



**Dominions 4
Thrones of Ascension**

**Mapmaking Manual
v4.06**

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Content

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1 Introduction

This document is a guide to making maps for Dominions 4. It covers the basics of how to create a map and how to use the functionality built into Dominions to customize and develop them beyond the basics provided by the graphical interface of the map editor.

This manual should give the reader all the tools necessary to create and modify maps, but it does not provide an extensive tutorial on how to create a map from scratch. Image processing guides are beyond the scope of this document. The chapter about the random map generator provides only the basics. The full potential of the RMG is beyond the scope of this manual.

2 Requirements

With the help of a simple text editor and a paint program like *Gimp* or *Photoshop* it is possible to create new maps for Dominions 4.

Previous versions of Dominions used Unix style endlines, but this is no longer a relevant concern and any text editor may be used to create maps.

3 Data Directories

The data directory for storing saved games, mods and maps is different depending on the operating system.

The easiest way to locate the data directories in Dominions 4 is by opening **Game Tools** from the **Main Menu** and using the **Open User Data Directory** function. The operating system will open the user data directory in a separate file manager window.

The data directory is located in a hidden folder in Windows. On Linux and Mac OS the data directory is not hidden.

- ◆ **Linux:** `~/.dominions4/`
- ◆ **Mac:** `~/.dominions4/`
- ◆ **Windows:** `%APPDATA%\dominions4\`

The `%APPDATA%` is an environment variable, which defines where the user data directories for any applications a Windows user has installed are stored. It points to the application data directory.

In Windows XP this directory is `C:\Documents and Settings\[username]\Application Data\`

In Windows Vista and Windows 7 the directory is `C:\Users\[username]\AppData\Roaming\`

Because the `%appdata%` directory in Windows is normally hidden, you must have the viewing of hidden files and folders enabled to see it. Select *Control Panel > Folder Options > View* and set the options to show hidden files and folders.

Even if it is not visible, you can get to the directory. Just type `%APPDATA%\dominions4` to the Windows Explorer address bar and press *Enter* and the directory will open. You don't need to use upper case letters either.

The subdirectories of the Dominions 4 data directory are

- ◆ maps
- ◆ mods
- ◆ savedgames

4 Map Mechanics

4-1 Syntax

Two consecutive dashes (- -) are used to denote comments. Anything after the dashes is ignored. This can be used to add explanations of what is being added to a map file and what is being intended with the commands.

All Dominions 4 map commands begin with a `#` sign. Map commands may or may not have arguments. An argument is a value after the command itself to denote something. Arguments are indicated by `<object>` after the command itself, e.g. `#setland <province nbr>`.

A map command that does not have an argument is used to assign a fixed effect. The effect of these commands are always the same..

Map commands that have arguments can have one or more of them and the arguments may be of several different types. Some commands require more than one type of argument to work.

The following types of arguments are used for map commands in Dominions 4:

integer – a whole number

percent – a percentage value (may be higher than 100 in some cases). Expressed as integer in mod syntax, interpreted as percentage.

string – text such as province names, map descriptions etc.

bitmask – a bitmask is a special type of integer number. Any integer can be expressed as a sum of the powers of 2. In a bitmask number each power of 2 that it contains means a different thing. A bitmask argument assigns ALL of these attributes to the object being modded.

Example: Setting the terrain type of a province (`#terrain <prov nbr> <terrain mask>`) is a command where the first argument of the command selects the target province and the second argument bitmask operation that assigns the specified terrain. Setting a bitmask of 1601 (1+64+512+1024) would mean a small province (1) that is a wasteland (64), which cannot be a starting location (512) and which has a high probability of containing many magic sites (1024).

5 The Map Image File

The image file of the map should be in Targa (.tga) or SGI (.rgb) format. The file should be at least 256x256 pixels large and saved in 24 or 32 bit color, uncompressed or RLE. A suitable size for a map might be about 1600x1200 pixels. This section discusses issues and common problems related to or caused by something in the map image file or interactions between the map image file and map file.

5-1 Defining Provinces

Provinces are defined by white pixels (RGB value 255, 255, 255). Each single white pixel is considered a separate province. If you need some white color on your map, use something like (253, 253, 253) for white. It will look white to the human eye, but will not cause extra provinces to appear.

When you add provinces to a map image, remember to use a single 1x1 pixel brush. It is also a good idea to use an image manipulation program that supports layers, so you can put the province pixels in a separate layer and later merge them down to form the final map file. That way mistakes will be easier to correct.

5-2 Province Borders

Province borders are not strictly necessary in the map image, but they are helpful for players in visualizing where to go and which province borders which. Beyond that, province borders in a red color allow Dominions to make a guess toward what size a province should be as well as guessing its neighbors if the map editor's **Guess Neighbors** function is used. Most of the time it is more efficient to just set the neighbors manually in the map editor, though.

Drawing borders on a map image is best done on a separate layer, which is then merged down to form the final image file. This allows for easy correction of mistakes and makes it possible to do several versions of the same map with different number of provinces.

5-3 Transparency

A targa file saved with improper alpha channel settings can result in Dominions treating the image as being transparent and showing only the map background instead of the map graphic. This problem is removed by saving the image file again in RLE compressed format and removing the alpha channel.

5-4 Map Image Dimensions

It is worthwhile to pay attention to map dimensions in pixels relative to the number of provinces meant to be on the map. Targa files sizes get significantly larger when the dimensions go up. Map zoom is automatically set by the game and allows a resized map with half the dimensions of the original to look just as good when used properly on maps with larger dimensions. This used to be done with the `#defaultmapzoom` command, but is now automated.

6 The Map Editor

Once you have drawn your map you have to create a **.map** file that contains certain information about the map. For example, some of the information in the map file is the title of the map and which provinces borders on which. The easiest way to create a working map file is to use the map editor in Dominions 4.

The *Map Editor* is located in the *Game Tools* menu. To edit an existing map, select the *Load Map* option and then the desired map. To create a new map, select *New Map* and enter the file name of the map image file.

Once you have created the map in the editor and saved it, it can be used to play Dominions 4.

6-1 Interface

The map editor interface is very simple. There is box with a list of province number, name, terrain types and other province properties on the left and the rest of the screen is taken up by the map itself. Provinces are marked by a silver flag.

The **command box** allows the mapmaker to

- ◆ set terrain type (default is plains)
- ◆ set province size (large or small, default is no preference)
- ◆ set recommended start locations
- ◆ set provinces that cannot be start loc.
- ◆ set higher magic site frequency
- ◆ set recommended throne provinces
- ◆ delete known sites from a province
- ◆ open the *Advanced Commands* menu
- ◆ save the map

The **Advanced Commands** menu allows the mapmaker to

- ◆ set horizontal wraparound
- ◆ set vertical wraparound
- ◆ remove all province connections (neighbors) from the map
- ◆ randomize province names
- ◆ remove all province names
- ◆ alter neighbors if provinces have been inserted
- ◆ alter neighbors if provinces have been removed
- ◆ set filters to show terrain and special locations such as planned throne sites (recommended)

6-2 Setting Connections

Provinces that have a connection between them are called neighboring provinces, or neighbors.

- ◆ To select a province, right-click on it
- ◆ To set a neighbor, click on an adjacent province
- ◆ To remove a neighbor, Ctrl-click on an adjacent province
- ◆ To change a standard connection to a mountain pass, shift-click on the adjacent province once
- ◆ To change a standard connection to a river border, shift-click on the adjacent province twice
- ◆ Shift-click a neighbor to cycle through standard, mountain pass and river border connections without removing it

6-3 Setting Terrain Type

To set a terrain type for the selected province, check all the terrain types that apply from the command box.

As a general rule, a single province should only contain one adverse terrain type (forest, waste, mountain, swamp, cave), or at the very most two. Adverse terrain slows down movement and too many provinces with mixed terrain make a map impassable and not very enjoyable to play on.

You can freely mix small or large province markers, fresh water, nostart, start (filter symbol red pentagram), throne and many sites with any terrain without affecting movement on the map.

Many sites means a province with a higher chance of containing magic sites and should be used sparingly or where map thematics require it. The symbol is a green pentagram when map filters are on.

All of the values set by these options are added into the terrain mask of the province. (see section 7-3 *Terrain Type in the Map File* for more details). Note that some special terrain types cannot be set from the map editor and must be manually added to the map file later.

The keyboard shortcuts for the map editor are listed in **Table 12** in the appendix.

7 Map Commands

Load the map you have drawn and click in all borders and terrains. After the map file has been saved you can edit it manually in a text editor if you want to add some extra map commands. Many map commands cannot be entered via the map editor.

When a game is created on the map, Dominions first randomly determines province names, amount of population, population types, independent defenders, magic sites and other such things. The map commands specified in the map file are applied only after this has been done. This can sometimes lead to results that the mapmaker, especially a beginning mapmaker, did not expect. The map commands that most often lead to such confusion have warnings and explanations of the most common problems.

Several map commands will require knowing monster numbers, fort numbers, poptype numbers, magic site numbers or other identifying information. In addition to terrain types and victory conditions, the tables in this manual list nation numbers, fort numbers and poptype numbers. Names and numbers for magic sites and monsters are available through other fan-made documentation. You can also check monster numbers and item numbers in the game by selecting the monster or item and pressing **ctrl+i** for monsters and **shift+i** for items.

7-1 Required Map Commands

These map commands must exist in every map file or the map will not work.

#dom2title <text>

The title of the map. This must be the first command for every map. The reason why this command is named *#dom2title* instead of *#dom4title* is because the map command syntax used here was first introduced in *Dominions 2: The Ascension Wars* and keeping it as it has been makes maps made for earlier versions of the game (more) compatible with Dominions 4.

#imagefile <filename>

The image file of the map in Targa (.tga) or SGI (.rgb) format. The file should be at least 256x256 pixels large and saved in 24 or 32 bit color, uncompressed or RLE. A suitable size for a map might be about 1600x1200 pixels. For more detailed information related to the image file, see *Chapter 5: The Map Image File*.

7-2 Basic Map Commands

These map commands are some of the most basic commands of mapmaking. These commands do not require an active province (see Province Commands) even if they affect a specific province.

#scenario

This command tags the map as a scenario and this will be indicated by a small burning star when selecting a map. It disables most game setup options, because those are supposed to be determined by map commands in the scenario map file.

#description "text"

The description of the map that is shown after selecting a map to play on. Use two newlines to add a new paragraph. Alternatively, use ^ at the end of a line to indicate newline. If you use ^ at the beginning of a line, it adds two newlines.

#neighbour <province nbr> <province nbr>

Makes it possible to move between these two provinces (in both directions). Use the map editor to set province neighbors. Doing it from the map file with a text editor is VERY difficult.

#neighbourspec <land1> <land2> <spcnbr>

This command can be used to create a mountain pass or other type of special border between two provinces. Special border types are listed below.

specnbr 1 = mountain pass
specnbr 2 = river border

#landname <province nbr> "name"

Sets the name of a specific province.

7-3 Terrain Type in the Map File

#terrain <province nbr> <terrain mask>

Sets the terrain of a province. The terrain is calculated by adding certain numbers for different terrain types or other attributes. You should use the map editor to set these values as it would be very difficult to do it by hand.

2^x	Nbr	Terrain
-	0	Plains
0	1	Small Province
1	2	Large Province
2	4	Sea
3	8	Freshwater
4	16	Mountain
5	32	Swamp
6	64	Waste
7	128	Forest
8	256	Farm
9	512	Nostart
10	1024	Many Sites
11	2048	Deep Sea
12	4096	Cave
22	4194304	Border Mountain
23	8388608	<i>Reserved for internal use</i>
24	16777216	Throne (recommended)
25	33554432	Start (recommended)

Table 1: Basic terrain masks

Terrain masks are listed in **Table 1** and **Table 2**. Note that the terrain masks used in editing maps are **NOT** the same as the terrain masks in the *Modding Manual* that are used for modding magic sites.

All terrain masks listed in **Table 1** can be set from the map editor. The terrain masks in **Table 2** cannot be added from the map editor and you must add them to the base terrain mask calculated by the map editor. The advanced terrain masks make it more likely that when a magic site is placed in the province, it will be of that specific type.

2^x	Nbr	Terrain
13	8192	Fire sites
14	16384	Air sites
15	32768	Water sites
16	65536	Earth sites
17	131072	Astral sites
18	262144	Death sites
19	524288	Nature sites
20	1048576	Blood sites
21	2097152	Holy sites

Table 2: Special terrain masks

7-4 Advanced Map Commands

These map commands are not necessary to get a working map, but they allow a great deal of customization and enhancement. These commands do not require an active province (see Province Commands) even if they affect a specific province.

Many of these commands are global and affect all provinces on the map or map attributes that are not directly tied to a specific province. It is recommended that they be placed at the start of the map file after the description.

#maptextcol <red> <green> <blue> <alpha>

Sets the color used to print province names. Each value should be between 0.0 and 1.0.

#features <0-100>

Sets the magic site frequency. Default is 45 for an Early Era game, 40 for Middle Era and 35 for Late Era. This command will override the site frequency specified in the game setup screen. It is modified by terrain on a per province basis.

Terrain affects magic site frequency by modifying the base frequency set at game creation:

- ◆ **Magic:** + 30 (also known as many sites)
- ◆ **Waste:** + 20
- ◆ **Swamp:** + 20
- ◆ **Mountain:** + 10 (including border mtns)
- ◆ **Forest:** + 10
- ◆ **Farm:** - 20

#allowedplayer <nation nbr>

Makes this nation one of the allowed nations to play on this map. Use this command multiple times or the map will only be able to host one player. This command can be used to make era specific maps.

#nohomelandnames

When this switch is used, homelands will no longer be named after their starting nations. For example, the home of Abysia might be called The Summer Lands or whatever.

#nonamefilter

Map filter that displays province names is disabled when this command is used. Does not work correctly.

**#computerplayer <nation nbr>
<difficulty>**

This nation will always be controlled by the computer. Difficulty ranges from one to five. One is Easy AI. Two is Standard difficulty, followed by Difficult (3), Mighty (4) and Impossible (5) AI.

#allies <nation nbr> <nation nbr>

These two players will not attack each other. This command will only affect computer players.

**#victorycondition <condition nbr>
<attribute>**

The game will end when one player fulfills a special condition, see **Table 3**. Dominion score is 11-20 points per converted province, depending on the strength of the dominion. The value of <condition nbr> should be a number from 0 to 5.

Nbr	Condition	Attribute
0	Standard	Nothing
1	Victory Points	Total VPs required
2	Dominion	Dominion score req.
3	Provinces	Provinces required
4	Research	Research points req.
5	VPs (cumul.)	VPs every summer

Table 3: Possible victory conditions

#cannotwin <nation nbr>

This nation will not win when they fulfill a special victory condition. Nation numbers can be found in **Table 4** and the three following tables.

#victorypoints <land nbr> <1-7>

The player who has control over this province will control from one to seven victory points. If the province has a fort then the controller of the fort controls the victory points.

7-5 Setting Start Locations

These commands allow you to set or deny specific provinces as start locations and to control which nations starts where on a map. The specstart locations will be used if you create a game with the *Use special starting locations* option enabled.

#start <province nbr>

Sets a recommended start location. By creating at least one start location for each player, every player will start at one of these locations. If **#start** provinces are set, nations will start at these locations unless there are more nations than **#start** provinces. If there are more nations than **#start** provinces, the extra nations will start in eligible random locations.

If a province is set as a **#start** province but its terrain mask includes the value 512 (nostart), the nostart will override the **#start** command and no nation will start there.

If no **#start** provinces are set, all provinces are available as random starting locations unless set nonstartable with the **#nostart** command or in the map editor.

#nostart <province nbr>

Tags a province as nonstartable. No player will start here when placed at random. This command can also be set from the map editor, which adds 512 to the province's terrain mask.

#specstart <nation nbr> <land nbr>

Use this command to assign a specific nation to a specific start location. Nation numbers can be found in **Table 4** and the three following tables.

If you use the **#specstart** command, please note that using the **#land** command to select the starting province of the nation for further modification results in the nation starting with no troops and a dead god. This is because the **#land** command kills all units initially placed in the province. In such situations the **#setland** command should be used instead.

8 Province Commands

These commands are used to manipulate specific provinces in order to set different features manually instead of being randomly assigned during game setup. Unless otherwise specified, they only affect the active province.

#land <province nbr>

Sets the active province and kills everyone in it. All the following commands will only affect the active province. Use this command if you want to activate a province in order to replace its random inhabitants with the monsters of your choice.

#setland <province nbr>

Sets the active province. All the following commands will only affect the active province.

#poptype <poptype nbr>

Sets the population type of the active province. This determines which troops may be recruited in the province. Poptype numbers can be found in **Table 9** and **Table 10**. If poptype is set with a number higher than existing poptypes, there will be no units available for recruitment in the province.

This command will override the poptype that was randomly assigned to the province during game creation, but it will NOT change the independent defenders, which will be of the poptype this command overwrote.

Example: *if the randomly determined poptype during game creation was 42 (Jade Amazons) and the poptype has been set to 25 (Barbarians) by this map command, the independent defenders will still be Jade Amazons. You just won't be able to recruit them. If you want the independent defenders to match the specified poptype, you must set them manually in the map file using the Commander Commands. You should also use the #land command to select the province if you do not want the randomly assigned defenders in addition to the ones you set manually.*

#owner <nation nbr>

Changes the ownership of the active province. Nation nbr indicates the new owner. Nation numbers can be found in **Table 4** and the three following tables.

#killfeatures

Removes all magic sites from the active province.

#feature "site name" | <site nbr>

Puts a magic site in the active province. This command can be used a maximum of eight times per province, because that is the maximum number of sites a province can have.

Adding unique sites to a map using this command will NOT prevent those sites from appearing randomly, because the map file is only applied to the game map after game setup has done random determination of sites for each province.

If the **#killfeatures** command was not used and all site slots were already filled by randomly determined sites during game setup, this command will be ignored and the site won't appear. These same limitations apply to the **#knownfeature** command.

#knownfeature "site name" | <site nbr>

Puts a magic site in the active province. This site is already found at the start of the game. Using this command prevents special features of the site that depend on its discovery from activating.

For example, the magic site *Academy of High Magics* causes a laboratory to be built in the province upon discovery, but if the site is set by this command, the **#lab** command must be used to add a laboratory to the province. Otherwise the owner of the province must build the laboratory as normal and pay the gold cost.

#fort <fort nbr>

Puts a fort in the active province. Fort nbr is a number between 1 and 43 and the list of fort numbers can be found in **Table 8**. Will replace a nation's default fort if used on a **#start** province.

#temple

Puts a temple in the active province.

#lab

Puts a laboratory in the active province.

#unrest <0-500>

Sets the unrest level of the active province.

#population <0-50000>

Sets the population number of the active province.

#defence <0-125>

Sets the province defence of the active nation. This command cannot be used for independent provinces.

#skybox “<pic.tga>”

Sets the sky (battleground background) to a tga/rgb pic of your choice for fights in the current province. The picture size should be a power of two. 512*512 is a good size.

#batmap “<battlemap.d3m>”

Sets the battleground that fights take place in for the current province. You can use the special name 'empty' for no battleground, useful for battles in space perhaps. This will affect fights both outside and inside castles.

#groundcol <red> <green> <blue>**#rockcol <red> <green> <blue>****#fogcol <red> <green> <blue>**

These three commands color the world with the specified colors for fights in the current province. Color values range from 0 to 255.

9 Commander Commands

These commands are used to set specific monsters in the active province and manipulate those monsters to modify them from the base monster type to create thematic provinces and special heroes. They must be used after the **#land** or **#setland** commands, because they require an active province. Whenever commanders and units are placed on a map, the type can be set using either the monster number or the monster name in quote marks. If the commander or unit to be added is a new monster defined in a mod, then monster number *cannot* be used and the name must be used instead.

#commander “<commander type>”

Puts one of these commanders in the active province. The commander will have a random name according to its nametype. This commander will be the active commander until a new instance of the **#commander** command is entered.

#comname “name”

Replaces the active commander’s random name with this one.

#bodyguards <nbr> “<type>”

Gives bodyguards to the active commander. This command only affects independents. All nations will ignore this command.

#units <nbr of units> “<type>”

Gives a squad of soldiers to the active commander.

#xp <0-900>

Gives experience points to the active commander.

#randomequip <rich>

Gives random magic items to the active commander. Rich must be between 0 and 4. A value of 0 means small chance of getting a magic item and 4 means large chance of getting many powerful items.

#additem “item name”

Gives a magic item to active commander. Items cannot currently be assigned by item number.

#clearmagic

Removes all magic skills from the active commander.

#mag_fire <level>

Gives active commander Fire magic.

#mag_air <level>

Gives active commander Air magic.

#mag_water <level>

Gives active commander Water magic.

#mag_earth <level>

Gives active commander Earth magic.

#mag_astral <level>

Gives active commander Astral magic.

#mag_death <level>

Gives active commander Death magic.

#mag_nature <level>

Gives active commander Nature magic.

#mag_blood <level>

Gives active commander Blood magic.

#mag_priest <level>

Gives active commander Holy magic. Unlike in modding, the commander does NOT need to be natively sacred to be given priest levels via map commands and will not crash the map.

10 God Commands

These commands are used to set a specific pretender god for a specific nation and will override the pretenders designed or loaded during game setup. They are useful for giving AI opponents an advantage and to offset the disadvantages stemming from the AI tendency to select bad scales.

Each of these commands may be used independently of the others. They do not require an active province.

If human controlled nations are assigned gods using the **#god** command and other *Commander Commands*, cheat detection will be triggered if the god does not conform to the normal design point limits for awake pretenders.

If only some attributes of a nation's pretender, such as Dominion strength and scales, are modified using the commands in this section but the **#god** command is *not* used to set the pretender type, cheat detection will be triggered if the total point cost of the pretender chassis and the modifications in the map file do not conform to the normal design point limits for awake pretenders.

#god <nation nbr> “<commander type>”

Forces the god of one nation to be this monster. The god becomes the active commander and can be manipulated with the *Commander Commands*. The same limitations on defining the commander type apply, meaning that modded monsters must be defined by their name instead of monster number. Nation numbers can be found in **Table 4** and the three following tables.

Using this command will generate an error message and crash Dominions 4 on game creation if the nation is not in play on the map. The other God Commands do *not* crash the map even if the nation is not in play.

#dominionstr <nation nbr> <1-10>

Sets the dominion strength of a nation to a value between 1 and 10. This command does not require an active province.

#scale_chaos <nation nbr> <(-3)-3>

Forces the Order / Turmoil dominion scale of a nation to a value between -3 and 3. A value of 3 means that the scale is fully tipped to the right (Turmoil) and -3 means it is fully tipped to the left (Order).

#scale_lazy <nation nbr> <(-3)-3>

Forces the Productivity / Sloth dominion scale of a nation to a value between -3 and 3. A value of 3 means that the scale is fully tipped to the right (Sloth) and -3 means it is fully tipped to the left (Productivity).

#scale_cold <nation nbr> <(-3)-3>

Forces the Heat / Cold dominion scale of a nation to a value between -3 and 3. A value of 3 means that the scale is fully tipped to the right (Cold) and -3 means it is fully tipped to the left (Heat).

#scale_death <nation nbr> <(-3)-3>

Forces the Growth / Death dominion scale of a nation to a value between -3 and 3. A value of 3 means that the scale is fully tipped to the right (Death) and -3 means it is fully tipped to the left (Growth).

#scale_unluck <nation nbr> <(-3)-3>

Forces the Luck / Misfortune dominion scale of a nation to a value between -3 and 3. A value of 3 means that the scale is fully tipped to the right (Misfortune) and -3 means it is fully tipped to the left (Luck).

#scale_unmagic <nation nbr> <(-3)-3>

Forces the Magic / Drain dominion scale of a nation to a value between -3 and 3. A value of 3 means that the scale is fully tipped to the right (Drain) and -3 means it is fully tipped to the left (Magic).

11 Random Map Generator

Dominions 4 comes with a powerful random map generator (RMG for short). The random map generator can be run from the **Game Tools** menu and the preferences set as to size of map, number of provinces, ratio of each terrain type and various wrap options (east-west, north-south or full wraparound). Anti-aliasing can be used to create better looking maps, but the processing time for map generation is greatly increased.

The RMG creates beautifully rendered maps that are more or less ready to play right out of the box. However, it is worth using the map editor to check the randomly generated map for faulty province connections and sometimes terrain types, because the random generation procedure does not always weigh things like a human player would.

Using command line switches, it is possible to specify much more options for the RMG than from the *Game Tools* menu. The RMG can be used to create maps with borders set to zero pixels in width. Some quick work with a paint program makes it possible to create a completely custom map with hand selected province locations and hand drawn borders without needing to do all the tedious map drawing completely from scratch if that is your preference.

Further, there is a command line switch called **--mapnospr** which creates a completely blank map template without any graphics drawn on it. Only the landmass and seas are drawn and provinces are assigned as normal. Such a blank canvas can then be painted with the map graphics of the cartographer's choice followed by province placement and drawing borders for a unique map.

12 Important Notes

12-1 Dominions 3 Maps

Dominions 3 maps are compatible with Dominions 4 with certain reservations. Basic terrain masks and other map commands are the same, so those do not present a problem and unscripted Dominions 3 maps can be used without modification. They will not contain mountain pass borders or river borders between provinces, but otherwise there is no difference.

However, scripted Dominions 3 maps cannot be used. The following objects have been modified and have different numbers in Dominions 4 than they had in Dominions 3:

- ◆ Nations
- ◆ Magic sites
- ◆ Forts

Any map file scripting that set specific commands for nations must be changed, because all those commands require nation numbers.

Fort commands that set a particular type of fort must be updated to use Dominions 4 forts. If the command is used to assign an invalid fort number to a province, Dominions 4 will crash to the desktop immediately when the province is selected.

Any map file scripting that set magic sites by site number instead of site name must be updated to correspond to the site numbers in Dominions 4 or the results will be wildly unpredictable. Site numbers in Dominions 4 are generally at least 100 points greater than they were in Dominions 3 and many of the sites have been moved around, which has caused them to be reordered and subsequently also renumbered.

13 Troubleshooting

The game crashes when I try to play on my map

Try running dominions with the `-dd` switch to enable maximum debug mode. Then read the `log.txt` file that has been created. At the end it will say where on the map this problem occurred. Linux and OS X versions will print the debug output to the console/terminal instead.

The game crashes when I try to open a new map in the map editor

When you create a new map from an image file, you must select the **New Map** option. Selecting **Load Map** will crash Dominions 4 because no map file exists to load yet.

14 Obsolete Commands

These commands appeared in Dominions 3 mapmaking, but have been removed and have no effect in Dominions 4.

#defaultmapzoom <value>

Sets the default zoom level on the map. Value should be between 0.0 and 2.0. This command adjusts the displayed size of forts, flags, temples etc relative to the map image file. If the default view (shown by the *End* key) looks too small or large, adjust this value until it looks right.

The `#defaultmapzoom` command is ignored in Dominions 4 maps, but need not be removed from old maps to make them compatible.

Appendix A: Tables

Nbr	Nation	Epithet
5	Arcoscephale	Golden Era
6	Ermor	New Faith
7	Ulm	Enigma of Steel
8	Marvemi	Time of Druids
9	Sauromatia	Amazon Queens
10	T'ien Ch'i	Spring and Autumn
11	Machaka	Lion Kings
12	Mictlan	Reign of Blood
13	Abysia	Children of Flame
14	Caelum	Eagle Kings
15	C'tis	Lizard Kings
16	Pangaea	Age of Revelry
17	Agartha	Pale Ones
18	Tir na n'Og	Land of the Ever Young
19	Fomoria	The Cursed Ones
20	Vanheim	Age of Vanir
21	Helheim	Dusk and Death
22	Niefelheim	Sons of Winter
23	<i>Reserved</i>	
24	<i>Reserved</i>	
25	Kailasa	Rise of the Ape Kings
26	Lanka	Land of Demons
27	Yomi	Oni Kings
28	Hinnom	Sons of the Fallen
29	Ur	The First City
30	Berytos	Phoenix Empire
83	Atlantis	Emergence of the Deep Ones
84	R'lyeh	Time of Aboleths
85	Pelagia	Pearl Kings
86	Oceania	Coming of the Capricorns

Table 4: Nation numbers, Early Era

Nbr	Nation	Epithet
33	Arcoscephale	The Old Kingdom
34	Ermor	Ashen Empire
35	Sceleria	Reformed Empire
36	Pythium	Emerald Empire
37	Man	Tower of Avalon
38	Eriu	Last of the Tuatha
39	Ulm	Forges of Ulm
40	Marignon	Fiery Justice
41	Mictlan	Reign of the Lawgiver
42	T'ien Ch'i	Imperial Bureaucracy
43	Machaka	Reign of Sorcerors
44	Agartha	Golem Cult
45	Abysia	Blood and Fire
46	Caelum	Reign of the Seraphim
47	C'tis	Miasma
48	Pangaea	Age of Bronze
49	Asphodel	Carrion Woods
50	Vanheim	Arrival of Man
51	Jotunheim	Iron Woods
52	Vanarus	Land of the Chuds
53	Bandar Log	Land of the Apes
54	Shinuyama	Land of the Bakemono
55	Ashdod	Reign of the Anakim
56	<i>Reserved</i>	
87	Atlantis	Kings of the Deep
88	R'lyeh	Fallen Star
89	Pelagia	Triton Kings
90	Oceania	Mermidons

Table 5: Nation numbers, Middle Era

Nbr	Nation	Epithet
60	Arcoscephale	Sibylline Guidance
61	Pythium	Serpent Cult
62	Lemur	Soul Gate
63	Man	Towers of Chelms
64	Ulm	Black Forest
65	Marignon	Conquerors of the Sea
66	Mictlan	Blood and Rain
67	T'ien Ch'i	Barbarian Kings
68	<i>Reserved</i>	
69	Jomon	Human Daimyos
70	Agartha	Ktonian Dead
71	Abysia	Blood of Humans
72	Caelum	Return of the Raptors
73	C'tis	Desert Tombs
74	Pangaea	New Era
75	Midgård	Age of Men
76	Utgård	Well of Urd
77	Bogarus	Age of Heroes
78	Patala	Reign of the Nagas
79	Gath	Last of the Giants
80	Ragha	Dual Kingdom
91	Atlantis	Frozen Sea
92	R'lyeh	Dreamlands

Table 6: Nation numbers, Late Era

Nbr	Nation
0	Independents
2	Special Independents

Table 7: Special nations used by AI

Nbr	Req	Fort
1	-	Palisades
2	1	*Wooden Towers
3	-	Fortress
4	-	Castle
5	-	Citadel
6	3-5	*Gate House
7	6	*Towers
8	7	*Additional Towers
9	3-5	*Killing Ground
10	-	*Deep Well
11	-	*Supply Storage
12	-	*Underground Storage
13	-	Crystal Citadel
14	-	Magic Tower
15	-	Kelp Palisades
16	-	Kelp Fortress
17	-	Basalt Castle
18	terrain	*Roads
*		<i>Fort upgrade</i>

Table 8: Fort Numbers

Nbr	Pootype
25	Barbarians
26	Horse Tribe
27	Militia, Archers, Hvy Inf
28	Militia, Archers, Hvy Inf
29	Militia, Archers, Hvy Inf
30	Militia, Longbow, Knight
31	Tritons
32	Lt Inf, Hvy Inf, X-Bow
33	Lt Inf, Hvy Inf, X-Bow
34	Raptors
35	Slingers
36	Lizards
37	Woodsmen
38	Hoburg
39	Militia, Archers, Lt Inf
40	Amazon, Crystal
41	Amazon, Garnet
42	Amazon, Jade
43	Amazon, Onyx
44	Troglodytes
45	Tritons, Shark Knights
46	Amber Clan Tritons
47	X-Bow, Hvy Cavalry
48	Militia, Lt Inf, Hvy Inf
49	Militia, Lt Inf, Hvy Inf
50	Militia, Lt Inf, Hvy Inf
51	Militia, Lt Cav, Hvy Cav
52	Militia, Lt Cav, Hvy Cav
53	Militia, Lt Cav, Hvy Cav
54	Hvy Inf, Hvy Cavalry
55	Hvy Inf, Hvy Cavalry
56	Hvy Inf, Hvy Cavalry
57	Shamblers
58	Lt Inf, Hvy Inf, X-Bow
59	Militia, Lt Inf, Archers

Table 9: Pootype Numbers, part 1

Nbr	Pootype
60	Militia, Lt Inf, Archers
61	Vaettir, Trolls
62	Tribals, Deer
63	Tritons
64	Tritons
65	Ichtyids
66	Vaettir
67	Vaettir, Dwarven Smith
68	Slingers, Hvy Inf, Elephants
69	Asmeg
70	Vaettir, Svartalf
71	Trolls
72	Mermen
73	Tritons, Triton Knights
74	Lt Inf, Lt Cav, Cataphracts
75	Hoburg, LA
76	Hoburg, EA
77	Atavi Apes
78	Tribals, Wolf
79	Tribals, Bear
80	Tribals, Lion
81	Pale Ones
82	Tribals, Jaguar
83	Tribals, Toad
84	Cavemen
85	Kappa
86	Bakemono
87	Bakemono
88	Ko-Oni
89	Fir Bolg
90	Turtle Tribe Tritons
91	Shark Tribe Tritons
92	Shark Tribe, Shark Riders
93	Zotz
94	Lava-born

Table 10: Pootype Numbers, part 2

Borders	
right click	select province
click	add border
ctrl + click	remove border
shift + click	toggle river / mountain pass
Province Attributes	
a	farm
b	border mountain
c	cave
d	deep sea
f	forest
m	mountain
n	no start
r	fresh water
u	underwater
s	swamp
w	waste
x	set battleground look
M	many sites
S	start
T	throne site
1	small
2	large
Misc	
#	goto province number
ctrl + s	save map

Table 12: Map Editor Keyboard Shortcuts