

STRONGHOLD WARLORDS



FIREFLY
studios

Chapter 1:

GETTING STARTED

Changing Language

Within the Steam client you can change the language used in-game:

1. Log into your Steam account
2. Right click on a game from the Steam game library and choose Properties
3. Go to the Language tab
4. Select the language you wish to use from the drop-down menu
5. Click OK

Tutorial

The tutorial will teach you the basic concepts you need to know to play STRONGHOLD: WARLORDS. The tutorial is especially useful to players who are new to STRONGHOLD games.

Choosing a Difficulty Level

STRONGHOLD: WARLORDS features a number of difficulty levels so that you can tailor the challenge to your personal taste. You can however increase or decrease the difficulty on a per mission basis on the mission briefing screen.



An experience crafted for those unfamiliar with Stronghold games and what makes them tick. This difficulty level offers a great balance between strategy and story.



Have you played Stronghold before but not for a while? Or are you finding easy just a little too easy? Step up the difficulty to give your enemies more of a chance (and you more of a challenge!)



Stronghold games are traditionally deemed to be quite hard. This is the difficulty level we all aspire to beat at Firefly! The AI is crafted to be firm but fair. If you have mastered a number of Stronghold games before, then this is the difficulty level you may want to start on.



Game Modes

Campaign - There are 5 campaigns to play through: 4 military and one more economic focussed campaign. The campaigns are a good place to start as they gradually introduce new buildings, troops and siege weapons allowing you to learn as you play. The first campaign is called "Jungle Kingdoms" and follows the legendary story of Thục Phán of Vietnam. Completing the Thục Phán campaign will unlock the economic campaign and "The Warring States of China" campaign featuring Qin Shi Huang.

Custom Skirmish - Pick a map, choose your allies, opponents and warlords and set the starting gold, troops, resource and food. The possibilities are endless, ensuring no two games are ever alike.

Free Build Mode - Take things at your own pace and build your perfect castle.

User Maps - Custom Maps allow you to load campaigns which you have created yourself using the editor or other user created maps.

Multiplayer - Fight medieval multiplayer battles with up to 8 players, with AI opponents mixed in if you desire. Last Lord standing wins.

Interface

This section introduces you to the STRONGHOLD: WARLORDS interface.



- 
1. **Objectives** – In the top left corner of the screen are your current objectives to win the mission. The progress bar around the edge indicates how close you are to achieving the objective.
 2. **Messages** – Important messages will appear in this area.
 3. **Menu** - Clicking on the cog icon brings up the in-game menu.
 4. **Day** - The current day the game is in. Each day lasts one minute.
 5. **Warlords Map** - The Warlords Map is where you issue edicts to your warlords and try to influence enemy warlords.
 6. **Gold** – The amount of gold in your treasury.
 7. **Food, Resources & Weapons** - A summary of what you have stored in your storage buildings.
 8. **Building Panel** - All the buildings available to place in the current map.
 9. **Population** – The total number of peasants currently in the castle and the maximum number the castle can currently hold.
 10. **Peasants** – The number of free peasants you have available to work.
 10. **Immigration Rate** - The time the next peasant will arrive at your castle.
 11. **Popularity** – How popular you are with your people.
 12. **Your Warlords** - The warlords that have sworn allegiance to you will be shown on the right of the screen. The progress bar around the edge indicates how much time is remaining on the current edict. The warlord will also change colour if another player is trying to capture the warlord. Left click on the icon to go directly to the diplomacy edicts within Warlords Map. Right click on the icon to do directly to the warlord on the map.

Navigating the Map

To move around the main map, move your mouse pointer to the edges of the screen. When you move around the map, the gold rectangle in the mini-map updates to show your current camera position. Hold down the middle mouse button and move the mouse left or right to rotate the camera. This is useful for seeing behind walls, towers and cliffs.



Building Panel

The Building panel displays all the buildings available to place in the current map.

To place buildings simply select the building from a building category and click on the main game screen.



Industry Buildings - Buildings which produce the raw materials required to build a great castle, such as wood and stone.



Food Buildings - Buildings which produce food to fuel your workers, such as rice, vegetables, meat and tea.



Housing - Houses provide a place for your peasants to live, ranging from basic hovels to superior houses.



Town Buildings - These buildings are important for maximising your castle such as the market, herbalist workshop, diplomacy buildings and temples.



Military Buildings - All things military including the barracks, military academy, armoury, weapons workshop and siege camp.



Castle Walls - The tools needed to create a perfect castle including walls, towers and gatehouses.



Castle Defence - Structures designed to help defend your castle such as gunpowder, barricades, wall hoardings and platform-mounted defences.



Fear Factor - Buildings designed to either entertain your peasants or scare them to death, depending on whether you want to be a good lord or a bad lord.



Repair & Delete - Repair damaged structures or remove them completely.





Mini-map

The mini-map gives you an overview of the whole map, showing the locations of all players, warlords and resources available. It can be very helpful for spotting approaching enemies. Left click inside the mini-map to jump the camera straight to that position on the map. You can also click and drag inside the mini-map to move the camera around.



Padlock - When your keep is enclosed by walls the padlock attached to the mini-map will "lock".

Greatest Lord - The Greatest Lord button brings up a list of all the players in the game in order of who is winning. It also shows useful information about each player such as their tax rate and number of troops.

Allies Panel - When teamed up with another player use this panel to send goods to and from your teammate. (human players only)

Signal - Use the signal button to place an alert marker on the mini-map which only you and your allies can see.

Toggle Estates - Switch the mini-map to see how the estates are marked out on the map.

Toggle Messages - Use this toggle to hide the message box.

Toggle Overhead View - Switch to the overhead view to view the action from a different perspective.

Briefing Scroll - View the briefing screen.



Chapter 2: HOW TO PLAY

This section is a quick guide through all the main features within STRONGHOLD: WARLORDS. Here you will learn how to place buildings, as well as a little about the key buildings in STRONGHOLD: WARLORDS and some of the main systems within the game.

If you have not played a STRONGHOLD game before we recommend that you play through the tutorial.

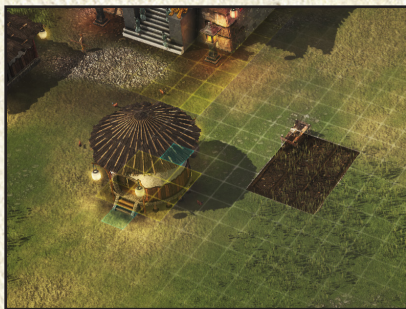
Placing Buildings

STRONGHOLD: WARLORDS is an instant build game; workers are not required to construct buildings. As long as you have the resources available to build the building, it is created as soon as it's placed.

At the start of each game you must place a Stockpile to store resources and a Granary to store food.

Select a building by clicking its icon in the main build panel, then left click on the map to place it. Right click to cancel a selected building. You can rotate buildings using the mouse wheel.

When placing a building on the map you will see white grid lines around it.



These reveal the universal grid which all buildings snap to. Tiles already occupied by buildings are highlighted in yellow. If your hovered building overlaps with an existing building, the overlapping tiles will appear in red. Most buildings also have access points marked with green squares that allow workers to access the building.



Each building you place requires wood, stone, gold or a combination of these to build it. You can only place a building if you have enough of the required resources available in your stockpile.

Deleting Buildings

To delete a building from your castle, left click on the delete button then click on the building you wish to delete.



The peasant working in the building will be returned to the free peasant pool and half of the resources spent on constructing the building will be recovered. Deleting a wall recovers the full amount of stone required to build it.

Repairing Buildings

To repair a building in your castle, left click on the repair button and then click on the building or structure you wish to repair. This will cost some of the same resources the building is made of.

The Stockpile

The stockpile is the most important economic building in **STRONGHOLD: WARLORDS**. It is the first building you must place and is where your primary resources are stored. Think carefully about where you locate it - placing it near trees is a good idea as this will give your woodcutters good access. You may also want to have some space around it if you plan to construct lots of working buildings nearby.





The stockpile can hold an infinite number of resources. To see the exact amount of each resource stored, left click on the stockpile.

Stockpile Resources

Resource		Produced by	Used to make
	Wood	Wood Camp	Bows, Crossbows, Axes, Lances
	Stone	Stone Quarry*	
	Iron	Iron Mine*	Swords, Heavy Maces, Armour
	Salt	Salt Mine	Gunpowder
	Gunpowder	Gunpowder Workshop	
	Silkworm Cocoon	Silkworm Farm	Silk Thread
	Silk Thread	Silk Workshop	Clothes
	Clothes	Clothes Workshop	

* The Stone Quarry and Iron Mine require an Buffalo Tether to transport Stone or Iron back to the Stockpile.



The Granary

The Granary stores the food used to feed your peasants. Only one granary can be placed and it can hold an infinite amount of food.



An efficient food chain is key to building a strong economy so it is a good idea to place food buildings as close to the Granary as possible.

Food

Food		Produced by	Used at
	Rice	Rice Field	
	Vegetables	Vegetable Field	
	Meat	Pig Farm	
	Tea	Tea Plantation	Tea House

The Keep

The Keep is the focal point of any castle. The Lord lives here and it is here that he will make his final stand in times of war. At the start of any game the keep will already be placed on the map. The keep houses 8 peasants who gather at the entrance to the keep ready to help get your village economy up and running.





Temples

Temples are the gateway to spiritual enlightenment for your peasants. The more spiritually enlightened they are, the happier they are and the more popular you are. The amount of spirit generated is based on what proportion of your housing and work buildings (i.e. buildings that require a worker) are within the radius of a temple.



If all your buildings are within the radius of a temple, then all your peasants are spiritually enlightened and you will receive the maximum popularity bonus.

Connecting Roads to Temples

If you connect a road between your keep and a temple, the temple's spiritual radius will expand, allowing more buildings to be covered.

Fear Factor

One of the advantages of being a lord is you can choose how you want to govern; do you want to be a good lord or a bad lord?





If you want to be a good lord you can place entertainment buildings, such as an opera house or kung fu plaza, to give your peasants some rest and relaxation. Alternately if you want to be a bad lord then there are a number of torture devices available to strike fear into your peasants.

There are, however, advantages and disadvantages depending on which path you choose.

	Good Lord	Bad Lord
Popularity		
Troop Damage		
Productivity		

The Market

The market allows you to set autobuy and autosell prices for goods. The game will then automatically buy or sell goods at your specified prices, so you need not do so manually at the granary, stockpile or armoury. This allows you to concentrate on fighting your opponents.



You cannot buy or sell goods if you do not have the appropriate storage building placed. Also some goods may not be available to trade during missions.

Markets only deal in bulk so you must buy or sell batches of at least five goods at a time. If you hold down SHIFT you can buy and sell greater quantities of goods at a time.





Creating Workers

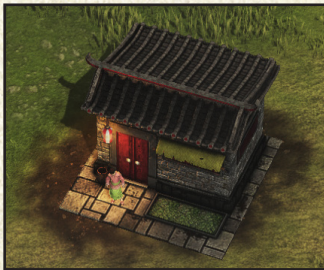
In order to build a thriving economy you need a willing workforce and in **STRONGHOLD: WARLORDS** that workforce consists of peasants.



The number of peasants standing around your keep represents the number of free peasants available to be turned into workers or troops. Your keep provides you with some starter housing for your peasants, but to increase your maximum capacity you will need to place houses.

There are 6 sizes of house. All houses house 8 peasants. However each house varies in quality with the Hovel being the lowest quality and Superior House being the highest quality. See Housing Quality for more information.

You must also ensure you are popular otherwise peasants will not come to your castle. You will see the speed at which peasants arrive on the popularity panel.



If no one is working in a building it probably means there are not enough peasants available to work there. This will be shown by a no workers symbol floating overhead. It may also mean that the building





has been turned off (by left clicking on it and clicking on the 'turn industry off icon'); in this case a sleep symbol will appear above the building.

Housing Quality

Your peasants enjoy living in nice quality houses. Each house is allocated a quality rating ranging from 0 for Hovels up to 20 for a Superior House (The Keep has a quality rating of 8). If the total quality rating of all your houses is proportionately high you will receive a popularity boost. If the total quality rating of all your houses is proportionately low then you will receive a popularity hit.

House Type	Quality Rating
Hovel	0
Shack	2
Hut	4
House	8
Fine House	12
Superior House	20

The total quality rating is calculated as follows:

$\text{Total Quality Rating} \div \text{No. of Workers} = \text{Average Quality Rating \%}$

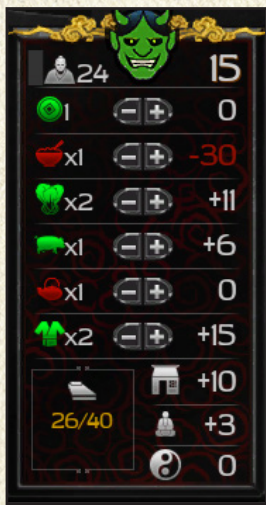
Average Quality Rating %	Popularity Effect
< 50%	- 10
50% - 74%	- 6
75% - 99%	- 3
100%	0
101% - 124%	+ 3
125% - 149%	+ 6
> 150%	+ 10





Popularity

Popularity is the determining factor on how fast peasants arrive/leave your village.



The number displayed at the top of the Popularity Information panel shows the overall popularity.

This represents the total of all the popularity factors listed below it. By increasing or decreasing the individual popularity factors you can determine the exact speed in which peasants arrive at or leave the castle.

This can change if you run out of gold (for bribing), rice, vegetables, meat or tea, or if your population changes or if an event is taking place.

Peasants will stop arriving at your castle if you do not have enough houses to house them.



Tax - Taxing your peasants is one of the best ways to generate gold. The more peasants you have working in your village the more gold you will gain from taxes. However raising taxes makes you unpopular. There may be times when you need to switch from taxing your peasants to bribing your peasants. For example, if you need to increase your immigration rate to quickly raise an army or if you have run out of food and need an emergency popularity boost. It's an expensive move but your peasants will love you for it.



Rice Rations - Rice is the staple food enjoyed by your peasants. Just by feeding your peasants normal rations you will gain a popularity boost but increasing this to double or triple rations will make you even more popular. If however you are running out of rice you may prefer to opt for half rations, cutting the amount of rice being consumed but also incurring the wrath of the peasants. Be careful as running out of rice (or setting no rice rations) will make your peasants extremely unhappy.



Vegetable Rations/Meat Rations/Tea Rations - The peasants see vegetables, meat and tea as luxurious additions to their rice diet. The more vegetables, meat and tea you feed your peasants the more popular you will be, just the same as rice. However, unlike rice,





if you run out of vegetables, meat and tea, you will not incur negative popularity.



Clothes Rations - Not only do your peasants like to eat well but they also like to wear good quality clothes. Once your silkworm economy is up and running you can increase your popularity by increasing your clothes rations.



Housing Bonus - Simply put, the higher the quality of housing you build, the happier your peasants will be (See Housing Quality). The housing bonus can also be negatively affected by overcrowding. If you do not have enough houses to support your population (maybe they have been destroyed by an enemy) then this will lead to overcrowding which will make you unpopular with your peasants.



Spirit - Your peasants are spiritual beings. The higher the proportion of your houses and work buildings that are within the radius of the temple, the greater the spiritual enlightenment and the more popular you will be.



Fear Factor - Do you want to be a good lord or bad lord? Good lords receive a popularity boost. Bad lords suffer from a popularity hit.

Events

Various game events will occur during missions. For example, an insect swarm can destroy your vegetable or tea crops or the peasants may revolt causing you negative popularity. Other events, such as festivals, however may boost your popularity. When there is an event taking place it will appear above the Popularity Information panel.



Events can be toggled in multiplayer, skirmish and freebuild games to add some randomness into the mix.





Building and Troop Limits

STRONGHOLD: WARLORDS has been designed with specific troop and building limits in single player for gameplay and performance reasons. However we appreciate some people may wish to try playing the game with higher limits. To change these limits:

1. Browse to the location of your `\Documents\Stronghold Warlords\Profiles` folder.
2. Using a text editor (we recommend Notepad++) open the `options.xml` file.
3. On line 4 change the values for `single_player_building_limit` and `single_player_troop_limit` (make sure you retain the exact formatting used in the file).
4. Save the file.

PLEASE NOTE: These values only affect single player games not multiplayer games. Changing these values beyond the default limits may adversely affect game performance (depending on your computer).



Chapter 3:

MILITARY BASICS

Military units are comprised of three groups in STRONGHOLD: WARLORDS: barracks troops, military academy troops and siege weapons. Each is produced in their own building and have unique uses.

The Armoury

The armoury stores weapons, which are needed to train barracks troops.



These weapons can either be bought with gold or produced by workshops, who will deliver weapons to the armoury. Without an armoury your weapons workshops will have nowhere to store the weapons they have made.

There are seven types of weapons in STRONGHOLD: WARLORDS.

Weapons

Weapon	Produced by	Requires
 Bows	Fletcher's Workshop	Wood
 Crossbows	Artillator's Workshop	Wood
 Axe	Axe Workshop	Wood
 Lance	Lance Weaponsmith	Wood
 Swords	Swordsmith's Workshop	Iron
 Heavy Maces	Forger's Workshop	Iron
 Armour	Armourer's Workshop	Iron

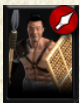
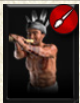
The Barracks

The Barracks is where you recruit the core troops in STRONGHOLD: WARLORDS.



Left click on the barracks to view which troops you can recruit. All troops require gold and a free peasant. Besides the tribesmen, every troop also requires a combination of weapons. These weapons can either be bought at the armoury or constructed using weapons workshops.

Troops

Troop	Weapon	Cost
 Spear Tribesman	None	Gold
 Blowpipe Tribesman	None	Gold
 Auxiliary Axeman	Axe	Gold
 Auxiliary Archer	Bow	Gold
 Auxiliary Cavalry	Lance & Horse	Gold
 Imperial Warrior	Sword & Armour	Gold



Imperial
Bannerman*

Sword &
Armour

Gold



Imperial
Crossbowman

Crossbow &
Armour

Gold



Imperial
Guardsman

Heavy Mace &
Armour

Gold



Imperial Cavalry

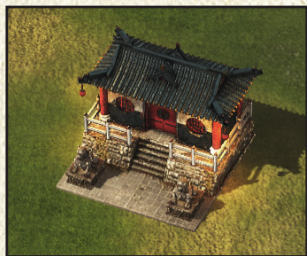
Sword &
Armour &
Horse

Gold

* The Imperial Bannerman also grants nearby units an armour bonus.

Military Academy

The Military Academy is where you hire specialist troops in
STRONGHOLD: WARLORDS.



These troops are expensive but unlike most barracks troops, they do not require weapons. Many of them also have unique special abilities.

Specialist Troops

Specialist Troop		Special Ability	Weapon	Cost
	Warrior Monk	Area attack	None required	Gold
	Horse Archer	Can shoot arrows in all directions while riding.	None required	Gold

	Ninja	Invisible to enemies until in close proximity. Can also climb walls. Throws shuriken on first attack.	None required	Gold
	Fire Lancer	Flamethrower has a wide angle and can be used when standing on a wall to attack troops on the ground.	None required	Gold
	Samurai	Short powerful charge attack.	None required	Gold
	General*	Provides a damage buff to nearby units.	None required	Gold

* The General also grants nearby units a damage bonus.

Siege Camp

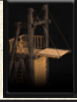
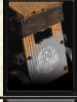
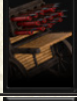
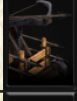
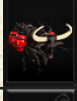
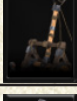
To breach an enemy castle you will need siege equipment which are built at a siege camp. A siege camp can only be built in your own territory or the territory of a warlord you control.



Left click on the siege camp to view which siege equipment you can build. In order to build siege equipment you will need resources, gold and available peasants for engineers. If the buttons in the siege equipment panel are greyed out it means you are lacking one or more of these resources.



Siege Equipment

Siege Equipment		Ability	Cost
	Ladderman	Places ladders against walls to allow troops to climb up onto them.	Gold
	Siege Tower	Docks against walls allowing troops to run onto walls.	Gold
	Mantlet	Absorbs all missile fire in a radius.	Gold
	Fire Arrow Cart	Fires a group of fire arrows that do area damage.	Gold + Gunpowder
	Ballista	Fires arrow bolts with great accuracy.	Gold
	Fire Ox	Set her alight and point her at the enemy!	Gold + Gunpowder
	Catapult	Throws rocks from medium range.	Gold
	Mortar	Fires mortar shells from long range but their damage decreases the further out they are.	Gold + Gunpowder
	Rocket Launcher	Fires a giant, one shot, firework that does massive damage to walls, towers, gatehouses and buildings.	Gold + Gunpowder
	Trebuchet	Throws rocks, diseased animals and thunder crash bombs at long range.	Gold



Chapter 4:

COMMANDING UNITS

Selecting Units

Being able to easily select troops and move them around the map is key to military success in STRONGHOLD: WARLORDS.

To select a military unit simply left click on him. A health bar will appear over his head when selected. If the military unit gets damaged the green health bar will turn yellow and then eventually red. If you click on an enemy unit the health bar will be blue to differentiate them from your own troops. Allied troops will have white health bars.



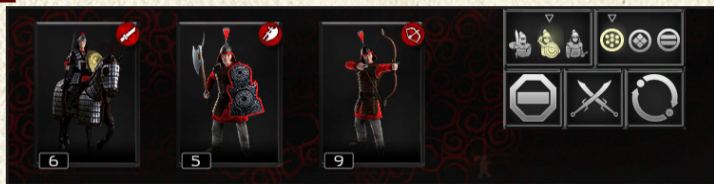
To select a group of units, press and hold the left mouse button then drag the pointer to create a box around them. When you release the mouse button, all of the units that were within the box will now become selected. Double clicking on a unit selects all units of that type currently on screen.

Units can be added or removed from a selection by holding down the SHIFT key then left clicking on them. Multiple units can be added to a selection by holding down the SHIFT key and dragging a box around them.

Troop Selection Panel

When units are selected you will see the troop selection panel appear at the bottom of the screen along with the units command box.

The unit information panel shows you the type and amount of units currently selected and allows you to select and deselect specific unit types.



Left clicking on a unit type from this panel will select only that unit type whereas right clicking will remove that unit type from the current selection.

Grouping units

You can form a group of units that you can command at the same time.

1. To form a group of units, first make a selection.
2. Next hold down the CTRL (control) key and press a number on the keyboard to assign to the group.
3. Once a group has been assigned a number, pressing that number on the keyboard will select it. For example pressing the number 1 on the keyboard will select group 1.
4. Pressing the same number again will take you to the group's current position on the map.

Marching Orders

When you have a unit selected, your pointer will change to the movement cursor.

Press the right mouse button on the map to move your troop to that spot. Holding down the right mouse button while moving troops will allow you to select which direction they will face when they reach their destination.

Moving units onto walls, towers and buildings

To position troops on top of your walls or buildings and defensive structures select a unit then right click to send units to that destination. Ensure you have stairs placed to access them.



Attacking Units

To attack an enemy unit, select a troop and right click on the desired target.



You will see a sword icon appear when the enemy is below the mouse. If the sword icon is tinted red, the target cannot be attacked, usually because there is no open route to reach it.

Horse archers will continue on their current path if ordered to attack a unit within range.

Attack Move

By default when you move troops to a location on the map they will not engage enemy troops while they are moving. However, if you hold down CTRL and click on a location on the map, you will invoke the attack move command and your troops will actively engage with any enemies in range while en route to their destination.

Attacking Walls and Buildings

The best way to tear down walls is by using siege equipment such as catapults, trebuchets, mortars and rocket launchers. If however these are not available (or have been destroyed), there are alternatives. Laddermen and siege towers can dock against enemy walls allowing your troops to climb up onto the tops of the walls. Simply select a ladderman or siege tower, hover over the wall and right click when the dock icon appears.

If all else fails then walls and buildings can also be targeted using troops. To target a building, wall, tower or gatehouse, select a troop and right click on the structure. A pickaxe icon will appear when a building or wall is under the mouse. If the building cannot be attacked, the pickaxe will be tinted red. For example, keeps are invulnerable and cannot be destroyed.





Tip: The ninja is the only unit that can climb onto walls without using a staircase, ladder or siege tower.

Capturing Gatehouses

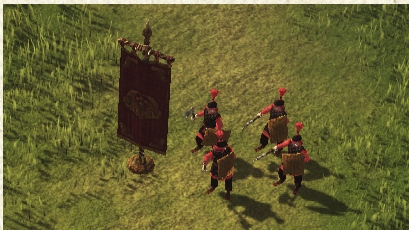
Enemy gatehouses can be captured by your troops if you station them on top of the gatehouse with no enemy troops present. This allows your troops to move through the gatehouse below.



Getting to the roof is the hard part; Ninjas are very helpful here as they can scale the wall next to the gate and capture it before the enemy has time to react.

Rally Points

After troops have been created they will by default all assemble just outside the Barracks, Military Academy or Siege Camp. To change the default place where troops assemble, select the Barracks, Military Academy or Siege Camp, right click on the Rally Point button, then right click on the map where you want them to assemble.



To place a rally point individually for each troop type, right click on the troop icon, then right click on the map.





Unit Stances

Using a unit's stance icon you can switch between three modes of operation for your selected group of troops.



Aggressive Stance – Units set to an aggressive stance will look a long way to engage or chase down enemy units. When the enemy is defeated your units will not return to their original position. Units in aggressive stance will respond actively to missile attacks.



Defensive Stance – Units set to a defensive stance will move a short distance from their post to engage any enemy units that come close to their position. Once there are no more enemy units to engage, they will return to their original position.



Stand Ground – Units set to stand ground will not move from their posts unless ordered to do otherwise. Ranged troops are always in Stand Ground stance, and will still fire at enemy troops that move into range.

Unit Formations

If you have a group of units selected you can left click on the formation icon to cycle through the three available formations you wish to put your troops into. Each formation also has its own smaller icon you can left click to jump straight to it.



No formation - Troops form a ragged group and each troop type will move at its own speed



Box - Troops form a form a well organised box, creating a strong collective unit.



Line - Troops form well organised rows, very useful for either attack or defence.





Unit Commands



Stop - Cancel the current command e.g. use it to stop a group of troops patrolling or a trebuchet from firing rocks.



Attack Here - The Attack Here icon allows you to command ranged units and siege weapons to attack an area on the map, which they will continue to do until you command them to stop. Archers given this command will fire in volleys, allowing their arrows to fly over walls. Mortars can be commanded to Attack Here allowing their cannonballs to drop short and roll towards a target.



Patrol - Use the Patrol command to force a unit or group of units to patrol between two points. Move the unit to where you want their patrol to start, select the patrol button then right click where you wish the patrol to end.



Unpack Trebuchet - Click to unpack the trebuchet and prepare it to attack an enemy castle.

Trebuchet Ammo Types

The trebuchet has the unique ability to fire more than one ammo type. Each ammo type has a cooldown time until it can be used again.

Ammo	Ability	Cooldown
Rocks	Great for knocking down walls.	Short
Diseased Pigs	Small amounts of damage on impact. Creates a number of small disease clouds that last for a long period of time.	Medium
Diseased Water Buffalo	Moderate amount of damage on impact. Creates a large disease cloud that lasts for a short period of time.	Long
Thunder Crash Bombs	Send balls of fire into the enemy's castle.	Long

Hurling dead animals over enemy walls causes the spread of disease amongst your enemy's population, disrupting their economy. Different animals spread disease in different ways. Disease can be countered by building a herbalist. As soon as a disease outbreak occurs the herbalist will go to work curing the disease.





Map Bookmarks

CTRL + ALT + 0 to 9: Pressing CTRL & ALT & 0 to 9 creates a bookmark of the current location on the map. Press ALT and the appropriate number to return to this location.



Chapter 5:

DEFENDING YOUR CASTLE

STRONGHOLD: WARLORDS uses tile-based building to make constructing an efficient, tightly packed castle extremely easy. Walls follow this same system as other buildings, allowing them to be built at 45 degree angles. This makes it easy to place gates, towers and stairs anywhere along walls and have them seamlessly connect together.

Building Walls

Walls in **STRONGHOLD: WARLORDS** can be built in thick segments or as thin curtain walls.



To place a line of wall, click and hold the left mouse button, drag out the wall and then release the mouse button to construct the wall. You can "layer" your walls by clicking and dragging a second wall adjacent to the first. There's no limit to how thick your walls can get if you have enough stone.

When placing walls, if any piece of the wall is not in a valid building location, the invalid section(s) will turn red.

In order for your troops to access the walls or towers, stairs must be attached to a section of wall.

Units standing on walls gain a range bonus and the wall they are standing on will also absorb a proportion of the arrows fired at them. Walls also have braziers built into them allowing archers to shoot flaming arrows at gunpowder trails and gunpowder stashes.



Gatehouses

Gatehouses are the main routes in and out of your castle. It is always a good idea to have several men stationed on top of one, in case your opponent makes a surprise assault to capture them with assassins. The gatehouse will only let your own and allied units through it, but if captured only enemies will be allowed through.

Tip: It is always a good idea to have several men stationed on top of a gatehouse, in case your opponent makes a surprise assault to capture them with ninjas.

Towers

Towers can withstand more damage than walls and offer greater range bonuses. Troops on them are also less susceptible to siege weapons as they will not crumble until they are completely destroyed. Troops can enter towers from any connected wall.

Wall Mounted Siege Weapons

There are a number of specialist defences that can be attached to walls to ward off the enemy. Select the siege weapon from the build panel and position it over a wall; the siege weapon will snap to the wall allowing you to place it.



Turret - This bolt-on turret is packed with archers and is a quick way to add extra defences to your castle.

Fire Arrow Platform - Fire arrow platforms fire a succession of rockets over a medium area, dealing damage to all troops in the area.

Mangonel Platform - Mangonel platforms fire several rocks at once over a wide area. They are useful against large groups of enemies as well as buildings.



Ballista Platform - Ballista platforms fire a single ballista shot over a long distance which makes them excellent anti-siege weapons.

Defenses

As well as walls and towers you have a wide arsenal of tricks and trap available to deter even the toughest of invading forces.

Barricades

Wooden barriers that are useful for protecting archers and siege equipment as they can be used to block off access to an area.



Hoardings

Hoardings are simple wooden barriers that can be attached to the side of walls to provide extra defence to the archers standing near them. They are good at absorbing missile fire but will fall quickly under catapult assaults.

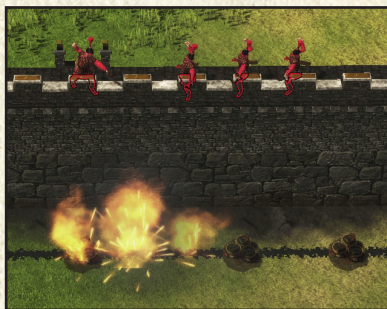
Tiger Cages

Tigers do not like being kept in small cages. When an enemy walks by, the cage will break and the tiger attacks. Tiger cages can, however, be locked to prevent them from automatically triggering.

Tip: The tiger may attack your own troops if you get too close!

Gunpowder Trails & Gunpowder Stashes

Using gunpowder produced by your gunpowder workshops, you can place chained gunpowder trails and gunpowder stashes around your castle.



Archers on walls, towers and gatehouses can launch fire arrows, setting them alight and causing a chain reaction along the adjoining trails and stashes. Gunpowder trails inflict fire damage to any troops, enemy or allied, standing nearby and gunpowder stashes inflict massive damage to anyone standing near them when they explode.

Water Pots

Fire is one of the most destructive misfortunes that can befall a castle full of tightly packed wooden structures. Luckily you can place water pots around your castle as a preventative measure.



As soon as a fire breaks out the water pot worker will rush to put out the fire. Water Pots only have a limited range so make sure you have enough to cover your most important buildings.

Chapter 6:

WARLORDS & DIPLOMACY

Well planned diplomacy is one of the key strategies in STRONGHOLD: WARLORDS. Using diplomacy you can take control of warlords and issue them commands, known as edicts, to supplement your economic and military endeavours.

Diplomacy Points

To influence warlords and issue them edicts, you will need diplomacy points. Diplomacy points are generated naturally over time at a rate of 6 per day. It is possible to increase the amount of diplomacy points being generated by placing diplomacy buildings or by taking control of the Pig or Crane warlords.

Diplomacy Buildings

The consulate and embassy buildings are expensive but the easiest way to generate extra diplomacy points.



Diplomacy Building	Gold Cost	Maximum Number	Diplomacy Points Generated
Consulate	200	4	12 per day
Embassy	500	2	30 per day



Connecting Roads to Diplomacy Buildings

If you connect a road between your keep and a diplomacy building, the diplomacy building will generate more diplomacy points.

Warlords Map

The Warlords Map is the central hub for managing your warlord strategy.



Using the warlords map you can see where the warlords are, find out who currently controls them, try to influence them using diplomacy and give your warlords commands using edicts.

The Warlords

There are 8 warlords to take command of, each with different specialities.

Warlord	Speciality	Perk	Military Capture	Diplomatic Capture
	Food/ Resources	Workers drop off more rice.	Easy	Easy
	Diplomacy/ Gold	Housing quality increased.	Easy	Very Hard
	Castle Defense	Walls & towers are stronger.	Quite Easy	Medium
	Mounted Troops	Stable spawn rate increased.	Quite Easy	Medium
	Resources	Workers drop off more resources.	Medium	Quite Easy
	Food	Small diplomacy points boost.	Medium	Medium



	Military Support	Infantry damage increased.	Hard	Hard
	Military Support	Fear factor increased	Very Hard	Very Hard

TIP: Right click on a warlord on the Warlords Map to automatically close the Warlords Map and jump to the warlord on the game map.

There are 2 ways of taking control of Warlords, either by influencing them using diplomacy or by simple military might.

Diplomacy Controls

When you click on a warlord in the warlords map, the diplomacy control panel will appear on the right side of the map. At the top of the panel is your current amount of diplomacy points and the rank of the selected warlord. A warlord's rank determines which edicts are available; the higher the rank the more edicts are available to be issued.

In the main body of the panel are the edicts and influence tabs.

Influencing Warlords Using Diplomacy

When clicking on a warlord you do not currently control, the influence panel will be displayed.



Each Warlord requires a different amount of influence before they can be controlled. There are 3 options for influencing warlords: +10 influence, +20 influence and auto influence. Each option requires diplomacy points and there is a cooldown period between influences. Auto



influencing constantly adds +10 influence until the influence threshold is reached.

Once the influence threshold is reached you can demand obedience of the warlord. Click the demand obedience button and the warlord will be under your control and can be issued edicts.

Taking Control of Warlords by Force

Alternatively you can take control of a warlord by force using your army. When you send your army to attack a warlord they will engage in combat. When the warlord has been reduced to zero health, he will bend the knee. This will allow him to be captured, as long as one of your troops is standing next to him.



Be careful because while the warlord is bending the knee he can be captured by the enemy, as long as the enemy has only his troops in the vicinity of the warlord.

Warlord Perks

Each warlord has a “perk” that is granted to the lord that is controlling the warlord. As soon as a warlord is captured the perk becomes active and stays active until you lose control of the warlord. Depending on the warlord captured, these perks can include increased food and resource production as well as stronger walls and towers and increased infantry damage. For a full list of perks see the warlords table.

Tip: warlord perks stack so bear that in mind in games where there are multiple warlords of the same type on the map.





Issuing Edicts

The primary reason for controlling warlords is the ability to issue edicts. Edicts are commands that the warlord will carry out on your behalf.



For example the ox can be commanded to send extra resources to support your economy. Whereas the dragon can supply arrow carts as reinforcements. Upgrading a warlord will unlock more edicts.

Upgrading Warlords

Each warlord has 6 levels of edicts. The current level is displayed at the top of the diplomacy control panel on the warlords map. To unlock the next level click the Upgrade Warlord button at the top of the edicts list.



Chapter 7:

THE CAMPAIGN LORDS

Thục Phán: Jungle Kingdoms



Thục Phán was the ruler of the Âu Việt tribes who were based in the mountainous northern area of what is now known as Vietnam. Thục Phán used his army to defeat the last of the Hung kings who had ruled over the area of Văn Lang for over 2000 years. The newly combined kingdom was known as Âu Lạc and Thục Phán built a fortress at its capital, Cổ Loa, now known as Hanoi. Legend has it that Thục Phán had a dream about a Golden

Turtle. A few days later the golden turtle emerged out of a river and gave Thục Phán one of his claws. Thục Phán used the claw to make a magic crossbow which he used to successfully defend the fortress over a number of years from attacks by Zhao Tuo, a general of the Qin dynasty. After numerous failures Zhao Tuo devised a plan to steal the magic crossbow. Using the crossbow Zhao Tuo successfully attacked the fortress, forcing Thục Phán to flee the battle. At the river he again encountered the golden turtle who revealed to Thục Phán that his daughter had helped Zhao Tuo steal the crossbow. Thục Phán was so angry he killed his daughter. He then rode off with the golden turtle.

Qin Shi Huang: The Warring States of China



Qin Shi Huang was born Zhao Zheng and was the eldest son of the Qin prince Yiren. At the age of 13 Zhao Zheng became king of the state of Qin in northwestern China. By 221 BC the Qin army had defeated the other 6 rival enemy states and King Zheng proclaimed himself Qin Shi Huang, the first emperor of a unified China. As emperor he initiated a series of reforms aimed at centralising power and limiting the feudalism that had led to the

previous periods of instability. His implementation of a number of standards for weights, measurements and currency led to the building of an extensive network of roads and canals to facilitate trade across the regions. Fortresses were erected to hold off barbarian incursions and eventually linked to form the Great Wall. Perhaps most importantly

he standardised the regional scripts to form one language that was used across China. In 210 BC, during a tour of Eastern China, Qin Shi Huang became seriously ill and died, although the exact reason for his death is unknown. Qin Shi Huang was buried in a huge tomb that took over 700,000 workers and 38 years to build. One section of the tomb contains the world famous Terracotta Army, consisting of over 8000 life-sized soldiers, chariots and horses made from terracotta to represent the Qin army.

Genghis Khan: Coming of the Mongols



Gengis Khan was born Temüjin Borjigin. His father led the Borjigin clan of the Mongols but was assassinated when Temüjin was only 9 years old. His father's clan members deserted the family and it was left to his mother to look after him and his brothers. It was a hard life of poverty and his mother taught him the key skill of survival and the benefit of making strong alliances. Through his alliance with

Toghril, khan of the Kereit tribe, Temüjin formed an army of 20,000 soldiers and defeated the rival Merkit tribe. His power steadily grew and eventually he was in the position to take on and defeat the formidable Tartars, killing all the adults to ensure there would be no future uprising. Soon after this though, Temüjin and Toghril fell out and Toghril allied himself to the Naimans, the last of the great rival tribes. Temüjin's army defeated the Naimans and in 1206, he was crowned the leader of the Great Mongol Nation. He assumed the title of Genghis Khan, meaning universal leader, marking the start of the Mongol Empire. Much of Genghis Khan's success came from the political and military reforms he introduced. The size of the Mongol Empire meant it was comprised of a number of different races and ethnicities. These people were treated as equals and all were considered to be Mongols. Religious tolerance was a key principle, allowing people to practice different religions without fear of reproach. Key individuals were promoted on merit, rather than family ties as it had been in the past, and were afforded a greater degree of autonomy, in return for their unwavering loyalty. Genghis Khan was also good at adapting rapidly to changing circumstances; although the Mongols are synonymous with horseback warfare, it was obvious this was not going to be effective at sieging cities. He therefore employed Chinese engineers to develop siege weapons such as ladders and catapults, enabling the Mongol army to siege fortresses and expand the empire even further.



Toyotomi Hideyoshi: Japan at War



Toyotomi Hideyoshi was the son of a peasant. He became a foot soldier in the army of Oda Nobunaga, the first great Japanese warlord, and fought in a number of important battles, including the Battle of Okehazama in 1560. Hideyoshi's intelligence was quickly recognised and he was promoted to samurai and gradually became one of Nobunaga's most trusted lieutenants. Hideyoshi was appointed a general of the Oda army and led a number

of successful campaigns in Western Japan. It was during this time that Hideyoshi learnt of the betrayal of another of Nobunaga's generals, Akechi Mitsuhide. Mitsuhide was ordered by Nobunaga to send his army to reinforce Hideyoshi. Instead Mitsuhide ordered his army to attack Nobunaga, who was resting at the Honnō-ji temple in Kyoto. Without his army around him and facing certain defeat, Nobunaga and his eldest son both killed themselves by committing seppuku. Hideyoshi immediately moved his army east to avenge Nobunaga and defeated Mitsuhide at the Battle of Yamazaki. However the question of who should succeed Nobunaga as the leader of the Oda clan fueled further conflict. Hideyoshi supported Nobunaga's grandson whereas Tokugawa Ieyasu, a powerful daimyo (feudal lord), supported Nobunaga's second son. The two armies fought at the Battle of Komaki and Nagakute but no true victor emerged. With their armies severely depleted, Hideyoshi and Ieyasu agreed a truce and eventually agreed to form an alliance. In 1586 Hideyoshi was awarded the family name of Toyotomi by Emperor Go-Yōzei, and thus came to bear the name Toyotomi Hideyoshi. Determined to continue Nobunaga's legacy, Hideyoshi embarked on his attempt to conquer the whole of Japan in an effort to unify the country after more than two centuries of feudal warfare. In 1590 Hideyoshi achieved his goal by sending a massive army to defeat the last of his major rivals, the Hojo clan, at the Siege of Odawara. After their defeat, he forced them to commit suicide and handed their lands to Ieyasu. Following the unification of Japan, Hideyoshi turned his attention to invading Korea. After great initial success, leading to the destruction of large areas of the country, Hideyoshi's forces were eventually driven back when Korea requested military intervention from China. Hideyoshi died in 1598, still frustrated by his failed campaigns during the Korea war.



Chapter 8:

MULTIPLAYER

STRONGHOLD: WARLORDS allows players to fight multiplayer battles with up to 8 players (with a maximum of 4 human players).

Multiplayer Lobby

The Multiplayer Lobby displays all the STRONGHOLD: WARLORDS games currently in progress. You can either choose to join a game from the list or host a game of your own.

Hosting a Game

As the host you can set the parameters of the game including the maximum number of players who can participate in the game and the map the game will be played on.



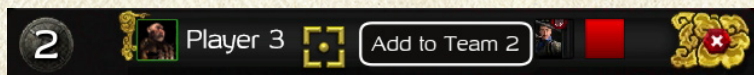
Click on the warlords icons on the mini-map to change which warlords you want to play with (if your chosen map supports warlords). Select the question mark to let the computer choose a random warlord when the game starts. Click on the Advanced options button to view a range of extra settings to allow you to customise the game further.

Once you are happy with your settings click on the green tick to notify the other players the game is ready to play.



Forming Teams

To form a team drag one player on top of another player.



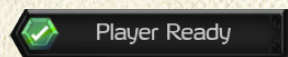
You can form teams of up to 7 players with teams comprising of any combination of humans and AI players.

Co-op Play

Multiplayer can also be played by 2 players in co-op mode. Instead of each player controlling their own castle, co-op play challenges both players to manage the same castle. To form a co-op team, first make a regular team. Now drag one teammate on top of the other teammate to form the co-op team.

Game Lobby

If you have joined a multiplayer game you will be taken to the game lobby where you can chat to the other participants and set team alliances.



When you are ready to play click on the ready button to notify the other players.



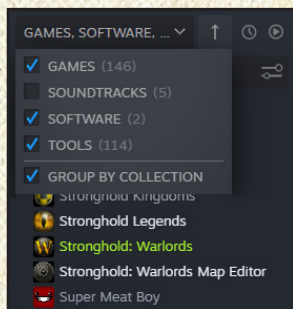
Chapter 9:

MAP EDITOR

Create your own maps and scenarios using the STRONGHOLD: WARLORDS Map Editor available within Steam.

Where is the Map Editor?

The map editor is a separate application that is available within the Tools area of your Steam Library. To view the applications within the Tools area, click on the dropdown above your games list and select Tools.



Now scroll down your games list and you will see Stronghold: Warlords Map Editor listed under the main app. Launch the Map Editor as you would any other game in Steam.

Map Types

The map type is set via the Scenario Editor:

Skirmish/Multiplayer - Design a map with player estates and warlords that can be used in Custom Skirmish and Multiplayer.

Mission - Design a single player mission with events and objectives using the in-built scenario editor.

Freebuild - Design a map for the players that just want to build a perfect medieval village.



Basic Skirmish Map Tutorial

1. **Selecting a Map** - Click File and select New. Select the size of map you would prefer: Tiny, Small, Medium, Large and Extra Large. We advise starting with a small map and saving often throughout this tutorial.
2. **Estate Placement** - Click the Factions tab in the Tools section. The list on the left hand side specifies if an estate is owned by a Player (human or AI), Warlord or Neutral (not owned by any players). Each faction has a colour associated with it, which can be "painted" onto the map to mark out their estates. Once painted, select 'Create Spawn Point' to designate where each faction's Keep will be positioned in the estate.
3. **Plateaus and Elevations** - Click the Landscape tab, select Plateau and choose from any of the five plateaus. (Sea-level, Lowlands, Uplands, Highlands, Mountain peak). Use the slider to adjust the size of the brush and paint onto the map as you see fit. Players and Warlords require flat land to build their strongholds, so try to keep the areas you wish to build in as clear and flat as possible.
4. **Refining the Landscape** - Select Freestyle from the Landscape tab and then choose the Smooth brush. This particular brush will smooth out the differences between elevations, leaving you with a more natural finish in comparison to the straight and box-like terrain already created. Choose a relatively small and low intensity brush and start smoothing out those elevations.
5. **Texturing** - Click on the Texture tab, then select a texture from the list provided. Adjust the size and intensity and paint freely on the map.
6. **Resource Placement** - Click on the Resource Tab and select Wood (try using the Bamboo Tree Mix). Then start placing individual trees where they are required. Now select Stone, choose a brush size and start painting the tiles as needed, making sure to have enough for at least one Stone Quarry.
7. **Vegetation Placement** - Now that the core of the map has been finished, you can populate it with rocks and vegetation. Click on the Vegetation tab and select any of the shrubs or rocks available. Click on the map to place them. Use the mouse wheel to rotate them before placing.
8. **Pathing Tiles** - Pathing tiles determine where units can and cannot traverse. Blue tiles block movement and blank tiles allow units to move freely. Click on the Pathing Tab and paint your pathing restrictions as needed for your map.
9. **Save and Play** - Your map is now ready. Click File and select Save to save the game to Documents\Stronghold Warlords\Saved Games. The map will be available to play within the Custom Skirmish or Multiplayer lobby.





Advanced Tools

Once you are comfortable making basic maps you can add some extra features to enhance them even more. The Sounds tab allows you to add environmental sounds such as birds or a flowing river. The Scenario Editor allows you to set the starting goods and building availability in a map, create missions with objectives and implement invasions and other events using a trigger and action scripting system. The Camera Grid tab even allows you to create a camera sequence at the start of the map.

For more information about map editor check out our official map editor guide in the [Stronghold: Warlords Steam Guides area](#).

Steam Workshop

Steam Workshop allows you to share your maps with the STRONGHOLD: WARLORDS community and download and play maps created by other players. [Click here](#) to browse the Steam Workshop page.

To publish a map to the Steam Workshop:

1. Save your map if you haven't done so already. Click File and select Save.
2. Click File and select Publish to Steam Workshop.
3. Enter a name and description for the map.

The screenshot shows the Steam Workshop publishing window. At the top, it says 'Please view and agree to the workshop terms of service before publishing' with a link to 'View terms of service'. The form includes fields for 'File Name' (containing 'dual2'), 'Title' (containing 'Dual 2'), and 'Description' (containing 'Awesome map based on the iconic Counter-Strike map'). Below these are 'Tags' with checkboxes for 'Balanced', 'Unbalanced', 'Abundant Resources', 'Scarce Resources', 'Historical', 'Fantasy', 'Flat', and 'Mountainous'. There are also checkboxes for 'Legacy', 'Warlords', 'Peplica', and 'Sea'. At the bottom, there is a 'Visibility' section with radio buttons for 'Everyone' and 'Steam Friends Only' (which is selected). The window has 'Publish' and 'Close' buttons at the bottom.

4. Choose any tags you feel will be helpful to other players.
5. Choose whether you would like your map to be visible to everyone or just your Steam friends.
6. Finally click Publish to send the map to the Steam Workshop.





Chapter 10: COMMUNITY FEATURES

Steam Achievements

STRONGHOLD: WARLORDS contains a number of Steam achievements for you to discover as you play. Can you collect them all?

Facebook, Twitter & Instagram

Find out all the latest news and updates at our Facebook page [@PlayStronghold](#) or follow us on Twitter [@fireflyworlds](#) and Instagram [@firefly_studios](#)

Discord

Join our official [Stronghold Discord](#) server for exclusive Stronghold content, competitions and giveaways. Designed to be a home for castle lovers everywhere, the Discord can also be used to team up for some classic Stronghold multiplayer, share your greatest custom maps, post terrible Stronghold memes and quote our beloved Scribe until the early hours of the morning.

YouTube

The Firefly YouTube channel is the place to go for official videos, interviews, features on upcoming updates and news of new Stronghold games: <https://www.youtube.com/user/fireflyworlds>



Chapter 11: SUPPORT

In the unlikely event that you find a fault with your game disc please return it to your retailer for a replacement.

If you are experiencing any difficulty using Steam or installing the game on Steam please visit the official Steam support site:

help.steampowered.com

If you are experiencing problems running the game please make sure you are using the most recent Windows service pack version, have the latest version of DirectX installed and have the latest graphics card drivers installed. If you are still experiencing issues please visit the Firefly Studios support site:

support.fireflyworlds.com

Chapter 12: HOTKEYS

Pause	Pause Break or P
Show Menu	ESC
Scroll Map	WASD or arrow keys or move mouse to edge of screen
Select	LMB
Order	RMB
Zoom	ALT+W/ALT+S or mouse wheel
Rotate	Q/E or hold mouse wheel
Rotate Buildings	SHIFT+Q/SHIFT+E or mouse wheel
Place Stone Curtain Wall	Z
Place Stone Wall	X
Delete	Delete
Repair	Insert
Open Warlords Map	Space Bar
Top Down View	ALT+Space Bar
Toggle Interface On/Off	Backspace
Increase Game Speed	Plus key or Numpad plus key
Decrease Game Speed	Minus key or Numpad minus key
Select Lord (double tap to focus)	L
Cycle Focus on All Lords	SHIFT+L
Select Granary (double tap to focus)	G
Select Stockpile (double tap to focus)	H
Select Armoury (double tap to focus)	J
Select Market (double tap to focus)	SHIFT+G

Select Keep (double tap to focus)	K
Select Last Placed Siege Camp (double tap to focus)	N
Select Barracks (double tap to focus)	B
Select Military Academy (double tap to focus)	M
Attack Move	CTRL+RMB
Attack Ground	ALT+RMB
Cycle Stance	R
Cycle Formation	F
Pack/Unpack Trebuchet	T
Patrol	I (RMB to set patrol point)
Place Rally Point (Barracks/Military Academy/Siege Camp)	RMB on unit icon + RMB on ground
Greatest Lord	TAB
Ping Mini-Map	ALT+LMB
Focus on Warning	C or CTRL + Space Bar
Toggle Chat	SHIFT+Enter
Toggle Team Chat	Enter
Select Unit Group (double tap to focus)	# (i.e 1-9 keys)
Create Unit Group	CTRL+#
Add Selected Units to Group	SHIFT+#
Add Units to Current Selection	SHIFT+LMB
Remove Units from Current Selection	CTRL+LMB
Select All of Unit Type (UI panel)	LMB
Remove All of Unit Type (UI Panel)	RMB
Create Camera Hotspot	CTRL+ALT+#
View Camera Hotspot	ALT+#

Chapter 13:

GAME CREDITS



FIREFLY
s t u d i o s

Game Designers	Simon Bradbury Stephen Richards
Executive Producer	Eric Ouellette
Senior Producer	Paul Harris
Producer	David Robertson
Lead Programmer	Anthony DeLibero
Senior Programmer	Matt Smith
Graphics Programming	Matt Smith
AI Programming	Stephen Richards
Multiplayer Programming	Anthony DeLibero
UI Animation & Programming	Anthony DeLibero
Audio Programming	Anthony DeLibero
Gameplay Programming	Anthony DeLibero Matt Smith Stephen Richards
Map Editor Programming	Matt Smith
Additional Programming	Jack Massey
Specialist Pathfinding Programming	Thomas Young @ PathEngine https://www.pathengine.com
Lead Artist	Andreas Lostromos <i>Benjamin Lloyd Thomas</i>
3D Artists	Andreas Lostromos Jorge Cameo Adelin Jercan <i>Benjamin Lloyd Thomas</i> <i>Emmanuele Biondi</i>

Technical Artist	Niall Benzie
UI Artist	Tomas Ward
Illustrations	Tomas Ward
Digital Paintings	Mariusz Kozik
Cutscene Art, Animation and Composition	Niall Benzie
Music composed and arranged by	Robert L. Euvino
Musicians	Bamboo, from The Bamboo Grove (Dizi, Xiao) Shawn Renzoh Head (Shakuhachi) Ya Ya Moo (Cello) Rebecca Tan (Guzheng) Nicole Ge Li (Erhu) Robert Euvino (Keyboards, percussion, miscellaneous abused objects)
Sound Design	Robert L. Euvino
Recording and engineering provided by	Night Owl Productions Inc. http://www.nightowlproductionsinc.com/
Lead Tester	David Robertson
Firefly Testers	Josh Munro Neal Bonner Murray Wilson

Additional Testing	Mark Barney Vincent Boutillier Pascal Heymann Daniel Matas Daniel Olaleye Emma Ouellette Georgy Politov Ben Tarrant Darren Thompson Patrick Singer Marcin Warkusz
Campaign Designers	Stephen Richards Simon Bradbury Eric Ouellette
Campaign Creators	Stephen Richards Eric Ouellette Simon Bradbury
Skirmish Map Creators	Neal Bonner Josh Munro David Robertson
Manual	Paul Harris
Narrative & Script	Stephen Richards Simon Bradbury
Voice Casting and Direction	Peter Beckmann Simon Bradbury Robert L. Euvino Stephen Richards
Dialogue Producer and Post Production Supervisor	Peter Beckmann http://technologyworks.co.uk

Voice Actors (English)	Justin Cabanting Dominic Hawksley Simon Greenall Chris Lateano Allan Lau Rae Lim Kuei-Lin Hsu Beau Marie Jay Preston John Wang Eric Yang Eddy Yeung
Voice Actors (German)	Lisa Braun Holger Franke Oliver Brod Matthias Horn Mario Hassert
Voice Actors (French)	Martial Leminoux Jerome Berthoud Laura Pelerins Frederic Souterelle Franck Sportis
Voice Actors (Spanish)	Xadi Mouslemeni Sonia Román Albert Vilar Domenc Farell Santi Lorenz Lluís Gustems
Voice Actors (Russian)	Ivan Porodnov Ilya Slanevsky Aliya Nasyrova Vladimir Golicyn Alexander Skidanov Egor Zhirnov

Voice Actors (Polish)	Kamil Pruban Jan Aleksandrowicz Zuzanna Galia Jakub Wieczorek Janusz Zadura
Voice Actors (Mandarin)	Chen Haotian (陈昊天) Wu Qiuyun (吴秋韵) Chen Wei (陈伟) Wang Zi (王梓) Kong Xin (孔新)
Voice Actors (Japanese)	Eirin N Towa Otomo Yukihiro Nakatani Aoto Hosaka Mashiro Takamiya Mase Keita Ishige Yuya
Localization Producer	Paul Harris
Localization Team	Localize Direct https://www.localizedirect.com
PR and Marketing Director	Nick Tannahill
Video Production	Aaron Hayden
Videographer (Game Trailers)	Niall Benzie Aaron Hayden
Community Lead	Natasha Evette
Community Managers	Vincent Boutillier (France) Pascal Heymann (Germany) Daniel Matas (Spain) Georgy Politov (Russia) Marcin Warkusz (Poland) Sticky Rice Games Inc. (Japan)
Digital Advertising Manager	Debbie Trautman
External PR	Evolve PR https://www.evolve-pr.com
PR & Marketing (Japan)	Sticky Rice Games Inc. (Japan)

Web Programming	David Robertson Ben Tidy Leo Camangian Jr.
DevOps Engineer	Alessio Molinaro
Financial Clever Clogs	Megan Ouellette Laurie Goldstein
Business Consultant	Nicholas Lovell
The Making of Stronghold: Warlords Video Transcription	Victoria Harris
Interns	Gregor Dickie Freddie Freeman Daniel Hardy Justen Koo Jacob Lane Luke Perring
Special Thanks	Mark Barney Anthony Brook Nikolay Dimitrov Darrin Horbal Meredith Meadows Cristian Olteanu Andrew Prime Ben Tarrant Darren Thompson Jack Chen Cenega Sticky Rice Games Inc Tokyo College of Anime & E-sports Fabian "Wuselfaktor" Coenen Our partners and family members for (still) letting us be game devs :-)
Baby born during the development of Stronghold: Warlords	Abigail Stirling Benzie

Chapter 14: TECHNOLOGY CREDITS

STRONGHOLD: WARLORDS uses the following technologies:



Chapter 15:

HEALTH WARNING

Always play in a well lit environment. Take regular breaks, 15 minutes every hour. Discontinue playing if you experience dizziness, nausea, fatigue or have a headache. Some individuals are sensitive to flashing or flickering lights or geometric shapes and patterns, may have an undetected epileptic condition and may experience epileptic seizures when watching television or playing videogames. Consult your doctor before playing videogames if you have an epileptic condition and immediately should you experience any of the following symptoms whilst playing: altered vision, muscle twitching, other involuntary movement, loss of awareness, confusion and/or convulsions.

STRONGHOLD WILL RETURN



©2021 Firefly Studios Ltd. All rights reserved.

©2021 Valve Corporation. Steam and the Steam logo are trademarks and/or registered trademarks of Valve Corporation in the U.S. and/or other countries.