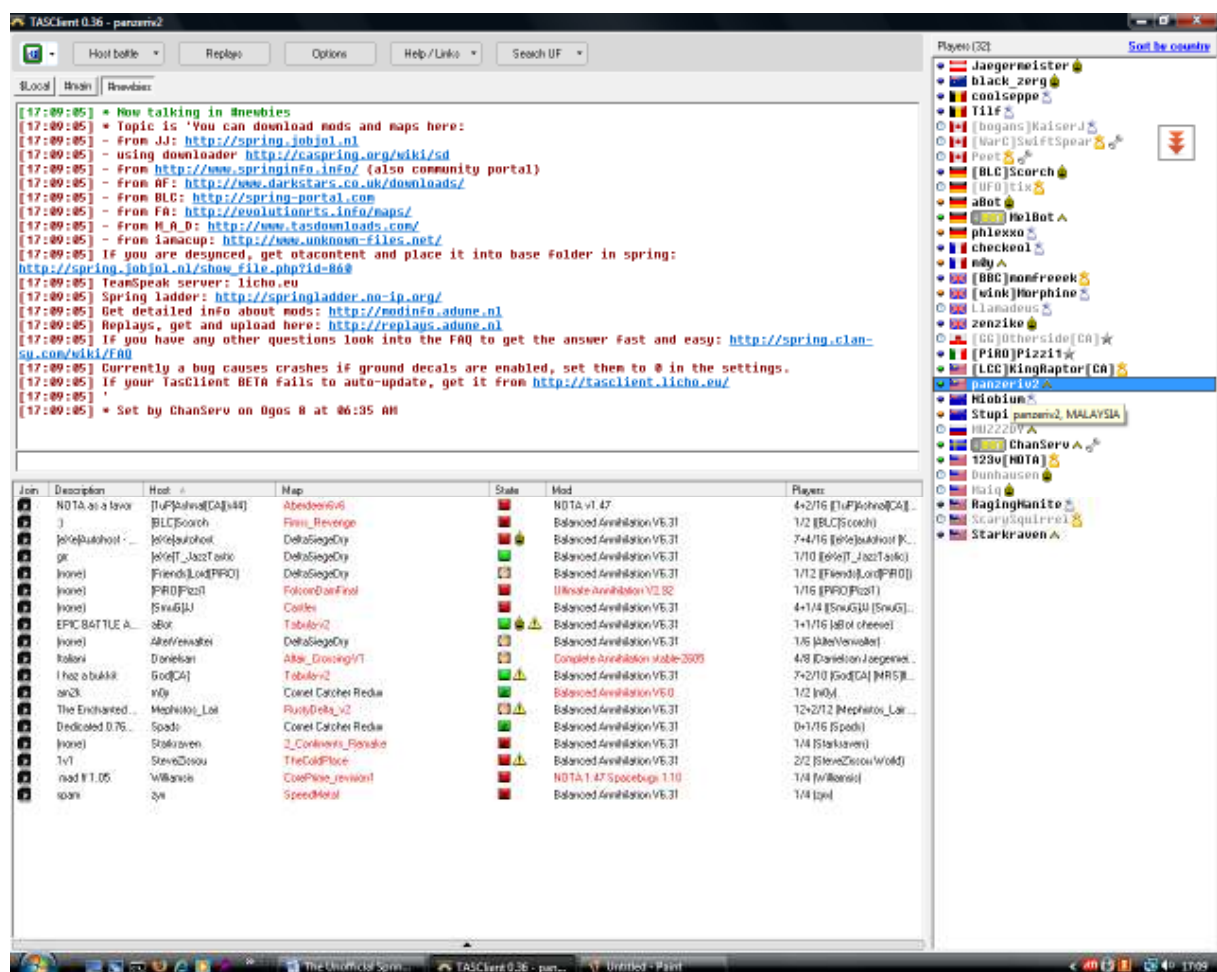
Click on the account tab. A screen like this should show.



Click “Create new account” and fill in the form with your desired username and password. When you’ve done that, click “Register account”.



Fill in the form with your desired username and password, then select “Apply and close”. Click on the plug-like button and you will be ported to the server.



Now you know how to get to the server. You can enjoy chatting in the lobby or play games with other players. Hosted games are listed at the bottom of the screen. Any games showing a green square can be joined by double clicking on their name (you may be prompted to download the mod and map).

To join lobby chat rooms, type, for example:

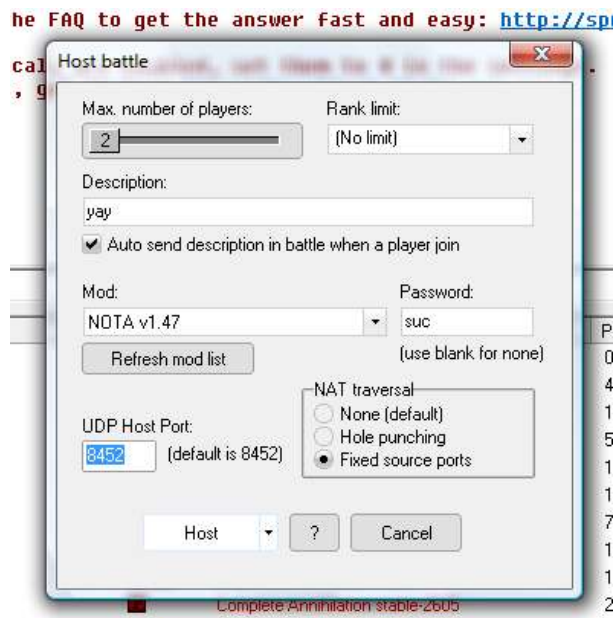
```
/join #main
```

By default, you will join #main and #newbies when entering the lobby.

4. Hosting a multiplayer battle

First log into the multiplayer lobby. Click on "Host battle".

A screen like this will show:



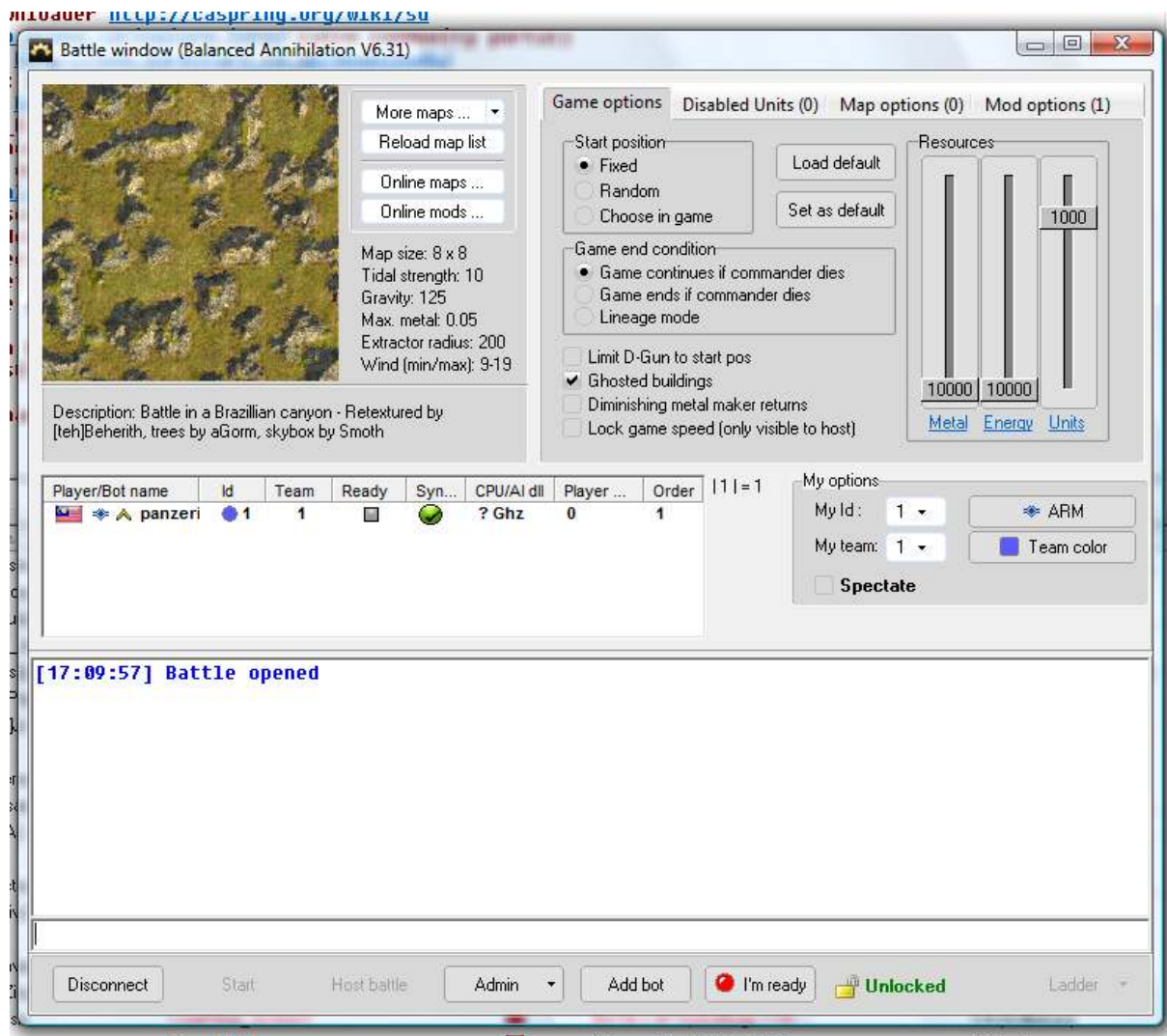
Select the mod you want to host. If you add a description (optional) this will be visible in the lobby. You could add a password to host a private game.

To host a game for other players, you need to ensure that your computer is open to accept connections. If you are using a router, you might need to set up 'port forwarding' for the UDP port shown on the hosting screen.

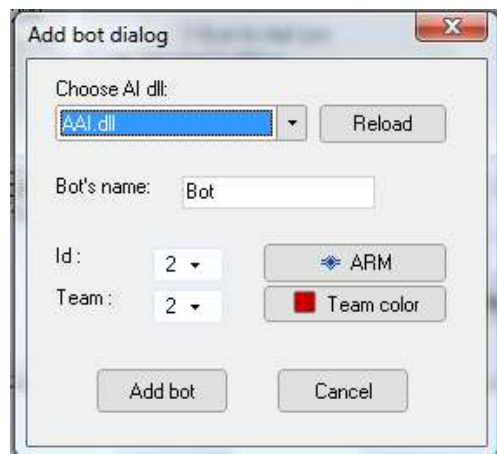
If you are not comfortable with port forwarding it is best to select "hole punching" or "fixed source ports". Be aware that some players may be unable to connect to you using these methods. You can get help on how to forward ports from your router at <http://portforward.com/routers.htm>.

You do not need to forward ports to join games that other people have hosted.

If you are done, then click "Host". You will see a window like this:



Set the options you desire. The picture above depicts me (panzeri). The "My options" panel shows that I am on the ARM side and have blue teamcolour. You can also add AI bots. Click on the "Add bot" button. You should see this window:



Choose an AI and pick a side and colour for the AI , then click "Add bot". After you have done, just click on the "I'm ready" button and click "Start".

5. Playing Spring

To explain the basic concepts, let's follow an example game. Host a battle, choose the mod "Balanced Annihilation", the map "Comet Catcher Redux", the "ARM" side, and add a bot to practice with. It can be difficult to alt-tab from Spring, so you might want to print this chapter.

The first time you run Spring, it may take some time to load, but be patient. If you have any problems, refer to the troubleshooting section at the end of this manual.

When the battle starts, you will see the map and user interface appear:



If you see a Lua widget called "eyes", press F11 and deselect eyes. Press F11 again to close the menu.

At the start you have only one very important unit; the commander. Press 'Ctrl' and 'C' at the same time on your keyboard. This will select your

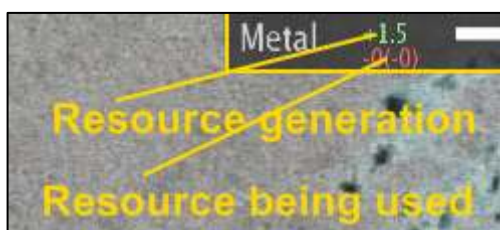
commander and zoom to it. Now you can see two new things: in the middle of your screen will be a big, bulky mech-like robot fellow. On the left side you see a bar with a list of commands that you can give to your selected unit. Refer to the 'User Interface' section for more help with this.

Don't be fooled by the Commander's looks. It will build the first buildings to start your base, economy and army growing and it is armed with the all powerful "D-Gun". The D-Gun destroys anything in the game in one hit, but it costs a LOT of energy to use. The commander is also a walking nuke. If it is destroyed, KABOOM! Be careful with your commander, it is powerful but can be overwhelmed and is almost useless against aircraft, so it should be protected by other units in the later game.

5a. The user interface



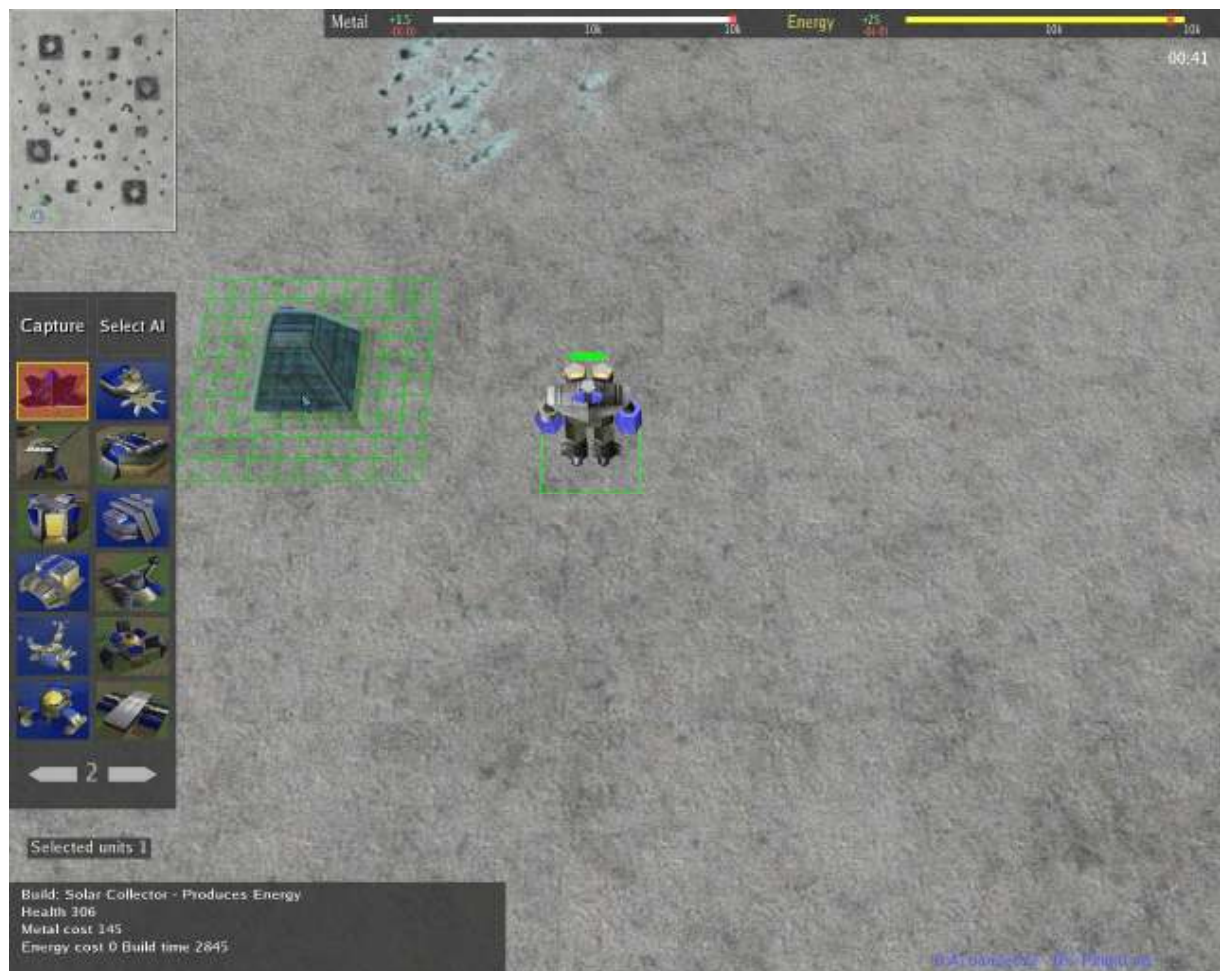
- | | |
|---------------------------------------|---|
| 1. The minimap. | A. Patrol area |
| 2. Stop whatever the unit is doing. | B. Move to area with unit engagement. |
| 3. Attack at object/feature/location. | C. Guard unit/area |
| 4. The Commander's special weapon. | D. Repair. |
| 5. Automated action options. | E. Reclaim feature as metal/energy or both. |
| 6. Automated movement options. | F. Restore feature/location to original height. |
| 7. Repeat orders. | G. Scroll to previous options page. |
| 8. Cloaking options. | H. Scroll to next options page. |
| 9. Move to location. | I. Name of unit. |
| | J. Unit health |
| | K. Resource bar (see image to left). |



5b. Building your first base

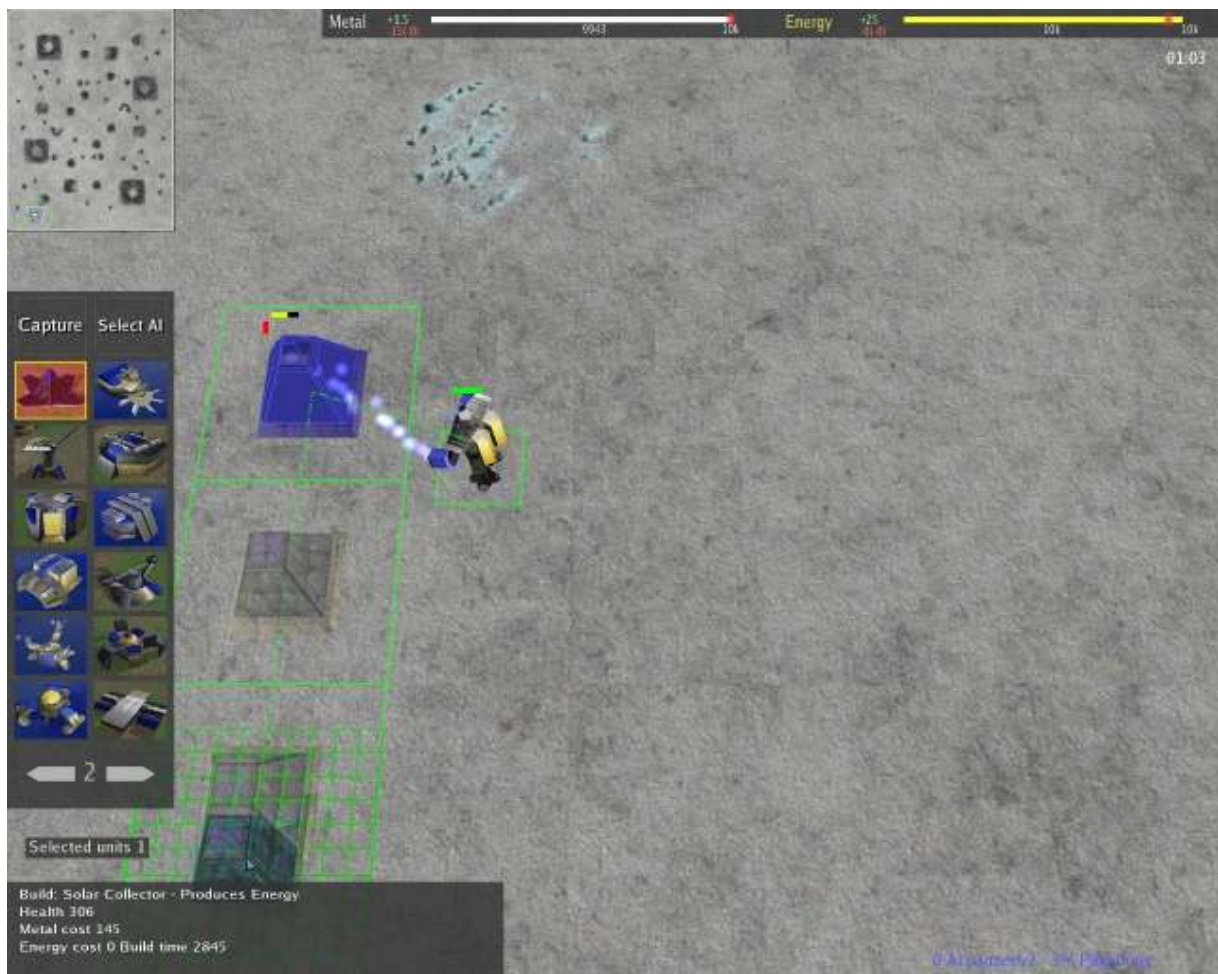
To build your forces, you will need two economy resources: energy and metal. Energy fluctuates much faster than metal, so you need a constant supply. To start gathering energy, build some solar collectors. Click on the solar collector icon, then click on the ground where you want it to be built.

The Commander selects a spot to construct a Solar Collector.



You don't have to build buildings one at a time. With your commander selected, form a build queue by holding down the shift key and clicking to place five solar collectors. Your commander will automatically build the queue in the order that you made it until he is finished. As well as building, any other commands can be queued up for any unit in the game, so remember this trick!

Building a Solar Collector and setting a building queue.

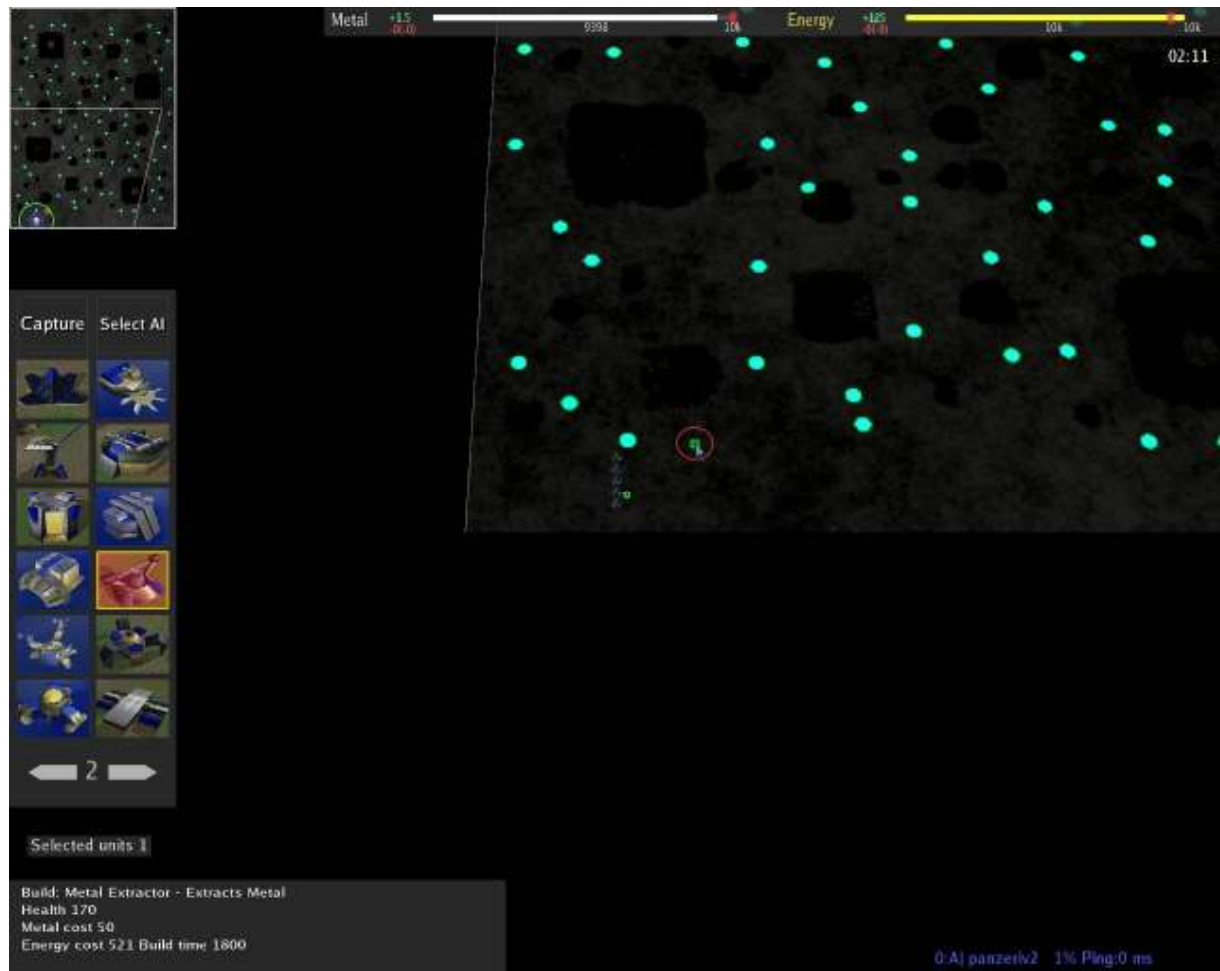


While the commander is building, let's look closer at your resources. Energy is used to make buildings and units, while some of your units need energy to fire. In some mods, like Spring: 1944, energy is also used when your unit moves. Ok, by this time your commander should have finished building the solar collectors. Now we will build some metal extractors.

Metal extractors (as the name suggests!) extract metal. Metal is used in building units and buildings, and because it is made and spent more slowly than energy, metal is the resource that lets you know whether you can afford to make a building or unit. You can only extract metal from metal spots, so it is very important to control territory, giving you access to more metal spots.

When you click on the metal extractor icon, the screen will go dark and you will see green spots littered across the map. You can also toggle this 'metal map' view by pressing F4.

Plenty of metal spots in Comet Catcher Redux!



There is no metal in dark areas, so there is no point in building metal extractors there. The green spots show metal. Build about five metal extractors on green spots by making a build queue as above.

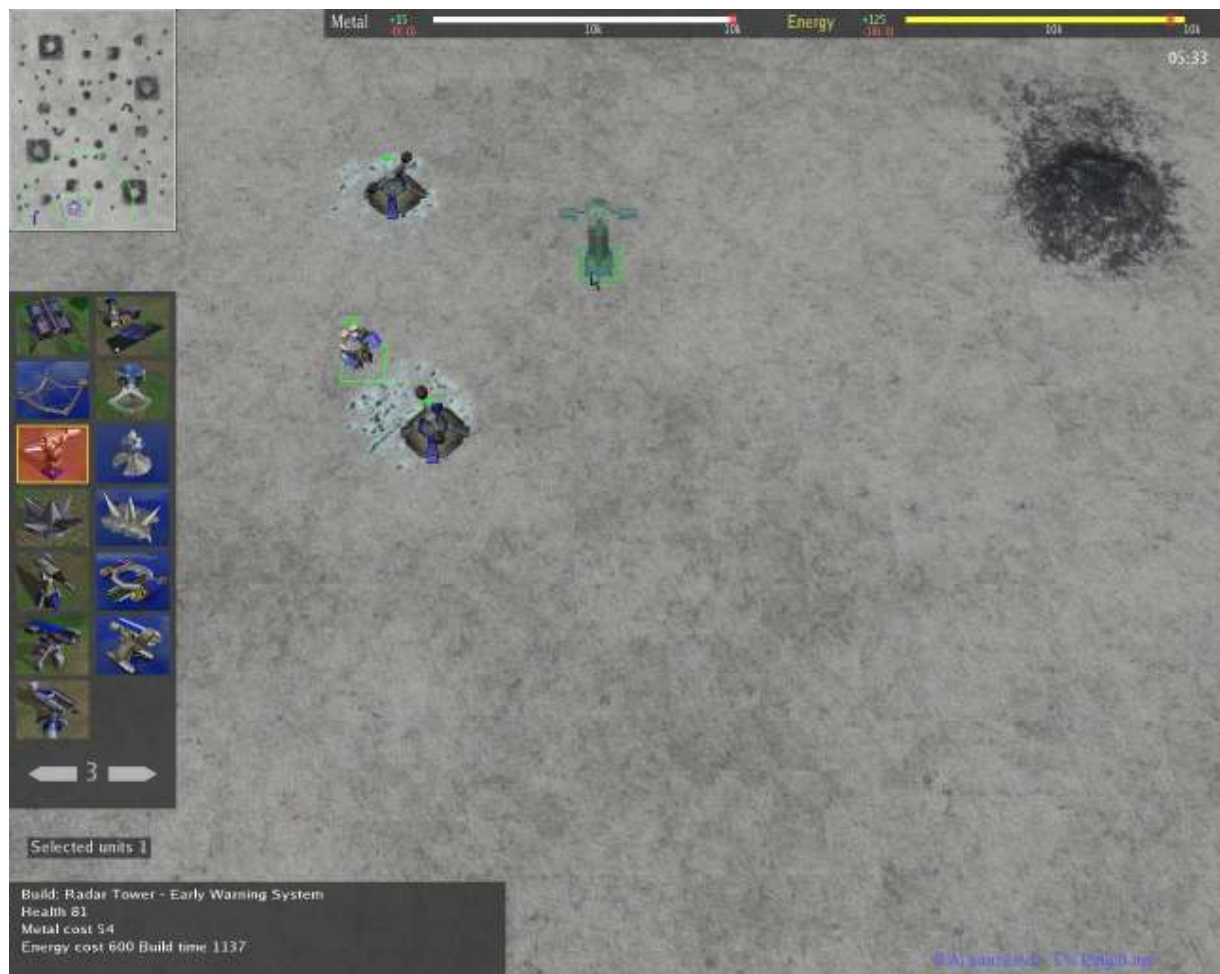
Building order queues.



Now build a Radar Tower. Radar towers detect enemy units within their range and display them as dots on the minimap (top left). Knowing where your enemy is will be important for you to be able to fight them.

Radar towers are cheap, but very weak; a single shot from most units will finish them off. To defend your buildings, you can build static defenses. The simplest is the 'light laser tower' or LLT. These are cheap, quick to build and effective against scouts and light raider units. You can build a few of these around your base and also use them to protect metal extractors further away.

Selecting a wise position for a radar tower.



Next, build a factory. Factories manufacture units. Some units help you to build and repair your forces. These construction units have different build options to your commander. Others are purely military units that exist for the sole purpose of bringing destruction upon the enemy. In BA, the most common starting factories are vehicle or kbot.

Once your factory is built, select it. The side bar shows what units it can build. Build queues are made differently for factories. To make a queue, click on the units in the order that you want to build them. A number will appear on each unit icon to show how many remain in the build queue. To add 5 of a unit to the queue hold down shift while clicking, or hold down ctrl to add 20.

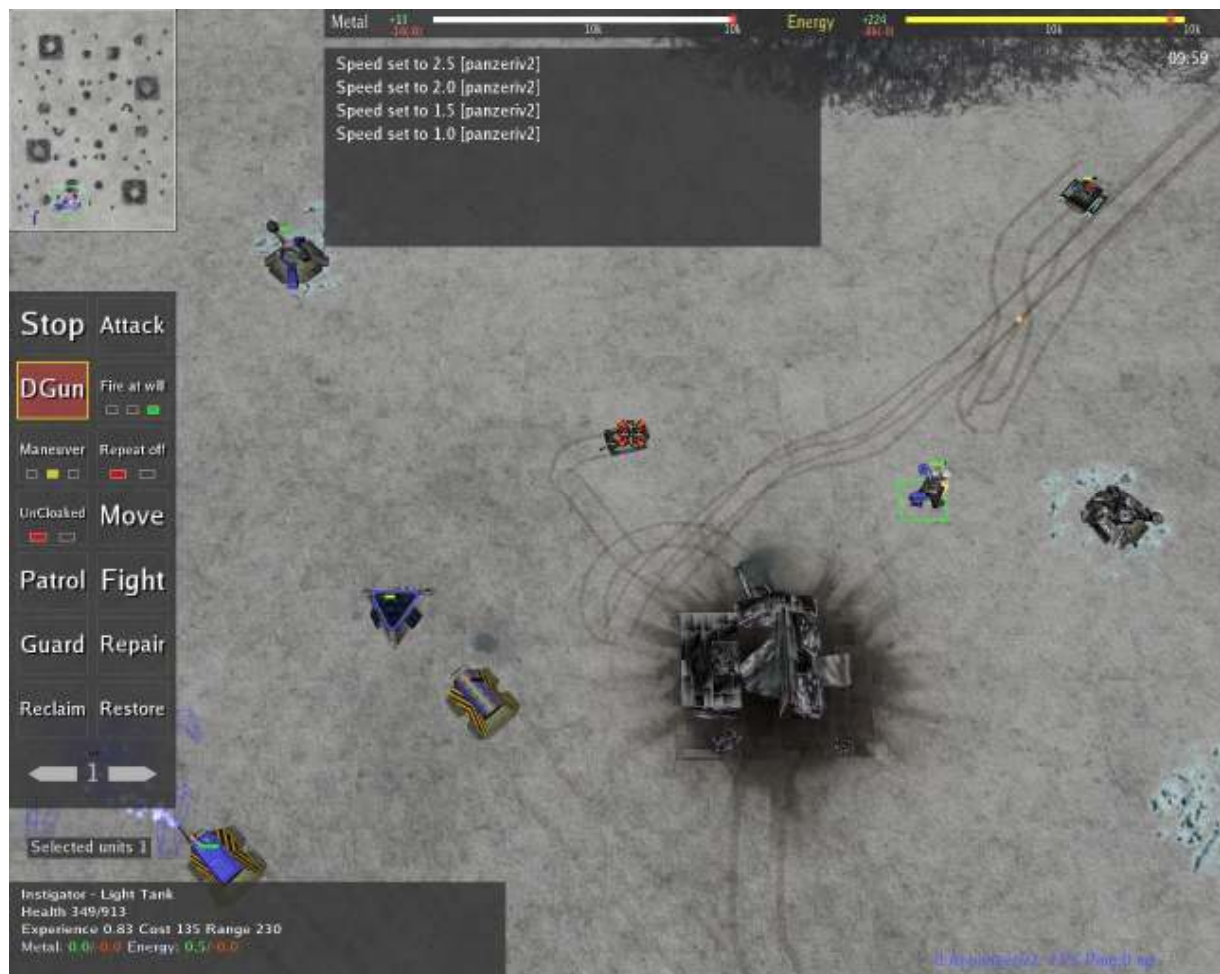
A vehicle factory building a few construction vehicles.



Units can be selected either by clicking on them, or by dragging a box around them with the left mouse button. To move your units, click with the right mouse button in the position that you want them to move to. Attacking is similar - when you see an enemy, first assess it. Is it powerful enough to wreck my base? Is it wise to take it on? If you think that you should attack it, then right click on the enemy unit to engage it with your selected units.

The only exception is the commander. Its ordinary weapon is a weak laser. If you want to use its powerful D-gun, press 'D' on the keyboard and then left click where you want it to fire. Bear in mind that the D-gun is quite short ranged and requires a lot of energy to work.

The Commander prepares to take on an invading enemy tank using its D-Gun.



Now that you have the basics, experiment with different strategies. The best way to learn quickly is to spectate good players in online games. Pay attention especially to the build orders that players start with – the first few minutes are critical. If you need help then talk to me on #newbies. I'll help you all I can.

Enjoy Spring and its games. I hope to play against you soon!

6. Troubleshooting

When starting spring, if you get an error message: “Missing Default Cursor”, it means that you do not have the ‘base’ files needed to run some Spring games. You can get them here: spring.clan-sy.com/dl/installer/base.

If Spring crashes and requires you to have the GL_ARB_texture_env_combine extension, one of the following might be a problem:.

- 1: Old video Hardware.
- 2: Old drivers.
- 3: Bad installed Drivers.
- 4: Bad game settings.

If your hardware is old, check this link:

http://web.archive.org/web/20070627091726/http://www.delphi3d.net/hardware/extsupport.php?extension=GL_ARB_texture_env_combine

If you can't find your video card then sorry, you have to buy a new one!

If your hardware is in the above list or you are sure that your video card support this opengl extension, download this software:

<http://www.realtech-vr.com/glview/download.html>

Install, run, and check under the *Report* tab for the *GL_ARB_texture_env_combine* string. If the string is present then the problem is in your Spring settings. Try a lower screen resolution and disable all graphics effects. If the string is not present and your hardware is in the list then the problem is your video card drivers. To solve this, UNINSTALL ALL PREVIOUS DRIVERS and install the last stable drivers for your video card. Usually this problem happens when there are uninstalled old video drivers on the system.

There is a bug that causes Spring to crash when Ground Decals are enabled. To fix this, go to Spring Settings, and set Ground Decals to zero.

For more information, please consult the FAQ or the forum (a.k.a the messageboard) on the Spring website. Good luck!

7. Spring Games

BA (Balanced Annihilation)



Balanced Annihilation (BA) is currently the most popular mod. With similar gameplay to Total Annihilation (TA or OTA), the RTS that originally inspired Spring, it has kept much of the TA gameplay, though it is not an identical copy.

NOTA (Not Original Total Annihilation)



NOTA, or 'Not Old Total Annihilation', is deprived from TA but has significantly changed its gameplay. Instead of a mobile commander, you start with a static command tower. Focusing on large ships and demanding progressive expansion, with limited plane ranges, NOTA games tend to develop slowly but on an epic scale.

Spring: 1944



Spring:1944 (S:44) is an original game created from scratch using the Spring engine. Set in World War Two, S:44 uses detailed period units including tanks, infantry and aircraft, with an original logistical resource model.

CA (Complete Annihilation)



Complete Annihilation (CA) began as a derivative of TA. However, CA's ultimate aim is to replace all TA models, textures and other intellectual property (IP), becoming an original RTS game. CA is being actively developed and is already a very different game to TA and BA, with a host of new features, graphical improvements and gameplay refinements.

XTA



XTA is the TA derivative with the longest continuous history in Spring. The gameplay of XTA focuses on strategy, with relatively slow unit speeds. The game released with the first version of Spring, XTA continues to be developed and has a number of innovative features, including an upgradeable commander.

Hotly anticipated games coming soon include P.U.R.E. and Imperial Winter (Star Wars). More information on the different games can be found on the Spring website.