

Children of the Nile: Editor Manual

CHILDREN OF THE NILE: EDITOR MANUAL	1
ABOUT THIS DOCUMENT	2
STARTING THE SCENARIO EDITOR	2
EDITOR BASICS	2
THE INTERFACE LAYOUT	2
ROTATING AND MOVING THE CAMERA.....	2
SAVING AND LOADING A SCENARIO	2
CREATE A NEW SCENARIO	2
SET MAP SIZE	2
SET DEFAULT TERRAIN	3
ADJUST ELEVATIONS.....	3
<i>Basics</i>	3
<i>Import an Elevation File (optional)</i>	3
CREATE THE NILE	4
PAINT CLIFFS	4
MAKE TERRAIN	5
<i>Terrain Types</i>	5
PAINT ROADS.....	5
PLACE RESOURCES	5
<i>Natural Resources</i>	5
<i>Decorative Objects</i>	5
<i>Animals</i>	5
<i>Quarries</i>	6
<i>Rotate a Resource</i>	6
PLACE BUILDINGS	6
<i>Rotate Buildings</i>	6
<i>Restrictions on Building Placement</i>	6
THE WORLD LEVEL.....	6
<i>Create an Activation Site</i>	6
Set the Location.....	7
Select the Site Category.....	7
Set the Site Properties	7
Set Costs	7
Set Effects	8
<i>Label Your World Map</i>	8
<i>Exporting/Importing World Level</i>	8
TRIGGERS.....	9
<i>Conditions</i>	9
<i>Effects</i>	9
<i>Objects</i>	10
<i>Areas</i>	10
STORY.....	10
PLAYER.....	10
GOALS	10
TESTING THE SCENARIO	11
COMMON ERRORS.....	11

CAMPAIGN EDITOR.....	11
STARTING THE CAMPAIGN EDITOR	11
CAMPAIGN EDITOR BASICS	11
<i>Interface Layout</i>	11
<i>Selecting the World Map</i>	11
<i>Adding a Scenario</i>	11
<i>Setting Campaign Information</i>	11
<i>Saving and Loading a Campaign</i>	12

About This Document

Clearly explaining the finer points of a game editor is difficult. This document gives you a fighting chance at making good *Children of the Nile* scenarios and campaigns, but will inevitably encounter questions. For answers, please visit the CotN forums at <http://www.tiltedmill.com/forums/>.

Starting the Scenario Editor

Click the "Editor" button on *Children of the Nile's* startup screen. Then select either "Create Scenario" to create a scenario from scratch, or "Load Scenario" to load a pre-made scenario.

Editor Basics

The Interface Layout

The top of the screen shows the city view. Buttons to access different Editor options appear along the bottom of the screen from the left. In the bottom right corner is the mini-map, which rotates with the camera. A set of options related to the currently selected Editor tab appears in the middle of the lower half of the split screen. A set of buttons for loading and saving scenarios, as well as exiting the Editor and testing the scenario, appears at the bottom center.

Rotating and Moving the Camera

Move the mouse to the edge of the screen to scroll the city map, or click a location on the mini-map to move the camera there. Clicking and dragging with the middle mouse button also repositions the camera. To adjust the camera angle, hold down the tilde (~) key and move the mouse up and down to adjust pitch, and left and right to rotate. The Home key returns the camera to the default orientation.

Saving and Loading a Scenario

To save a scenario, click the Save button in the lower middle section (to the left of the mini-map) and type in a name for your new scenario, or overwrite a previously saved version. To load a scenario, click the Load button and select an available scenario from the list, or type its name in. Quick save and quick load functions are also available. Quick save stores a single save, which can be restored by using the quick load.

Create a New Scenario

Set Map Size

The first step to creating a new scenario is to set the desired map size for the city. The dropdown boxes on the Map tab list the possible map sizes. You can select

different sizes for the width and length of the map. (Note: Selecting different sizes will make the mini-map display incorrectly.)

Set Default Terrain

The Terrain dropdown, which defaults to "Grass", is used to select which type of land will initially cover the map. Some terrain has randomly seeded vegetation sprites to provide visual variety. Other terrain types do not. Those which contain sprites are labeled either "Decorative Terrain" or "Sprite Terrain". The best choice for city maps set in Egypt is either Grass or a desert variety, to save time painting these terrains later. The default terrain is also used on the top of a cliff when painting cliffs.

Adjust Elevations

Basics

The simplest way to change the land's elevation is to set a height and paint it onto the map. Choose the "Paint Hills" option on the Elevation tab. Use the Terrain Elevation slider to set the height you want to paint, then use the Fine Elevation slider to fine-tune that value down to two decimal places.

During a normal flood, all terrain below elevation -0.1 will be under water. At high flood, the water will cover terrain up to elevation 0.1. Low floods only cover land below -1.11 elevation. The Slope Elevation slider controls how far the terrain brush radiates out to the surrounding tiles. At a slope elevation of 100, only the grid squares directly beneath and immediately adjacent to the brush are affected. At a slope elevation of 0, all squares on the map would be set to the chosen height.

Terrain elevation can also be modified using the right mouse button. Hold the button down and drag the mouse up to raise the terrain around the selected point, or down to lower the selected terrain.

Import an Elevation File (optional)

The *Children of the Nile* Editor lets you import elevation files from actual satellite data and use them to define the elevation of the city map. Use this method to create very accurate maps of modern terrains (satellite data from 2500 BC is surprisingly difficult to find). Search the Internet to find the rough geographical coordinates for the area where your map is set (<http://www.lib.utexas.edu/maps/africa/egypt.gif>, for example; as a point of reference, the Nile delta is located roughly at 30° N, 30° E). Then enter those coordinates at the Web site <http://www.ngdc.noaa.gov/cgi-bin/seg/ff/nph-newform.pl/seg/topo/subset> to get topological information. Using a sample smaller than 1° by 1° will give the resulting map a badly pixilated look. After entering the desired latitude and longitude range, click "Get Data" at the bottom of the window (The default settings for exporting the data should be correct.) Create a folder in \Data\Scenarios\ called Elevation Maps, and save the .bin and .hdr files to this new directory (using the same filename -- "Myscenario.bin" and "Myscenario.hdr", for example).

Once the files are saved, open the .hdr file using any text editor and count the number of columns and number of rows in the file. Create a .txt file using the same name that you used for the .bin and .hdr files ("Myscenario.txt"). Type the number of columns, a space, and the number of rows. Do not put a return at the end of the line. If your .hdr file had six columns and 20 rows, your text file will simply say "6 20", without the quotation marks.

In the scenario editor, use the dropdown menu to select the new elevation file ("Myscenario" should now appear in the list.) There should now be four new fields (water depth, water cutoff, land height, and land cutoff) and only one map dimension. This one dimension dictates the size of the map while preserving the ratio of the original data. You now need to fill in the four fields mentioned above, based on the range of values in your saved .hdr file. "Water depth" is the lowest number in your data range. Adjust the values for water depth and water cutoff to determine how negative values in the data file are translated into depth values in the game. "Land height" is the maximum value in your .hdr data. Adjust the values for land height and land cutoff to control the scaling of the positive values from the data file. You can think of "water cutoff" and "land cutoff" as "sea level" -- the highest elevation that water reaches, and where dry land starts. Usually, these numbers will be the same, and often near zero. There is always some trial and error involved in getting these parameters right, so play around with them until the terrain is at a satisfactory level. Bear in mind that buildings need to be built on relatively flat terrain, so elevations should not be made too jagged.

After setting up all of these parameters, click the Create Scenario button and the map will be created, completely wiping out whatever current map is displayed. Once you are pleased with your elevation map, you can start molding it into shape.

Create the Nile

The levels of the different flood are as follows:

Level	Elevation	Fine Elevation
High	0	10
Norm	-1	90
Low	-2	89

When creating a scenario it is best to start with a default elevation, move on to painting the high flood areas, paint the flood plain, and finally paint the river bed. The following table is a list of suggested brushes for each step. These all assume that you Paint Hills with the Tiny brush size.

Step	Elevation	Fine Elevation	Slope Elevation	Notes
Map Elevation	4	0	1	Click once in the map center
High Flood	-1	90	6-10	
Flood Plain	-2	89	12-18	
River bed	-8	0	40-80	

Alternatively, create the river bed by painting down with the Paint Cliffs tool at elevations of -8 and -4, and then use Paint Cliffs Paths to smooth it over. At each step, click the Create River button. This can take over two minutes to process, but will fill the riverbed with water and determine the direction in which the Nile will flow. Saving your scenario with a different file name after each step is strongly recommended. After the river creation process is complete, check the different heights of flooding with the Low, Normal and High buttons, or by sliding the Flood Level slider.

Paint Cliffs

The "Paint Cliffs" button on the Elevation tab creates terrain with a sharp drop in height, accompanied by a cliff texture. To use this feature, select the Paint Cliffs button, set the height of the desired cliff base (it can work in both directions, with

the Paint Cliffs height being above or below the current terrain elevation). Note: Painting Hills near a cliff can cause the cliff to become smoothed out. The "Paint Cliff Paths" button will smooth out sections of the cliffs automatically, without manually adjusting terrain height. If the cliff is too high, set multiple tiers of cliff in the desired path area, and then smooth each tier with Paint Cliff Paths.

Make Terrain

Terrain Types

The Terrain tab modifies the terrain textures on the city map. To paint a terrain type, just select it from the list, choose a brush size on the left, choose a color palette for the texture from the list on the right, and begin to paint. Some terrain types will fill in sprites as well as changing texture. The longer the brush is held over a particular area, the more densely it will fill with sprites. To remove these sprites, select the Remove Sprites tool and paint over them. The Randomness check box will randomly rotate and translate (within the tile) the sprites associated with the current terrain type.

Certain terrains affect gameplay. Floodplain terrain determines which areas of the map are farmable, and buildings are not allowed there. Steep slopes and areas below height -1.11 are not buildable, regardless of terrain type. Lowered terrain has different shading than the same terrain type above flood level.

Paint Roads

Roads are put on top of any terrain, but not below water level. To paint roads, select the "Paint Roads" option, choose a road type from the list, and begin painting. Use only a tiny brush for painting roads, since it is the size of a single road segment. A large brush is sometimes useful for removing roads. If you make a mistake when painting roads, erase it by shift-clicking on the erroneous road segment.

Place Resources

Natural Resources

Use the Units tab to fill the map with natural resources. Select the tab, and then select "World Player" in the menu that appears. To place useable resources, select Resources. The list contains all of the resources that can be harvested by the city's people. Select one from the list, and then click on the tile where you want it to appear. To remove a resource, right-click on a resource tile with the Units tab active. Different resources serve as either foraged food or raw materials for finished goods. For your scenario to play properly, you need to place at least Papyrus Reeds, Rushes, Flax Fields, Clay, Henna, Quartz/Faience, and Oil Flax Plant. Pomegranate trees and date palms can be placed near villager settlements as foraged food sources. Some animals, discussed below, can also be a source of food for villagers and citizens alike.

Decorative Objects

Most decorative resources can be accessed in the Buildings tab of the World Player menu. These serve only to make the city look more attractive and the landscape more natural.

Animals

Place animals in the city by choosing the Land tab of the World Player menu. Some animals (fish and fowl) are hunted for food, others (lions and crocodiles) are hunted for sport, and some just serve to populate the city.

Quarries

To add a quarry to the city, switch to the Buildings tab of the World Player menu. The different Quarry types are Basalt, Limestone, and Granite. Place the quarry on any level area of at least 15 by 15 tiles. They are intended to blend into the desert texture.

Rotate a Resource

To rotate a resource away from its default orientation, click on the resource, then click and hold the right mouse button, and move the mouse around to orient the resource towards the mouse. The arrow displayed in the selected unit window will also allow rotation of the resource (see Rotate Buildings, below).

Place Buildings

To place buildings on the map, select the Units tab, and then select Player, and then select Buildings. Choose a building from the list and then click somewhere on the map to place it. To delete a building, right-click on it while the Units tab is active.

Rotate Buildings

There are three ways to rotate buildings. After selecting one by left-clicking on it, you can align it in 45-degree increments angles using the arrow box. Left-click on the arrow until the building faces the desired direction. Note: Only square buildings with odd dimensions should be rotated at angles other than 45, 135, 225, or 315 degrees. The second way to rotate a building is to use the rotate arrow before placing it. This does not prevent you from changing its orientation after it has been placed. Finally, buildings can also be free-rotated like resources (see Rotate a Resource, above).

Restrictions on Building Placement

In the Editor, the only restrictions on building placement are steep slopes, jagged terrain, and elevations below height -1.1 (under water). When placing a building, a green footprint indicates a valid location. A red tile indicates an invalid placement. Yellow and orange tiles indicate buildings that may be placed, but are below the flood level and therefore have a chance to be destroyed during play. The game imposes additional terrain-type restrictions, such as not being able to place on floodplain. Roads/plazas will prevent placement of buildings as well. Buildings placed in the Editor start inhabited by a family with some basic supplies and no service needs.

The World Level

The world level is where you add story elements to your scenario. Any non-city government facilities, government trade sites, private traders, or enemy sites can be placed on the world level. The world level in the Editor is laid out as a split screen, similar to the city map, with the main panel in the bottom part of the screen, and the world map in the top part.

Create an Activation Site

To create an activation site on the world level, first switch to the world level tab. Next, click the New Activation Site button, which opens a menu in the main panel describing the site and a new menu on the left of the screen for activation costs and effects.

Set the Location

First, give your activation site a place on the world map. Select the Move check box and click the map at the site's desired location. Alternately, you can enter the coordinates in the boxes labeled x and y on the main panel. The size of the world map is 800x600, so set the coordinates accordingly, and then click add to see where the site will be.

Select the Site Category

Four site categories determine how the site can operate.

- Government Owned sites are run by the government and either send raw materials to the city or provide the city with a service. There can also be an upkeep cost associated with a Government Owned site. Sites with upkeep costs will shut down and need to be reopened if the upkeep is not paid.
- Government Trade Partners are cities or outposts that aren't part of the Egyptian empire, but which provide certain government resources in exchange for others. A Government Trade Partner will only exchange an amount of its exports proportional to the amount of its imports the city can supply.
- Private Traders trade luxury wares for the people, independent of the government. Generally private traders will sell their wares for bread, and buy wares from your city's luxury shops.
- Enemy Sites have a negative effect while active, like sending raiders to the city. They can be deactivated via military conquest or perhaps other conditions. In order for a world level site to create raiders, a trigger (see Triggers below) must be created.

Set the Site Properties

Several general properties can be set in the main panel. Two checkboxes determine whether the site is active and/or visible by default. Sites that are not initially active need to be activated either by the player paying an activation cost (see Set Costs, below) or through a trigger (see Triggers, below). Sites that are not initially visible can be revealed via triggers, or by having another site reveal them when it is activated (see Set Effects, below). The third checkbox, only meaningful in a campaign, determines whether or not the site will be carried forward to the next scenario. You can also change the site icon by selecting from the dropdown list labeled Graphic.

The Full Name field on the main panel determines how the game will refer to the site. The Map Label field sets the name shown on the map, and the Site Type field specifies a second line of text to be displayed under the name. The Pop-up menu on the left lets you enter descriptions of the site in each of its possible states by selecting the appropriate tab.

To make a world level site is send raiders into the city, select the Spawn Raiders checkbox. This will display an icon on that site in the game. The No open message button prevents the player from seeing a message when the site opens.

Set Costs

Select a cost category on the main panel to define a cost to activate your site. *Resources* specify one-time activation costs as well as ongoing upkeep costs, or trade needs for a trade site. Attributes are really the effects of the site, rather than costs, so they are discussed in "Set Effects", below. Citizen costs include envoys needed to activate the site, or the types and quantities of soldiers required to activate or deactivate it via conquest.

After selecting a cost category, the menu on the left of the screen adds an activation cost or an import or export. Imports are upkeep costs for Government Owned sites. To add a cost, select the type of resource to be added, specify an amount in the box on the left, and click "Add". There can be only three activation costs and three imports per site. In addition to resource and citizen costs, you can enter a value in the "Min. Prestige" box to require a minimum prestige to open a site.

Set Effects

Sites can have various effects, the most basic of which is to export something to the player's city. To make a site export, select "Resources" from the Cost Category menu. In the menu on the left, set the right-hand dropdown to "Exports". Now select a type and amount of resources to export, and click "Add" to put it in the list. As with activation costs and imports, there can be only three exports per site. Site Category dictates which resources can be exported. Government sites export only government raw materials like stone and gold, while private sites generally export finished goods. The exports from a Government Trade Partner will be proportional to the imports received the previous year. Give these sites large amounts of both imports and exports to prevent players from reaching the site's full capacity.

To make certain sites depend upon others, set the dependent sites to "Not visible" at the start of the scenario. Create the invisible, dependent site first or it will not appear in the precursor's dropdown list. Select the precursor site and set the Cost Category to Attributes. In the left menu, in the right-hand dropdown, select "Reveal". Now select the dependent site from the middle dropdown. The value for "Reveal" doesn't matter. Click "Add" to put the "Reveal" in the list. One site may reveal multiple other sites.

World-level sites can also give prestige bonuses, which reward the player for significant accomplishments, and worship bonuses, which provide some relief for worship needs tied to a specific god. Each of these bonuses (as well as security penalties) can be accessed via the Attributes selection in the Cost Category. The right-hand dropdown on the left menu selects the type of effect to add, and the middle dropdown updates to match the selected effect. Again, use the "Add" button to add these effects to the current site.

Label Your World Map

Use the "New Region" button on the world level tab to create region labels. These names don't affect the game. They merely serve as visual aids for the player, or as reference points for story or site text. To define a region label's location, follow the steps explained under "Set the Location", above.

Exporting/Importing World Level

To export the sites and their properties from the world level, click on the "Export Map" button. This will overwrite any previous export -- only one world-level export can be stored. To import the last exported world level into a new map, click "Import Map" on the world level tab. To export and import the text for sites, as well as the Story text, go to the Story tab. In the box at the bottom labeled Localization Text File Name, enter a file name, and then click "Export." To import the text, go to the same place, type in the same name, and hit Import. Export and import the world level before importing the text, or errors will occur.

Triggers

Triggers create scripted events in a scenario. Each trigger consists of a condition or set of conditions (see "Conditions", below) that activate the trigger. Each trigger also contains an effect or set of effects (see "Effects", below) that occur when the trigger is pulled.

In the Triggers tab, create a new trigger, and define conditions and effects from the respective menus. To specify multiple conditions, change the menu that says "end" to either 'and' or 'or'. A new menu for the second condition will appear, along with a menu that says "end". The same process lets you add multiple effects. Each effect can be delayed -- delays are calculated individually from the time the trigger occurs, not sequentially from one another. The entire trigger can be delayed using the "Conditions True For" checkbox. A condition can be set as not true by using the "Not" checkbox.

The "Looping" checkbox makes the trigger check its conditions repeatedly instead of just once. This works best for triggers whose effects will only be true briefly, but which may potentially need to fire multiple times. A good example of this is a "Chat Message Contains" trigger.

The "Trigger Is On" checkbox lets you turn the trigger off at the start. Some triggers are able to activate or deactivate other triggers.

Conditions

The Conditions tab lets you apply up to seven tests to a trigger. To create a condition, click the "New" button and then assign and rename the condition for use in the triggers.

- "Player attribute" checks the amount of any resource, building, or other variable that a player has.
- "Trigger attribute" checks if a trigger is on, or has fired.
- "Game attribute" checks the game difficulty setting, the current year, or the current week.
- "World conditions" check if a site is open, closed, visible, or dead.
- "Chat message conditions" check if a player has sent a specific chat message.
- "Event conditions" check if a game event has occurred.
- "Random conditions" pull triggers with a random chance.

Effects

Triggers can generate six types of effects. To access effects, create a new effect on the Effects tab of the menu under the Triggers tab, then select the desired effect in the dropdown. After setting the effect, give it a name and it will be available to use in triggers.

- "Object effects" let objects (see "Objects", below) be created, frozen/unfrozen, rotated, killed, removed, modified, or tasked to other objects or areas (see "Areas", below.)
- "Player effects" let the scenario script victory/defeat, create a scripted camera sequence, flare the mini-map, fire a game event, or set an arbitrary player variable.
- "Trigger effects" enable/disable triggers, and toggles them as having fired or not.
- "Media effects" cause sounds to play, scenario goals to update, or message dialogs to appear during gameplay.

- "Game effects" displays graphical effects or triggers the upcoming flood level.
- "World site effects" activate/deactivate sites, toggle a site's visibility, remove a site, or move a site.

Objects

The Objects tab ties particular objects to specific triggers, as either conditions or effects of the trigger. Use "Select Object On Map" to use a particular object that you already placed in your scenario. To use a generic object, select the "Object Class" from the dropdown that appears with the "Object Specification". "Min" and "Max" are used to further define an object which uses Object Specification. "In Area", "Distance To", "Has Attribute", and "Selected By" can further classify an object. In order to create an object, it must have an "In Area" value.

Areas

To tie a trigger to a specific location on your map, use the Area tab, click "New" and paint the rectangular area on the game half of the Editor screen. Rename the area for easy reference among your other triggers.

Story

Click the Story tab to write your scenario's historical setting, explain the objectives, and convey any other information, fictional or factual, that will draw a player into your scenario. This is your only chance to address the player and set the mood. Use the menus along the top of the screen to select a background picture from your Master\Scenarios folder, to set an intro movie for the scenario, and to choose select an audio file in the Master\Data\Audio\Sounds folder to play during the instructions. To export the story, enter a filename for the exported version and click the "Export" button. The story can then be imported to another scenario using the same filename and the "Import" button. IMPORTANT: Doing this will also import and export the triggers and goals for the scenario.

Player

The Player tab is broken up into four sections.

- The Events tab enables and disables specific game events in the scenario.
- The Worship tab includes and excludes deities, and sets the patron god for the city.
- The Construction tab allows or disallows units and buildings, and defines which buildings convey prestige.
- The Options tab sets the starting year, week, time period, pharaoh, prestige, and starting pharaoh age and number.

Goals

To win your scenario, the player needs to achieve ANY ONE of the goals designated "or" and ALL of the goals marked "and" on the Goals tab.

- A "Resources" goal requires the player to get a certain level of resources.
- "Varieties" requires a certain number of finished goods be created.
- A "Citizens" goal specifies that a certain number of a character type exist.
- "Buildings" requires that certain buildings be fully constructed on the city level.
- A "World Site" goal specifies that a particular world-level site be opened, closed, or defeated. You can also describe the goals and write hints, which will appear in the Tips screen for the scenario.

Testing The Scenario

Use the Test button on the lower right to quickly verify that all necessary elements are included in your scenario, without exiting the editor. While testing, bring up the in-game menu to return directly to the Editor.

Common Errors

Statues (meaning temples and cult temples, too) require basalt. Obelisks and stele require granite. All pyramids require limestone and fine limestone. If the appropriate quarries are not present in the city level, then there must be a site/sites that export(s) the required resources on the world level.

Campaign Editor

Starting the Campaign Editor

From CotN's main menu, select Editor, then select Create Campaign. Each campaign is made up of one or more scenarios, which are organized into Tiers. The player can choose one scenario in each defined tier. When a single scenario in a tier is completed, the player moves on to the next tier.

As you can see from this set of instructions, making a campaign is simple and straightforward compared to creating scenarios.

Campaign Editor Basics

Interface Layout

The bottom of the left panel shows available scenarios. The middle of the panel lists the scenarios that have been added to the campaign. Basic information about the campaign is at the top. The rest of the interface is the world-level map being used for the campaign. This can be changed at the top of the left panel. As scenarios are added, their icons appear on the map in the specified location.

Selecting the World Map

The dropdown menu at the top of the left panel selects the world map to be used for the campaign. This has no effect on the individual scenarios' world maps. You should verify that they all use the same file and have the cities in the correct places.

Adding a Scenario

To add a scenario to a campaign, first select the scenario from the list at the bottom of the left panel. Next, fill in the name and the X and Y coordinates to place the city on the world map. Add descriptive text, set the tier and choose an icon. Finally, click "Add" to include it in your campaign. To change something after adding the scenario, first select it from the list in the center of the left panel, then make changes, and then click "Update".

Setting Campaign Information

The text box at the top of the left panel lets you name your campaign. The box below that can be used to describe it. Below that, write descriptions for each tier of the campaign.

Saving and Loading a Campaign

To save a campaign, use the button marked "Save" at the bottom of the left panel. To load a campaign, use the "Load" button in the same panel. Saving a campaign saves a copy of each scenario with it, so you don't need to distribute individual scenarios within your campaign. If you revise any of the component scenarios, though, return to the campaign editor and update the scenario list to incorporate your revisions.