First look

The ToolKit was designed for working with game files, creating and editing maps, and creating mods for “Disciples 3: Reincarnation”. It was designed to be easily understood, and anyone can master it. The controls are intuitive, and scripting (creation of scripts and cutscenes in the game) is also easy, thanks to the tooltips. In this manual we will describe the basic functions of the ToolKit, to give you all the knowledge you need to start working with it, and learning more about it through use.

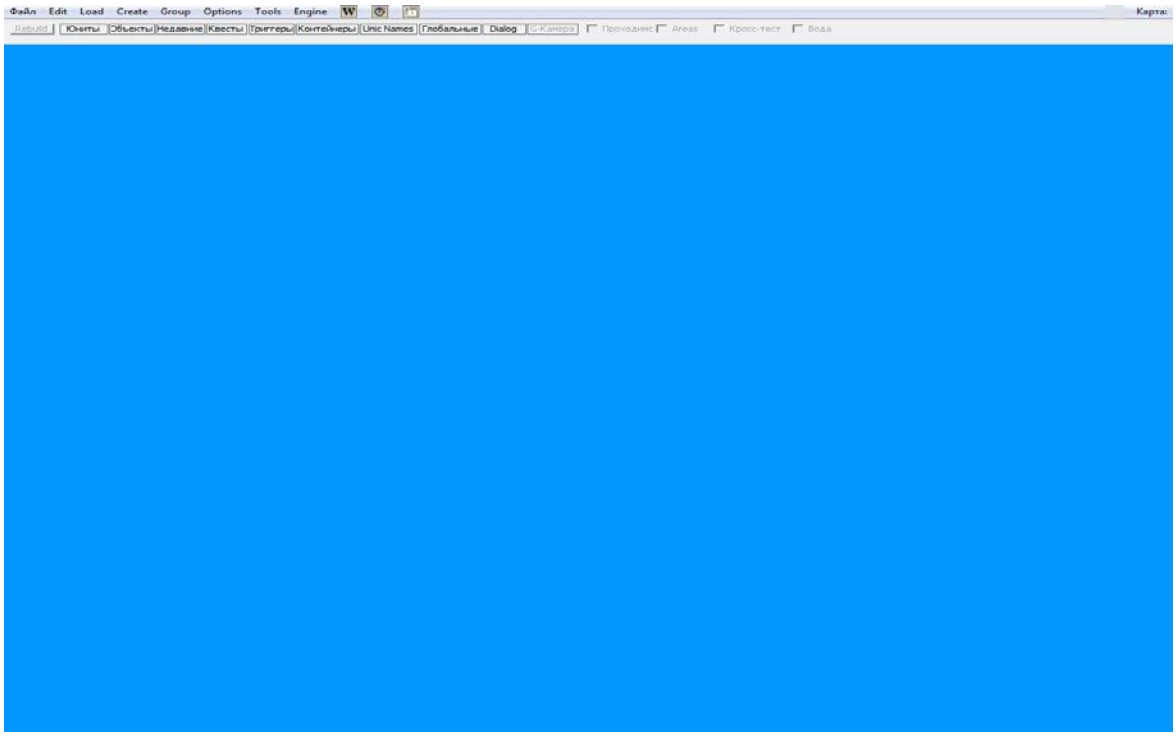
The ToolKit can be accessed as soon as you install the game. The game files (and the ToolKit) for “Disciples: Reincarnation” is under your Steam directory (most commonly, C:\ Games\Steam\steamapps\common\Disciples III Rebirth).



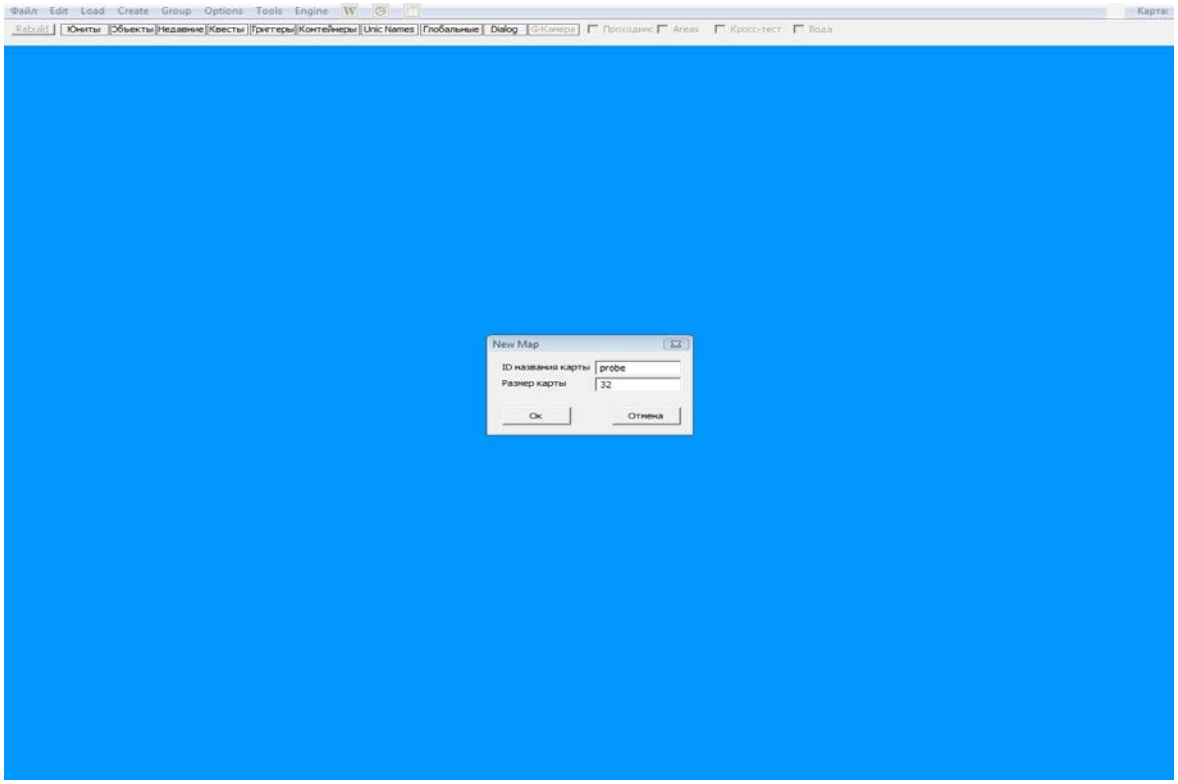
The ToolKit has the same icon as the game file, and is named ToolKit.exe

Map creation

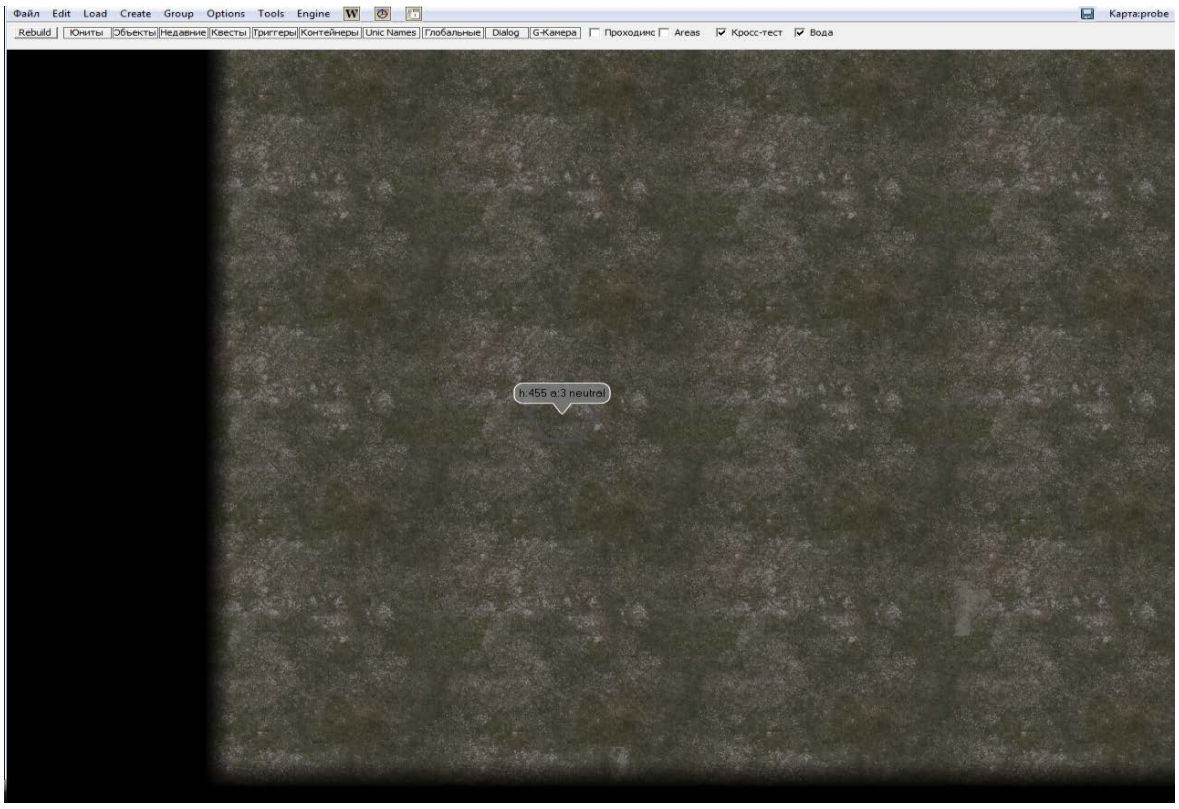
Let’s start with the creation of a scene. First you will need to launch the ToolKit. After it is loaded, you will see the editor window. The working zone is blue.



You can start editing after setting the parameters of the new scene. Click the “File” menu and select “New…”. A “New Map” window will appear, prompting you to enter the map name and its size. The maximum size of a game map is limited to 128 units (16384 hexes). Let’s name the first scene “probe” and set its size equal to 32 units (1024 hexes total). A small map like this is perfect for familiarizing yourself with the basic functions of the editor.



Once the map is initialized, you will see the hexes you created, colored as neutral territory.

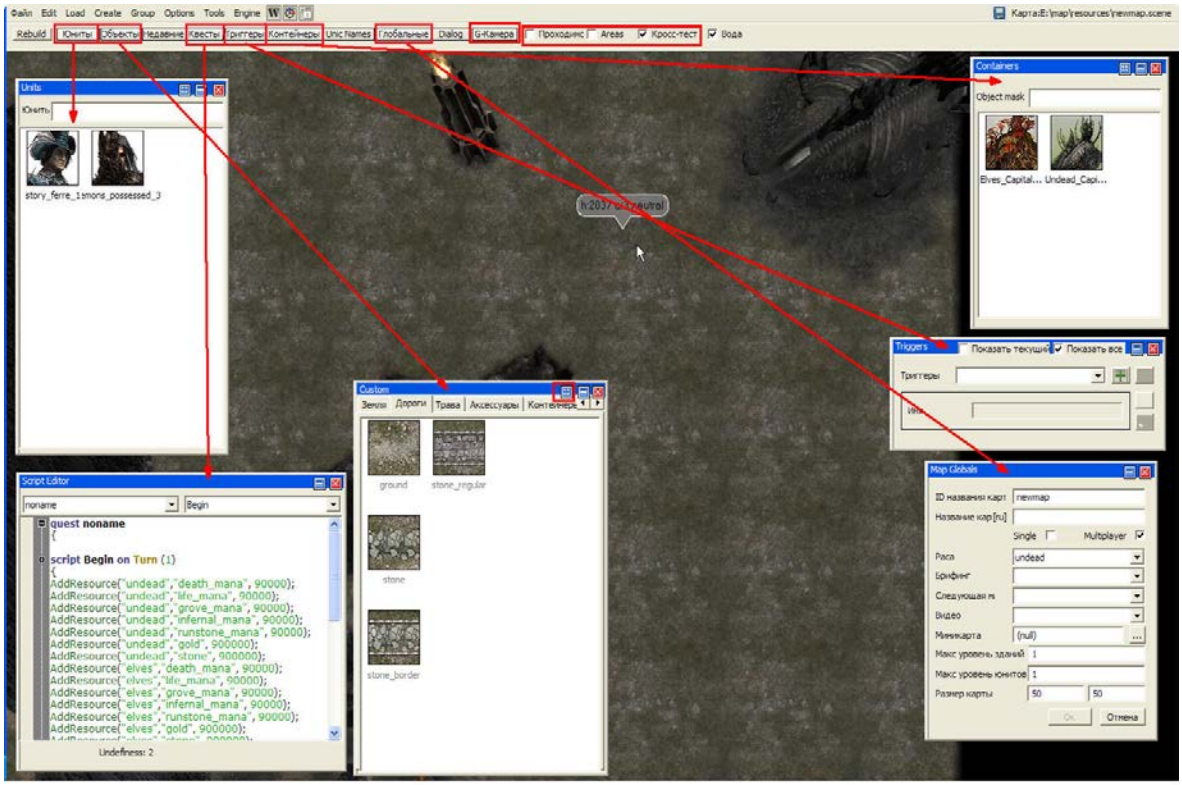


Now it is time to take a closer look at the territory you'll be editing. This can be done with the keyboard and the mouse. Below is a list of the most useful controls:

- the camera can be moved by moving the mouse while the mouse wheel is pressed down, or by using the **W, A, S,** and **D** keys

- **Ctrl+mouse wheel pressed** – rotate the camera
- **Alt+mouse wheel pressed** – rotate the camera around the center of the screen
- **Mouse wheel** – zoom in/out
- **Home** – return the camera to its default location
- **Ctrl+LMB** on an object – rotate the object on the map
- **Shift+LMB** on an object – delete the object. Certain objects can only be deleted in their drawing mode (roads, grass).
- **C+LMB** on an object and drag. This copies the object and then drags the copy to its new location.
- **V+LMB** on an object and drag. This moves the object.
- **Space** rotates the object selected in the object window, for placement on the map
- An object's properties can be accessed by double-clicking on that object
- **[** and **]** -- these square brackets keys, '[' and ']', enlarge and decrease size of the brush when creating terrain and water.

Before you place your first object, you should familiarize yourself with the basic editor buttons. You can bring up the list of the main buttons at any time, so a basic familiarity is all that you need for now.

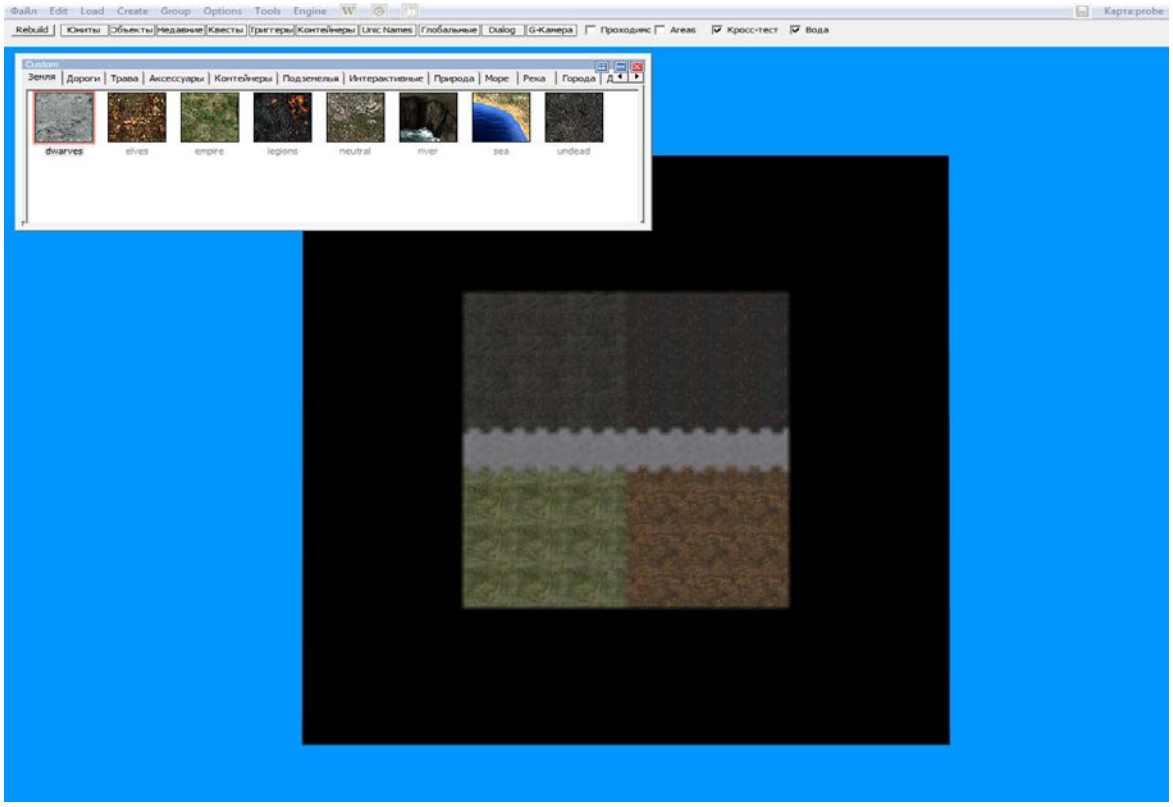


- The *Passability* and *Areas* Checkboxes on the button panel toggle the modes of hex passability and terramorphing zones around cities and control points. Colors of terramorphed zones indicate the stage of development at which the zone shall be terramorphed. The capitol has only one stage, land guardians have three and cities have five.

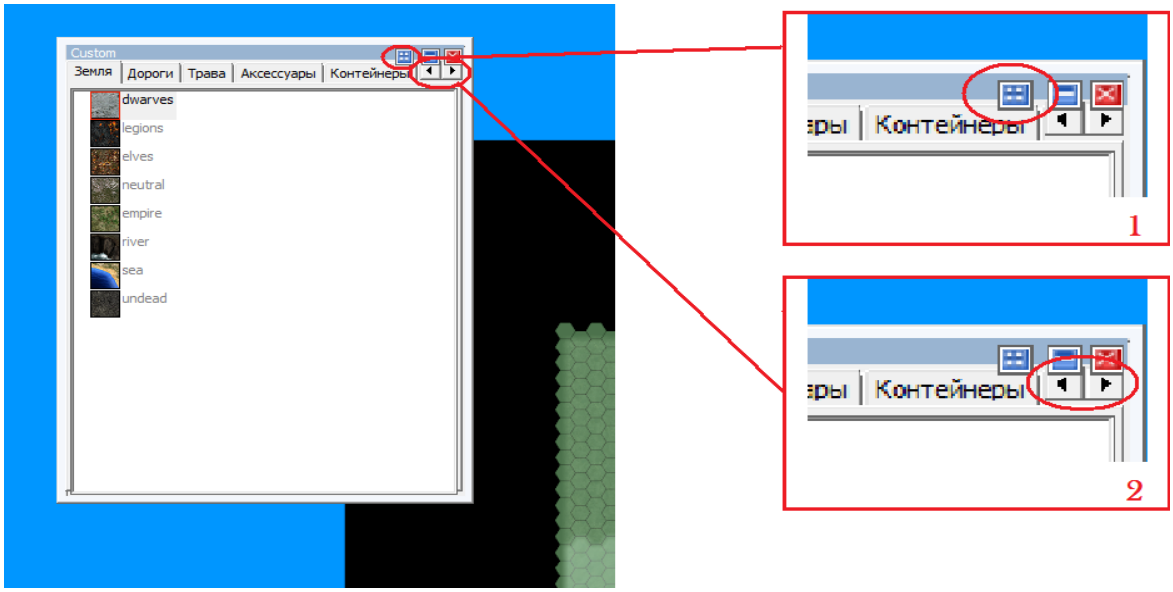
- Deselecting the *Cross-test* checkbox allows the placement objects overlapping each other. While this checkbox is set, you cannot place an object in such a way that it intersects with another object. Intersection of objects can cause graphical artifacts.
- When you hover your mouse over a hex containing an object, you will see a tooltip with text reading something like this: "<Name of object or unit occupying the hex> h: 1233 a: 3 <terramorph type>", after *h* is the hex number, after *a* is the rotation angle of the object in the hex (an integer from 0 to 5 for each side of the hex). The same format (an integer from 0 to 5) is used to set the rotation angle in any scripts which place objects on the map.
- Pressing Alt shows the tooltips for all armies in the field of view. Factions are color coded.
- The four-dot icon in the upper right corner of the object windows (next to the “Minimize window” and “Close window” icons) toggles the view between small and large icons.
- The G-camera button toggles the camera and camera controls between game mode and editing mode. In game mode a window will appear where you can check the lighting during different times of the day, and the current camera coordinates (central hex, rotation angle and distance). You can press the *Copy to Clip* button to copy these coordinates to the clipboard, so you can then paste them into the script editor. You can also show or hide the current position of the dialog window.
- The “Units” button displays a window with a full list of all the units on the map.
- The “Objects” button opens the list of all available objects which can be placed on the map. This list is divided into tabs by category. The tools for terramorphing can also be found there.
- The “Quests” button opens the interface for creating quests, scripts and cutscenes.
- The “Triggers” button opens the trigger creation interface.
- The “Containers” button opens a list of all the containers on the map (not including armies with inventories).
- The “Global” button opens the global settings window for the current map.

Different mapmakers use somewhat different approaches. Let’s employ one of the simplest methods of scene creation. We will make a duel map with 4 factions. The players will be able to develop their heroes and armies to the level cap without much effort, and then they will proceed to the center of the map, where a large-scale duel shall occur.

To make editing more comfortable, zoom out on the map using the mouse wheel. Think of the map as your “canvas”, which you are now going to paint. Open the object window, using the “Objects” button, and select the “Land” tab (selected by default when the object window is loaded). Now you can alter the hexes according to the concept you have for the map (namely, 4 territories for different factions and the dueling territory). In the example below, we marked the dueling territory with the snow of the Mountain Clans.

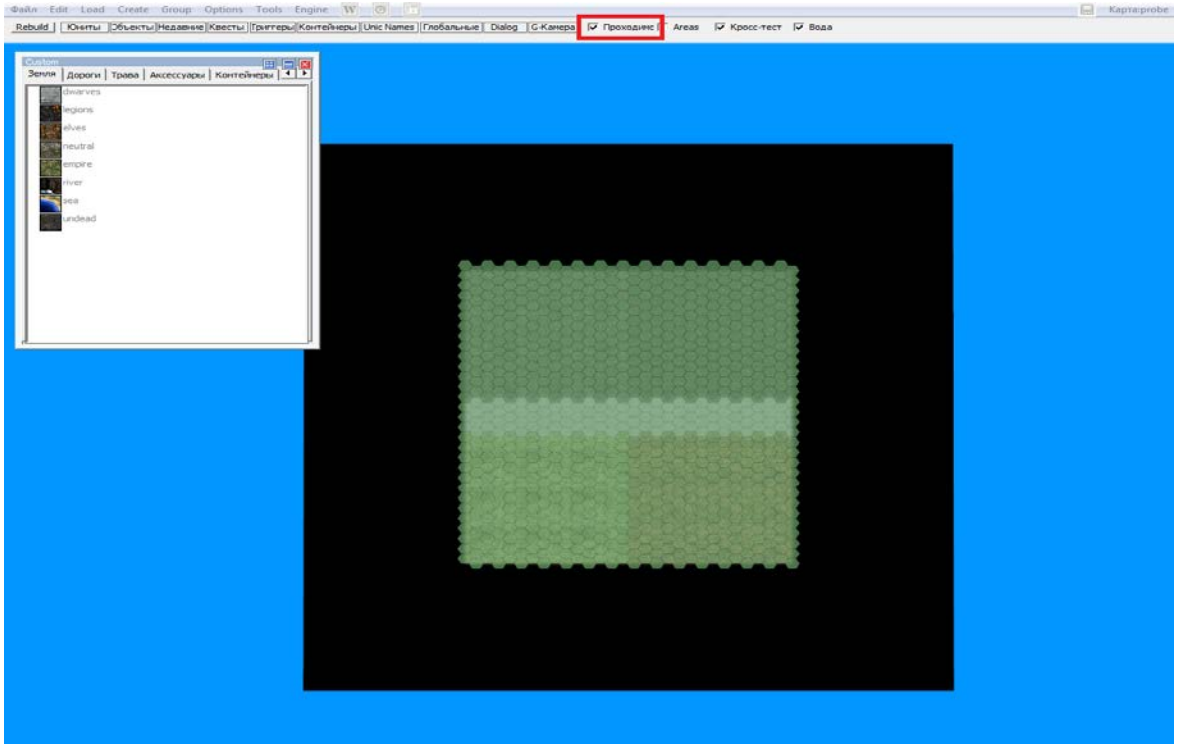


As you are editing, you might notice that the objects window is located separately. For your convenience, you can dock any windows to the edges of the working area, or move them off of it altogether (for instance, if you are using 2 or more monitors). This function is very useful, since you can arrange you working tools any way you like. In addition, you can also scale down the object icons and adjust the window size. The screenshot below shows the scale-down icon (1) and the arrow buttons used for scrolling between tabs (2). The window size can be changed like any normal window, by dragging the window's border with the mouse.

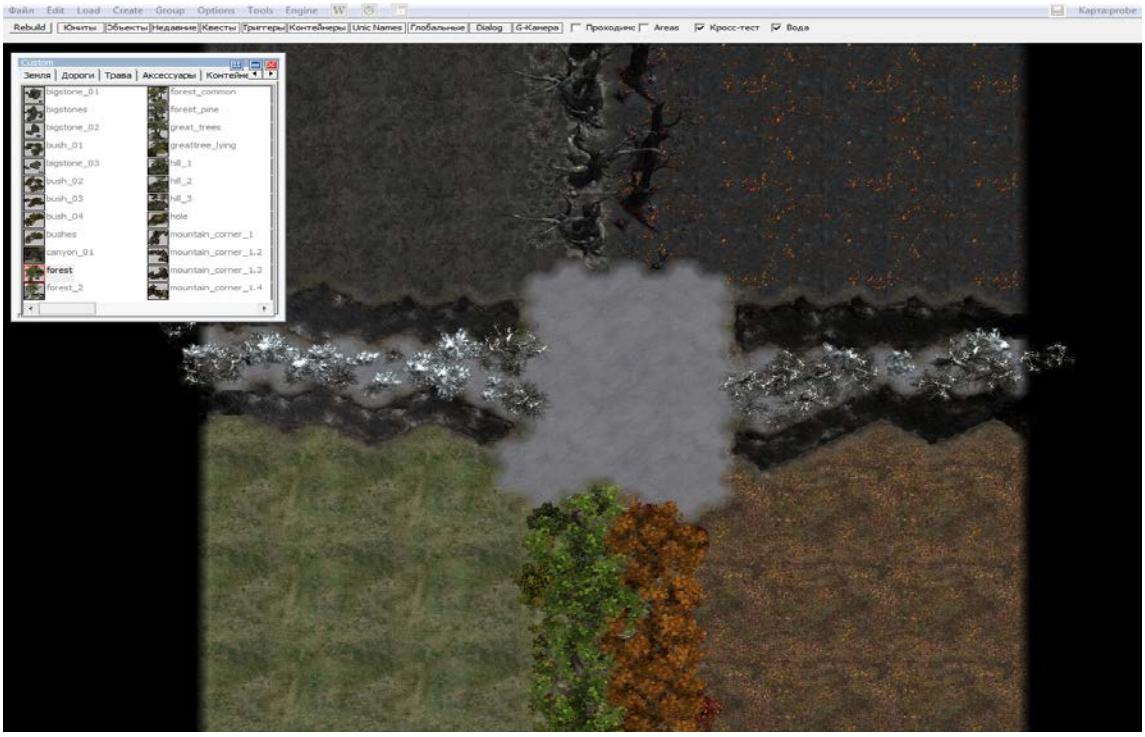


Once you have finished setting up the territories on your map, you will probably want to separate them somehow. You can do this by using any impassable object. To see where troops can pass, select the “Passability” checkbox on the buttons panel. Because there are not yet any

obstructions, the entire map will turn green. Green indicates where characters will be able to pass.



Now let’s separate the factions from one another using rivers, stones and trees. De-select the “Passability” checkbox and navigate to the “Nature” tab. This list does not display stones or trees characteristic of one of the races; rather, only "neutral" objects are displayed here. But even neutral objects will assume a certain appearance according to the land they are located on. Separate the territories of the factions with trees and stones, and use rivers to separate the dueling territory. You might have noticed the river in the “Land” tab. If you find it difficult to work with the map when fully zoomed out, try to experiment with the scale.

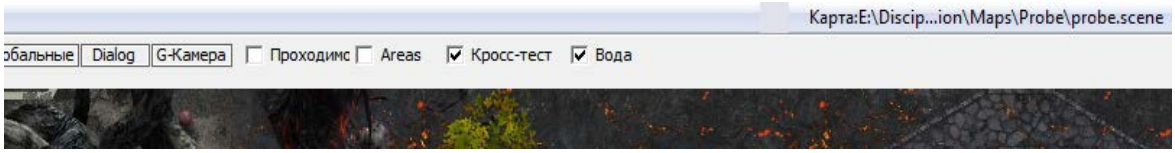


Hint: you can experiment with other settings as well. On the "Nature" tab, several objects are automatically substituted with random ones. For example, "forest" or "bushes" place different trees and hexes on every hex, which means that they will change with every click.

Now that you have separated the territories, let's place the capitals of the factions. First, place the capital of the Empire. To do this, go to the "Cities" tab and select the object empire_capital. Place this object on the Empire territory.

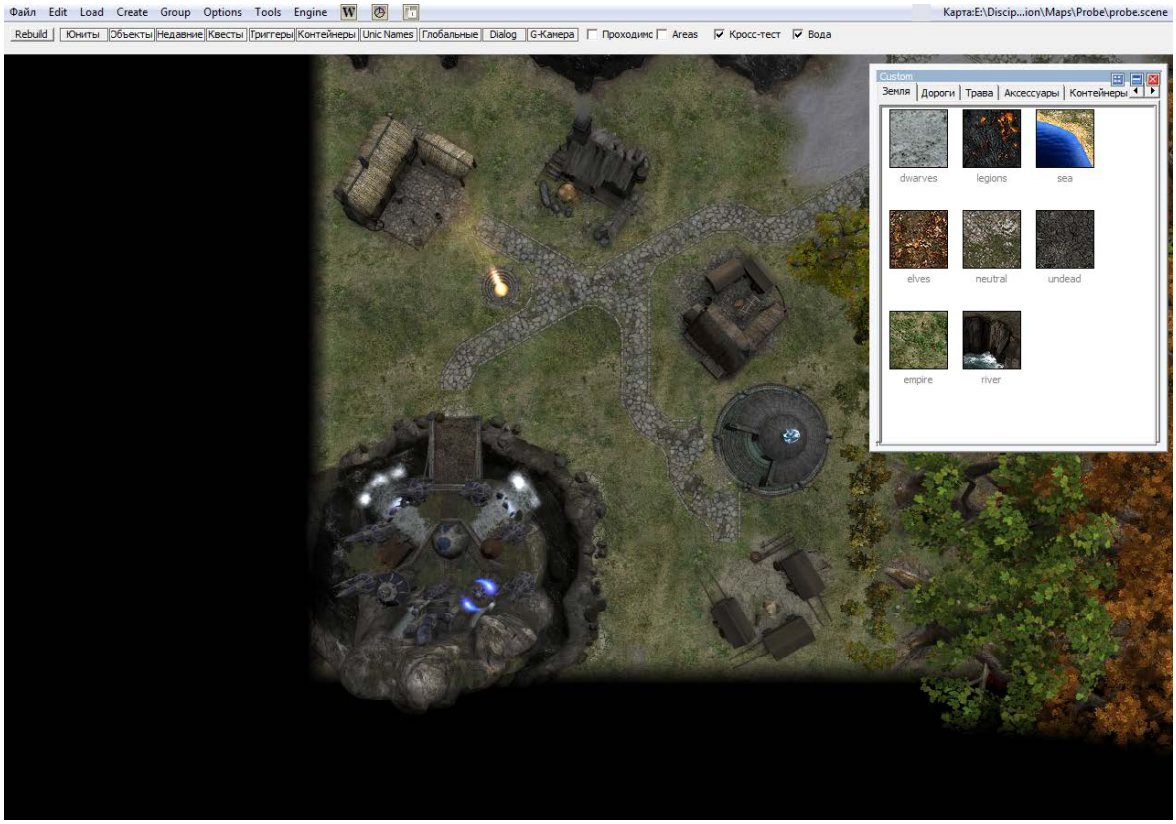


Notice in this screenshot that the capital has been placed in an awkward manner, with the front gate pointing towards the edge of the screen. The object should be rotated. To do this, you can hold down Ctrl and then click the mouse on the capital. Repeat this until the capital takes the desired facing. Repeat this process to place the remaining capitals. After all four capitals are placed, save your scene. Click the "File" menu and select "Save As…" You will see the warning that your map doesn't meet certain requirements. This is perfectly fine, since you haven't finished working on it yet. Click "Yes" and choose the location where you wish to save your scene. Please do not store your editor saves in the main game folder or in your "Documents" folder, since this can cause errors in the game. We advise to create a separate folder for your maps – for example, something like C:\Disciples Reincarnation\Maps\Probe *(though your path can be different, of course).* Notice that the scene name in the upper right corner has changed, and now displays the short location (e.g., "Maps\Probe\probe.scene").

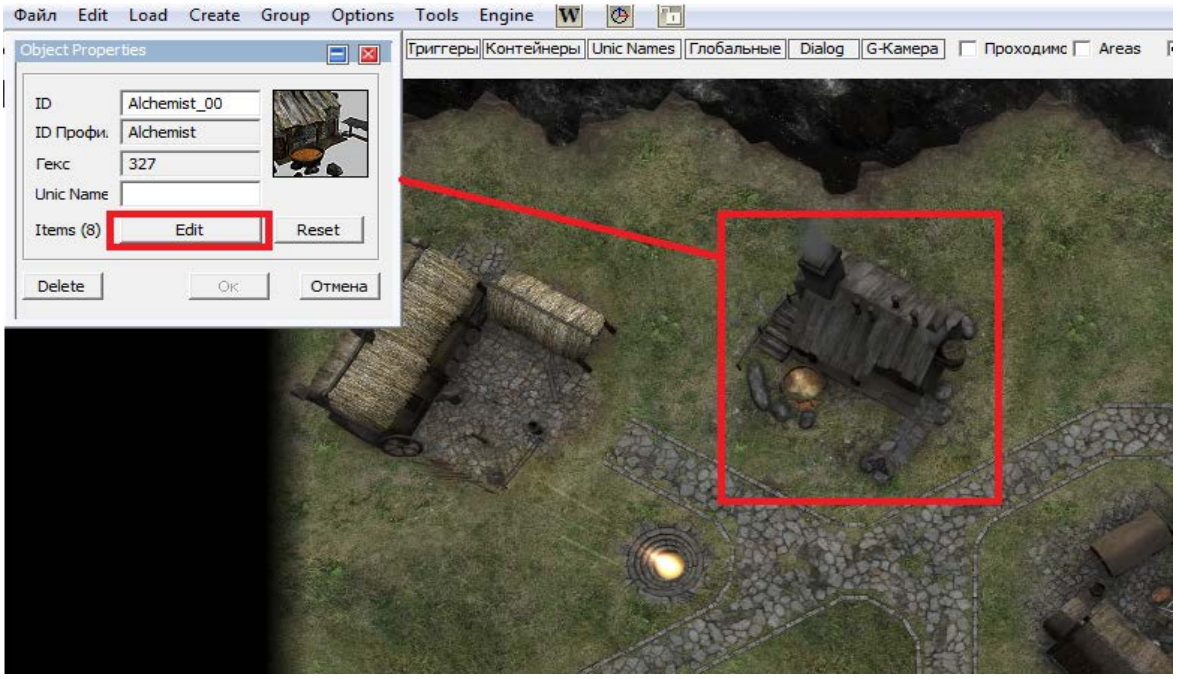


Hint: it is best to create a separate folder for each map. Keep in mind that right now we are creating and saving only one map scene

After a successful save it’s time to continue editing the map. Now let’s place roads from the capitals towards the dueling territory, using the “Roads” tab. -- And let’s place a Military Academy for one of the factions (the object named training_camp) and some Tree Towers (tree_tower), both from the “Interactive” tab. To make the duel more challenging, you could also add more objects, such as an “Alchemist”, “Merchant_weapons”, “Merchant_spells”, “Mercenary_camp”, or “Road_plant”. All these objects can be found in the “Interactive” tab. In the end, each one of your locations will have a road, and one of the factions will also have buildings needed for hiring an army and leveling units.



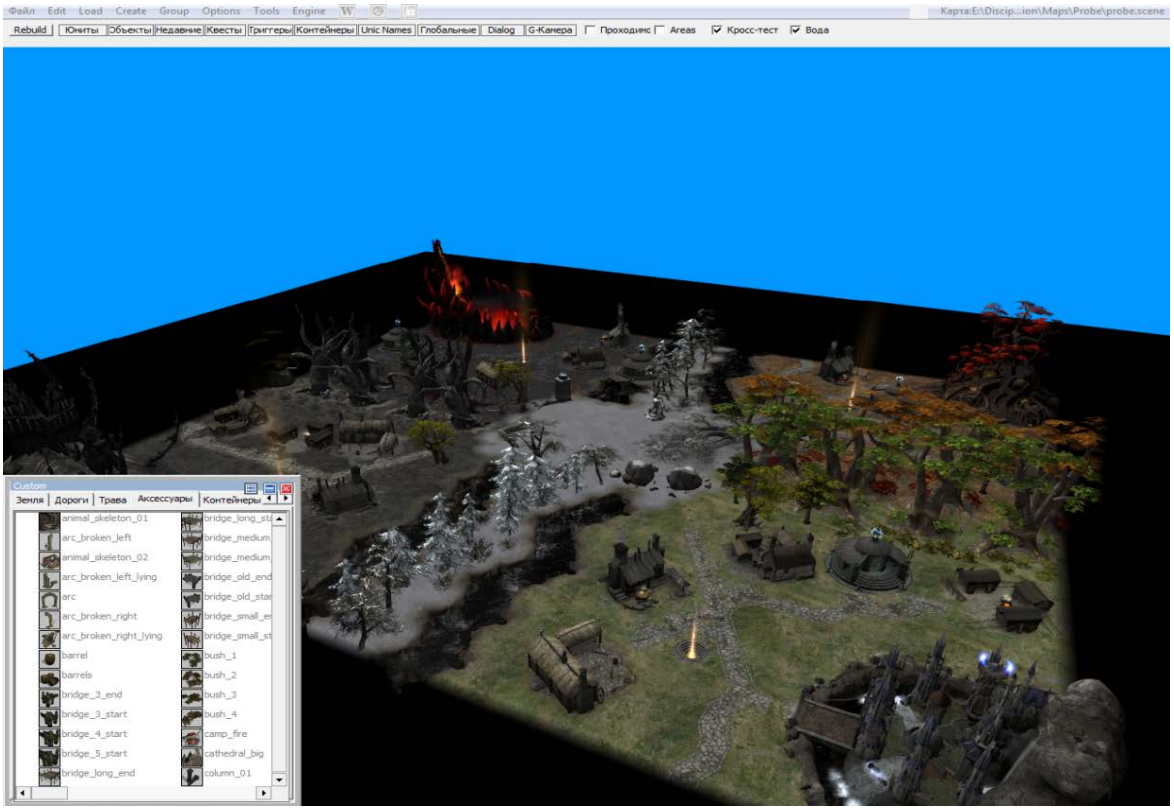
Double-click on certain objects to inspect their properties. In this window you can delete the object or add more functions to it. Double-click the “Alchemist”, and then press the “Edit” button.



After pressing "Edit", the “Initialization” window will open. Using the PLUS and CROSS buttons, you can add and remove items from any shop. Take a moment to add some items to the “Alchemist”, the “Merchant_weapons” and the “Merchant_spells”. As you proceed, you may notice that information about the items you added pops up when you hover your mouse over the object.

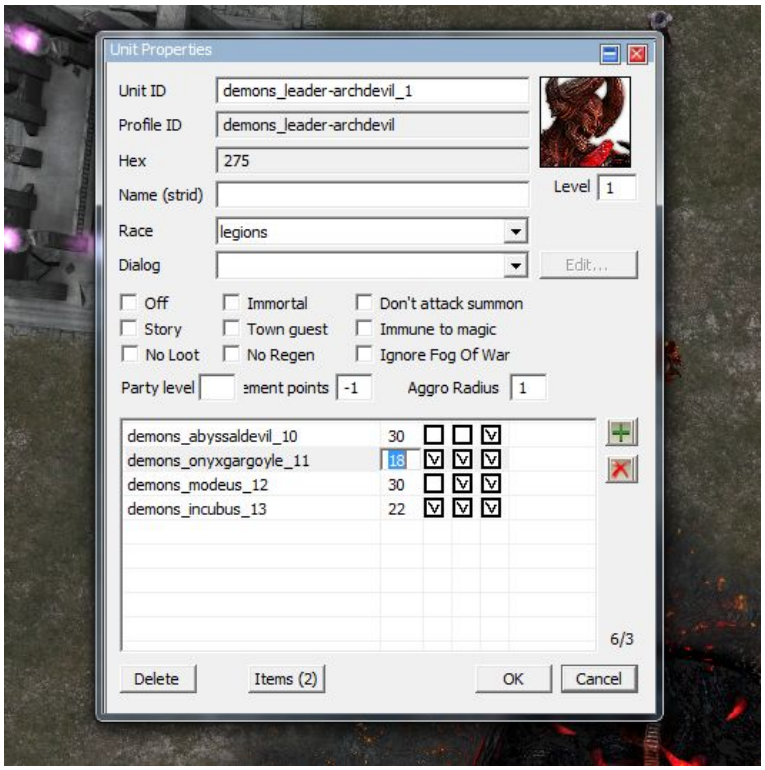


Now you can copy these stores with items onto the territories of other factions, and add a kind of barrier to the dueling territory (by placing several artificial obstacles, for example). Remember that you can copy objects by holding down "C" and pressing the left mouse button, and you can



rotate the item by holding down Ctrl and clicking on it. In the end you might have a map similar to the one shown in this picture.

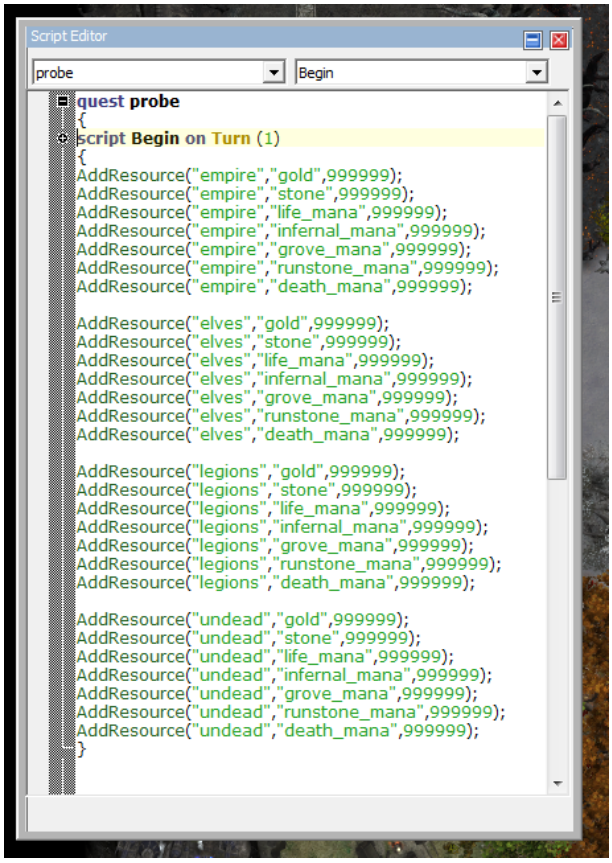
If you wish to add NPC units, you can do so now. After you add a unit, you can open its "unit property window. As you can see you have 3 checkmark boxes for each unit, each representing a difficulty level (easy/normal/hard).



In the above example, the Abyssal Devil will only appear if the player is playing the game on 'hard' difficulty, and the Modeus will appear if you play at 'normal' or 'hard'. The Onyx Gargoyle and Incubus will appear in all difficulty settings.

Also note that you can edit each units level by double clicking the number before the checkmarks as shown for the onyx gargoyle.

Now that you have created the map, it's time to finish editing the scene. It is time to add some scripts. The best way to learn about scripts is to look at the scripts used in the main game, in single player campaigns and other people's mods. To begin familiarizing yourself with the script editor, take a look at the following simple example. First, open the script editor (Script Editor window). You can do this by pressing the “Quests” button. An example script, which grants all players a large amount of resources, is shown on the screenshot. Virtually every input position provides tips and lists of possible variants you type (functions, parameters etc.). The “quest QuestName” code is needed for convenience only, for the grouping the scripts. The scripts themselves are composed inside the quests.



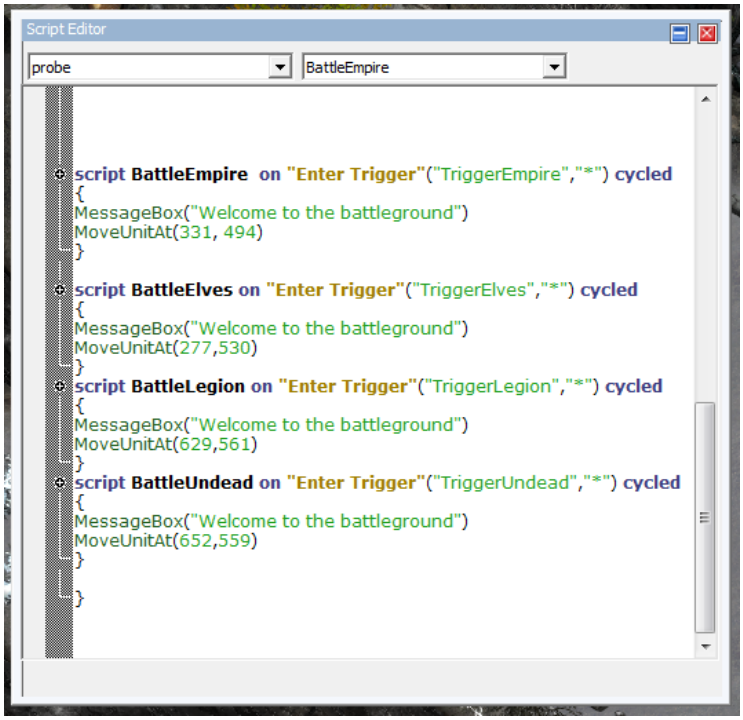
Scripts can be of 2 types:

- ***scripts***
  script <name> on <event>
  (<parameters>)
  {
  }
- ***cutscenes***
  cutscene <name> on <event>
  (<parameters>)
  {
  }

The difference between scripts and cutscenes is that while a cutscene is executed, the controls and interface are blocked, and the scripts are executed in the background (unless the function states otherwise). Now that we have a script to give resources to all the players, let’s return to the editor and create some trigger points on the map, which will allow a character to enter the dueling territory. To create a trigger, press the “Triggers” button. Press the PLUS button  to create a trigger, which you will then be able to place on the map by clicking the mouse. You can use the “Name” field in order to rename a trigger any way you choose.

Hint: to avoid being confused with the names, try to always use customized and unique names, rather than leaving object or trigger names as they are by default.

Place the four corresponding triggers not far from the dueling territory, and use an object to indicate them to a player, since triggers themselves are not visible in the game. After the triggers and objects had been placed on the map, you will need to write a script. An easy way to activate the portal is shown on the screenshot.

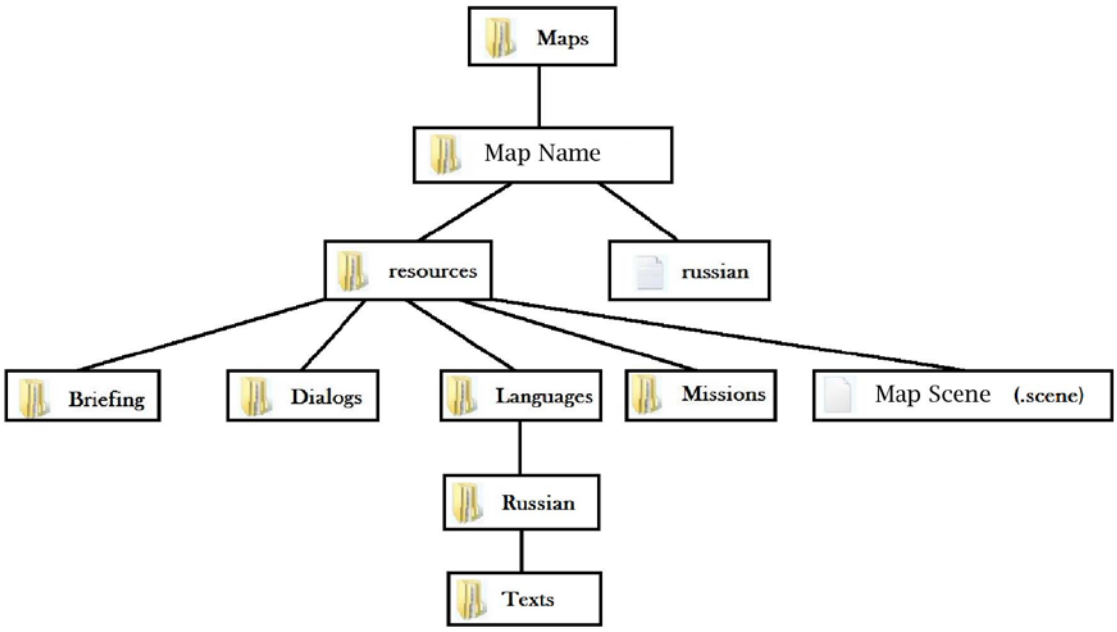


After setting the triggers, writing simple scripts and placing objects on the scene, you can proceed to the creation of the map. Map files have the extension .vdpack, and scenes have the extension .scene.

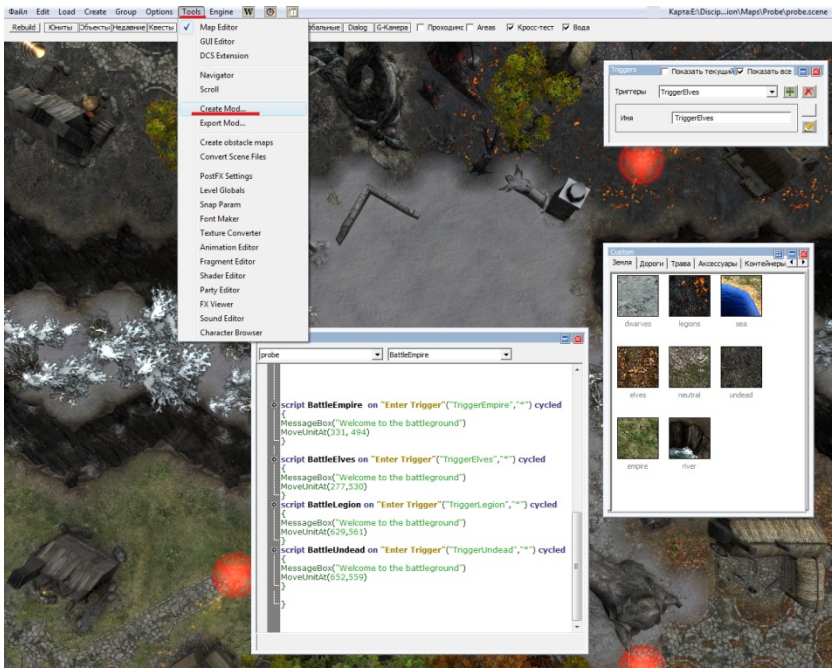
Hint: The two hexes referenced by the "MoveUnitAt" function are basically "from" and "to". In the parameter (331, 494), 331 is the hex containing the trigger (and the unit that's interacting with the trigger), and 494 is the destination hex (the dueling territory) where the unit will be sent.

To get the file of the required format, you will need to prepare the working folders first. Below is the folder tree and step-by-step instruction:

- *In the scene folder, create the resources folder ("resources")*
- *In the scene folder, create a map description file (it must be called "english.txt" if you are using the English version of the game)*
- *In the resources folder, create the Briefing folder (for the map briefing)*
- *In the resources folder, create the Dialogs folder (for dialogs)*
  - ✓ *Create a Languages folder in the resources folder*
  - ✓ *Create a Russian folder in the Languages folder*
  - ✓ *Create a Texts folder in the Russian folder (for map texts)*
- *Finally, move the scene file to the resources folder*

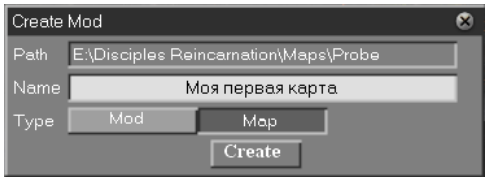


After you had created this folder tree, go to the “Tools” menu and select “Create Mod…”



In the window that appears, select the folder with your map name and press “OK”.

The “Create Mod” window will open, where you will indicate the name for quick search of the linked mod in the game (for example, “My first map”). Then press the “Map” button and click “Create”.



As a result you will get a file with the extension .vdpack, which you will need to move to your linked mods folder (C:\Users\YourUserName\Documents\My Games\Disciples Reincarnation\Maps).

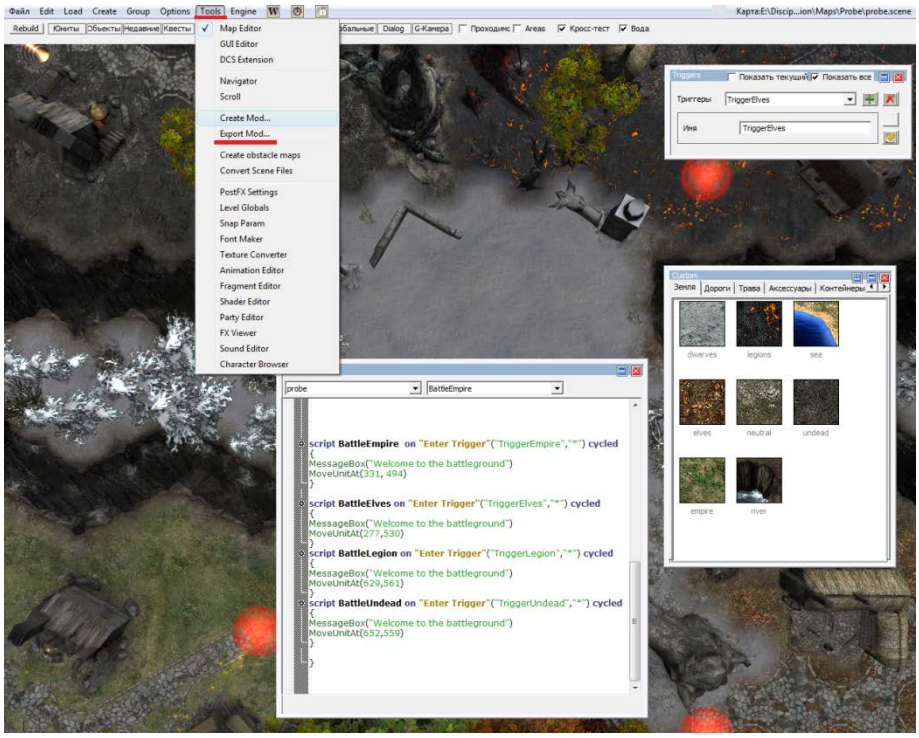
Then simply launch the game, go to the options menu, press the “Advanced” button, and enable your map. After restarting the game you will be able to select your map among the other local games.

Mod creation

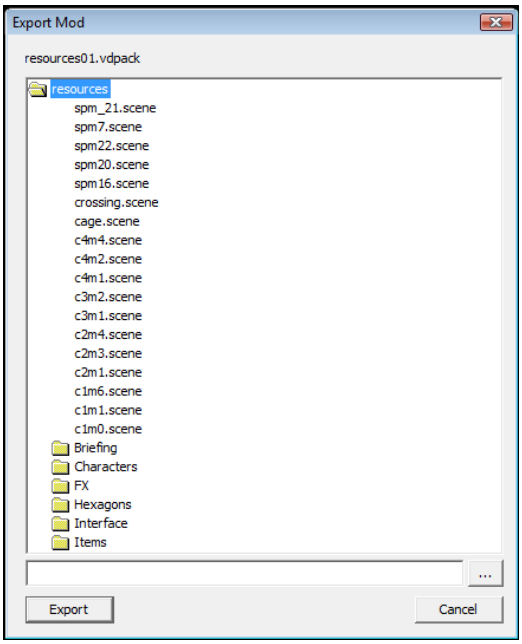
A mod in “Disciples: Reincarnation” is an extension of the features of the game or one of its maps. To do this, you will need to exercise your mapmaking skills (see “Map creation”) and edit the game's resources as you wish.

You can use the resources from the original game for mod creation. In the game folder, they have the extension .vdpack and must first be decompressed. You will need to create a separate folder for unpacked resources – for example ...\source\. There is a place for unpacked files close to our maps in C:\Disciples Reincarnation\Mods.

Open the ToolKit and select “Tools”, and then select “Export Mod…”



In the window that opens, select the .vdpack resource file which needs to be unpacked. In the unpacking window you can view the files in the selected archives and select specific files and folders for unpacking. Then press the "..." button in the lower right corner of the window, select the folder, which was created to store the mod's resources, and press the "Export" button. After the process is finished, you will see the files and folders you selected for decompressing in the destination folder.



Hint: you might have noticed that files with the extension .vdpatch are present in the game folder. These are the resources altered by a patcher. In order to unpack those, you will need to rename them into .vdpack (but remember to make a backup copy of the original files).

Mods can be of two different types: those that affect gameplay (indexed mod) and those that do not affect gameplay (non-indexed). Indexed mod files are checked for integrity; non-indexed files are not.

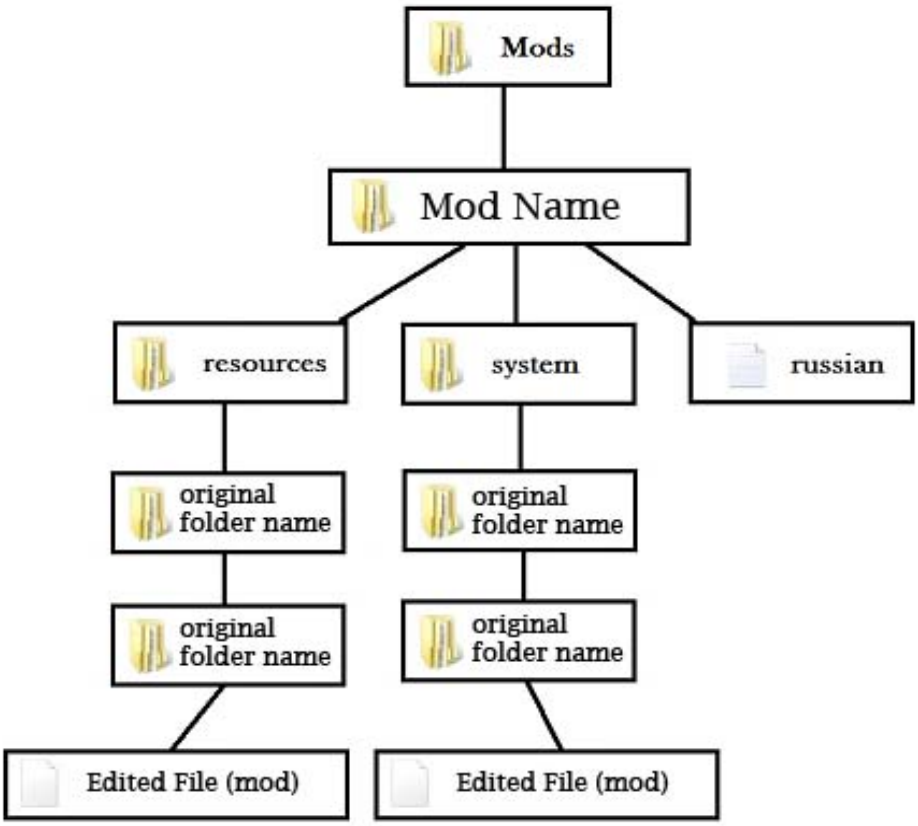
A mod which does not affect the gameplay (a graphics or sound mod, for example) is created by editing of the necessary files and placing them back where they were contained in the archives. For example, perhaps you have changed the cursor. You will need to place into the game folder C:\Games\Steam\steamapps\common\Disciples III Rebirth\resources your changed files. For example you would copy your new cursor.t file into the location C:\Games\Steam\steamapps\common\Disciples III Rebirth\resources\Cursors\cursor.t. Now, when the game starts, it uses files from this location first, and only if it does not find them there does it accesses the archives .vdpack and .vdpatch.

A mod which affects gameplay is applied in the same way as a map, the only difference being the folders and file types used. A mod should not contain briefing files, dialogs, or scenes (.scene files); in other words, a mod does not have the same folder tree shown in the example of the creation of a map, above.

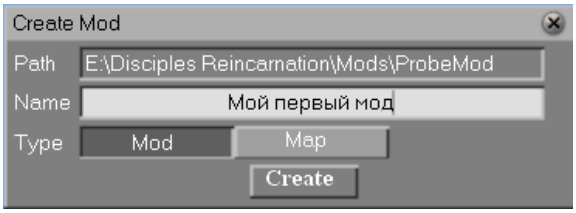
The sequence of operations for creating a linked mod are as follows:

- *In the mods folder, create a folder with your mod's name*
- *Create this new mod folder, create a resources folder ("resources") and other system folders as needed*
- *Create in your mod folder a description file (it must be called "english.txt" if you are using the English version of the game)*
- *Place into the mod folder the modified files, which should have the same names, as in the original game resources and be located in the same folders. For example,*

Mods\ProbeMod\resources\Profiles\skills\story_druid.g



Once this folder tree is created, open the ToolKit editor and select “Tools” and “Create Mod…” In the window that appears, select the folder name of your mod and press “OK”. The “Create Mod” window will open, where you will need to will indicate the name for an in-game quick search of this linked mod (for example, “My first mod”), then press the “Mod” button and click “Create”.



The result will be a file with the .vdpack, extension, which you should copy to the linked mods folder (C:\Users\YourUserName\Documents\My Games\Disciples Reincarnation\Mods).

Launch the game, go to the options, and press the “Advanced” button to enable your map. After restarting the game you will be able to select your mod from the local game, just like a map.

Useful information:

- In the editor, in the “Cities” tab there are 2 Imperial capitals – one has a 3rd level Guardian, and the other has Myzrael (empire_capital_myzrael)
- Units can be placed inside active and inactive objects. When placed in an inactive object, the unit is seen on the global map. When placed into an interactive object (including dungeons) the army will not be seen on the global map, but will attack the player

character when he attempts to interact with the object. Once the army inside the object is eliminated, the object will function as usual.

- You can reward players for defeating certain enemies by placing "reward" objects in their inventory (or by adding them via a script). Be aware that the AI will be able to use any items in its inventory during combat against the player.
- The “Search” tab in the object window enables you to quickly find an object by its name. The search is conducted as you type, so you will not have to type the whole name.
- One can set the assortment of items available not only in the shops, but also in the capital. To do this, you can use the properties window, which can be brought up by a double mouse click.
- A limit of "-1" for the number of items available in a store means that an unlimited number of such items is available there.
- Items with the "proxy" prefix turn into a random item of the corresponding level (including items in shops, once the map is initialized).
- In unit properties, the “Aggro Radius” sets the area within which the party will attack the player on the global map, once that player enters that area.
- Errors and ambiguities are underlined. Links to game files (effects, for example) are almost always underlined as ambiguities.
- Hovering the mouse over events and functions brings up a window with descriptions and a list of function parameters.
- Ctrl+Space in the script editor opens a window showing possible variants, depending on where the pointer is positioned.
- Pressing Alt turns on hyperlinks. When they are on, clicking them moves the camera to the hex of the indicated number, or the location of the trigger or unit.

Sources:

Thanks to the official Disciples site: http://disciples3.ru/
(and the forum section dedicated to maps and mods: http://disciples3.ru/forum/showthread.php?t=7472)

Thanks to the official Disciples fan site: http://alldisciples.ru/
(and those who contributed to the discussion of the map and mod editor:
http://alldisciples.ru/modules.php?name=Articles&pa=showarticle&artid=441)

Detailed information about map editing and mod creation is available freely in the Internet.