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1. Introduction

1.1. Welcome

Welcome to Sengoku Jidai: Shadow of the Shogun!

Sixteenth century East Asia is in turmoil. In Japan, the ruling Shogun family has lost its grip on the country. A civil war is brewing as regional lords actively expand their influence. In Korea, the Joseon dynasty is paralysed by factional struggle within the royal court. In China, the might of the Ming dynasty is waning due to rebellions and foreign incursions. These seemingly separate internal conflicts will pave the way for an international war involving the three countries.

Sengoku Jidai: Shadow of the Shogun is a turn-based tactical and strategic game set during this turbulent time; primarily focusing on the Japanese Warring States period and Japanese Invasion of Korea. Other armies from East Asia are also made available to simulate different conflicts across the region.

Take command of diverse armies which employ varying tactical doctrines. Lead your chosen army and their generals to victory in set-piece historical battles or “what-if” skirmish situations against
an AI or human opponent. Become more ambitious and achieve regional domination through the operational campaign layer where you have to deal with the consequence of preceding battles.

To become the Japanese Shogun, to overthrow the Emperor of the Middle Kingdom, or to establish a Pan-Asian Empire, one requires mastery of the battlefield. In this time of turmoil, Asia is yours for the taking!

There are single player and multiplayer battle modes – the latter using Slitherine’s easy-to-use PBEM++ Multiplayer system.

1.2. System Requirements

**Minimum Spec**
- Windows® XP/Vista/7/8
- Pentium 4 or equivalent
- 1GB RAM
- 128Mb DirectX video card
- CD ROM Drive (not required for the digital version)
- DirectX Compatible Sound Card
- DirectX 9.0c or higher (included in installer)

**Recommended Spec**
- 1GB RAM
- 256Mb DirectX 9 video card with shader model 2.0 or better

Please ensure your graphics and sound drivers are up to date before playing the game or you may experience graphical glitches or more serious errors. Check your manufacturer’s website for the latest version, as new drivers are released regularly.
1.3. Installing the Game

Please ensure your system meets the minimum requirements listed above. If you purchased from the Slitherine or Matrix site you will have been provided a download link for the games installer. To install the game, either double click on the installation file you downloaded or if you have the boxed version, insert the *Sengoku Jidai: Shadow of the Shogun* DVD into your DVD-ROM drive. If you have disabled the autorun function on your DVD-ROM. Follow all on-screen prompts to complete installation.

If you have redeemed a Steam key or purchased via Steam you can also launch the game on Steam.

1.4. Uninstalling the Game

Please use the Add/Remove Programs option from the Windows Control Panel or the Uninstall shortcut in the games Windows Start menu folder to uninstall the game. Uninstalling through any other method will not properly uninstall the game.

1.5. Product Updates

In order to maintain our product excellence, Slitherine releases updates containing new features, enhancements, and corrections to any known issues. All our updates are available free on our website (www.slitherine.com) and can also be downloaded quickly and easily by clicking on the Update link in your Game Menu or by using the Update Game shortcut in your Windows Start menu folder for the game. If you have the Steam version, Steam will update it according to your settings.
1.6. Multi-player registration

If you bought the game directly from us, we highly recommend registering your game first before playing. You can simply do this through the game menu, from Multiplayer or directly at Slitherine’s website at:

www.slitherine.com/sign up

This is because you will need a registered account to play Multiplayer games on Slitherine’s PBEM (play by e-mail) server.

When registering you can choose to sign up to the newsletters to receive regular updates, offers and discounts on the rest of Slitherine’s catalogue so it is worth registering!

Steam users cannot currently register though are able to play multiplayer.

1.7. Game forums

Our forums are one of the best things about Slitherine. Every game has its own forum with our designers, developers and the gamers playing the game. If you are experiencing a problem, have a question or just an idea on how to make the game better, post a message there.

Go to www.slitherine.com and click on the Forums hyperlink.

1.8. Need help?

Go to www.slitherine.com and click on the Forums hyperlink.
2. Historical Overview

The Sengoku Jidai (Warring States Era) was a period of civil war in Japan from 1467 to 1600. During that time, the Emperor of Japan was only a religious and ceremonial figure who delegated power to the Shogun, the military governor of Japan. The era began with the Ōnin War (1467-1477) where a dispute between potential heirs to the Ashikaga Shogunate led to a civil war involving several daimyō and the destruction of Kyoto. Since then, the authority of the Shogunate had diminished while the daimyō increased their authority over their fiefs and fought against each other to expand their realms.

The era brought about the rise and fall of several prominent clans. Old families like the Imagawa and Hōjō would be eliminated. Some families would break away from their old masters and forge a path of their own, like the Tokugawa. The Takeda family, hailing from an agriculturally poor province, dominated central Japan

Qing Dynasty troops on the attack. 18th century painting.
through exploitation of their gold mines, and employed cunning military and political strategies against their neighbours. Peasants could become lords and make a name for themselves, like the Toyotomi.

In this time of chaos, strong leadership was required to unify Japan, but the work was not easy and wasn’t achieved overnight. It took three unique personalities and several decades to finally achieve lasting peace.

The first major figure was Oda Nobunaga. He was a revolutionary leader for his time as he embraced Western technology, encouraged trade, and saw the usefulness of a large conscript army as opposed to a samurai army. He established a policy of military dominance and treated his generals as mere pawns. This led to the rise of many enemies. At the height of his power, Nobunaga died during the rebellion of one of his vassals in 1582.

The resulting power vacuum led to the rise of one of his vassals, the former peasant, Hashiba Hideyoshi. In contrast to Nobunaga,

*The siege of Osaka Castle, 17th century Japanese painting.*
he was a very charismatic leader and was able to win the hearts of many former Oda retainers. He was also a great military strategist and defeated his rivals one by one. In 1585, the Emperor gave him the title of kampaku as he could never become shogun because of his peasant background. In 1586, His surname was changed to Toyotomi by the Imperial court. He then completed his conquest of Japan.

In 1592 Hideyoshi invaded Korea as a stepping stone to the ultimate conquest of China. Prior to the invasion, the Joseon (Korean) court did not take the Japanese threat seriously as they were preoccupied with political infighting. Korea at that time, being a Confucian society, favoured scholarly pursuits over military service despite a well-established archery tradition. So when the Japanese landed 150,000 battle-hardened soldiers of the long civil war, their initial advance was unstoppable and forced the Joseon King, Seonjo, to evacuate the capital and head north.

In 1593, Ming China sent an army to help the Joseon. Like the Koreans, the quality of the Chinese soldiery was not on a par with the Japanese, but the sheer number of troops and the vast

*Ming Guards from Return Clearing handscroll*
arsenal of firearms and artillery they wielded were enough to force the Japanese to retreat south. The Achilles Heel of the Japanese army was logistics. Korean Righteous Army resistance fighters and Admiral Yi Shun Shin’s navy prevented the Japanese from obtaining reinforcements and supplies. This led to a truce from 1594 to 1596. Hideyoshi thought that he had won against the Koreans and the Ming would offer formal trade relations. But when the terms of the truce showed otherwise, hostilities resumed in 1597.

Hideyoshi died from illness in 1598 and the invasion force was withdrawn. His son Hideyori was too young to rule, so the Council of Elders took over. Tokugawa Ieyau was part of the council and steadily gained support from several of the Japanese lords. The animosity between the pro-Toyotomi Western faction and Tokugawa’s Eastern faction led to the epic battle of Sekigahara in 1600. Tokugawa’s complete victory in that battle led to the establishment of the Tokugawa Shogunate. Also called the Edo Period, the peace was kept for more than 200 years until the Meiji Restoration of 1868 which brought power back to the Emperor of Japan.

2.1. Troop Notes

2.1.1. Japanese

The armies of the Sengoku Jidai were manifestations of the feudal social structure of Japan, which revolved around kinsmen and vassals. The head of the clan and its army was the daimyō, literally translated as “great name”. He was supported by the kashindan. These were a group of blood relatives and retainers associated by family ties, marriage, filial oaths, and hereditary vassalage. The retainers were given land to govern and were expected to provide military support during times of war.
A standing army was uncommon but was popularised during the later years of the Sengoku Jidai. For the majority of the period, armies were composed of farmers who needed to stand down during the planting and harvesting seasons. Fighting a campaign during idle periods would offer an opportunity for the peasants to earn extra income from looting and possibly get promoted to samurai.

Typically, when a call to arms was issued, each landowning samurai was required to muster a pre-determined quantity of troops and equipment based on his wealth. Troops from all around the province would then converge at a designated place where they would be reorganised into battalions wielding similar weaponry and start practicing drills. The daimyō determined the chain of command for the campaign. The prominent retainers would act as bushō (general). A taishō (field marshal, commander-in-chief) would be appointed if the daimyō did not intend to take the role himself.

Each general commanded a division comprised of specialised battalions of cavalry, missile and melee troops mustered from their fiefs. These troops were only loyal to their direct lord and the Kato Kiyomasa by Kuchika Toyohara.
daimyō, not the taishō or other generals. To reflect this, Japanese commanders who are not assigned as the Commander-in-Chief are classified as Ally-Generals. Their units cannot receive any command effects from other generals except the C-in-C.

The Japanese wielded a variety of weapons, the prominent ones being the *katana* (sword), *yari* (spear), *naginata* (polearm), *yumi* (bow) and *teppō* (matchlock). Contrary to popular depictions, the katana was just a sidearm and the yari was the weapon of choice due to its range and versatility. All classes of soldier, from the lowly ashigaru to the elite samurai, wore armour of lamellar construction.

Before 1530, mounted samurai would primarily use bows, similar to other East Asian cavalry. The switch to the yari and shock tactics happened around the 1530s, pioneered by the Takeda clan.

The main fighting force was foot samurai, augmented by ashigaru. Due to the rugged terrain, the Japanese utilised loose formations and fighting was done man-to-man, as depicted in martial arts and samurai films. Hence they are classified as Warriors.

In 1543, Portuguese merchants introduced matchlock firearms (teppō) to the Japanese. Teppō ashigaru infantry were deployed, but there weren’t enough firearms available to equip large units. These small units are classified as Light Foot and are primarily used as skirmish troops.

By 1551, as battles grew larger, more and more ashigaru infantry were being mustered, as a result of which the proportion of foot samurai in the army was somewhat reduced. The Battle of Nagashino in 1575 showed the Japanese that massed volley fire from firearms behind field defences could defeat samurai cavalry. From then on, teppō ashigaru formations were larger and did not engage in mere skirmishing tactics.
By 1577, samurai cavalry had lost its appeal due to changes in battlefield technology and tactics. And by 1592, ashigaru infantry tactics evolved into fighting in close formation. They would receive better training and form the backbone of the Late Sengoku Era army. Ashigaru infantry, including yumi and teppō armed units, are now classified as Medium Foot. A century of fighting also depleted the numbers of available samurai. Just like their mounted counterparts, foot samurai, who still fought man-to-man, were finding it harder to dominate the battlefield against organized peasant foot troops. The 1590s also introduced some other elements of modern warfare such as light artillery, but these were not used as extensively as on the Asian mainland.

Buddhist monks of various temples also trained for combat. They had to take up arms in order to protect their temples from rival sects. These warrior monks were called sōhei. During the Gempei War (1180–1185), the sōhei eventually became embroiled in secular politics as they joined the lords that supported their temple. This

*Battle of Nagashino.*
was repeated during the Sengoku Jidai and the daimyō were able to gain the support of sōhei from their local temples.

The monks’ weapon of choice was the naginata, a long-bladed polearm. They also used bows and matchlocks. Occasionally, they can be seen wearing armour underneath their robes but the majority were unarmoured.

The Ikkō-ikki revolution gave some sōhei a new purpose. Instead of fighting for their temples and patrons, they fought under an ideology of equality and independence from the daimyō. Ikkō-ikki rebel armies were mostly made up of sōhei and supported by armed peasant mobs. Samurai who shared their ideals also joined but did not form separate units. The samurai fought alongside the monks and peasants and provided leadership as well as training.

2.1.2. Ming Chinese

Ming Chinese armies were formed around the Wei-suo tradition where military service was an inherited profession. This ensured the availability of a standing army accessible by the Empire at all times, but as Chinese society embraced Confucian values that shunned wars, soldiers were seen as second class citizens. Training camps and military campaigns were run by civilian bureaucrats (scholars) instead of experienced generals. This led to mismanagement of military resources and low morale. Despite all this, the Ming army was still a viable fighting force and was active in quelling rebellions, protecting the borders and fighting pirates with varying degrees of success.

The Chinese employed combined arms tactics. Even at the smallest scale, squads were composed of a mixture of missile and melee troops. This ensured tactical flexibility to suit the ever-changing battlefield situation. These mixed battalions are indicated as Protected in the game.
The Ming was basically a shooting army and was best suited to fighting their cavalry-based northern rivals like the Mongols and Jurchen. In addition to bows and crossbows, gunpowder weapons were extensively used. These weapons ranged from crude handguns to large artillery pieces. The simplest of all firearms were the antiquated fire lances and handguns. These had poor accuracy and were difficult to reload. Despite these disadvantages, however, they were still used extensively by Northern Ming armies even after the advent of the matchlock. Matchlocks, on the other hand, were more common among Southern Ming armies due to more contact with Western merchants. The Ming had a staggering arsenal of artillery pieces of both indigenous and Western design. They also employed rocket arrow launchers.

Cavalry was important, though Northern Ming armies had more mounted troops than Southern Ming armies. These horsemen were mostly armed with bows and melee weapons.

Tribal warriors were often employed in campaigns and were recognised for their fierce charges.

*Ming Victory over Japanese Pirates Scroll*
As for personal protection, elite soldiers wore lamellar, scale, and brigandine armour while the regular troops wore padded cloth or no armour at all. Southern troops wore light but sturdy armour made of rattan. In the game, non-elite Ming troops are unarmoured.

2.1.3. Joseon Korean

Joseon Korea also followed Confucian ideals and had a caste system. The population was divided into the yangban (scholarly aristocrats), sangmin (commoners) and cheonmin (lower class and slaves). The yangban held most of the wealth and took on government and military posts. The sangmin were labourers and were subject to conscription.

The Koreans had a long tradition of archery and made use of powerful composite reflex bows. A majority of the population practiced archery, especially the yangban and the sangmin who were aspiring to gain status. But a long period of peace degraded the military’s efficiency and it was considered as a mere rabble.

*Chinese cavalry and infantry attacking the walls of Pyongyang in 1593.*
when the Japanese invaded in 1592. The best troops were the Northern Cavalry (horse archers) which defended the borders against the Jurchen. Much of the cavalry arm was destroyed by the Japanese during the battles of Chungju and Imjin River. The Sogo system was introduced in 1593 so that the Koreans could build a new professional standing army.

The Korean army was organized into battalions of mixed ranged and melee weapons. The most prominent missile weapon was the *gakgung* (composite reflex bow). Prior to the invasion, the Koreans did not bother adopting firearms because of the accuracy and speed of their bows. But bows proved to be inadequate against Japanese armour and tactics. They soon learned that the matchlock, though individually slow and inaccurate, could be quite devastating when fired en masse.

The Sogo reform recognised the importance of firearms. In close combat, the Joseon used a variety of polearms in the form of spears and tridents. These are classified as Heavy Weapon in the game.

Like the Chinese, the Koreans possessed several forms of artillery including the famous *Hwacha* rocket arrow launcher. Artillery was an important factor that contributed to the success of the Korean navy.

Korean soldiers were largely unarmoured except for the heavy mounted troops and generals, who wore brigandine armour.

During the Imjin War, resistance fighters called the *uibyeong* (righteous army) performed guerrilla raids and provided support during battles. They wielded various ranged and close combat weaponry and were sometimes thought to be better than the regular Joseon troops. Buddhist monks called the *sungbyeong* also joined the fight against the Japanese and gained a reputation for ferocity and bravery on the battlefield.
2.1.4. Mongols

The Mongols were split into two major groups during the 1600s, the Oirats of western Mongolia and the Khalkha of eastern Mongolia. The Khalkha were often referred to as the Northern Yuan, paying homage to the former rulers of China, the Yuan Dynasty.

Mongol armies were composed of mounted archers. Higher quality units would wear lamellar or brigandine armour. Standard steppe hit and run tactics were prevalent.

2.1.5. Manchu

The Manchus originated from the Jurchen tribes who settled in present-day Manchuria. During the 16th century, the tribes were unified under the leadership of Nurhaci and were organised into the Eight Banners. The Jurchen banner armies fought in a similar manner to other steppe armies like the Mongols. They fielded mounted archers, some armoured, some unarmoured.

By 1622, the Jurchen had a substantial population of assimilated Han Chinese. These formed the core of the Jurchen foot units which utilised the same equipment and tactics as the Ming. A contingent of Ming artillerymen surrendered to the Jurchen during the fall of Yongping in 1629. These guns were influential in the subsequent battles against the Ming.

Hong Taiji succeeded Nurhachi and changed the name of the Jurchen to Manchu in 1635. In 1636, Hong Taiji proclaimed the creation of the Qing Dynasty. The Qing differentiated Han bannermen from ordinary Han subjects and created the Green Standard Army in 1644. The Green Standard Army would subsequently see much of the fighting against the remnants of the Ming. The original Banner Armies were now considered royal guards.
Manchu armies during the Qing period fought in a similar way to the Ming. They formed mixed battalions of protected missile troops and utilised a large amount of artillery. Close combat units of swordsmen with large rattan shields were commonly fielded. Cavalry remained an important component of the army and were still composed of the traditional horse archers.

2.1.6. Wokou

Wokou pirates raided the Chinese and Korean coasts from the 13th to the 16th centuries. They used Japanese-style weaponry like the yari, katana, and yumi. They were also enthusiastic users of Portuguese matchlocks. Due to their sea-faring nature, they did not wear heavy armour and most would usually be unarmoured. They were organised into several bands of warriors with mixed weaponry.
3. Playing the Game

3.1. New Players

New players should start by playing through the Tutorial scenarios, as this will introduce the basics of movement, shooting, close combat, morale and important troop interactions. After completing the tutorials, start with a Skirmish (Random Map Battle), setting the scenario type as Open Battle, the force size as Small or Very Small and allowing the computer to choose the armies (Pot Luck). As you gain experience in the game’s mechanics, try playing with larger armies, or other scenario types, until you feel ready to tackle the Historical scenarios and Campaigns. Feel free to adjust the difficulty as needed in the Options screen (see Options below).

3.2. Starting a Single Player Game
To start a single player game select **Historical** from the main menu. If you have not played before, select the Tutorial. When you have played through that, you can either pick **Skirmish** from the main menu, which generates a hypothetical battle between historically opposing armies selected from historically accurate army lists on a unique computer-generated battlefield, or you can make a start on one of the sets of historical scenarios or strategic campaigns. The historical scenarios are arranged in chronological order, but you can play them in any order you like. You can adjust the difficulty in the Options menu.

# 4. Historical Scenarios

Apart from the Tutorial scenarios, each of the scenarios in the historical campaigns is a historical battle, and is closely modelled on the real battle. Victory conditions vary from scenario to scenario, as specified in the scenario briefing, but an army will generally break
when a certain proportion of its units are routed or destroyed. The commonest goal is to defeat the enemy army.

In the multiplayer versions of the scenarios, the player who starts the battle with the advantage will need to defeat the enemy without suffering too many losses himself, or the battle may be considered a strategic defeat.

Each historical scenario is preceded by a scenario briefing, which shows the map and brief information about the forthcoming battle.

5. Skirmish Mode

Skirmish mode allows an infinite number of what-if scenarios to be played. The player (or challenger in the case of multiplayer games) can choose the size of the forces involved, the size of the map, and the nationality and date of the opposing forces. The battle will be fought on a computer-generated battlefield.

5.1. Scenario Types

5.1.1. Attack
The enemy is disadvantaged in strength of forces, but his infantry are behind field fortifications.

5.1.2. Defend
The player is disadvantaged in strength of forces, but his infantry are behind field fortifications.
5.1.3. **Open Battle**
Both sides are eager for battle on an open battlefield.

5.1.4. **Reinforcements (Enemy)**
The enemy is expecting reinforcements. Best defeat him before they arrive.

5.1.5. **Reinforcements (Own)**
You are expecting reinforcements. Can you hold the enemy off until they arrive?

5.1.6. **Send Flank March**
You have decided to send part of your forces on a flank march, to catch the enemy at a disadvantage. Alternatively he might overrun you before they arrive. There is no scenario selection to make the enemy send a flank march, but they may choose to do so in any of the other scenario types.

Also, troops who are unable to deploy due to terrain (usually in mountainous areas) may be sent on a flank march. In this case the flank march does not represent a stratagem, but instead represents part of the army arriving at the battlefield by a different route owing to the difficulty of moving the whole army down one narrow route.

5.2. **Force Size**
You can choose the size of battle you wish to fight. There are preset Very Small, Small, Medium, Large and Very Large sizes, or you can specify other sizes in the Advanced section. The points balance between the two sides in the preset options will depend on the scenario type, difficulty setting (in SP games) and
whether you opt to choose your own force or let the program do it automatically for you.

5.3. **Map Size**

You can choose the width of the battlefield. The program will automatically increase the map width setting for larger force sizes unless you set the map width manually in the Advanced section.

5.4. **Terrain Type**

The general terrain type of the region in which the battle will take place can be specified. The types are Agricultural, Hilly, Wooded or Mountains. This modifies the parameters the random map generator uses to set up the map, but note that even in mountainous regions there may be some valleys wide enough to allow a fairly open battlefield.

5.5. **Army Lists**

The armies for skirmish mode battles are chosen from historically-based army lists for a particular nation and date range. If you select *Pot Luck*, the computer will set up a battle between two historically opposing forces of the same date. If you choose to select the nations involved, you can either pick them from possible historical opponents or turn the historical filter off. You can also choose whether to have the computer pick the armies (few historical commanders had the luxury of choosing the forces available to them) or allow the player(s) to tailor their forces within specified limits. If you choose the latter option in single player games you will get a slightly smaller force.
6. Force Selection

At the start of each scenario you’ll be taken to the force selection screen. In some scenarios you must make do with the forces available, but others allow you to vary your forces. You can select units from those available up to the points limit specified. The points available will often depend on the difficulty level you have set. Each unit’s stats are shown, along with a basic text description.
7. The Battlefield

The battlefield is covered with an invisible square grid. Each unit occupies one square (tile). Units move from square to square and never end up part way between squares. Units can face in any of 8 directions. Diagonal movement costs 1.5 times the AP (action points) of straight movement. There can never be more than one unit in a square. Buildings, woods and hills block line of sight. You will only see enemy units on tiles you have line of sight to and that are within visibility range. Squares you cannot see into are darkened – representing the “fog of war”.

Different terrain types have different effects – see the Terrain section below.

7.1. Battlefield Display
Information about the currently selected unit appears on the left hand side of the screen. Information about any non-selected friendly or enemy unit appears on the right hand side of the screen when the mouse is hovered over the unit. This information includes close combat, shooting and armour ratings as a general guide to the unit’s overall power. The close combat rating is only a very approximate guide – terrain and the interaction between POAs (Points of Advantage – see the Close Combat section) is far more important in determining the likely result of a close combat. In the wrong circumstances, a powerful unit can lose to a much weaker one. The unit’s available AP, troop-type, quality rating, combat capabilities and cohesion state are also displayed.

More detailed information about a unit can be obtained by selecting the Tools button and then selecting **Show detailed unit information** or by CTRL-L clicking on the unit.

A list of your units (excluding those that are irretrievably dispersed or currently off the battlefield) can be obtained by selecting the Tools button and then selecting View Unit List or by hitting the L key on the keyboard. Units that have not yet moved are shown in black. Units that have already moved are shown in red. Units with a shooting capability that currently have a valid shooting target and have not yet shot this turn have **Can Shoot** shown in blue. You can select a unit by clicking on it in the list.
Alternatively you can tab through your units by selecting Tools then selecting **Next Unmoved** (TAB hotkey) or **Next Unit** (N hotkey).

The Tools menu also allows you to view an up to date casualty report (K hotkey), to toggle between top down and isometric views (M hotkey), and to show a unit’s line of sight and line of fire (1 hotkey).

### 7.2. Unit Identification

Unit identification may be hard for first timers so here are some tips and historical background on the banners.

#### 7.2.1. Unit size

Approximate unit size can be identified by looking at the relative sizes of the formations. (In campaign battles the visible formation sizes are based on the full paper strength of the unit, not the current strength, which may have been considerably reduced by previous losses. A common method of assessing enemy numbers was to count the banners – this could obviously lead to overestimates if enemy units were significantly understrength).

#### 7.2.2. Unit quality

As a rule of thumb, unit quality can be identified by the number of flags.
3 flags = Superior and above. (Superior Mongol units have two flags and a tug – see below).
2 flags = Average.
1 flag = Raw.

7.2.3. Japanese Banners

Japanese troops may be pretty hard to distinguish when fighting against fellow Japanese. That is because a common uniform for a unit was rare despite popular depictions. No clan would wear something unique to their clan. Sengoku era armours were predominantly lacquered black or brown with different colour lacing. Some samurai wore red armour. Some samurai wore bulkier and more colourfully laced classical armour of an older era. The lack of a military uniform gave rise to several means of identification.

Sode Jirushi were small emblems attached to the shoulders and arms, only useful to distinguish friend from foe in close combat.

Sashimono were banners worn on the backs of the soldiers. These are probably the most unique and iconic of all Sengoku flags, but we did not use them in the game as they are not appropriate for the scale of the unit blocks.

Hata Jirushi were tall narrow unit banners hung from a cross bar. These flags fell out of favour during the Sengoku Jidai, but in the game you will see them used in the Honjin.

Nobori were tall stiffened flags used to identify units with a similar construction to the sashimono. These were the most prominent flags on Sengoku battlefields and are the ones used for identification and depicting unit quality.

As in real life, the player needs to familiarise himself with the nobori being used by his clan and the opponent as there are no
real clan uniforms. Historically, prominent generals had their own flag designs but we don’t go that far in the game.

Another tip for those playing Japanese: missile foot units (yumi and teppo) wear brown armour, close-fighting foot units black or red.

7.2.4. Ming and Joseon Banners
Ming Chinese and Joseon Koreans have similar banners (although the Korean flags have longer tails) because the Joseon civilisation adopted several aspects of Chinese culture. What we see in the game are three of the Four (actually Five) Guardian Creatures of Direction.

<table>
<thead>
<tr>
<th>English Name / Chinese Name / Korean Name / Japanese Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azure Dragon / Qing Long / Cheong-ryong / Seiryuu (East)</td>
</tr>
<tr>
<td>White Tiger / Bai Hu / Baek-ho / Byakko (West)</td>
</tr>
<tr>
<td>Black Turtle / Xuan Wu / Hyeon-mu / Genbu (North)</td>
</tr>
<tr>
<td>Vermilion Bird / Zhu Que / Ju-jak / Suzaku (South) [not in game]</td>
</tr>
<tr>
<td>Yellow Dragon / Huang Long / Hwang-ryong / Kouruu (Centre) [not in game]</td>
</tr>
</tbody>
</table>

Their use was most probably to show positions in a formation (left wing, right wing, centre, etc.), but we don’t go that far in the game.

7.2.5. Jurchen / Manchu / Qing Flags
The Jurchen tribes later called themselves Manchu and became the Qing Dynasty, the last dynasty of China. They went by the Eight Banners system.
These banners were used for both administrative and military purposes. The banner system organised Manchu society from fragmented tribes into unified armies. Membership of a banner did not go by ethnicity, Chinese and Mongols were also accepted. Before and during the Manchu invasion of the Ming, Chinese defectors were incorporated into the banners. When the numbers became too large, the “Old Han Army” created their own eight banners. The subjugated Mongols too had their own banners. But eventually, the growth of the banners stopped. They formed the core and the most elite of the Qing dynasty army, while the rest were relegated to the Green Standard Army. The Green Standard Army eventually saw more fighting than bannermen.

The game only shows the plain Yellow Banner which was considered one of the most elite “upper” banners. The skirmish army lists have banner armies, mixed armies, and pure Green Standard armies.

7.2.6. Mongol Banners

The Mongols used a combination of flags and tugs. Average Mongol units carry two flags, while Superior Mongol units carry two flags and a tug. A tug is a standard made of horse or yak hair. A white tug is used during peace time and a black tug during war. Skirmishers don’t carry flags, but we gave the Superior skirmisher units a tug.
8. Generals

At the start of the battle, your army is divided into commands. In skirmishes and campaigns, all non-light commands have their own general. In historical scenarios, the allocation of generals will be part of the scenario design. You cannot switch units from one command to another.

When you select a unit, the commanding general and the other units in his command are highlighted – general’s unit in red, other units in blue. When you select a general’s unit, tiles within his command range are highlighted in pink.

8.1. Command Range

Units that are out of command range of a general in line of command have reduced command control. They lose the free 45 degree turn that is allowed to troops that are in command range.
(This may sound like a minor handicap, but in practice it can cause significant inconvenience). The exception is that they can move at least one square even if this does involve a turn of 45 degrees.

Command range is determined at the start of the player’s turn. Troops that are in command range at that time will be deemed to be in command range until the player’s next turn, unless the general from whom they were taking command control is disabled. Troops that are out of command range at the start of the turn will remain out of command range until the player’s next turn, even if the general moves into range before that.

Units that are in command range this turn have white facing indicators, units that are out of command range have dark facing indicators.

Command range varies with the command ability of the general. You can see the command range for each of your generals by mousing over his unit. (e.g. CR: 8 means the general has a command range of 8 squares from his position).

Generals have no command range when in close combat, pursuing or routing, so if any of these apply at the start of the player’s turn, their units will have reduced command control unless there is another general in line of command within command range.
8.2. Line of Command
The C-in-C can provide command control to any troops. A sub-general can provide command control to any non-allied troops. An ally-general can only provide command control to the units in his own command.

8.3. Generals in Close Combat
A general whose unit is in close combat is deemed to be fighting in that combat. He adds +50 Points of Advantage (POAs) to his unit’s combat capability. He also adds a +1 modifier on Cohesion Tests for friendly units within (command range / 4) squares while he is in close combat (but not otherwise). Ally-generals can only inspire units of their own command.

However, he is at risk of being killed or wounded in the combat. This is much more likely to occur if his unit loses the combat.

If a general is killed or wounded, all friendly units within 1 square if the general was a sub-general, or 2 squares if the general was a C-in-C or ally-general must take a Cohesion Test. Ally-generals only affect units of their own command.

In addition to the normal risks of engaging in close combat, if a general’s unit is in close combat with an enemy general’s unit, there is a chance that the two generals may engage in a duel, which is likely to result in the incapacitation of one of them. The chances of success in a duel are modified by each general’s duelling skill rating. You can see your own generals’ duelling skill ratings by mousing over their units. (e.g. D: 4). Duelling skill ratings range from 2 to 8. You cannot see enemy generals’ duelling skill ratings.
8.4. Moving Generals

Generals normally move with the unit they are with. However, unless their unit is in close combat or pursuing, they can move once per turn to another unit in line of command. (See Battlefield Orders below).

8.5. Rallying Units

Disrupted, Fragmented or Routed units have a chance of testing to rally at the start of each of their side’s turns if eligible (see the chapter on Cohesion/Morale below).

A unit with a general tests every time. (Units without a general have a much lower chance of testing).

9. Deployment

Some scenarios allow you to redeploy your troops before the battle proper starts (some don’t). You can drag, move or swap units into any permitted square (see below), and also set their initial facings.

When you select one of your units, its potential redeployment area is highlighted. Redeployment is restricted to specified areas. In most cases, non-light troops (see Light troops in Glossary) can only be redeployed within the rectangle defined by the extremes of the current battlefield width occupied by your non-light troops and your rear map edge. Non-light foot troops cannot be redeployed within 8 squares of the side map edge – even
though some units may already be in that area. Light troops have a somewhat larger redeployment area, defined by the extremes of the current positions of your light troops and your rear map edge.

You can redeploy a unit in any of the highlighted squares, but bear in mind that moving a unit too far from its commanding general will impair its command control and hence manoeuvrability.

Note that medium and heavy artillery can only be redeployed when limbered. However, you can toggle them between limbered and unlimbered without penalty during the deployment phase. If you have the LOS/LOF display toggled on (using the “1” hotkey, or the Tools panel) this will show the potential line of fire of the guns even when they are limbered.

Japanese Honjin HQ units can be redeployed at deployment time, but cannot move thereafter.

Once you’re happy with the starting positions of your troops, you can start the battle.

### 10. Battlefield Orders

When the default Left/Right UI mode is in use, units are selected with the left mouse button, and orders are issued with the right mouse button. Units are deselected by left-clicking on another unit or an empty square.

The order system is simple. The following actions are permitted. Each has its own icon, which shows when you hover over the target square.
10.1. Move

Apart from Honjin HQs and unlimbered medium or heavy artillery, which cannot move, all units can potentially move to any square within reach of their AP (action points). In Open Ground, moving one square generally costs 4 AP if the move is straight and 6 AP if it is diagonal. Other terrain types may have higher movement costs for some or all troop-types. Gun limbers have higher costs in Open Ground. A unit can move to any square where the total cost of reaching it does not exceed its total AP. There may be additional AP costs if the overall move includes a turn – see Turns below.

Moves cannot go between units in close combat or between pursuers and routers.

10.1.1. ZOC (Zone of Control)

Movement is restricted when close to the enemy, as follows: Each unit exerts a ZOC (zone of control) affecting the square directly in front of it. A unit’s move cannot pass through an enemy unit’s ZOC, nor diagonally across its front. A unit that is already in an enemy ZOC cannot move except away from that enemy – which (owing to turning restrictions) means that this is mostly only possible for light troops.

Non-light troops ignore the ZOC of light troops. Routing troops and artillery do not exert a ZOC. Evaders, routers and pursuers (which are moved automatically by the computer) ignore ZOCs.

10.1.2. Interruption of Moves

A unit’s move may be interrupted by enemy fire. It halts briefly then will require a further Move order to complete its move. However,
if the originally intended move was not directly forwards, the unit may no longer be able to complete it. This represents disruption of manoeuvre when the unit comes under enemy fire.

**10.2. Turn**

Units can face any of the 8 squares adjacent to their own. Facing is very important because arcs of fire are restricted and flank or rear attacks are deadly (see below).

Each game turn non-light units that are in command range are allowed one free turn of up to 45 degrees. Light troops are, in addition, allowed one free turn in any direction. Beyond this, turns of up to 90 degrees cost 8 AP, and larger turns cost the unit’s full starting AP. 45 degree turns by troops that are out of command range cost 4 AP.

Any turn required to reach the chosen tile in a Move order is costed similarly. Note that only the angle between the original facing and the line between the starting tile and the final position is taken into account, so that sometimes a unit can make multiple twists and turns along the way that are not costed. This is particularly true of AI units, which use a different route finding algorithm taking into account terrain preferences. The route they take may sometimes include multiple changes of direction, but as usual only the overall angle between the original facing and the line between the starting tile and the final position is taken into account. This may appear to favour the AI, but in fact they end up moving to the same final position that they would have reached using the direct route if they were a player unit.

All this means that most non-light foot troops cannot turn more than 45 degrees and also move in the same turn. Most non-light
mounted troops can turn 90 degrees and still move a square or two, but use their entire movement allowance to turn 135 or 180 degrees.

Turns are also restricted by enemy proximity. Units may have priority charge target(s). These include enemy units that are ZOCing them and also enemy within two map squares directly to their front (one square if facing diagonally) and facing within 45 degrees of towards them. A unit with a priority charge target cannot turn except to reduce the threat of a flank charge or face a different priority charge target. This prevents units from ganging up on the front units in a chequerboard formation. Note however, that non-light troops do not treat light troops as priority charge targets, so can effectively ignore them.

10.3. Move General

A sub-general or ally-general can move once in a turn to another unit of his command that is within 4 squares (even if the general’s unit has already moved this turn). A C-in-C can also move to a unit of one of his sub-generals’ commands.

Generals cannot move from a unit that is in close combat or pursuing, and cannot move to join an artillery unit.

Generals in a Honjin HQ cannot move to another unit.

10.4. Shoot

Units with shooting weapons can shoot once in their own turn and once in the enemy turn. Shooting in their own turn is controlled by the player (or AI), shooting in the enemy turn is automatic and reactive to enemy movement or shooting.
10.4.1. Shooting Tooltip

If the Simple Tooltips option is toggled on (see Options), the tooltip shows the range bracket (if long range), arc of fire, cover modifier (if any) and range of casualties that shooting will inflict. If the Detailed Tooltips option is toggled on, the tooltip gives additional information.

10.4.2. Range

Shooting weapons can shoot if in range. Some weapons have a long and a short range – shooting at half effect at long range.

10.4.3. Arc of Fire

All units have an arc of fire. If the target unit is outside 45 degrees of straight ahead they can’t shoot at it. If the target unit is between (approx.) 22.5 degrees and 45 degrees of straight ahead, they can only shoot with half their men. (They do not get to use the other half against a different target). Off-shore ships can fire a full broadside at troops within 45 degrees of their side.

Potential targets are indicated by a full or half arc of fire icon above the unit.

10.4.4. Line of Sight

Line of sight is blocked by higher ground, woods and built-up areas – though not by individual buildings which are not large enough to block LOS through the whole square.

For shooting purposes, it is also blocked by units. The line of sight algorithm for shooting past troops is fairly generous, however – it assumes that there are large enough gaps to shoot through between units in chequerboard formation.
Artillery on higher ground can shoot over any friendly or enemy units that are not in the square immediately in front of them. Artillery can shoot over light foot or commanded shot on the flat provided that they are more than 2 squares from the artillery. Medium and Heavy Artillery can shoot over enemy artillery.

If no higher ground is available, some care is required to avoid blocking the LOS of your artillery.

Foot bows can shoot over other units.

Line of Sight and Line of Fire can be displayed on the map by selecting Toggle LOS/LOF from the Tools menu, or using the “I” hotkey. Note that this does not take into account the blocking effect of intervening troops.

**10.4.5. Residual Shooting Phase**

Any units that can shoot but have not shot during a turn, will shoot automatically in the Residual Shooting Phase at the end of the turn, unless they are in concealing terrain.

**10.5. Charge**

Troops in adjacent map squares are not automatically in close combat. Those that are in close combat are indicated by red close combat indicators between the units.

Charges are triggered by the Charge action. The unit has to have sufficient AP to enter the square that the enemy is in – although the unit is not actually moved into the square. The enemy are assumed to have made a short counter-charge if that would be appropriate to the matchup, and not if not, but are not physically moved.
Charges can be launched against units that are within 45 degrees of straight ahead at the start of the move.

To charge a unit you need to click on the Charge icon twice.

10.5.1. Charge Tooltip

After clicking once on the Charge icon, the charge tooltip appears. If the Simple Tooltips option is toggled on (see Options), the tooltip shows approximate Win:Draw:Lose chances for the Impact combat and first round of Melee combat. If the Detailed Tooltips option is toggled on, the tooltip gives a full breakdown of the factors affecting the combat. The Detailed Tooltip mode can also be temporarily turned on by holding down the CTRL key.

10.5.2. Priority Charge Targets

Units may have priority charge target(s) – these are (a) enemy within two map squares directly to their front (one square if the chargers are facing diagonally) and facing within 45 degrees of directly towards them, or (b) enemy ZOCing them. Priority charge targets apply if the charge path starts in or passes through a square in which they would apply.

Non-light troops ignore light troops for the purpose of priority charge target. If a unit has a priority target, it cannot charge a non-priority target. This stops units from ganging up on the front units of a chequerboard formation, or adjacent units in a line. It also allows units to protect the flank of friendly units. Restrictions apply equally to player and AI units. Priority targets do not affect shooting (except reaction fire), but the arc of fire rules ensure that a unit which shoots at a different target will usually only shoot at half effect.
Sometimes, when the path chosen by the program to a proposed charge target results in the charge being disallowed, the charge may still be possible by moving the unit to a different intermediate square first.

10.5.3. Non-Permissible Charges

Foot units other than non-missile-armed Warriors or Determined Foot cannot charge non-light cavalry, even in the flank or rear. Light Foot cannot charge unbroken non-light troops (other than artillery) in open terrain, even in flank or rear. Mounted Infantry cannot charge unfragmented non-light troops (other than artillery) in open terrain, even in flank or rear. These restrictions are based on usual historical behaviour. FRAGMENTED troops (see Cohesion/Morale section below) cannot charge.

10.5.4. Evasion

Light troops (light foot, light horse and mounted infantry) and non-lancer cavalry can attempt to evade charges. The AI decides for the (player or AI) unit whether it will evade, based on its chance of winning the combat and its chance of successfully getting away. The charging unit pursues with its remaining APs, so that it is more likely to catch the evaders if it starts its charge in an adjacent map square. Evaders and chargers may get a random addition or deduction of 4AP to/from their current AP. Evaders who are caught are treated as having been charged in the rear. If they do escape, evaders may go off the battlefield, in which case they do not count as lost and may possibly return to the battlefield later. Chargers never follow evaders off the battlefield. If the chargers’ pursuit path goes adjacent to another enemy unit (within 45 degrees of straight in front of the chargers), they will charge it if they (the AI on their behalf) fancy their chances and they have enough AP left to charge them.
10.5.5. **Flank/Rear Attacks**

Charges by units that start their (whole) move behind the flank of a unit count as flank/rear attacks. Unless they are non-light troops charged by light troops, the victims automatically drop 1 cohesion level (see the Cohesion/Morale section below), and the impact combat is fought on a guaranteed net POA (see Points of Advantage in the Close Combat section below) of +200 to the flank attackers. (+50 if lights charge non-lights, if their non-flanking net POA would be less than +50). Being charged in the flank by non-light troops is VERY bad. The AI does its best to avoid it and so should the player. The AI will not miss any chance offered.

Foot are immune to the ill effects of flank/rear attacks across an obstacle (hedge, field fortification etc.), and when in a built-up area.

To qualify as a rear attack, the charger must be less than 45 degrees from directly behind the charged unit.

10.5.6. **Artillery contacted by a charge**

Unless they are defending an obstacle or protected by friends, artillery are automatically dispersed and removed from play if contacted by an enemy charge.

To count protected they must have an un-routed friendly non-light non-artillery foot unit in any adjacent square.

10.6. **Fall Back**

Units can fall back one or two squares straight backwards while maintaining their original facing. Such moves could panic the troops if performed close to the enemy. Consequently, if a fall back move is performed when within charge
reach of a non-routing non-light enemy unit, the falling back unit will take a Cohesion Test (see Morale below).

10.7. Limber/Unlimber

Medium and Heavy artillery cannot move when unlimbered, and cannot shoot when limbered. The Limber/Unlimber commands allow an artillery unit to perform these actions. The artillery will not be able to shoot on the turn in which they unlimber, nor move on the turn in which they limber.

11. Shooting

The effects of shooting are modified by various factors, not least the number of men shooting.

11.1. Range

Some weapons have a long and a short range – they shoot at half effect at long range.

<table>
<thead>
<tr>
<th>Shooting Ranges</th>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot bow and crossbow</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Mounted bow and crossbow</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Matchlock</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Handguns, bombs and javelins</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Heavy artillery</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Medium artillery</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Light artillery</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Regimental guns</td>
<td>4</td>
<td>-</td>
</tr>
</tbody>
</table>
11.2. Arc of Fire
All units have an arc of fire. If the target unit is outside 45 degrees of straight ahead they can’t shoot at it. If the target unit is between (approx.) 22.5 degrees and 45 degrees of straight ahead, they can only shoot with half their men. Off-shore ships can fire a full broadside at troops within 45 degrees of their side.

11.3. Points of Advantage
The casualties inflicted by shooting depend on the number of shooters, range, arc of fire, unit cohesion and movement. In addition there are a number of other factors that can modify the effect of shooting depending on the shooting weapon and the target. Points of Advantage (POAs for short) are used to define these factors. 100 POA is roughly equivalent to a 33% modifier to casualties inflicted.

Note that the POA table opposite is provided only as a guide to various factors that may influence the effectiveness of shooting. Some of the modifiers are applied at different stages in the shooting calculation, so you cannot work out the overall modifier by simply totalling the POAs. The detailed shooting tooltips show the applicable modifiers.

11.4. Overhead Shooting
Artillery can shoot over units on lower ground and light foot, provided that the unit they are shooting over is at least 2 squares away. Medium and heavy artillery can also shoot over enemy artillery.

Foot bows can shoot over any unit.
### Shooting POAs

<table>
<thead>
<tr>
<th></th>
<th>vs Foot</th>
<th>vs Mounted</th>
<th>vs Artillery</th>
<th>vs Elephants</th>
<th>vs Battle Wagons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matchlock</td>
<td>0</td>
<td>-100</td>
<td>0</td>
<td>+100</td>
<td>-100</td>
</tr>
<tr>
<td>Bow/Sling</td>
<td>-50</td>
<td>0</td>
<td>-50</td>
<td>-50</td>
<td>-150</td>
</tr>
<tr>
<td>Javelins</td>
<td>-50</td>
<td>0</td>
<td>-50</td>
<td>+50</td>
<td>-150</td>
</tr>
<tr>
<td>Additional modifier for bow, javelins or sling vs armoured targets</td>
<td>-100 to -200 depending on completeness of armour</td>
<td>-100 to -200 depending on completeness of armour</td>
<td>+50</td>
<td>-150</td>
<td></td>
</tr>
<tr>
<td>Crossbow</td>
<td>-150</td>
<td>-50</td>
<td>-150</td>
<td>+50</td>
<td>-150</td>
</tr>
<tr>
<td>Carbine/Handgun</td>
<td>-100</td>
<td>-100</td>
<td>-100</td>
<td>+100</td>
<td>-100</td>
</tr>
<tr>
<td>Bombs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+100</td>
<td>0</td>
</tr>
<tr>
<td>Regimental Guns</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Artillery</td>
<td>-100</td>
<td>0</td>
<td>-200</td>
<td>+100</td>
<td>0</td>
</tr>
<tr>
<td>Additional modifier for target being in cover</td>
<td>Up to -225</td>
<td>Up to -225</td>
<td>Up to -225</td>
<td>Up to -225</td>
<td></td>
</tr>
<tr>
<td>Additional modifier for foot shooters with threatened flank</td>
<td>-100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional modifier for artillery vs large or enfiladed target</td>
<td>+100</td>
<td>+100</td>
<td>+100</td>
<td>+100</td>
<td></td>
</tr>
<tr>
<td>Additional modifier for shooting at skirmishers (light foot, light horse)</td>
<td>-100</td>
<td>-100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional modifier for shooting at pursuers</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional modifier for quality of shooting unit</td>
<td>-50 to +100</td>
<td>-50 to +100</td>
<td>-50 to +100</td>
<td>-50 to +100</td>
<td></td>
</tr>
</tbody>
</table>

#### 11.5. Shooting and Moving

Stationary units shoot more effectively than units that move or turn. This also applies to reactive shooting in the following enemy turn.

If artillery unlimber, move or turn, they cannot shoot until their side’s next turn.
11.6. Cover

Terrain and obstacles provide varying degrees of cover in various circumstances (see the Terrain section).

11.7. Armour

The effects of armour are on a sliding scale depending on the amount of armour worn by the target unit. Armour is of little value against firearms or crossbows. It is, however, beneficial against bows, javelins and slings.

11.8. Skirmisher Target

Casualties inflicted when shooting at skirmishers (Light Foot or Light Horse) are reduced because of their dispersed formation.

11.9. Large Targets and Enfilade

Large units and units shot at from behind their flank will suffer higher losses from artillery fire.

11.10. Threatened Flank

Foot units shoot less effectively when their flank is threatened. This only affects their shooting factor against foot, as the phenomenon is already taken into account in their basic shooting factor against mounted troops.

11.11. Morale/Disorder

Shooting is reduced by disorder and low morale/cohesion.
12. Close Combat

12.1. Combat Strength

In impact combat, only the men who actually make contact fight, so if a smaller unit charges a larger one, both sides initially fight with the strength of the smaller unit.

Note that the “strength” is not the strength in actual men, but the relative combat strengths of the units. Mounted troops have more combat strength per man than foot – the ratio varies from scenario to scenario, but often 3 foot have approximately the same combat strength as 2 horsemen. Nevertheless, generally speaking, standard battalions of approximately 500 men are large enough that they have 50% higher overall combat strength than equivalent 200–250 man mounted units.

In continuing combat (melee), the smaller unit will be overlapped, so the larger unit fights with extra strength equivalent to half the difference between the units’ actual combat strengths.

In shooting and close combat, infantry units larger than 500 men fight only with 500 men, and cavalry units larger than 250 men with 250 men, the extra troops being mainly extra rear ranks. The extra rear ranks do, however, provide resilience.

In continuing close combat, a unit that is fighting more than one unit fights them each in turn, but suffers a 20% reduction in combat strength per extra enemy unit, with a maximum reduction of 50%.
12.2. Points of Advantage

In addition to relative combat strength, there are a number of other factors that will affect the outcome of a combat. Troop type, armour, combat capabilities and situational factors will all make a difference. Points of Advantage (POAs for short) are used to determine who has the upper hand.

Combat damage inflicted depends on the net difference between the POAs applying to the opposing units. 100 POA difference is roughly equivalent to a 33% modifier to relative casualties inflicted.

The POA difference can never be above 200 – additional POAs beyond that are ignored.

### 12.2.1. Impact POA Table

<table>
<thead>
<tr>
<th>Impact POAs</th>
<th>Against</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact foot.</td>
<td>+100 against any foot</td>
</tr>
<tr>
<td>100% matchlock, handgun, bow or crossbow unit defending an obstacle, if not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100 against any mounted</td>
</tr>
<tr>
<td>Spearmen, if not charging and not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100 against any mounted</td>
</tr>
<tr>
<td>Spearmen, if not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100 against any foot except impact foot or foot defending an obstacle</td>
</tr>
<tr>
<td>Heavy weapon *</td>
<td>+100 against any foot except impact foot or foot defending an obstacle</td>
</tr>
<tr>
<td>Foot with at least 33% light spear unless they are charging mounted shock troops</td>
<td>+100 against any troops except impact foot or foot defending an obstacle</td>
</tr>
<tr>
<td>Foot with at least 16% light spear, if not charging</td>
<td>+100 against any troops except impact foot</td>
</tr>
<tr>
<td>Artillery, if defending an obstacle or protected by adjacent non-light foot</td>
<td>+100 against any</td>
</tr>
<tr>
<td>Elephants</td>
<td>+100 against any</td>
</tr>
<tr>
<td>Light lancers Only in open terrain</td>
<td>+100 against any except elephants or non-charging STEADY foot spearmen</td>
</tr>
<tr>
<td>Any mounted</td>
<td>+100 against any light foot, mounted infantry, warriors or medium foot</td>
</tr>
<tr>
<td>On higher ground (height difference &lt;= 75)</td>
<td>+25 against any</td>
</tr>
<tr>
<td>On higher ground (height difference &gt;= 100)</td>
<td>+100 against any</td>
</tr>
</tbody>
</table>
Foot defending light or medium fortifications &+100 against any
Foot defending heavy fortifications &+200 against any
Unit has attached guns, and is not charging &+50 against any
General with the unit &+50 against any
Charge counting as on flank or rear &+200 Final overall POA regardless of all other factors (+50 if lights charging non-lights)

* A unit with 50% heavy weapon and 50% shooting weapons counts as 100% heavy weapon in close combat because the heavy weapon men are assumed to make up the front ranks.

12.2.2. Melee POA Table

<table>
<thead>
<tr>
<th>Melee POA</th>
<th>Against</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any one of...</td>
<td></td>
</tr>
<tr>
<td>100% matchlock, handgun, bow or crossbow unit defending an obstacle, if not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100 against any mounted</td>
</tr>
<tr>
<td>Swordsmen</td>
<td>+100 against any except elephants, or STEADY foot who are spearmen, or defending an obstacle.</td>
</tr>
<tr>
<td>Spearmen, unless FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100 against any except foot defending an obstacle.</td>
</tr>
<tr>
<td>Heavy Weapon *</td>
<td>+100 against any except foot defending an obstacle.</td>
</tr>
<tr>
<td>Artillery, if defending an obstacle or protected by adjacent non-light foot</td>
<td>+100 against any</td>
</tr>
<tr>
<td>Elephants</td>
<td>+100 against any</td>
</tr>
<tr>
<td>Better Armour</td>
<td>Up to +50 against any except matchlock, heavy weapon, artillery or elephants</td>
</tr>
<tr>
<td>Warriors, swordsmen or heavy weapon</td>
<td>+15 against any smaller enemy unit (unless fighting multiple units)</td>
</tr>
<tr>
<td>On higher ground (height difference &lt;= 75)</td>
<td>+25 against any</td>
</tr>
<tr>
<td>On higher ground (height difference &gt;= 100)</td>
<td>+100 against any</td>
</tr>
<tr>
<td>Foot defending light or medium fortifications</td>
<td>+100 against any</td>
</tr>
<tr>
<td>Foot defending heavy fortifications</td>
<td>+200 against any</td>
</tr>
<tr>
<td>General with the unit</td>
<td>+50 Against any</td>
</tr>
</tbody>
</table>

* A unit with 50% heavy weapon and 50% shooting weapons counts as 100% heavy weapon in close combat because the heavy weapon men are assumed to make up the front ranks.
12.2.3. Steady
A unit is only STEADY for combat purposes if it is neither Disrupted, Fragmented or Broken, nor Moderately or Severely Disordered. A unit which is Slightly Disordered will get partial STEADY benefits.

12.2.4. Troop Quality
In addition to the POAs specified in the tables above, there is a final POA adjustment of between -50 and +100 POA for troops that are below or above average quality.

12.3. Combat Results
At the end of the combat calculation, the combat will either be a draw or one side will have won. The losing unit will take a Cohesion Test (see Cohesion below) and may drop morale. It will also suffer higher casualties than the winner.

If Combat Reports are toggled on (see Advanced Options), a popup window will appear after each combat. If Simple Combat Reports are on, it will give a short report. If Detailed Combat Reports are on, it will give a full report of the factors affecting that combat.

12.4. Break Offs
One of the units may break off – this is determined by the AI.

Mounted troops will break off from enemy foot if they don’t fancy their chances in the continuing combat. They may break off from enemy mounted if they lose badly in close combat. They can only break off from mounted enemy Shock Troops (see glossary) if they themselves initiated the close combat.
Foot may break off from enemy non-shock enemy foot if they lose badly in close combat.

12.5. Continuing Combat (Melee)

If neither side breaks or breaks off after the impact combat, the close combat continues in the Melee Phase each turn until it is decided.

If you mouse over one of your units that is in close combat, unless another unit is selected you will see an approximate estimate of your unit’s Win:Draw:Lose chances in the next round of Melee combat. If the Detailed Tooltips option is toggled on, the tooltip gives a full breakdown of the factors affecting the combat. The Detailed Tooltip mode can also be temporarily turned on by holding down the CTRL key.

12.6. End of Close Combat

When a close combat ends as a result of one side breaking or breaking off in the melee phase, the victors have no CC (cannot be given orders) in the immediately following turn, even if they don’t pursue. Likewise nor does a unit that broke off.

Note, however, that if a unit charges in its turn and breaks off immediately after the impact combat, the enemy unit will have CC in the following turn.
13. Cohesion (Morale)

13.1. Cohesion States

There are 4 states of Cohesion.

- **STEADY**
- **DISRUPTED**
- **FRAGMENTED**
- **BROKEN (ROUTING)**

DISRUPTION and FRAGMENTATION reduce a unit’s fighting capability. FRAGMENTATION also reduces its AP. FRAGMENTED units cannot charge.

BROKEN units flee away from the enemy. If they leave the battlefield or continue to rout for several turns they are considered irrevocably dispersed.

Cohesion states and losses are indicated visually by a unit state icon above the unit – see below.

13.2. Cohesion Tests

Troops take a Cohesion Test if they suffer significant total shooting casualties (> 5%) in a turn, lose a round of close combat (inflict significantly less total close combat damage in the turn than they suffer), see a friendly unit break in an adjacent map square, or attempt to Fall Back when in the charge range of enemy non-light troops.

The cohesion test is based on Rand(1,6) + Rand(1,6), with some “re-rolls” depending on troop quality. There are shades of quality,
and the effect of these variations is fully represented mathematically by the game engine. However, as a general guide, Untrained troops re-roll 6s, Superior troops re-roll 1s, Elite troops re-roll 1s and 2s. A score of 6 (after modifiers have been applied) is required to pass the test. If a unit fails it drops a cohesion level, and can sometimes drop two levels if the score is bad enough. (It cannot double drop from shooting, nor from close combat unless it lost badly).

### Cohesion Test

| MODIFIERS |  
| **Unit suffered heavy total shooting casualties this turn (> 8%)** | -1 | **Unit is heavy, mixed or determined foot** | +1 |  
| **Unit suffered significant total close combat damage this turn (> 5%)** | -1 | **Unit is inspired by a friendly general fighting in close combat within (command range / 4) squares. (Allied units are only inspired by their own general, and ally-generals only inspire their own units)** | +1 |  
| Total close combat damage suffered this turn exceeds total close combat damage inflicted by a large margin | -1 |  
| **Unit has lost over 25% of its original men** | -1 | **Current Cohesion State** |  
| **Unit has lost over 50% of its original men** | -1 | **Disrupted or Severely Disordered** | -1 |  
| Foot battle troops with threatened flank | -1 | **Fragmented** | -2 |  
| Any troops shot at by artillery or bombs* |  
| Any troops testing for having lost close combat even partly against elephants** |  
| Medium foot, warriors, light foot, mob or mounted infantry testing for having lost close combat even partly against mounted troops or mixed, heavy or determined foot in open terrain** | -1 |  
| Any troops testing for having lost impact phase combat even partly against lancers ** |  
| Foot testing for having lost impact phase combat even partly against impact foot** |  
| * Only applies when testing as a result of shooting. The modifier for being shot at by artillery applies whether or not they inflicted any casualties.  
** Only applies when testing as a result of losing a close combat. The modifier for fighting specific enemy troop types applies whether or not these inflicted more damage on the unit than it inflicted on them.  
Other tests do not use these modifiers even if they occur in the same phase. |
As a unit may have to take multiple cohesion tests for the same reason in the same turn, the random score for each of shooting and close combat is retained for the whole turn. (But replaced in the enemy turn, and also after melee close combat has been resolved). This means that (for example) subsequent cohesion tests for shooting after the first will get the same result unless there are additional modifiers – such as -1 for being shot at by artillery, or -1 for the total shooting casualties this turn exceeding 8% of the unit. The program remembers if the unit has already been shot at by artillery this turn, so it does not matter which order the shooting is done in. For example, if the unit is shot at by artillery first, it might not reach the threshold of 5% shooting casualties this turn necessary to trigger a Cohesion Test. If it is subsequently shot at by musketeers, and the total losses from shooting this turn exceed 5%, a Cohesion Test will be taken, with a -1 modifier for being shot at by artillery.

Moreover, a unit cannot drop cohesion twice in the same turn from shooting, nor from impact close combat, nor continuing close combat. (But can drop once for each, and in some circumstances can double drop). Also, a unit that is Fragmented may break (without waiting to be contacted) if charged by another unit, even if it became Fragmented as a result of a previous impact close combat this turn.

13.3. Rallying

There is a chance at the start of each of its side’s turns that a Disrupted, Fragmented or Routed unit will take a Cohesion Test to improve its cohesion state. The chance of testing is much lower if it is routing. However, a unit with a general will always test.

If it does take a test and scores 6 or more, it rallies and goes up one cohesion level.
Units cannot test to rally if they dropped Cohesion in the previous own or enemy turn. Routing units cannot test to rally if they are being pursued, or if they suffered more than 5% losses from shooting in the previous enemy turn. (This includes damage from shooting in the Residual Shooting Phase immediately preceding the current turn).

13.4. Autobreak

In addition units will Autobreak if their losses get too high. For example an average quality unit will autobreak if it falls below 50% of its original strength. Higher quality units will stick it out longer and Raw units won’t hang around as long.

13.5. Flank/Rear Attacks

Troops also automatically drop a cohesion level if charged in flank or rear (unless they are non-light troops charged by light troops).

13.6. Routing and Pursuing

If a unit breaks, friendly troops in an adjacent map square take a Cohesion Test, unless the broken unit was artillery, or the broken unit was light troops and the adjacent friends aren’t.

Broken units rout. Their close combat opponents will pursue at least once in most cases, with the following exceptions:

~ Foot usually won’t pursue mounted. (10% chance they will).
~ Non-light foot usually won’t pursue light foot. (10% chance they will).
~ Foot usually won’t pursue foot if they themselves did not originally initiate the close combat by charging or pursuing
into the enemy. (25% chance they will).

Foot defending fortifications have an even lower chance of pursuing. (None if defending heavy fortifications).

Artillery never pursue.

If pursuers end their pursuit move within 2 map squares of the routers they are still considered to be pursuing, and will inflict some casualties on the routers.

After each turn, routers will rout again. Pursuing units test to see if they continue to pursue, the chance of which depends on their troop type. Warrior impact foot are very likely to continue pursuing.

Troops pursuing routers cannot perform any other actions until the unit decides to stop pursuing. However, if the pursuers meet fresh enemy in an adjacent map square that is within 45 degrees of straight ahead, they will charge them if they have enough move left and they (the AI on their behalf) fancy their chances. For the purpose of determining whether such charges count as flank/rear attacks, the starting position of the charger at the beginning of the pursuit is what is taken into account, not its starting position at the start of the whole turn. If the charged unit breaks and the pursuer pursues again, the starting position is once again reset.

If the routers go off the battlefield they are considered irretrievably dispersed. The pursuers test to see if they follow them off. If they do, they subsequently have a chance each turn of returning to the battlefield close to the place where they left it.

Routers that have no route of escape are dispersed. Routers are also dispersed if they have not rallied after 5 consecutive rout moves.
14. Unit State Icons

The flag icons above each unit become progressively more tattered as the unit suffers losses. They also show a D if the unit is Disrupted or an F if the unit is Fragmented. If the unit is Broken, they turn into a white flag.

15. Terrain

15.1. Difficulty

Terrain is divided into 4 difficulty levels: Difficult, Rough, Non-Open and Open. These affect movement and order to varying degrees. (Heavy and Medium Fortifications count as Difficult to troops attacking them but cause no ill effects on troops defending them).

Difficult terrain includes Woods and Marsh. It does not disorder Light Foot. It disorders non-Spearmen Medium Foot and Warriors, Mounted Infantry and Mob. It causes slightly more disorder to Mixed Foot, even more to Spearmen Medium Foot and Warriors. It causes severe disorder to other types. Mountain is a special type of Difficult terrain that is only passable to light foot.

Rough terrain does not disorder Light Foot, Medium Foot, Warriors, Mounted Infantry or Mob. It slightly disorders Mixed Foot. It disorders other types.
Non-Open terrain (e.g. Enclosures, some Streams) does not cause disorder, but stops combats counting as In Open Terrain thus reducing Impact POAs for Mounted Troops and Pike keils.

Open has no effect.

Streams vary in difficulty level according to the size of the stream.

Built-up areas protect occupying foot from the ill effects of flank/rear charges.

15.2. Impassable Terrain

Water squares (including moderately large rivers except at bridges or fords) are impassable to land troops. Ships can only enter Deep Water squares.

Cliffs are impassable to all troops.

15.3. High Ground

Troops on higher ground gain an advantage in close combat. This is minor (+25 POA) if the height differential is 75 or less, but significant (+100 POA) if the differential is 100 or more. Squares for which no height is shown on the tooltip are height 0.

15.4. Visibility

Woods, Buildings and Marsh offer concealment to stationary foot troops inside.

Dead Ground is Open, but stationary infantry can be concealed in it (by lying down) and then cannot be shot at. Its main value is to allow infantry to avoid enemy artillery fire.
Woods, built-up areas and higher ground block line of sight. (Some individual buildings don’t, if they are not large enough to block a whole square).

15.5. Close Combat on the Edge of Terrain

If troops inside a terrain feature are in close combat with troops outside, then the troops outside will suffer the disorder penalties as if inside the terrain if they are attacking into it, but not if the enemy is attacking out of it. Either way the combat will not count as if In open terrain.

15.6. Obstacles and Fortifications

15.6.1. Obstacle positions

Linear obstacles are either on or close to tile edges, or along roads. Foot troops in a tile with an obstacle along an edge gain benefits when defending it against troops beyond an imaginary line extending that edge. Those on a straight hedged road square gain benefits when defending it against enemy except in the direction of the road. Those on a curved hedged road square gain benefits when defending it against enemy on the outside of the bend. Fortifications only protect the tile edges where fortifications are depicted.

15.6.2. Obstacle effects

Foot defending obstacles count as Protected against mounted troops (see combat charts) and against the ill-effects of being flank/rear charged across the obstacle. Depending on the nature of the obstacle they may also count Cover – reducing incoming shooting casualties (see below).
When on a tile edge, chains, hedges and low walls can protect stationary foot whichever side of them they are on. Cover is lost if the unit moves, even to change facing. Fortifications only protect foot inside the fortification, but cover is not lost if the unit turns or moves.

Troops that charge enemy across an obstacle lose all benefits that they would have had if the enemy charged them.

15.6.3. Obstacle types

**Chains** – these give Protection but no Cover.

**Hedges/Low walls** – these give Protection and 33% Cover.

**Field Fortifications (Light Fortifications)** – these give Protection, 33% Cover, and a +100 POA bonus in close combat to troops defending them.

**Enhanced Field Fortifications (Medium Fortifications)** – these give Protection, 66% Cover, and a +100 POA bonus in close combat to troops defending them, and also count as Difficult Terrain for troops assaulting them across the fortifications.

**Heavy Fortifications** – these give Protection, 75% Cover, and a +200 POA bonus in close combat to troops defending them, and also count as Difficult Terrain for troops assaulting them across the fortifications.

**High (Estate) Walls** – unless destroyed these are impassable and block LOS.
16. Victory Conditions

These will depend on the individual scenarios. However victory conditions depending on losses are based on units routing or dispersed rather than casualties or destroyed units. The size of units is taken into account.

Default victory conditions are that an army breaks and the side loses if 60% of its original troops are routed or dispersed, or if 40–59% are routed or dispersed and the enemy have loss at least 25% less. Thus a side will fight on longer if the battle is hard fought than if it is a disaster.

In the historical MP scenarios the final scenario victory conditions are adjusted to take account of any initial disparity in forces, so that an initially disadvantaged losing army will win the scenario if the enemy victory was too Pyrrhic.

In SP games, the player is given the option to play on and conduct mopping up operations after the enemy army is defeated.

17. Battle Reports

When a scenario is won (or lost!) you get a report showing each side’s losses resulting from the battle. This takes into account additional losses suffered in the pursuit, and the recovery of some walking wounded.
18. Load/Save and Options

The Load/Save/Options menu allows you to load and save games, set the difficulty level and set various audio and screen options. The advanced options menu allows you to control the amount of information displayed.

You can save your progress during your turn or from within the Scenario Selection screen. You cannot save between turns or during the enemy turn. Saved games are located in: My Documents\My Games\SJIDAI\SAVES.

You can load your saved game from the main menu or when on the Battlefield.

18.1. Difficulty

There are six difficulty settings: Samurai, Bushō, Taishō, Daimyō, Shogun and Tenryū. Samurai is the easiest and Tenryū (Celestial
Dragon) is the hardest. In most scenarios these difficulty settings adjust the size of force available to the player. In some of the historical scenarios, however, there may be different effects. Multiplayer games are played on the Taishō setting for both sides.

18.2. UI Mode

The default UI mode is called Left/Right UI mode. In this mode the left mouse button is used to select units and the right mouse button is used to issue orders. Units are deselected by left-clicking on another unit or an empty square (or by using the SPACE bar).

The alternative UI mode is called Left only UI mode. In this mode the left mouse button is used to select units and issue orders. Units are deselected by right clicking or by using the SPACE bar. (They can also be deselected by left-clicking on another unit, but this is not recommended as it will instead result in the first unit executing a turn action if the second unit is on an adjacent square).

18.3. Advanced Options

18.3.1. Helper Mode On/Off

When helper mode is on, additional helpful information is displayed in the tooltips and in popup windows. Most of these message appear only once per game. When you no longer feel the need to see these messages you can turn helper mode off. You can toggle helper mode on and off in the advanced options menu. There is also a button to toggle helper mode on and off on the popup message box.
18.3.2. **ToolTips: Simple/Detailed/Minimal**

Detailed tool tips display the factors affecting shooting or close combat in much greater detail. However, on the keyboard, detailed tool tips can be temporarily turned on by holding down the CTRL button while mousing over the target unit.

Minimal tool tips show only the unit name.

18.3.3. **Close Combat Reports Simple/Detailed/Off**

You can toggle between simple close combat report popups, detailed close combat report popups, and no close combat report popups. When close combat report popups are turned off, the most important close combat information can still be seen as floating text above the units.

You can also toggle between the options using the upper button on the close combat popup, although this will not take effect until any queued reports have been shown. (Note that if you turn close combat report popups off you will have to use the Advanced Options menu if you want to turn them on again).
18.3.4. **Yellow Question Marks On/Off**

When this option is on, yellow question marks appear to warn of terrain that might conceal hidden enemy units.

19. **Campaigns**

19.1. **Design Philosophy**

The Sengoku Jidai campaign system is primarily designed to produce a series of challenging and interesting battles, with the results of each battle having consequences for the strategic situation and the forces available for the next battle. Because armies will retreat if their local commanders consider their forces outmatched, none of the battles should be a foregone conclusion.

The strategic aspects of the campaign have been deliberately streamlined to keep the emphasis on the battles.
19.2. Starting a Campaign

To start a campaign, select one of the Campaigns from the Campaigns menu then pick your side and (unless they are preset) the two army lists representing the opposing sides in the campaign.

If you select Automatic your starting forces will be recruited automatically. If you select Player you can recruit your own starting forces.
The campaign can be saved at any point, whether in the campaign overview or during a battle.

19.3. Army Lists

Campaigns use the same army list system as used for Skirmishes.

In some campaigns the army lists are fixed throughout the campaign, in others, they change as the campaign progresses. Forces raised in certain provinces or at certain dates may use different army lists.

19.4. Campaign Year

There are six campaigning turns each campaign year: Early Spring, Late Spring, Early Summer, Late Summer, Early Autumn, Late Autumn.

Armies abandon any on-going sieges and retreat into winter quarters at the end of the Late Autumn turn. Troops can be raised in any turn if funds and manpower are available.

19.5. Provinces and taxation

Provinces can be Agricultural, Hilly, Wooded or Mountainous – the more favourable the terrain the more tax is collected from the province. The terrain of a province also affects army movement into it, and the type of terrain generated for battles occurring in it.

Fighting within a province will erode its tax value and ability to supply armies.

Captured provinces only produce half as much tax as an equivalent originally-owned province.
In addition to tax from their on-map provinces, each side has a base income which represents income from off-map provinces, foreign subsidies or other sources.

Income is collected, and field army troops are paid, at the end of each campaigning year.

19.6. Raising Troops
When you have money in the treasury you can raise troops in any province that you owned at the start of the campaign. You can raise up to the manpower limit (which is expressed in points).

Raising an army costs 5 of the army’s 6 AP allowance, so you won’t be able to move them in the same turn, but you will be able to combine them with any army already in the province – see below.

19.7. Other army options

Other options are to **split** an army (when there is only one in a province) and **combine** armies (when there are more than one in a province and all of them have at least 1 AP left).

When splitting an army, you can use CTRL or SHIFT in the normal way to select multiple units at a time.

You can also **refit** armies (bring the units up to strength) if you have money available and manpower in the province – which must belong to you. This uses 5 AP, so the army will not be able to move on the turn when it refits.
However, all armies are automatically refitted at the end of each campaign year – the manpower and cost being deducted from throughout your territory automatically. Replacing losses dilutes any experience and elan gains that a unit may have – so if you really want a super unit it has to be involved in winning battles while losing as few men as possible – but not none – see below.

These option buttons only appear when they are possible in the selected province.

19.8. Inspecting Armies

The size of the army icons on the map gives some indication of the relative size of armies. The tooltip will show basic information about an army when you mouse over it. You can inspect your own armies in more detail by R-clicking on them. If you then mouse over the icon for each unit type, the tooltip will give you information about the individual units – including each unit’s strength in men, and a description of its experience and elan. The combination of experience and elan determine the quality of the unit in battle.
19.9. Fog of War

The points value reported when you mouse over enemy armies is adjusted by a Fog of War factor - the reported points will be between 75 and 133% of the true value. This uncertainty applies equally to player and AI decision-making. Decisions on whether an army should retreat from an enemy army, or whether AI armies attack, are based on estimates of the enemy adjusted by the Fog of War factor.

19.10. Moving Armies

To move an army, drag it into an adjacent province (one province step at a time). The cost of each such move depends on the terrain in the destination province. Each army starts each turn with 6 Action Points (AP). The terrain costs are 2 for Agricultural, 3 for Hilly or Wooded, and 4 for Mountains. It also costs 1 AP to combine the armies in a province.

After the player hits End Turn, the AI side moves its armies.
19.11. Units

19.11.1. Field Army Units
The units in the armies on the map represent only field army units.

Field army units are persistent, and will gain experience in battle and gain or lose elan depending on the events of the campaign. After a battle severely damaged units may be disbanded and the men from them used to top up the strength of other units of the same type. Units are also removed from the field army roster when they go into garrison after a province is captured or recaptured.

19.11.2. Auxiliary Units
In addition to field army units, there are assumed to be additional garrison and local units that will defend a province’s town(s) even in the absence of a field army. This is why it can take several turns to subdue a province after the province owner’s field army has been driven out.

Some of these auxiliary units may also reinforce the local field army if their province is invaded, or if their friends send a field army to relieve them. The maximum points value of auxiliary forces available for field battles is 300 points in an originally-owned province and 150 points in a captured province. They will only be mobilised if the threat is deemed sufficient to warrant this, and the minimum will be mobilised to match the perceived threat.

Provided that an invader invades with a substantial force, the full allowance of auxiliary troops is only available when the province is first invaded (each time this occurs). A counterattack in the province owner’s next turn may be supported by up to half the full number of auxiliary troops. Later in the siege of the province, no
auxiliary forces are available because they are all assumed to be penned in by the besieging forces. Small invading forces may be insufficient to suppress the local units in this way.

The current availability of local auxiliary troops (or otherwise) can be seen in the province tooltip.

19.12. Battles

Battle may occur when an army enters a province containing an enemy army. If its commanding general doesn’t fancy its chances, the defending army will retreat to an adjacent province rather than fight. If a battle occurs, the side who owns the province may have additional local or garrison troops added to their army (see above). In some circumstances the defender will fight a defensive battle from behind field fortifications. If the defender has more than one army in a province when it is attacked, some troops may arrive late as a reinforcement or flank march scenario.

Large battles must be fought out using the tactical battle system. Smaller battles can either be played out using the tactical battle system or Auto-Resolved. The chances of victory when a battle is auto-resolved depends partly on the relative strength of the opposing armies, and partly on your track-record in the battles you have played out using the tactical battle system in the course of this campaign. So once you have proved your ability as a battlefield commander, you can bypass the smaller battles by Auto-Resolving them with a high chance of victory.

If you play the battle using the tactical battle system, then if you exit the battle before the time limit, your army retreats, and you take additional losses – though not as many as if you fought on and lost badly.
At the end of a battle, both armies gain experience, the winning side’s units will gain elan and the losing side’s units will lose elan. Units routing or dispersed at the time the battle ends will lose elan even if their side won the battle. The losing side’s units will take additional losses, especially if the army was broken. Units that suffer no losses at all in a battle do not gain experience – on the assumption that they did not fight.

19.13. Sieges

If an enemy province is undefended when it is invaded, or its army retreats, or loses a battle, the town(s) or other strong-points of the province come under siege by the invaders.

The chance of the province falling to the invader depends on the strength of the besieging force and the number of turns the province has been continuously under siege. When determining the strength of the besieging force, foot are worth more than horse, and medium or heavy artillery are worth even more.

The besieging army suffers attrition each turn from combat casualties, disease and desertion. If the province has not capitulated by the end of Autumn the besieging army breaks off any sieges and retreats.

If a province capitulates, the besieging army will automatically leave an appropriate garrison, those units being removed from the field army roster.


The supply limit for each province is expressed in troop points, which makes it easy to see whether armies will exceed supply limits. (A more complex calculation was not deemed necessary,
as cavalry units generally have higher points costs than foot units, and half as many men, so their additional supply requirements are automatically taken into account). If the total points value of field army troops in a province exceeds the supply limit at the end of a turn, armies in the province will suffer attrition. The greater the discrepancy between the total forces in the province and the supply limit, the greater the attrition, and the more damage will be done to the province’s economy and hence future capacity to supply armies.

Supplies in a province are assumed to be obtained partly locally and partly from adjacent friendly provinces. The supply limit will therefore depend partly on the terrain and economic condition of the province itself, and partly on the number, terrain and economic condition of adjacent friendly provinces. Thus the supply limit in a province will be different for the two opposing sides, and large armies will be hard to supply if they advance far into enemy territory without capturing the intervening provinces.
19.15. Economic Damage

The taxable value, manpower and supply value of a province is damaged by military action, particularly armies larger than the supply limit of the province. Both sides’ forces count towards this. Such damage will recover slowly year by year.

19.16. Attrition

In addition to any losses in battle, armies will suffer attrition (losses of men and elan):

~ If the troop points in a province exceed the supply limit.
~ If they are besieging the town(s) of a province.
~ If they retreat to avoid battle.

19.17. Difficulty level

The difficulty level you set in the Options menu determines not only the overall balance between player and AI forces, but also the thresholds at which armies decide to retreat rather than fight, and the AI decides whether to attack.

19.18. Victory Conditions and Scoring

The relative power of the two sides is calculated from the tax value of provinces currently owned and the points value of field army forces currently in being. An indication of the current balance is shown on the right hand side of the campaign screen.

When the overall “power” of one side is 3 times that of the other, the losing side’s leaders will sue for peace.
The end campaign report shows victories, defeats, provinces gained and lost, and an overall prestige score based on the decisiveness of your battlefield victories or defeats, as well as provinces gained or lost. These stats only take into account the battles you have fought out using the tactical system, not those you have let the computer auto-resolve.

19.19. Special Campaign Rules

Some campaigns have special rules.

Tenka Fubu:

~ The campaign is fought out only in the centre of the map. Neutral provinces are edged in grey, and cannot be entered.
~ The alliance leaders are Oda and Takeda. If a province has no clan listed in brackets after the province name, new forces will be taken from that side’s main clan’s list (Oda or Takeda). If another clan is listed, the force will be taken from that clan’s list.
Sengoku Jidai:

At the start of the campaign, a number of provinces belong to neutral clans. By sending gifts to these clans, the player and AI can attempt to induce them to join the war on their side. If they do so, their army (drawn from their clan’s own army list) will become available to that side to move and if desired integrate with their own armies. However, if the other side subsequently induces them to change sides, their units and generals will be withdrawn from their previous side’s armies, and they will raise a new army to fight for the other side. It is easier to induce a neutral clan to join your side than it is to induce a clan to change sides once it has committed itself. However, it becomes much easier to induce them to change sides if you are in control of their home province.

While a neutral clan remains neutral, it is not permitted to move armies to the clan’s province.
Imjin War:

- Japanese troops are not permitted to move to China (Liaoning) and Korean/Chinese troops are not permitted to move to Japan (Nagoya).
- Japanese troops moving from Japan to the mainland or vice versa may suffer attrition due to storms or enemy naval action.
- Although the campaign starts with some Korean provinces under Japanese control, the Koreans count as the original owners of those provinces.
- After the first turn, the Japanese can only raise forces in Japan (Nagoya).
- Allied forces raised in China (Liaoning) come from the Ming Chinese Expeditionary Force army list applicable at that date. Allied forces raised in Korean provinces come from the Joseon list applicable at that date.

19.20. Campaign Strategy

Historical generals would normally retreat rather than give battle when they deemed the odds of victory were poor. Consequently when a province is invaded by player or AI forces, the general in command of any field army in the province will make a judgement call as to whether to offer battle or retreat to a neighbouring province. It was not usually possible to force battle on an unwilling enemy if they decided to retreat before the armies were in close proximity. Because of this, there is no time for the local general to request instructions from the high command (the player), he needs to make the decision himself.

His decision takes into account:
The perceived odds between the overall points value of each army, taking into account previous losses and current troop quality and morale. (This estimate may however be misjudged due to the Fog of War factor.)

The tactical prowess of the opposing high command, as suggested by the difficulty level the player has set. If the difficulty level is set higher, the AI will assume that it needs better odds to have a good chance of victory, and the player’s generals will be willing to accept battle at worse odds. The desired minimum odds (player:AI) for each difficulty level are the same as in Skirmish games, as follows:

- **Samurai**: 100:75
- **Bushō**: 100:95
- **Taishō**: 100:105
- **Daimyō**: 100:118
- **Shogun**: 100:134
- **Tenryū (Celestial Dragon)**: 100:150

These odds are only guidelines, generals will sometimes accept battle at worse odds, if necessary adopting a defensive position, and may have miscalculated the odds due to the Fog of War factor. The opportunity to retreat only applies to the field army already in a province when it is invaded by an enemy army. (It does not matter which side actually controls the province). When invading a province, the invading army does not get the opportunity to retreat unless the enemy army has adopted a defensive position.

The consequences of all this are twofold:

- If you want to win a campaign you should set the difficulty level no higher than that at which you can win the majority of Skirmish battles. It is possible to lose more than half the
battles and still win a campaign, but you do need to win most of the major battles.

~ Putting all your field forces in one enormous stack of troops and chasing the enemy round the map is not the best strategy, because the enemy will not accept battle at poor odds, and is likely to attack your other provinces, possibly with multiple smaller forces. Also, if your stack is larger than the supply limit permits, your army will suffer increasing attrition.

It is therefore often better to keep your field forces divided into two, three or even more divisions, with some defending your provinces and others attacking the enemy’s provinces. Attacking multiple enemy provinces can be good strategy, as it tends to distract him from attacking yours, unless the forces you are using are too small to be a significant danger.

If you invade a province where there is an enemy field army you will not get the opportunity to retreat before a battle starts if the odds are poor. You can of course retreat as soon as the battle starts, but this will still count as a defeat and, because the enemy army is close enough to pursue effectively, will result in higher attrition and loss of morale than a retreat before battle.

From a defensive point of view, even one field army unit in a province will act as a nucleus on which local garrison and militia forces can coalesce to offer battle if the province is invaded by a moderate sized enemy force. Up to 300 points worth of garrison/militia forces will be available in provinces originally owned by your side, half as many in captured provinces. Making good use of local forces in this way is good strategy.

It is also important to take control of enemy provinces. The enemy will certainly be trying to take control of yours. The chances of success in capturing enemy provinces depends on the size of the
invading force, and its suitability for conducting sieges, with infantry being more effective than cavalry, and medium and heavy artillery even more valuable. It also depends on the duration of continuous siege, so avoid breaking off a siege if possible. If you wish to replace the current besieging force with another force, move the new force in before you move the existing force out, so as not to give the garrison any chance to resupply – which would restart the siege counter. Both sides use exactly the same rules for sieges, so if the enemy appear to be having more luck in capturing your provinces than you do in capturing theirs, it either really is luck, or their forces are larger or have more suitable composition for successful sieges.

20. Multiplayer

Sengoku Jidai: Shadow of the Shogun includes a very comprehensive and easy to use multi-player system. To reach it, select Multiplayer from the main game menu. If you already have a Slitherine forum username or have previously played other multiplayer games on our server, choose the login option and enter your details. If you are new to Slitherine, register your username and password in game. You can use these details to log in to the Slitherine forum and view stats or chat to other players.

The revolutionary PBEM (Play by E-Mail) system does not require you to organise games in advance; you do not even need to be online at the same time as your opponent. It is as simple to play as a single player game, removing all the barriers to entry of other multiplayer games.

It really needs to be tried to be believed!
When you arrive in the Lobby, you’ll see 3 tabs. The first tab, My Games, lists any games you currently have going. The middle tab is how you issue a challenge to start a new game, while the third lets you view any challenges from other players looking to start a game. You can accept these to get playing.

Any games displaying a padlock icon are private challenges only available to specific opponents.

If you don’t see any open challenges in the list, it is not because people aren’t playing, but because new challenges get snapped up very quickly after they are created. Your best bet is to create some new challenges of your own – they will soon be accepted. You can play as many games at a time as you like.

To create a new challenge, go to the My Challenges tab and click the New Challenge button and you’ll see a list of available scenarios. Select the one you wish to play, or click the Create Skirmish button to set up a computer generated scenario, then select your side.

Once you have an opponent, the game moves to My Games. If it is your turn you’ll be able to select the game and press Play. If
not, you’ll have to wait for your opponent to take their turn. When your opponent has moved you’ll be notified by e-mail. It is very important that you enter your real e-mail address when registering or you will not see the e-mail alerts when it is your turn.

21. Hints and Tips

Try to keep your units within command range of a general in line of command. If they are out of command range they will be less manoeuvrable.

Generals give the unit they are with a big boost in close combat, but they cannot issue orders while they are in close combat, so the units of their command will be deemed out of command range until the close combat ends, unless they are within range of another general in line of command. Also, generals in close combat risk being killed or incapacitated, which can have a disastrous effect on the morale of nearby units.

The key to defeating the enemy is to make his units drop Cohesion (Morale) until they break and run.

The more shooting damage a unit suffers in a turn, the more likely it is to lose cohesion. It therefore pays to concentrate your fire as much as possible on individual enemy units. Shooting at an enemy unit with both small arms and artillery is particularly effective at cracking their morale.

Troops shoot better at short range, with full arc of fire and when stationary. They shoot less effectively if they move or turn. This effect lasts until your next game turn, so will affect two rounds
of shooting. If you are not advancing, try to anticipate enemy movements and have your troops in position before the enemy is in range. Artillery cannot shoot at all if they unlimber, move or turn. Try to avoid blocking the shooting of your own artillery. Units react to enemy units by shooting in the opponent’s turn. Take this into account when advancing on the enemy and when planning your defence. Any shots not used in either side’s turn are used in the residual shooting phase that follows the turn.

For close combat Points of Advantage are the key to victory. (See the Close Combat section above). Try to ensure that your units have the best possible matchups, and try to avoid charging frontally against enemy who will have the advantage in close combat.

Some units have capabilities which give them an advantage in the initial impact against some troops. Some of these require the unit to be stationary – i.e. not charging. For the others, it does not matter whether the unit is charging or receiving the charge as the unit receiving the charge is assumed to counter-charge a short distance if that fits the situation (although the unit does not actually move on the screen).

The close combat rating is only an approximate guide to the unit’s overall close combat power - the interaction between terrain, cohesion and POAs is far more important in determining the likely result of a close combat. In the wrong situation, a powerful unit can lose to a much weaker one. Along with the optimal use of firepower, advantageous matchups are key to victory.

Foot (other than non-missile-armed Warriors or Determined Foot) can’t charge non-light mounted troops. Light foot and mounted infantry can’t charge most non-light troops in open terrain.
Flank or rear attacks are very dangerous. Try to avoid leaving your units vulnerable to them. Try to set up flank or rear charges against enemy units.

Light troops (Light Foot, Light Horse and Mounted Infantry) and non-lancer Cavalry can evade enemy charges, but may get caught, especially if the chargers start their move close to them. Troops that evade off the battlefield may return later.

Some terrain disorders troops, especially mounted troops, spearmen and close order foot. The worse the disorder, the more the fighting ability of the unit is affected. Troops charging enemy who are in disordered terrain are disordered as if they were in the terrain themselves. However, troops in open terrain that are attacked by troops in disordered terrain are not disordered by the terrain. Troops in cover take reduced shooting damage, especially when stationary. Foot can hide in buildings, woods and some other terrain. They can only be seen by nearby enemy or if they shoot. Before some battles begin you may be able to redeploy your troops. Position troops to make good use of terrain.

Troops behind obstacles or fortifications gain various advantages against attacking enemy. They lose these if they themselves charge. Troops behind obstacles (other than fortifications) lose any cover provided by the obstacle if they move or turn.

Light Foot and non-spearmen Medium Foot and Warriors are vulnerable to mounted troops in the open. Try to keep them in terrain or behind obstacles when cavalry are about.

Troops in close combat have an advantage if on higher ground than the enemy – the advantage is much greater if the slope is steep (height differential 100 or more).
A unit that is in melee against more than one enemy unit fights less effectively against each of them. So ganging up multiple units in close combat against an enemy unit increases the chance of defeating it.

Once in close combat, units continue to fight in each melee phase until one side routs or breaks off. Higher quality troops fight better and are more resilient. When a unit routs, its opponents will usually pursue. You cannot issue orders to routing troops until they rally, nor pursuers until they stop pursuing. Troops that pursue off the visible map may return later. Routers won’t.

Disrupted or Fragmented troops fight less well. Fragmented troops are likely to rout if anything else goes wrong, or if they are charged. Fragmented troops cannot charge and cannot move far. If they attempt a Fall Back action when the enemy is in charge reach, they will probably break. However, if you can keep the enemy occupied with other units they may get a chance to rally.

Units outside command range of a general in line of command are less manoeuvrable. Try to keep commands together if possible.

Generals increase the close combat fighting power of the units they are with, but are at risk of being killed or wounded in close combat, which may cause dismay to nearby units.

22. The Map Editor

A map in *Sengoku Jidai: Shadow of the Shogun* is built up from a grid of tiles, with 3D objects placed on them. As well as the visual look, the tiles determine the passability and cover values of each square, although certain objects can override these values.
The default size for a map is 32x32 tiles. If you wish to change the size or proportions of the map, click the button at the bottom left of the sidebar.

This opens up the map resize dialogue. You can either create a new map of the required dimensions, or resize the current map. Resizing the current map can cause issues if care isn’t taken to avoid lopping off key features or leaving placed units stranded off map. If just the size of an existing map is changed, the playable area will shrink or expand from tile 0,0. If this isn’t what is desired, the x and y offset values can be used to shift the point at which the new sized playable area is applied.

22.1. Tiles

Once the size is correct, the basic terrain can be laid out with tiles. To work with terrain tiles, press the top left button on the sidebar.

The tiles are grouped into palettes of terrain types. Selecting a palette name from the second window down in the sidebar displays all the terrain tiles in that palette in the larger window below. Mousing over
the tiles within this window displays a tooltip of the tile’s terrain type. Clicking on a tile within the large palette window selects it and allows you to place the tile onto the map with a click of the mouse (or hold the mouse button down to paint large swaths). Tiles can be rotated in 90 degree increments using the R key, although some have their rotation automatically randomised. While over the map, the tooltip displays the existing tile’s terrain type, rather than the type of the tile you are painting with.

The palettes available in the window are limited to those matched with the terrain style specified when the map was created. However, an Advanced Mode can be turned on with the button underneath the tile window, which allows access to all terrain tile types at once. Advanced mode defaults to off, but this can be changed by adding ‘EDITORADVANCEDMODE 1’ to USER.TXT.

There are two kinds of tiles, flat and overlay.

- Flat tiles are used to block out the functional landscape and set terrain types - open ground, forest, marsh, water etc.

- The tiles from an overlay palette sit on a layer over the top of normal tiles. An alpha channel on the overlay tiles allows parts of the tile beneath to be seen. Some overlay tiles are completely transparent but alter the terrain-type of the tile without altering its appearance (e.g. Enclosure, Deep Stream, Medium Stream, Dead Ground).

These two layers of tiles can be edited independently of one another. Selecting an overlay tile from the palette window and clicking on an already laid down overlay tile will replace it without changing the tile underneath, while an underlying flat tile can be changed without affecting the overlay above it. Pressing the Delete key while working with terrain tiles will remove any overlay tile underneath the mouse pointer.
Some overlays (e.g. roads and tracks) can be layered over other overlays (e.g. streams).

Certain overlay tiles change the terrain type of a tile they are placed over. Roads, paths and tracks can be laid out across multiple tiles and overwrite their terrain types.

22.1.1. Auto-edging.

Auto-Edging can be toggled on and off using the button underneath the tile window.

When a flat tile is placed while Auto-Edging is on, the computer will automatically assign edge overlays to blend the terrain to the default terrain. Water placed on the map will automatically form streams, lakes or rivers, while roads will join together without time consuming selection of bends and straights.

This generally saves a great deal of time, but in some cases a map designer may wish for more control. Turning Auto Edging off using the button below the Advanced Mode button will disable this feature, and allow individual selection of overlay tiles. This is very useful when joining different types of roads together or when sorting out the propensity of the editor to create “mini-roundabouts” whenever roads make tight turns. See also Edging and Style below.

22.2. Hills

The game supports multiple hill levels. Holding the CTRL key allows the player to change the height of tiles on the map. Left click raises a tile in set increments, right click lowers. Complex hill geometry can prove very tricky for the game’s LOS rules to interpret, especially narrow ridges.
22.3. Objects

Objects are accessed via the central button in the top row of the sidebar. Objects are grouped together in palettes in much the same way as the tiles. As with the Tiles, the terrain type selected in the map creation screen determines the object set available, unless Advanced Mode is active, in which case all object sets can be used.

To place an object, select a name from the list in the larger window. The object is then attached to the cursor and can be placed as seen on the map with a left mouse click. Objects can be rotated in 90 degree increments using the “R” key. They can also be freely rotated using the Page Up and Page Down keys. Objects can be scaled up and down using the Home and End keys. Holding SHIFT while scaling or rotating allows for finer control. Pressing Delete will remove any object currently under the cursor.

Certain objects, such as buildings and fortifications, change the terrain type of a tile they are placed over as well as blocking the LOS. Bridges create a passable tile beneath them over water. These objects’ placement is often constrained to within a tile’s boundary, to prevent the placed object falling between two tiles and creating visually misleading terrain. If two objects on the same tile have different terrain effects, whichever was placed last will take precedence.

Trees are a special case. The terrain tile Woods specifies that the tile provides cover for infantry units. However, it is the objects placed on it that cause the tile to block LOS.

Some objects have restrictions on where they can be placed on the tile. Certain objects, such as Hedge objects, can only be placed on tile edges, except for the special versions designed to go along roads. These will provide defensible obstacles as detailed in the Terrain section above.
22.4. Units

Once the map has taken shape, it can be populated with units. To work with Units, click the right hand side button on the top level of the sidebar. The units are divided into Side 0 and Side 1 unit lists. Not all unit types are in both. Repeated clicks toggle between Side 0 and Side 1 unit lists. Holding down the Shift key while doing this will show units from both lists – this will result in many duplicate units, but will allow the units missing from the usual Side 0 or Side 1 list to be used for that side. The list can be refined by clicking on the filters in the small window above the main unit list.

Once a unit type has been selected from the list, move over the map and click the left mouse button to place the unit on a tile. Press “R” while holding the mouse cursor over an already placed unit will rotate it in 45 degree increments. Pressing Delete in similar circumstances will remove the unit.

To load artillery on a limber, or vice versa, right mouse click on the tile that contains the existing unit. The editor does not limit what units can be loaded, so it is up to you to avoid loading (for example) an infantry unit into an infantry unit. You should in practice only put one unit on a tile – except for guns on limbers.

The same care must be taken in where units are placed. There are no limitations to where a unit can be deployed, so to avoid problems once the scenario is being played we must, for example, guard against units in lakes or outside the battlefield.

22.4.1. Fixed/Unfixed Units

When a unit is placed in the map editor, it displays a label Fixed above it. This denotes that in a scenario the player will not have to purchase that unit and it will always be present in the scenario.
Pressing the “F” key with the cursor over a unit turns off the fixed label and means that the unit will have to be purchased using the points allocated in the scenario.

22.4.2. Alternate Unit Textures

The map editor allows units to have a variety of different textures. The Unit Textures button will pop up a list of textures available for the currently selected unit type. Selecting a different texture will convert all units of that type on that side to the new texture.

The alternate textures are kept in subfolders in Data/Battle/UnitTextures (either in the main installation or under the specific campaign). The name of the subfolder determines the name that will appear in the text box. The textures must be named the same as the original texture.

You can find out which texture names apply to which unit by looking in the Squads.csv file in the AssetFilename column. However, altering the Squads file will not alter the file-reference in the associated model, so the editor will still show the alternative textures as per the unaltered filename.

22.5. Copy & Paste

Copying and pasting of Tiles, Objects, and/or Units works using the standard Ctrl-C and Ctrl-V keyboard shortcuts. The Copy/Paste window will be displayed while pasting or when Shift-Ctrl-C is pressed (note this opens the window and enters tile selection mode but does not copy). This window allows selection of which types of data to paste. The most recently copied data can also be exported to a file for later use, the clipboard is cleared whenever a scenario is loaded. To select a region for copying, press Y and
then define the region by clicking on opposite corners (press Y again to cancel).

22.6. Edging and Style

This section allows high level control of the auto-edging functionality in the editor.

Edge All will attempt to edge all terrain tiles, overwriting any hand placed edging that the player has implemented.

Align all roads will attempt to join all roadways together.

Clear all ground edging removes all generated and hand placed edging of ground terrain.

Clear all water edging removes all generated and hand placed edging of water tiles.

Convert Style allows the designer to change the visual look of a map but keep its layout if more than one texture set is available. (There is only one in vanilla Sengoku Jidai: Shadow of the Shogun). This only works if the two texture and tile sets have the same components. Note that objects will not be changed.

22.7. Conditions

Weather and Time of Day are currently purely aesthetic.

22.8. Reinforcements Mode

This section allows a designer to bring on reinforcements for either side during a scenario. While in reinforcement mode, click on any units on the map to add them to the current reinforcement
group (there are up to 8 reinforcement groups per side). Each group can be assigned a turn to arrive on.

If you wish to display a message to the deploying side when the reinforcements arrive, type it under Message. Message text will be stored in the TEXT9.TXT file in your campaign. If you wish the camera to pan to show the units to the player, set Move Camera: to Yes.

The units will appear where they were placed, so some discretion should be exercised to avoid complaints of teleportation.

Advanced users may wish to customize their own scenario scripts (see the Scenario Script section below). Once units have been added to the map and assigned to reinforcement groups, clicking Export to File in the Reinforcements Editor window writes a script fragment with the unit types and locations. The units should be removed from the map once the fragment has been integrated into the main scenario script.

22.9. Deployment Mode

Clicking on this button cycles through the three options for deployment in the scenario:

- **No deploy** – all units start where they are placed
- **Partial deploy** – one side deploys while the other is fixed
- **All deploy** – both sides can deploy

The default behaviour is that units can deploy into any tile they can see into. To use the standard deployment rules as outlined in the main Deployment section above, you need to include
if (GetTurn() == -1)
{
    SetUniversalVar("StandardDeployment", 1);
    SetStandardDeploymentBounds();
}

in the StartTurn(side) function of your scenario script.

22.10. Custom AI Dialogue

This controls the AI behaviour. AI Team button cycles through the 8 possible teams that the AI force can be split into. Select a team number, then click on any units on the map to assign them to that team.

Aggression controls the currently selected team’s responses to the player. Each behaviour has its own value

- 2 – Keep together when moving.
- 4 – Ignore all enemy unless they are close. Don’t move (except to turn to face) even if they are.
- 8 – Ignore all enemy unless they are close. Engage them as per other orders if they are.
- 16 – Seek and Destroy
- 32 – Use the threat map to move around carefully.
- 64 – Stay put in current tile.
- 128 – Non-light troops ignore enemy light troops unless they are protected commanded shot or very close.
- 256 – Ignore enemy foot troops unless very close.
- 512 – Ignore enemy mounted troops unless very close.
- 1024 – Light troops bug out. (This isn’t much use if applied in the Editor, but it can be used in scripted AI in the scenario script).
- 2048 – Ignore enemy artillery.
These behaviours can be combined by adding them together. For example, a team can seek and destroy enemy non-light foot only by combining seek and destroy (16), ignore enemy light troops (128) and ignore enemy mounted (512). The resulting Aggression code would be 656. Holding shift advances the values by 10 each click.

These Aggression values can also be used to control AI behaviour in scripts using the available script functions.

**AI target point** allocates a destination to the AI team. Clicking the AI point button cycles through the twenty four available points. Once the correct number is displayed, click the Place AI point button, then click on the map to place the marker.

### 22.11. Plugin Tools

This button accesses the additional tools that have been coded to help scenario design. There are currently three.

#### 22.11.1. Random Enemy

This controls how many points each of the 8 AI teams will be given to purchase unfixed units.

#### 22.11.2. Random Map

This section creates a random map using the present map’s dimensions. The random map generator creates battlefield terrain tailored to the region covered by the game.

Click **Build map** to generate the map. Each click will build a different map.
22.11.3. Victory Points

This section covers the placement and allocation of victory points, and also the conditions required for victory.

Clicking on the left hand button of a VP cycles through its four possible states – Off, Neutral, belonging to side 0, belonging to side 1. Clicking on the right hand side, then clicking on the map allows the placement of VP.

Clicking the side 0 and/or side 1 boxes allows the designer to set victory conditions. Left clicking the Capture and Defend boxes raises the count, right clicking decreases.

Left clicking increases the turn limit, right clicking decreases it. Clicking the small box next to the turn limit sets the victory conditions to be “whoever has the most VPs at the end of the game”.

The bottom section allows the designer to select which AI teams will attempt to capture any VP flags held by the player.

22.12. Scenario Description

In the editor, click the Scenario Description Exporter button to open the tool. Fill in the scenario name and up to five additional pieces of descriptive text. Click Export once you have entered the text to save the scenario description.

For single player scenarios, this information will be displayed when choosing which scenario to play. If you place a .dds or .tga format image in the scenarios directory with the same name as the scenario, it will be used as the background while displaying this text in place of the default.

For multiplayer scenarios, it is possible to enter all of the strings and a UI file will be created, but only the name and first line of
description will be displayed on the game selection screens within the lobby UI.

The UI is written to:

MyCampaignName/data/UI/ScenUI_<Scenario>.txt while the strings are written to text9.txt.

It is safe to manually edit the UI after it has been exported, it is only rewritten when explicitly exporting from this window.

22.13. Text Markers

Text markers can be created and placed on the map. The top window shows a list of markers currently specified. New markers can be created by clicking New Marker while existing ones can be removed by clicking Delete marker.

The window below these buttons shows pre-set options for the text markers. If another option is required, the designer can click Clear String and type their message into the box. The tag displays the identity tag of the text line – this will be generated automatically for any custom text lines created. Both the font and the text colour can be customised.

Once the Text marker has been created, it can be placed on the map by clicking Place Marker then clicking on the map. This will clip to the centre of the tile, although holding Shift down will allow for finer placement.

Use the ID shown in the text marker list to turn the visibility of text markers off and on from script using SetVisibilityTextMarker.

Strings created in the text marker edit window are stored in the TEXT9.TXT file in your campaign.
22.14. Map Border Tool

This allows you to set the tiles outside the playable map area to black.

22.15. Generals

Generals can be added to your scenarios as follows:

You can add a new general name to the list of custom general names by typing the name into the edit box and clicking on Add New General Name. The name will then be added to the list of names in the lower list box. When you save the scenario, any new general names you have added will automatically be added to the text9.txt file in your campaign’s main directory.

(If you make a typo, you cannot edit the name in the Editor, but you can simply edit the line in your text9.txt file after saving the scenario – they are in the form ‘IDS_CUSTOMGENERALNAME_n, “GeneralName”,‘. If you want, you can delete the whole of the offending line. This will not cause any side effects unless you have used that name in another scenario in the campaign. You should not renumber any lines).

To add a general to the scenario, you need to assign him to a unit on the map. First highlight his name in the names list, then set his type (Sub-General, Commander-in-Chief or Ally-General), quality (Troop Commander – command range 4, Field Commander – command range 8, or Great Commander – command range 12) and personal duelling skill (2-8).

Then, with the editor in unit placement mode, place the general’s unit or click on a unit that is already on the map. Then click on Place General. His name, characteristics and map location will appear in
the list box at the top of the Generals window. You can check he is with the right unit by mousing over the unit on the map.

If you decide to move him to a different unit, you must first remove him from the generals list by highlighting him in the top list box and then clicking on **Delete General**. You then need to assign him to another unit following the procedure above.

You also need to assign the units that will be under his command in the scenario. You do this using the custom AI data dialog to assign the units to a team. (You need to hold down the CTRL key when doing this for Side0 units). The general will be in command of all units in the same team as his unit. (Note that even if you use a scenario script that includes code that reassigns team allocations – such as the AI_Masterplan() function – the original team allocations will be retained for command control purposes.)

When you save the scenario, any generals you have added will be automatically saved with the other scenario data.

### 22.16. Custom Unit Names

Custom unit names can be added to your scenario as follows:

You can add a new custom unit name to the list of custom unit names by typing the name into the edit box and clicking on **Add New Unit Name**. The name will then be added to the list of names in the lower list box. When you save the scenario, any new custom unit names you have added will automatically be added to the text9.txt file in your campaign’s main directory.

(If you make a typo, you cannot edit the name in the Editor, but you can simply edit the line in your text9.txt file after saving the scenario – they are in the form ‘IDS_CUSTOMUNITNAME_n’,
“UnitName”, If you want, you can delete the whole of the offending line. This will not cause any side effects unless the name is in use in any of the scenarios in the campaign. You should not renumber any lines).

To add a custom unit name to a unit, you need to assign it to a unit on the map. First highlight the name in the names list, then, with the editor in unit placement mode, place the unit you want to give a custom name to, or click on a unit that is already on the map. Then click on Assign Name. The custom unit name, default unit name and map location will appear in the list box at the top of the Custom Named Units window. You can check you have assigned the name to the right unit by mousing over the unit on the map. You can assign the same custom unit name to multiple units if you wish.

If you decide to remove the custom unit name from a unit, you do this by highlighting the unit in the top list box and then clicking on Remove Custom Name.

When you save the scenario, any custom unit names you have added will be automatically saved with the other scenario data.

22.17. Side0/Side1

Side 0 is the player’s side, Side 1 the AI or opponent’s side. Left and right clicks cycle up and down through a list of available side identities.

22.18. Point Allocation

Underneath the tile/unit list window are the displays for the points available for each side. If a side has no points allocated, it will be unable to buy any non-fixed units. If there are no non-fixed units on the map, the points allocated are redundant.
These points values are over-ridden if the scenario script contains a `FORCE_POINTS_CALLBACK(side, points)` function.

## 22.19. Scenario Script

It isn’t absolutely necessary to have a Scenario Script for scenarios created in the Editor to function. However, a Scenario Script is recommended because it will allow:

- AI more complex than what can be set in the Editor.
- Bespoke victory conditions – without a script the game will use the default victory conditions with no adjustment for MP imbalance.
- Different points availability for different difficulty levels – otherwise the difficulty levels will all be the same.
- Scripted reinforcements – the Editor can generate a script fragment to do this.
- Any other scripted behaviour

Examples of how to do the first three of these are in ScenarioTemplate.BSF in the main directory. You can clone this file as the starting point for your own scenario script – copy it into the same directory as the scenario .BAM file created by the editor, and rename it with the same name as the scenario – `SCENARIONAME.BSF`. If you use the cloned file unchanged, your scenario will work correctly, but you can add any additional script features that you want.

Note that if you are designing a straightforward encounter scenario, with side0 on the left of the map and side 1 on the right, you can use the `AI_Masterplan()` function to automate the AI. This is in SCENARIOTEMPLATE.BSF but is currently commented out.
23. Modding

Sengoku Jidai: Shadow of the Shogun offers very many modding opportunities. You can create new scenarios, alter unit tables, modify the campaign structure, and adjust the game rules and user interface.

For help modding and creating scenario scripts see the Battle Academy section of the Slitherine GameWiki at http://www.slitherinebravo.net/GameWiki/

Also please visit the Sengoku Jidai: Shadow of the Shogun modding forum at www.slitherine.com/forum

See also the Appendix below on modding Sengoku Jidai; Shadow of the Shogun to use units from Pike and Shot to allow what-if East meets West battles.

24. Technical Support and Game Forum

The main menu has a button with a link to the game forum where there is a technical support sub-section. You can go there to post your question or problem. Please remember to tell us as much information about your problem as possible and include your machine’s specs and operating system.
25. Useful Hot keys

1 – Toggle LOS and LOF display.
A - scroll map to the left.
CTRL and left click on unit - detailed information on the unit.
CTRL when moused over target – showed detailed tooltips.
D - scroll map to the right.
E - rotate map to the left.
ESC - opens load, save and exit options.
F - zoom out on map.
F1 - list of hot keys.
F2 - Takes a screenshot and dumps it to
     My Documents\My Games\SJIDAI\SCREENS.
J - moves and hides the mini map.
K – toggles casualty screen
L – toggles unit list.
M - toggles the overhead map view.
N - next unit.
P - add map pin.
Q - rotate map to the right.
R - zoom in on map.
S - scroll map down.
SPACE - deselect unit. Also closes popup windows, and acts as proceed button for most screens.
TAB - next unmoved unit.
W - scroll map up.
### 26. Appendices

#### 26.1. Troop Types

<table>
<thead>
<tr>
<th>Troop Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Foot</td>
<td>Foot troops who fight in close formation. (Most Far Eastern troops fought in a looser formation, so are graded as Medium Foot or Warriors.)</td>
</tr>
<tr>
<td>Determined Foot</td>
<td>Heavy foot noted for their exceptional speed of advance.</td>
</tr>
<tr>
<td>Medium Foot</td>
<td>Foot troops fighting in looser formation than heavy foot and hence better suited than heavy foot to fighting in rough terrain. Unless they are Spearmen, they are very vulnerable to a mounted charge if caught in open ground.</td>
</tr>
<tr>
<td>Light Foot</td>
<td>Foot troops who fight in a dispersed formation with missile weapons. They are best at harassing enemy from a distance and working in difficult terrain.</td>
</tr>
<tr>
<td>Warriors</td>
<td>Tribal or other close combat foot not part of the European or Chinese tactical systems, They are often fiercer but less disciplined than European or Chinese troops. Unless they are spearmen, they are very vulnerable to a mounted charge in open ground.</td>
</tr>
<tr>
<td>Mob</td>
<td>Untrained rabble, usually of low morale, fighting as a disorganised mass. They may be equipped with only peasant weapons or may have been hastily equipped with proper weaponry but not trained to use it effectively.</td>
</tr>
<tr>
<td>Light Horse</td>
<td>Lightly equipped horsemen specialising in skirmishing, usually with missile weapons.</td>
</tr>
<tr>
<td>Cavalry</td>
<td>Most other non-light mounted troops fall into this category.</td>
</tr>
<tr>
<td>Mounted Infantry</td>
<td>Mounted Samurai with teppo and other mounted troops with firearms who habitually dismount to shoot.</td>
</tr>
<tr>
<td>Elephants</td>
<td>Indian elephants, whose strength is breaking into solid lines of enemy troops. Elephants disorder horses.</td>
</tr>
<tr>
<td>Light Artillery</td>
<td>Small cannon and rocket artillery. Treated as foot.</td>
</tr>
<tr>
<td>Medium Artillery</td>
<td>Moderately mobile artillery pieces. Treated as foot.</td>
</tr>
<tr>
<td>Heavy Artillery</td>
<td>Heavy guns. Intended more for sieges than for field battles. Treated as foot.</td>
</tr>
</tbody>
</table>
26.2. Combat Capabilities

The combat system is function based. The mere possession of a weapon is not sufficient to qualify for a combat capability. For example, many missile-armed troops were equipped with a cheap side-arm but were not well-practised in its use and so do not have swordsmen capability. Similarly, some cavalry primarily operating as horse archers also carried lances, but are not given lancers capability because their primary tactic was horse archery rather than a fierce charge with the lance.

<table>
<thead>
<tr>
<th>Capability</th>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matchlock</td>
<td>Shooting</td>
<td>Foot with up-to-date firearms.</td>
</tr>
<tr>
<td>Bombs</td>
<td>Shooting</td>
<td>Foot equipped with naptha bombs or grenades.</td>
</tr>
<tr>
<td>Bow</td>
<td>Shooting</td>
<td>Specialist foot bowmen or horse archers (excluding crossbowmen).</td>
</tr>
<tr>
<td>Crossbow</td>
<td>Shooting</td>
<td>Foot or mounted troops armed with crossbows.</td>
</tr>
<tr>
<td>Heavy Artillery</td>
<td>Shooting</td>
<td>Heavy artillery.</td>
</tr>
<tr>
<td>Heavy Weapon</td>
<td>Impact, Melee</td>
<td>Troops armed with heavy pole arms capable of cutting or chopping as well as thrusting.</td>
</tr>
<tr>
<td>Impact Foot</td>
<td>Impact</td>
<td>Foot relying on a fierce charge to disrupt the enemy at impact.</td>
</tr>
<tr>
<td>Javelins</td>
<td>Shooting</td>
<td>Light foot or light horse with javelins.</td>
</tr>
<tr>
<td>Lancers</td>
<td>Impact</td>
<td>Mounted troops specialising in charging with lance, such as later mounted samurai with yari.</td>
</tr>
<tr>
<td>Light Artillery</td>
<td>Shooting</td>
<td>Light artillery.</td>
</tr>
<tr>
<td>Light Spear</td>
<td>Impact</td>
<td>Foot battle troops armed with light spear, whether thrust or thrown. Sometimes used in the front ranks of units armed with other weapons, as a defence against enemy charges.</td>
</tr>
<tr>
<td>Medium Artillery</td>
<td>Shooting</td>
<td>Field guns.</td>
</tr>
<tr>
<td>Handgun</td>
<td>Shooting</td>
<td>Foot or cavalry with primitive or exotic firearms.</td>
</tr>
<tr>
<td>Spearmen</td>
<td>Impact, Melee</td>
<td>Foot fighting in formation with thrusting spear.</td>
</tr>
<tr>
<td>Swordsmen</td>
<td>Melee</td>
<td>Foot using swords as their primary weapon. Mounted troops equipped with swords, maces or horseman's axes and ready and willing to fight hand to hand.</td>
</tr>
</tbody>
</table>
Allocation of capabilities inevitably has a subjective element.

Capabilities are situational and may not result in points of advantage in every combat.

Units may have men with different capabilities – if so this is expressed as a percentage value. e.g. a Ming Chongbing unit might have 16% light spear, 84% matchlock.

### 26.3. Glossary

**Light Troops** These include light foot, light horse and mounted infantry.

**Shock Troops** These include any non-light unit with impact foot or light lancers capability.

### 26.4. Making your scenario UI match the vanilla scenario UI.

The default Scenario Description Exporter Wizard intro format is not the same as the vanilla SP scenario intros - if you want to reproduce that layout, you need to follow the instructions below:

- Use the editor Scenario Description Exporter wizard to export the strings you want to use. However, ONLY enter text in the top two boxes. The whole of your scenario description should therefore be in the box labelled **Part 1**. If you want it to contain linefeeds, use the tilde character “~”. When you have finished typing your text hit the Export Description button.
- Look in the main game installation to find a vanilla SCENUI file (e.g. /Campaigns/4SengokuJidai/Data/UI/SCENUI_Anegawa.txt).
~ Copy this into your campaign’s UI folder which you will find at: /My Documents/My Games/SJIDAI /Campaigns/ WhateverYourCampaignIsCalled/Data/UI
~ Delete the SCENUI file created by the wizard for your scenario. It will be called SCENUI_MyScenarioName.txt (whatever that name is)
~ Rename the copy of SCENUI_Anegawa.txt to SCENUI_MyScenarioName.txt (whatever that name is)
~ Do a search and replace all on the SCENUI_MyScenarioName.txt file - i.e. Search for Anegawa and replace all instances with MyScenarioName (whatever that name is).
~ Copy the file BACKDROP.dds from one of the vanilla campaigns (e.g. /Campaigns/4SengokuJidai/Backdrop.dds) into /My Documents/My Games/SJIDAI/Campaigns/ WhateverYourCampaignIsCalled
If you have done all this correctly, when you load up your campaign, your scenario intro will then appear in the usual vanilla format.

Note: If you subsequently want to edit your text, don’t use the wizard as this will overwrite the SCENUI file. Edit the strings directly using Notepad, Notepad++ or another text editor. (Don’t use Word or another word processor, or you may get unexpected results because the word processor may insert characters that are not valid Unicode characters).

The strings can be found in: /My Documents/My Games/SJIDAI/ Campaigns/WhateverYourCampaignIsCalled/text9.txt

and are called IDS_SCENARIO_MyScenarioName for the title, and IDS_SCENARIO_DESC_MyScenarioName for the description. (Ignore IDS_SCENARIO_DESC_B_MyScenarioName etc.)

The character to use for a linefeed is the tilde: “~”. 
26.5. East meets West

Although vanilla *Sengoku Jidai: Shadow of the Shogun* displays only troop information relevant to its geographical area, the game code does in fact also include the full rules for western troops of the same era.

It would therefore be possible for modders to copy units across from *Pike and Shot: Campaigns* and set up what-if East meets West skirmishes or campaigns in *Sengoku Jidai: Shadow of the Shogun*.

The game can be made to show the full POA information including western troop-types and capabilities by:

Including the line “SetShowRulesSubset(0);” in the INIT_CAMPAIGN() function in your campaign’s Campaign.BSF script, and

Including the line “FULLRULES 1” at the top of your campaign’s ArmyList.txt file.

The full charts are as follows:

### 26.5.1. Shooting Ranges

<table>
<thead>
<tr>
<th>Shooting Ranges</th>
<th>Short</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musket and salvo</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Foot bow and crossbow</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Mounted bow and crossbow</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Arquebus and carbine</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Sling</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Pistols (shooting)/Handgun, bombs and javelins</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Heavy artillery</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Medium artillery</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Light artillery</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Regimental guns</td>
<td>4</td>
<td>-</td>
</tr>
</tbody>
</table>
Some weapons have a long and a short range – shooting at half effect at long range. Salvo also shoot at half effect at short range, because they are reserving fire for a pre-charge salvo. Musket/Impact Foot shoot at three-quarter effect at short range, because their tactical doctrine emphasizes a rapid advance to close combat.

Pistols (Impact) and Pistols (Melee) are not treated as distant shooting weapons, because troops with those capabilities are reserving their pistols for close combat.

26.5.2. Shooting POA Table

The casualties inflicted by shooting depend on the number of shooters, range, arc of fire, unit cohesion and movement. In addition there are a number of other factors that can modify the effect of shooting depending on the shooting weapon and the target. Points of Advantage (POAs for short) are used to define these factors. 100 POA is roughly equivalent to a 33% modifier to casualties inflicted.

Note that the POA table below is provided only as a guide to various factors that may influence the effectiveness of shooting. Some of the modifiers are applied at different stages in the shooting calculation, so you cannot work out the overall modifier by simply totalling the POAs. The detailed shooting tooltips show the applicable modifiers.
### Shooting POAs

<table>
<thead>
<tr>
<th></th>
<th>vs Foot</th>
<th>vs Mounted</th>
<th>vs Artillery</th>
<th>vs Elephants</th>
<th>vs Battle Wagons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arquebus</td>
<td>0</td>
<td>-100</td>
<td>0</td>
<td>+100</td>
<td>-100</td>
</tr>
<tr>
<td>Musket/Salvo</td>
<td>0</td>
<td>-100</td>
<td>0</td>
<td>+100</td>
<td>-100</td>
</tr>
<tr>
<td>Additional modifier for Musket/Salvo at long range vs majority armoured foot</td>
<td>-100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bow/Sling</td>
<td>-50</td>
<td>0</td>
<td>-50</td>
<td>-50</td>
<td>-150</td>
</tr>
<tr>
<td>Javelins</td>
<td>-50</td>
<td>0</td>
<td>-50</td>
<td>+50</td>
<td>-150</td>
</tr>
<tr>
<td>Additional modifier for bow, javelins or sling vs armoured targets</td>
<td>-100 to -200 depending on completeness of armour</td>
<td>-100 to -200 depending on completeness of armour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crossbow</td>
<td>-150</td>
<td>-50</td>
<td>-150</td>
<td>+50</td>
<td>-150</td>
</tr>
<tr>
<td>Carbine/Pistol/Handgun</td>
<td>-100</td>
<td>-100</td>
<td>-100</td>
<td>+100</td>
<td>-100</td>
</tr>
<tr>
<td>Bombs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+100</td>
<td>0</td>
</tr>
<tr>
<td>Regimental Guns</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Artillery</td>
<td>-100</td>
<td>0</td>
<td>-200</td>
<td>+100</td>
<td>0</td>
</tr>
<tr>
<td>Additional modifier for target being in cover</td>
<td>Up to -225</td>
<td>Up to -225</td>
<td>Up to -225</td>
<td>Up to -225</td>
<td>Up to -225</td>
</tr>
<tr>
<td>Additional modifier for foot shooters with threatened flank</td>
<td>-100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional modifier for artillery vs large or enfiladed target</td>
<td>+100</td>
<td>+100</td>
<td>+100</td>
<td>+100</td>
<td>+100</td>
</tr>
<tr>
<td>Additional modifier for shooting at skirmishers (light foot, light horse, commanded shot)</td>
<td>-100</td>
<td>-100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional modifier for shooting at pursuers</td>
<td>-150</td>
<td>-150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional modifier for quality of shooting unit</td>
<td>-50 to +100</td>
<td>-50 to +100</td>
<td>-50 to +100</td>
<td>-50 to +100</td>
<td>-50 to +100</td>
</tr>
</tbody>
</table>

#### 26.5.3. Overhead Shooting

Artillery can shoot over commanded shot, provided that the unit they are shooting over is at least 2 squares away.
### Impact POA Table

<table>
<thead>
<tr>
<th>Impact POAs</th>
<th>Bonus</th>
<th>Against:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot using salvo. Pike in the same unit as foot using salvo</td>
<td>+200</td>
<td>against any foot</td>
</tr>
<tr>
<td>Impact foot. Pike in the same unit as impact foot.</td>
<td>+100</td>
<td>against any foot</td>
</tr>
<tr>
<td>Pike or protected shot, if not charging and not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any mounted</td>
</tr>
<tr>
<td>100% musket, salvo, arquebus/matchlock, handgun, bow or crossbow unit defending an obstacle, or protected commanded shot, if not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any mounted</td>
</tr>
<tr>
<td>Spearmen, if not charging and not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any mounted</td>
</tr>
<tr>
<td>Spearmen, if not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any foot except pike kells, protected pike, protected shot, foot with bayonet or impact foot</td>
</tr>
<tr>
<td>Heavy weapon *</td>
<td>+100</td>
<td>against any foot except pike kells, protected pike, protected shot, foot with bayonet or impact foot</td>
</tr>
<tr>
<td>Foot with at least 33% light spear unless they are charging mounted shock troops</td>
<td>+100</td>
<td>against any except pike kells, protected pike, protected shot, foot with bayonet or impact foot</td>
</tr>
<tr>
<td>Foot with at least 16% light spear, if not charging</td>
<td>+100</td>
<td>against any except pike kells, protected pike, protected shot, foot with bayonet or impact foot</td>
</tr>
<tr>
<td>Artillery, if defending an obstacle or protected by adjacent non-light foot</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Elephants</td>
<td>+100</td>
<td>against any mounted</td>
</tr>
<tr>
<td>Battle wagons</td>
<td>+100</td>
<td>against any except elephants, battle wagons, impact mounted (unless the pistols are high quality Determined Horse), or non-charging STEADY foot who are any of pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Impact Pistol</td>
<td>+100</td>
<td>against any except elephants, battle wagons, impact mounted, impact pistol, or non-charging STEADY foot who are any of pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Heavy lancers</td>
<td>+100</td>
<td>against any except elephants, battle wagons, impact pistol, or non-charging STEADY foot who are any of pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Light lancers</td>
<td>+100</td>
<td>against any except elephants, battle wagons, heavy lancers, impact pistol, or non-charging STEADY foot who are any of pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Impact mounted</td>
<td>Only in open terrain</td>
<td>against any except elephants, battle wagons, heavy lancers, or non-charging STEADY foot who are any of pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Pike kells whether charging or not, unless FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Any mounted</td>
<td>+100</td>
<td>against any light foot, mounted infantry (dragoons), warriors or unprotected commanded shot or medium foot without bayonet</td>
</tr>
<tr>
<td>On higher ground (height difference &lt;= 75)</td>
<td>+25</td>
<td>against any</td>
</tr>
</tbody>
</table>
### Melee POA Table

<table>
<thead>
<tr>
<th>POA Description</th>
<th>Bonus</th>
<th>Against</th>
</tr>
</thead>
<tbody>
<tr>
<td>On higher ground (height difference &gt;= 100)</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Foot defending light or medium fortifications</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Foot defending heavy fortifications</td>
<td>+200</td>
<td>against any</td>
</tr>
<tr>
<td>Unit has attached guns, and is not charging</td>
<td>+50</td>
<td>against any</td>
</tr>
<tr>
<td>Charge counting as on flank or rear</td>
<td>+200</td>
<td>Final overall POA regardless of all other factors (+50 if lights charging non-lights)</td>
</tr>
</tbody>
</table>

* A unit with 50% heavy weapon and 50% shooting weapons counts as 100% heavy weapon in close combat because the heavy weapon men are assumed to make up the front ranks.

### Melee POAs

<table>
<thead>
<tr>
<th>POA Description</th>
<th>Bonus</th>
<th>Against</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pike or protected shot, unless FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any mounted</td>
</tr>
<tr>
<td>100% musket, salvo, arquebus/matchlock, handgun, bow or crossbow unit defending an obstacle, if not FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any mounted</td>
</tr>
<tr>
<td>Melee Pistol</td>
<td>+100</td>
<td>against any except elephants, mounted swordsmen if the pistoliers are not STEADY, or STEADY foot who are any of pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Swordsmen</td>
<td>+100</td>
<td>against any except elephants, STEADY melee pistols, or STEADY foot who are any of spearmen, pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Spearmen, unless FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any except pike keils, protected pike, protected shot or foot with bayonet</td>
</tr>
<tr>
<td>Heavy Weapon *</td>
<td>+100</td>
<td>against any except pike keils, protected pike, protected shot or foot with bayonet. Also cancels enemy ‘better armour’ POAs if any.</td>
</tr>
<tr>
<td>Artillery, if defending an obstacle or protected by adjacent non-light foot</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Elephants</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Pike keils, unless FRAGMENTED or SEVERELY DISORDERED</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Better Armour</td>
<td>Up to +50</td>
<td>against any except shot, heavy weapon, elephants or battle wagons</td>
</tr>
<tr>
<td>Warriors, swordsmen or heavy weapon</td>
<td>+15</td>
<td>against any smaller enemy unit (unless fighting multiple units)</td>
</tr>
<tr>
<td>On higher ground (height difference &lt;= 75)</td>
<td>+25</td>
<td>against any</td>
</tr>
<tr>
<td>On higher ground (height difference &gt;= 100)</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Foot defending light or medium fortifications</td>
<td>+100</td>
<td>against any</td>
</tr>
<tr>
<td>Foot defending heavy fortifications</td>
<td>+200</td>
<td>against any</td>
</tr>
</tbody>
</table>

* A unit with 50% heavy weapon and 50% shooting weapons counts as 100% heavy weapon in close combat because the heavy weapon men are assumed to make up the front ranks.
26.5.6. **Keils**

Any unit with enough pikemen (which can include a proportion with swordsmen or heavy weapon capability) to qualify as a keil. This is more than about 350 men on the default representational scale.

Keils give benefits in close combat, are immune to the ill-effects of flank attacks, and ignore enemy ZOCs.

The POA bonus for **Pike keils** applies if a unit has enough pikes to qualify (equivalent to approximately 350 pikes remaining at the default representational scale. For this purpose troops with swordsmen or heavy weapon in a pike unit count towards the keil). Most Early Tercios and some full-strength Later Tercios will qualify for the pike keil bonus, as will pike blocks detached from normal pike and shot units. Most normal pike and shot units won’t. The UI will display whether the unit currently qualifies as a keil – a unit may lose keil status after suffering enough losses.

Note that only the proportion of the unit with pike, swordsmen or heavy weapon capability get the keil POA bonus. So an Early Tercio with 50% pike, 50% shot would get only +50 POAs for being a keil.

26.5.7. **Immunity to flank or rear attacks.**

Keils (units with very large blocks of pikemen) and units classed as Later Tercios are immune to flank attacks, and units classed as Early Tercios are immune to flank and rear attacks. (Under the rules Later Tercios are the deep units that were the final stage of development before shallower Dutch-style units were generally adopted. Very late Spanish units were still called tercios but were similar to other nations’ units so don’t qualify for the bonus.)
Later pike and shot units were in shallower formations and historically far less able to cope with being flanked (especially by cavalry). They do not therefore have the in-game ability to form square.

26.5.8. Protection

Protected shot are foot with Musket, Salvo or Arquebus capability in any of the following circumstances:

1. Their unit includes pikemen.
2. They are defending an obstacle. (Not attacking across it).
3. They are commanded shot who are not attacking, and who have unbroken friendly non-light mounted troops in an adjacent tile (not including the 3 tiles to the commanded shot’s “rear”).

The effects of being Protected Shot can be seen in the POA tables, but essentially Protection:

1. Gives a +100 POA advantage against enemy mounted (provided that the Protected troops are not charging, and not Fragmented or Severely Disordered).
2. Cancels any POAs that the mounted may have (provided that the Protected troops are Steady – i.e. Not Disrupted, Moderately Disordered, Fragmented or Severely Disordered – and are not charging).

So it essentially changes the shot from being at a -100 or even -200 POA disadvantage against mounted troops to being at a +100 POA advantage.

Protected pike are those in mixed units with shot.

Artillery are Protected when defending an obstacle, Unprotected when not defending an obstacle.
26.5.9. **Light Troops**
These include light foot, light horse, mounted infantry (dragoons) and commanded shot. All other troop-types are non-light troops.

26.5.10. **Shock Troops**
These include keils, any non-light unit with salvo, impact foot, light lancers, heavy lancers or impact mounted capability, and all gendarmes, cavaliers and determined horse capability.

26.5.11. **Shot**
Any foot with arquebus, musket or salvo capability.

26.5.12. **ZOC (Zone of Control)**
Non-light troops ignore the ZOC of light troops (except commanded shot currently Protected by adjacent mounted troops). Keils (units with very large blocks of pikemen) ignore all ZOCs unless the enemy unit is directly in front of them.

26.5.13. **Terrain**
Rough terrain severely disorders fully armoured gendarmes.
### Cohesion Test

<table>
<thead>
<tr>
<th>MODIFIERS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit suffered heavy total shooting casualties this turn (&gt; 8%)*</td>
<td>-1</td>
</tr>
<tr>
<td>Unit is heavy, mixed or determined foot</td>
<td>+1</td>
</tr>
<tr>
<td>Unit suffered significant total close combat damage this turn (&gt; 5%) **</td>
<td>-1</td>
</tr>
<tr>
<td>Unit is inspired by a friendly general fighting in close combat within (command range / 4) squares. (Allied units are only inspired by their own general, and ally-generals only inspire their own units)</td>
<td>+1</td>
</tr>
<tr>
<td>Total close combat damage suffered this turn exceeds total close combat damage inflicted by a large margin</td>
<td>-1</td>
</tr>
<tr>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>Unit has lost over 25% of its original men</td>
<td>-1</td>
</tr>
<tr>
<td>Current Cohesion State</td>
<td></td>
</tr>
<tr>
<td>Unit has lost over 50% of its original men</td>
<td>-1</td>
</tr>
<tr>
<td>Disrupted or Severely Disordered</td>
<td>-1</td>
</tr>
<tr>
<td>Fragmented</td>
<td>-2</td>
</tr>
<tr>
<td>Foot battle troops with threatened flank</td>
<td>-1</td>
</tr>
<tr>
<td>Broken</td>
<td>-3</td>
</tr>
</tbody>
</table>

*Only applies when testing as a result of shooting. The modifier for being shot at by artillery applies whether or not they inflicted any casualties.

**Only applies when testing as a result of losing a close combat. The modifier for fighting specific enemy troop types applies whether or not these inflicted more damage on the unit than it inflicted on them. Other tests do not use these modifiers even if they occur in the same phase.

### Pursuing

Pursuing units test to see if they continue to pursue, the chance of which depends on their troop type. Warrior impact foot, cavaliers and gendarmes are very likely to continue pursuing.
## Troop Types

<table>
<thead>
<tr>
<th>Troop Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Foot</td>
<td>Foot troops who fight in close formation. These include most pikemen and billmen.</td>
</tr>
<tr>
<td>Determined Foot</td>
<td>Heavy foot noted for their exceptional speed of advance, such as Swiss pikemen.</td>
</tr>
<tr>
<td>Medium Foot</td>
<td>Foot troops fighting in looser formation than heavy foot and hence better suited than heavy foot to fighting in rough terrain. They are often principally reliant on shooting weapons. When not mixed with pikes – see below - they are very vulnerable to a mounted charge if caught in open ground. Medium foot cannot have pike capability.</td>
</tr>
<tr>
<td>Mixed Foot</td>
<td>Units with some Heavy Foot and some Medium Foot. Most pike and shot.</td>
</tr>
<tr>
<td>Light Foot</td>
<td>Foot troops who fight in a dispersed formation with missile weapons. They are best at harassing enemy from a distance and working in difficult terrain.</td>
</tr>
<tr>
<td>Commanded Shot</td>
<td>These are small units of detached shot who have been assigned to assist their side's mounted troops against enemy mounted troops. They are treated as light foot except that they become “Protected” (see combat section) if they have unbroken friendly non-light mounted troops in an adjacent map square (not including the three squares to the commanded shot’s “rear”).</td>
</tr>
<tr>
<td>Warriors</td>
<td>Tribal or other close combat foot not part of the European or Chinese tactical systems. They are often fiercer but less disciplined than European or Chinese troops. They are very vulnerable to a mounted charge in open ground.</td>
</tr>
<tr>
<td>Mob</td>
<td>Untrained rabble, usually of low morale, fighting as a disorganised mass. They may be equipped with only peasant weapons or may have been hastily equipped with proper weaponry but not trained to use it effectively.</td>
</tr>
<tr>
<td>Gendarmes</td>
<td>Usually drawn from a gentry skilled in horsemanship, these are heavily armoured cavalry who rely on a fierce charge at the gallop with lance. They usually fight in less depth than other mounted troops, and can get carried away in the pursuit of defeated enemy.</td>
</tr>
<tr>
<td>Cavaliers</td>
<td>Usually drawn from a gentry skilled in horsemanship, these are cavalry who rely on a fierce charge sometimes at the gallop. They usually fight in less depth than other mounted troops, and can get carried away in the pursuit of defeated enemy. Example: English Civil War Royalist horse.</td>
</tr>
<tr>
<td>Determined Horse</td>
<td>Disciplined cavalry in shallow close order formations who mostly charge at the trot in a controlled manner. Examples: Swedish 30 Years War cavalry and Cromwell’s Ironsides.</td>
</tr>
<tr>
<td>Horse</td>
<td>Cavalry who ride in close deep formations and charge at the trot. They include German men-at-arms and reiters trained to use the caracole.</td>
</tr>
</tbody>
</table>
Light Horse | Lightly equipped horsemen specialising in skirmishing, usually with missile weapons.
---|---

Cavalry | Most other non-light mounted troops fall into this category. Examples: Hungarian Szeklers, Polish pancerni, Ottoman sipahis.
---|---

Camelery | Camel-mounted troops. They are treated as Cavalry, but they have less difficulty with movement over sand. Camelery disorder horses.
---|---

Mounted Infantry (Dragoons) | Infantry mounted on cheap horses who usually dismount to fight on foot in support of cavalry wings in battle.
---|---

Elephants | Indian elephants, whose strength is breaking into solid lines of enemy troops. Elephants disorder horses.
---|---

Light Artillery | Small cannon such as organ guns, falconets or galloper guns and drakes and also eastern rocket artillery. Treated as foot.
---|---

Medium Artillery | Moderately mobile pieces such as demi-culverins, quarter-cannon, sakers and falcons. Treated as foot.
---|---

Heavy Artillery | Heavy guns such as full cannon, demi-cannon and culverins or bombards. Intended more for sieges than for field battles and virtually immovable once deployed. Treated as foot.
---|---

Battle-Wagons | Horse or ox drawn wagons, usually with missile-armed crew on board. Treated as foot. Not very manoeuvrable.
---|---

## 26.5.17. Combat Capabilities

<table>
<thead>
<tr>
<th>Capability</th>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arquebus</td>
<td>Shooting</td>
<td>Foot whose missile weapons are mainly arquebus or caliver, though possibly including a proportion of musketeers.</td>
</tr>
<tr>
<td>Bayonet</td>
<td>Impact, Melee</td>
<td>Foot equipped with musket and either plug or socket bayonet.</td>
</tr>
<tr>
<td>Bombs</td>
<td>Shooting</td>
<td>Foot equipped with naptha bombs or grenades.</td>
</tr>
<tr>
<td>Bow</td>
<td>Shooting</td>
<td>Specialist foot bowmen or longbowmen, or horse archers (excluding crossbowmen).</td>
</tr>
<tr>
<td>Carbine</td>
<td>Shooting</td>
<td>Mounted equipped with carbine: the cavalry equivalent of the arquebus.</td>
</tr>
<tr>
<td>Crossbow</td>
<td>Shooting</td>
<td>Foot or mounted troops armed with crossbows.</td>
</tr>
<tr>
<td>Heavy Artillery</td>
<td>Shooting</td>
<td>Heavy artillery such as demi-cannon, culverins or bombards.</td>
</tr>
<tr>
<td>Heavy Weapon</td>
<td>Impact, Melee</td>
<td>Troops armed with pole arms or 2-handed swords, axes, and other weapons. Examples: English billmen, Irish Galloglaich and some Landsknecht and Swiss foot.</td>
</tr>
<tr>
<td>Impact Foot</td>
<td>Impact</td>
<td>Foot relying on a fierce charge to disrupt the enemy at impact. Examples: C17th French foot. Aztec and Indonesian foot warriors.</td>
</tr>
<tr>
<td><strong>Impact Mounted</strong></td>
<td><strong>Impact</strong></td>
<td>Cavalry, usually in shallow formations, who rely on the impetus of their charge, sword in hand or with light lance, to shatter the enemy formation, allowing the effective use of swords and similar in the ensuing melee. Examples: Polish winged hussars, English Royalist cavaliers and 17th century French cavalry trained by Turenne.</td>
</tr>
<tr>
<td><strong>Javelins</strong></td>
<td><strong>Shooting</strong></td>
<td>Light foot or light horse with javelins. Examples: early Irish kerns, stradiots. Warriors with atlatl. Example: Aztec or other Mesoamerican warriors.</td>
</tr>
<tr>
<td><strong>Lancers</strong></td>
<td><strong>Impact</strong></td>
<td>Mounted troops specialising in charging with lance. Example: French and other gendarmes. Most early gendarmes are classed as having heavy lancers capability. Some gendarmes, and most non-gendarme lancers, have light lancers capability, which includes cavalry using a spear as a primary weapon such as early reiters.</td>
</tr>
<tr>
<td><strong>Light Artillery</strong></td>
<td><strong>Shooting</strong></td>
<td>Light artillery such as drakes or organ guns.</td>
</tr>
<tr>
<td><strong>Light Spear</strong></td>
<td><strong>Impact</strong></td>
<td>Foot battle troops armed with light spear, whether thrust or thrown. Example: Inca warriors.</td>
</tr>
<tr>
<td><strong>Medium Artillery</strong></td>
<td><strong>Shooting</strong></td>
<td>Field guns such as falcons, sakers and demi-culverins.</td>
</tr>
<tr>
<td><strong>Musket</strong></td>
<td><strong>Shooting</strong></td>
<td>Foot armed mainly with musket though possibly including a proportion armed with arquebus or caliver.</td>
</tr>
<tr>
<td><strong>Pike</strong></td>
<td><strong>Impact, Melee</strong></td>
<td>Mounted armed with pistols. Depending on their style of fighting, such troops may be given Pistol capability in Shooting (S) or Impact (I) and/or Melee (M) phases. For example, 16th century German reiters preferred to use their pistols at a distance, so are given Pistol capability in the Shooting phase, but not in the Impact phase. Later in the century, cavalry started to withhold their pistol fire until the moment of impact, so are given Pistol capability in the Impact phase. Both could use spare pistols in the melee, so are also given Pistol capability in the Melee phase. Troops with pistol capability can only use pistol in the phase(s) specified in their description.</td>
</tr>
<tr>
<td><strong>Pistol</strong></td>
<td><strong>Shooting, Impact, Melee</strong></td>
<td>30 Years War Swedes were trained to withhold fire until very close range when usually at least 3 ranks would fire simultaneously. Such troops have an advantage in the impact phase to simulate the powerful effect of close range volley fire but shoot with reduced capability at short range in the shooting phase.</td>
</tr>
<tr>
<td><strong>Salvo</strong></td>
<td><strong>Shooting, Impact</strong></td>
<td>Still used in this era by some native Americans.</td>
</tr>
<tr>
<td>Spearmen</td>
<td>Impact, Melee</td>
<td>Foot usually fighting in close formation with thrusting spear.</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>Swordsman</td>
<td>Melee</td>
<td>Foot using swords as their primary weapon. Example: Spanish sword and buckler men. Foot equipped with swords or equivalent weapons as secondary weapons, but ready and willing to fight hard hand-to-hand when required. Example: Early Ottoman janissaries. Mounted troops equipped with swords, maces or horseman’s axes and ready and willing to fight hand to hand. Examples: French gendarmes and some horse archers.</td>
</tr>
</tbody>
</table>

27. Credits

Byzantine Games

Game Design
Jayson Ng and Richard Bodley Scott.

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Richard Bodley Scott, Philip Veale and Jayson Ng.

Graphics
Pat Ward and Jayson Ng.

Music
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Slitherine

Chairman
Jd Mcneil

Development Director
Iain Mcneil

Producer
Bart Schouten
Operations Director
Erik Rutins

Technical Director
Philip Veale

Marketing Director
Marco A. Minoli

Creative Director
Richard Evans

Public Relations Manager
Olivier Georges

Community Manager
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Marta Falbo

Manual Layout
Myriam Bell

Production Lead
Matthew Davis

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Dean Walker, Liz Stoltz

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