

Level Design concept on Crusader Kings 2

Real-Time Strategy Game

Summary :

Summary :	1
The Game :	2
Game Concept :	2
Unknown terrain :	2
Foreword :	3
Why Japan :	3
Why the time of Sengoku Jidai :	3
The difference with the original game :	4
Level Design :	5
Cutting the map :	5
Attribution of the territories at the beginning of the game:	10
Game situations :	11
Circulation and examples of scripting :	12
Strategy adopted for the production of this level design :	14
Sources/ références :	15

The Game :

Game Concept :

The game places the player at the head of one of the reigning families of the Old World (Europe, Middle East, India), in a medieval context extending from 1066 to 1453, dates of the Norman conquest of England and the fall of Constantinople. The player can control a county, a duchy, a kingdom or an empire, all in accordance with the historical logic of the time. As a leader, the player must take into account the feudal interactions (with his suzerain, his vassals), the economic, military and diplomatic management of a conflict, or the religious aspect of the thing, preserving an image of Godly leader to attract papal graces. Indeed, the player will have to take part in the Crusades that shook the Middle East at that time, to face the establishment of heretical sects in his cities or to the pagan communities of the North and East. Other options open to players, such as marrying their leader or offspring to foreign dignitaries, forging strong alliances, or being able to orchestrate plots and intrigues for the assassination of some high-ranking national dignitary or revoke the titles and lands of a potentially dangerous vassal. Finally, it will be important not to be a tyrannical leader monopolizing all conquests, at the risk of anger rumble in the ranks of the vassals, the latter may gang up against you in order to overthrow you at the end of a bloody civil war. When it came out, the game map contained 1016 provinces.

The final goal of the player is not really defined, it is rather rules that will guide the player in different ways of playing.

Thus, the player can spend his entire game managing his domain without ever wanting to expand, without ever taking part in a war, or he can try to become the largest empire in Europe in the time allotted to him. (387 years)

Why Crusader Kings 2:

I have always been a fan of medieval times whether in literature, movies or video games. In addition, I have a penchant for strategy games that I often find very complete with significant choices, tons of parameters to take into account and giving free rein to the creativity of the players. Indeed, we can adjust this or that situation in different ways, allowing each player to play as he wishes.

Crusader Kings 2 fits perfectly with what I wrote before. This is why I chose to make a map with the game mechanics of this game.

Unknown terrain :

Level design would be a DLC of this game. As in other DLCs, the start and end dates of the game change.

In this DLC, the player will be able to embody any ruler of Japan during the sengoku jidai between 1477 and 1603 which marks the beginning of the Tokugawa shogunate and the final unification of Japan.

In this Level Design, I had to create a map of Japan, cut it and assign territories to make it playable in Crusader Kings 2. This is something I had never done before in Level Design. Usually, I create levels on FPS or TPS maps but here I had to spend a lot of time studying maps of Japan in terms of topography but also geography. I also had to study the history of Japan during the sengoku jidai, the different clans that existed there and their territories in Japan.

I wanted to try a new way of designing a level design and to diversify myself at the same time in what I could produce and that is why I took the risk of making a map in Crusader Kings 2 .

Foreword :

Why Japan :

Japan is a nation that, during the sengoku jidai, knew a government very close to that of Europe: the feudal government. The mechanics of the game are therefore relevant to this nation because it follows the same type of government that can be seen in Crusader Kings 2.

Finally, part of the gaming community is hungry for a Crusader Kings 2 DLC on Japan. By doing so, I respond to their desires, so I expect the DLC to be well received. (Mods on Japan have been made by players, but my work does not resemble theirs, except that it is the same nation).

Why the time of Sengoku Jidai :

In addition to the points advanced above, the sengoku Jidai is a time of discord where clans of Japan take their independence from the military governor (Shogun). As a result, the borders between clans were very small and very limited, it allowed me to have a base to create my game card respecting those already made in Crusader Kings 2. (By their boundaries and their numbers) .

During this same period, European sailors discovered Japan and brought them their cultures and religions. What makes a religious war also occurred during this confrontation, as in the game taken for base. This further reinforces the relevance of the use of game mechanics during this time.

There were three religions during this era:

- Shinto Buddhism, the original religion of Japan (a mixture of Buddhism and Shintoism),
- Christianity, the religion brought by the Europeans,
- Ikko-Ikki, branch of the Buddhist religion (sect that emerges during revolts).

The difference with the original game :

In this DLC, the player has a specific goal in mind, to become the new Shogun and to be able to control the empire of Japan. This sets it apart from Crusader Kings 2 which offers a Sandbox with a lot of rules, the player can literally do what he wants. Since the game mechanics are taken over by this DLC, the Sandbox is equally present. However, the special context of this card will force the player to take up arms to become the supreme leader.

During this work, I was inspired by the game map of Total War Shogun 2 and Nobunaga's Ambition for the delimitation of the territories because it is the fruit of a research already carried out at the same time, I nevertheless sought other cards of the sengoku Jidai era to change some territories and enlarge the total number of provinces, and thus respect the Game Design of the game.

Level Design :

Cutting the map :

In crusader Kings 2, the map is divided into different types of territories, these types of territories have different characteristics

A/ The county :

The county is the smallest territory value the player can have. In case he no longer has a county, the game is over.



The cutting of the counties in japan (65 counties)

Each county has its own characteristics:

- The type of land
- Its climate,
- The supplies he can bring to the troops stationed on his site.
- His troop numbers

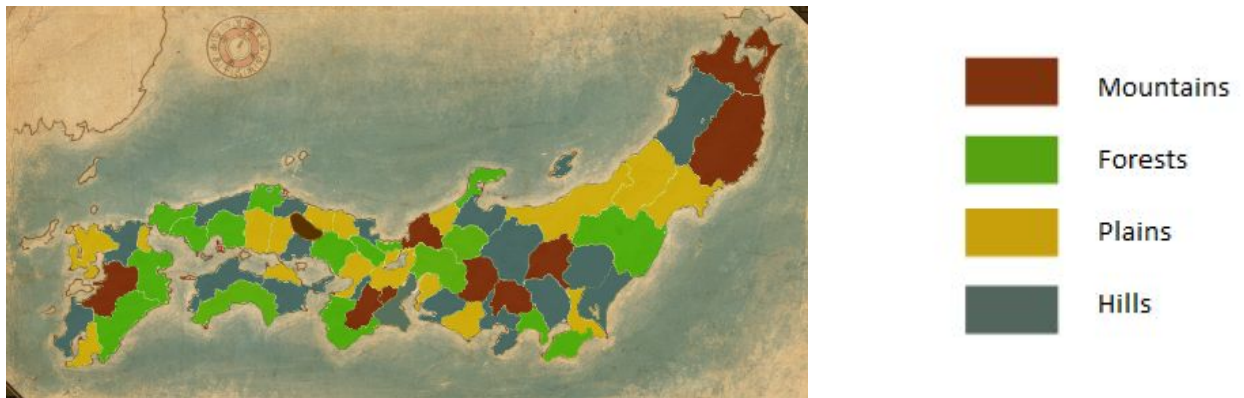
1) The type of land :

The terrain type adds a strategic dimension to the game.

There are four different types of terrain on this map:

- The mountain: it makes it possible to get a big defensive bonus during a battle, however the speed of movement of the units and the supplies it can bring are really bad.

- The hill: roughly equivalent to the mountain, it allows to gain a correct defensive bonus, the speed of movement is slow but its supply is correct.
- The forest: Has a slight defensive bonus, but allows you to move quickly and have a correct supply.
- Plain: Does not have any defensive or offensive bonus, but allows you to move very fast and have a high supply.



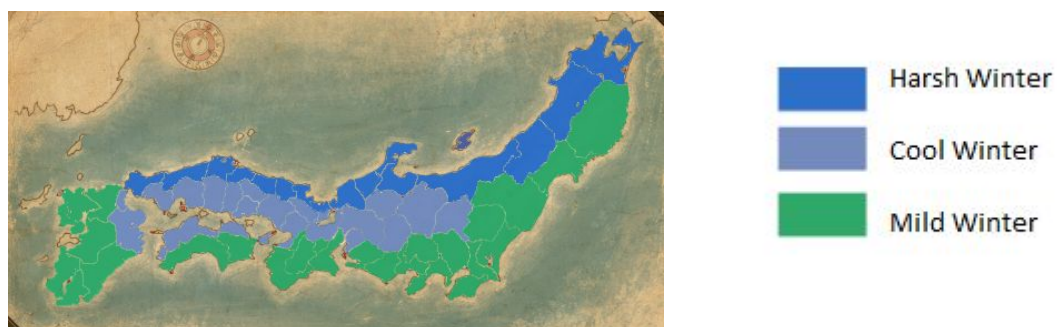
Type of Land of the counties

The type of terrain has been thought to look like the topography of Japan. However, I have taken the liberty of modifying some areas to diversify the types of terrain that are side by side, so no matter where the player will be, he will always have a strategic choice of terrain to make depending on the situation.

2) The Climate :

In Crusader Kings 2 there are two main seasons. Winter and the rest.

Winter is a mechanic that will decrease the supply of a troop. I took the real weather of japan in term of climate for a concern of coherence, but I arranged the terrain types so that the player although being in a very cold place could refuel his army effectively conquering counties with plain land type or forest.



Counties's Climate

3) The supplies :

Food supplies can feed an army, if supplies are lacking then the army loses soldiers. The algorithm that measures the supply is as follows:

- A base county has a supply of 5K (5000 men)
- The terrain types provide bonuses, these are the plains, forest, hills and mountains respectively 5K, 3K, 3K, 2K.
- Different climates bring penalties, these are harsh, cool and mild winters respectively -5K, -3K, -2K.
- In percentage, the counties give other bonuses :
 - +50% if the county belongs to the player
 - +50% if the county is a coastal county
 - + 25% if the county is an allied, neutral or occupied county.
 - -10% if the county is an enemy county.

In this map, we realize that it is essential to conquer the coastal counties to have a good supply, Japan is a coastal nation, so it will be simple for the player to have a good supply. However, to balance the map, the majority of the plains are in northern and central Japan where it is coldest in winter. Thus, the plains will bring back supply which will be reduced during the winter in a consequent way. During the other seasons these counties will be big strategic points to supply the armies of the player.

4) Troops Number :

Historically, during the Sengoku Jidai, Japan had large armies despite its size. Indeed, tens of thousands of fighters could be counted during the biggest battles for up to 180,000 soldiers during the Battle of Sekigahara.

A county can form a number of troops between 800 and 3000 soldiers according to the degree of advancement of its technologies.

Chronologically, each county will begin with more or less 800 men at the beginning of the game, while at the end of the game the counties will each produce about 3000 men.

Thus, the strategic supply dimension, which is a mid / late game mechanic, will appear when the player has several counties and a strong army.

B/ The Duchy:

The duchy is a territory that includes several counties, the counties encompassed by this duchy owe allegiance to the duke. Thanks to his title, a duke can claim lands more easily than a count.

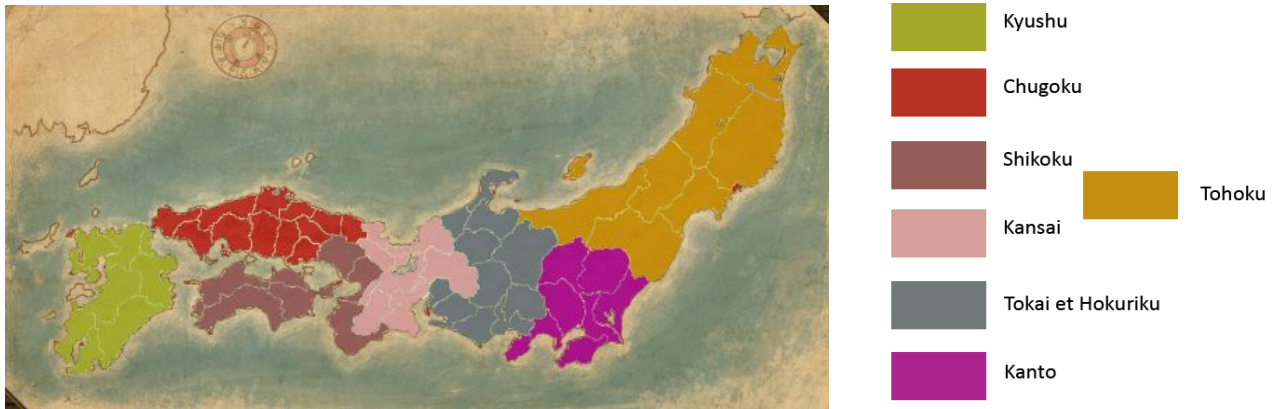


Differents Duchys (23)

To claim a Duchy, the player must have more than 50% of the territories defined by the duchy, for example, if a duchy in its totality contains 4 counties then the player will have to occupy at least 3 to create the title of duke.

C/ The Kingdom :

The Kingdom is a territory that includes several duchies, the duchies encompassed by this kingdom owe allegiance to the king. The counties under the dukes' responsibility owe allegiance to their dukes and not to their kings, so if a duke decides to rise up against his sovereign, then his vassals will follow him. Due to its title, a king can claim new lands more easily than the duke.



Differents Kingdoms(7)

To claim a Kingdom, the player must possess more than 50% of the territories delimited by the Kingdom, for example, if a kingdom in its totality contains 8 counties then the player will have to occupy at least 5 to create the title of King.

D/ The Empire:

The Empire is a territory that encompasses several Kingdoms, the kingdoms encompassed by this empire owe allegiance to the emperor. In the same way as for the kingdoms, the duchies under the responsibility of the kings owe allegiance to their king and not to their emperor, so if a king decides to rise up against his sovereign, then his vassals will follow him. Thanks to his title, the emperor has a full claim to the empire of Japan.



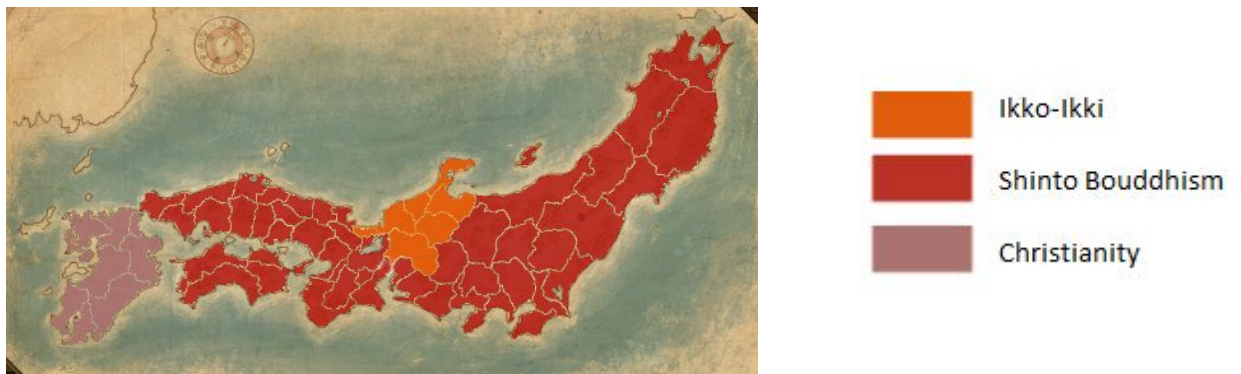
Japan Empire

To claim an Empire, the player must own more than 80% of the territories delimited by the empire, for example, if an empire in its totality contains 65 counties then the player will have to occupy at least 53 to create the title of emperor.

E/ Religion :

Religion also plays an important role in Crusader Kings 2. When the player performs religious actions, he will increase his piety. This will allow him to perform special actions such as claiming land belonging to a clan with a different religion.

Although the Japanese are fighting for Shogun's place, religion may be a way to get to that position faster.



Religion in Japan

Attribution of the territories at the beginning of the game:

The attribution of territories is made at the beginning of the game, each time the player starts the game, there will be the same attribution of counties for each clan. Since the player can play any clan or clan vassal, the level design is thought to give different starting places for the player. Thus, he can restart the game to test a new way to play and test new experiences.



Differents clans and their locations.

On this map, the player can play different characters of different roles:

- A county, a duchy or a kingdom. The empire is the player's ultimate reward, so he can not embody an emperor unless he creates that title during the game.
- A Christian religious, Ikko Ikki, or Shinto Buddhist

Knowing that a game over 126 years lasts between 15 and 20 hours. If the player decides to try each role independently of the others, this card would have a life of about 105 hours (6 (different roles listed above) * 17.5 (average hour of play of a game won / completed)).

Game situations :

First of all I arranged clans, religions and terrain types in this way to create different experiences depending on where the player starts.

So I made a list of interesting starting point for the player if he has no idea who to choose:

- The character Shimazu: this character is a Christian count which is a minority religion in Japan, the player starts the game with two counties, he lacks a county to obtain the title of Duke. Due to his military strength due to his two counties, he will be able to easily occupy the neighboring territories if he has a valid casus belli. However, the game will be complicated when confronting other religions, because it will be more difficult to prevent revolts and create good armies.



In addition, the counties in terms of topography are interesting, there is a plain that can easily refuel his armies but also a hill that makes it easier to defend his territory.



Finally, its geographical location allows it to have its flanks protected, it will hardly be invaded by the sea.

- The character Ashikaga: Former Shogun of the empire, he lost most of his possessions during the uprising of his vassals. He is now King of Kansai (the only king playable by the player). Given its particular situation, the other clans of the game are all hostile towards Ashikaga, the diplomatic aspect of the game will be more difficult. However, his number of territories being higher, he will have a strong military power, until his vassals rebel.



In addition, its geographical location is in the middle of other clans, they can all combine their strength at the same time against King Ashikaga to clear the threat it brings.



That's why the kansai kingdom has this topographic layout, so the player can easily protect his southern and eastern flanks thanks to the surrounding mountains and hills and he can supply his troops thanks to the plains.

Circulation and examples of scripting :

Each Circulation is different depending on the starting area of the player. Here, we will take as an example the circulation of the Shimazu clan over the years with a gap of 25 years between each circulation.

The soldiers being the characters who circulate in the level, they appear in each county, so as soon as a player gets a county, its circulation is considered as maximum because the soldiers pass by the counties before fighting.



In 1477, the player begins the game, he holds two counties. His most direct goal is to become Duke. For this he must conquer at least one of the two adjacent counties using his military forces, intrigue and diplomacy. For 10 years he will develop his army, create claims to acquire territories. The other 15 years he will make war to seize territories then become Duke.

In 1502, the player became duke, he owns 4 counties. His goal now is to become Kyushu king. For this he must conquer at least one county to create this title. He can then claim more easily the rest of the kingdom. During 5 years, he will make claims and create his title of king, then during 20 years he will conquer the rest of the kyushu kingdom and become the legitimate king of this kingdom. We can consider some revolts in the country that appear but are quickly destroyed.



In 1527, the player became king of Kyushu. He faces the first great resistance because he faces the new king of chugoku (in the worst case, another king will have emerged at this place). A kingdom is a territory much more difficult to conquer than a duchy or a county, so it will take much more time for the player to conquer these lands. For 25 years, he will fight against the king of chugoku who is Buddhist, he has no claims to create, he fights for a holy war. Finally, the player will manage to seize the kingdom and will be able to have both titles of king at the same time.



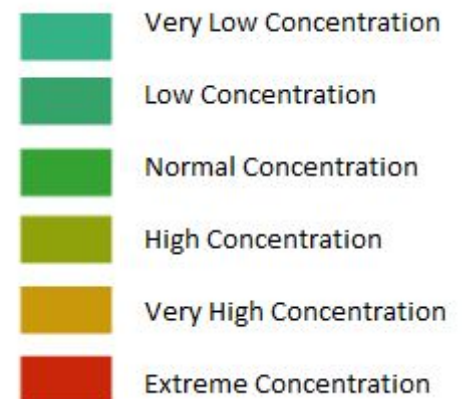
In 1552, the player is at the same time king of Kyushu and Chugoku, he owns 20 counties therefore a little less than 30% of the territories of the empire of Japan. In front of him is a



coalition of kings who found that the player was too great a threat. The player will fight against them for 50 years by forming an alliance with the king of Shikoku (in blue). He will finally succeed in winning these great wars force the king of the shikoku to become his vassal and unify Japan under a single banner his, he is now Shogun of Japan in 1602.



Final Map. player became Shogun



HeatMap

Strategy adopted for the production of this level design :

To do this level Design, I imposed myself several constraints:

-
- Get real information about Japan and the sengoku jidai era to bring a certain geographical, topographical and historical coherence to the game map.
- Use the order of magnitude of type of territory (county, duchy, etc ...) present in Crusader Kings 2.

So :

- A Duchy contains between 2 and 4 counties
- A kingdom contains between 3 and 4 Duchies and 8 and 12 counties
- An Empire contains several kingdoms (here 7), several Duchies (here 23) and several counties (here 65).

Sources/ références :

<https://fr.wikipedia.org/wiki/Hokkaid%C5%8D>

[https://fr.wikipedia.org/wiki/Histoire_des_grandes_puissances#Puissances du Moyen %C3%82ge](https://fr.wikipedia.org/wiki/Histoire_des_grandes_puissances#Puissances_du_Moyen_%C3%82ge)

https://fr.wikipedia.org/wiki/%C3%89poque_Sengoku

https://fr.wikipedia.org/wiki/Guerre_d%27%C5%8Cnin

<https://www.histoire-pour-tous.fr/histoire-par-pays/4918-histoire-du-japon-6-sengoku-jidai-lage-du-pays-en-guerre.html>

[http://crusaderkings-two.wikia.com/wiki/Terrain_\(types_and_properties\)](http://crusaderkings-two.wikia.com/wiki/Terrain_(types_and_properties))

https://fr.wikipedia.org/wiki/G%C3%A9ographie_du_Japon

<http://fr-fr.topographic-map.com/places/Japon-9839/>

[http://crusaderkings-two.wikia.com/wiki/Terrain_\(types_and_properties\)](http://crusaderkings-two.wikia.com/wiki/Terrain_(types_and_properties))

<https://ck2.paradoxwikis.com/Attrition>