

# The KsirK Skin Editor Handbook

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# Contents

<b>1</b>	<b>Introduction</b>	<b>6</b>
<b>2</b>	<b>Creating a KsirK skin</b>	<b>7</b>
2.1	Structure of folders and files . . . . .	7
2.1.1	The Data folder . . . . .	7
2.1.1.1	The onu group . . . . .	7
2.1.1.2	The sprites description groups . . . . .	8
2.1.1.3	The countries description groups . . . . .	9
2.1.1.4	The nationalities description groups . . . . .	9
2.1.1.5	The continents description groups . . . . .	9
2.1.1.6	The goals description groups . . . . .	10
2.1.2	The Images folder . . . . .	10
2.1.2.1	The pool.svg file . . . . .	10
2.1.2.2	The map-mask.png file . . . . .	12
2.1.2.3	The buttons images . . . . .	13
2.1.3	The Sounds folder . . . . .	14
2.2	Using the KsirK Skin Editor . . . . .	14
<b>3</b>	<b>Command Reference</b>	<b>15</b>
3.1	The main KsirK Skin Editor window . . . . .	15
3.1.1	The buttons . . . . .	15
<b>4</b>	<b>Developer's Guide to KsirK Skin Editor</b>	<b>16</b>
<b>5</b>	<b>Questions and Answers</b>	<b>17</b>
<b>6</b>	<b>Credits and License</b>	<b>18</b>
<b>A</b>	<b>Installation</b>	<b>19</b>
A.1	How to obtain KsirK Skin Editor . . . . .	19
A.2	Compilation and Installation . . . . .	19

# List of Tables

2.1	The onu group entries . . . . .	8
2.2	Sprite description group entries . . . . .	8
2.3	Country entries . . . . .	9
2.4	Nationality entries . . . . .	9
2.5	Continent entries . . . . .	9
2.6	Goal entries . . . . .	10
2.7	The elements of the pool . . . . .	12
2.8	The buttons of the GUI . . . . .	14

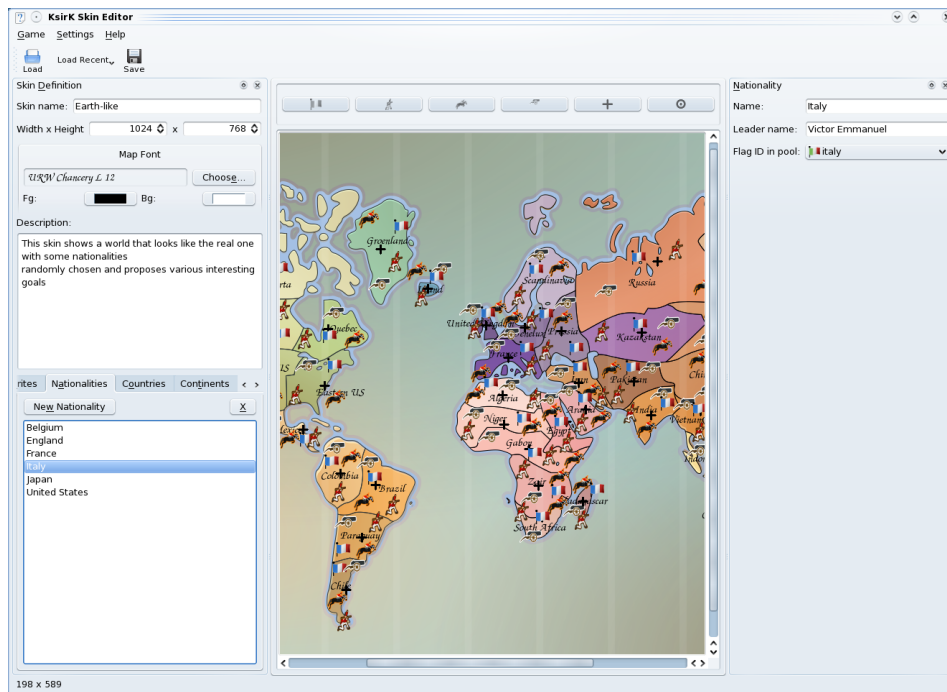
## **Abstract**

KsirK is a computerized version of a well known strategy game. It is fully skinable. This manual explains how to create new skins from scratch, using a file browser, a SVG image editor and KsirK Skin Editor.

# Chapter 1

## Introduction

KsirK is a computerized version of a well known strategy game. It is fully skinnable. This manual explains how to create new skins from scratch, using a file browser, a SVG image editor and KsirK Skin Editor.



There is three main steps to create a new skin: creating the folders hierarchy; creating the graphics, all pooled inside a SVG file; and then placing sprites and naming things using KsirK Skin Editor.

## Chapter 2

# Creating a KsirK skin

KsirK is fully skinnable. For who have graphic capabilities, creating a new skin is as simple as copying an existing one, editing or changing the graphics and updating the data in a .desktop configuration file, which is done using the KsirK Skin Editor. A last step is to edit the file describing what to install.

All examples (text and images) are taken from the default skin of KsirK

### 2.1 Structure of folders and files

- Data/ : Data used by the program to handle the images of the skin.
  - CMakeLists.txt : Describes what to install.
  - onu.desktop : Main file for the description of the skin. See its description below.
- Images/ : The images of the skin (map, sprites, etc.)
  - CMakeLists.txt : Describes what to install.
  - pool.svg : the map and all the sprites used in this skin.
  - map-mask.png : the image allowing the program to find which country the mouse is over during the game (see below).
  - \*.png : the other images here are buttons images.
- CMakeLists.txt/ : Describes what to install.
- Sounds/ : sound files for the skin.

#### 2.1.1 The Data folder

This folder contains only one file, world.desktop. This file is a description of the content of the skin. It is used to describe the organization of the world and how to display it. You don't have to fill it manually as it will be handled by the KsirK Skin Editor. But, for the sake of completeness, we will now describe its structure.

An onu group contains a number of country entries, a number of nationality entries and lastly a number of continent entries. Then various groups contain the description of the different sprites, the description of the different countries, continents, nationalities and goals.

The following sections describe the content of each group.

##### 2.1.1.1 The onu group

Entry name	Signification
width	The width of the skin's map
height	The height of the skin's map
skinpath	The path of the skin relative to the application data path (e.g. skins/default)
nb-countries	The number of countries (42 in the default skin). There should be the same number of country groups below
nb-nationalities	The number of nationalities (6 in the default skin). There should be the same number of nationality groups below
nb-continent	The number of continents (6 in the default skin). There should be the same number of continent groups below
pool	The path and name of the pool file relative to the skin path (e.g. Images/pool.svg)
map-mask	The path and name of the map mask file relative to the skin path (e.g. Images/map-mask.png)
format-version	The version of the skin file format (2.0)
name	The display name of the skin
desc	The long description of the skin
fighters-flag-y-diff	The height difference between flags and cannons sprites
width-between-flag-and-fighter	The number of pixels between the left most pixel of the flag and the right most pixel of the simple cannon (when not firing nor exploding)

Table 2.1: The onu group entries

### 2.1.1.2 The sprites description groups

Each type of sprite (flag, infantry, cavalry, cannon, firing cannon and exploding cannon) is defined by a group. Only some sprites have a width entry. This entry is used for relative positioning during animations: the cannons, firing or exploding should not "move" around the country's flag during fight.

Entry	Signification
width	The reference width of the flag sprite frames
height	The reference height of the flag sprite frames
frames	The number of frames of the sprite
versions	The number of versions of the flag sprites

Table 2.2: Sprite description group entries



### 2.1.1.3 The countries description groups

Each country listed in the onu group, countries entry has its own group whose label is the country name. The table below lists the entries of these groups.

Entry name	Signification
id	The integer unique identification number of the country, must start at zero (0)
name	The displayed name of the country
<sprite>-point	Each type of sprite (flag, infantry, etc.) in the country is displayed at a certain position defined by this entry made of two integers separated by a comma
neighbours	The list of the ids of the neighbors of the current country

Table 2.3: Country entries

### 2.1.1.4 The nationalities description groups

Each nationality listed in the onu group, nationalities entry has its own group whose label is the nationality name. The table below lists the entries of these groups.

Entry name	Signification
name	The name of the nationality (e.g. Japan)
leader	The name that will be proposed to the player choosing this nationality
flag	The name of the country's flag sprite element in the onu SVG file

Table 2.4: Nationality entries

### 2.1.1.5 The continents description groups

Each continent listed in the onu group, continents entry has its own group whose label is the continent name. The table below lists the entries of these groups.

Entry name	Signification
name	The name of the continent (e.g. Africa)
id	The integer unique identification number of the continent
bonus	The number of armies obtained at the end of the turn by the player owning all the countries of the continent
continent-countries	The list of the ids of the countries inside the current continent

Table 2.5: Continent entries

### 2.1.1.6 The goals description groups

Each goal listed in the onu group, goals entry has its own group whose label is the goal name. The table below lists the entries of these groups.

Entry name	Signification
type	The type of goal. Can be continents, countries or player
nbArmiesByCountry	set the minimal number of armies the player will have to put on each country
nbCountries	set the number of countries the player must possess
nbCountriesFallback	For a player goal type, if the target player is killed by another one, this sets the number of countries the player will have to conquer instead
desc	A full text description of the goal with appropriate placeholders (needs more doc here)
continents	The list of continents ids the player will have to conquer

Table 2.6: Goal entries

## 2.1.2 The Images folder

This folder contains the buttons specific to KsirK and the pool SVG file that contains the map and all sprites.

### 2.1.2.1 The pool.svg file

This SVG file contains the map and all the sprites of the game. Each element is named such that the game can select and render separately each of them.

In the default skin, the sprites are flags, infantry, cavalry and cannon. Infantry represents one army, five for cavalry and ten for cannons. Cannons are also used to display fighting armies. That's why there is three kinds of cannon sprites: normal static or moving cannon, firing one and exploding one.

Each sprite image is the concatenation of the various views of the object and for each view, its frames. Views are organized vertically and frames horizontally. Where to cut the image in individual frames is found by dividing the height of the image by the number of views and the width by the number of frames. These data are found in the onu.desktop file.

## The KsirK Skin Editor Handbook



*An example of a sprite image: cannon.png*






For armies sprites, there is three different views, from top to bottom:

- looking right
- looking left and
- facer

For flags, there is only one view. All sprites backgrounds should be set to transparent.



*An example of a flag sprite image: italy.png*

Element name	Sample Image	Signification
map		Map of the skins's world. Countries can have arbitrary shapes, but should be grouped in eye-recognizable continents, by location only or by color
italy		The flag of the Italy nation. There is one such entry for each nation
infantry		Icon representing one army
cavalry		Icon representing five armies
cannon		Icon representing ten armies


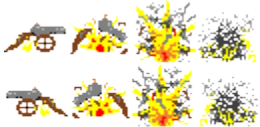




firing		Icon representing armies during a fight
exploding		Icon representing armies when losing a fight
Alaska		The shape of the Alaska country. This is used to highlight the country. There is one such shape for each country. Its color is not used. As such, the color is free.
reddices		The red dices used to show battles results
bluedices		The blue dices used to show battles results
mark1		This mark is added to fighting sprites to show the number of armies they represent, here 1. There is also a mark2 and a mark3 elements.

Table 2.7: The elements of the pool

### 2.1.2.2 The map-mask.png file








This is a png file representing also the map of the skins's world, but with coded colors that allows one to identify uniquely each country. Countries must have at least the same shapes as the corresponding countries on the map.png file so that users can click anywhere in a viewable country and select the good one. Countries, like little islands as Indonesia in the default map can be greater than the equivalent in the map.png file to facilitate the selection of the country.



The blue component (in RGB model) of a country's color identifies the country: index 0 is country 0 in the onu.xml file, index 1 is country 1, etc. White (0xFFFFFF in RGB) identifies the absence of country (sees or, why not, no man's lands).

### 2.1.2.3 The buttons images

The filenames are hard-coded in the code, so they should not be modified. The table below shows all the buttons that should be provided.

Image	Filename	Signification
	newNetGame.png	Tries to join a network game
	recycling.png	After all players have put their armies, it is possible to modify the distributions (named recycling). This button asks to do such a redistribution
	recyclingFinished.png	Chooses not to redistribute. All clients windows must have this button clicked to really end the distribution
	nextPlayer.png	Ends the current player's turn and switch to the next one or to the next turn if the current player was the last one
	attackOne.png	Chooses to start an attack with one army
	attackTwo.png	Chooses to start an attack with two armies
	attackThree.png	Chooses to start an attack with three armies




	defendOne.png	Chooses to defend an attacked country with one army
	defendTwo.png	Chooses to defend an attacked country with two armies
	moveArmies.png	Chooses to start the moving of armies between two countries (last action in the turn)

Table 2.8: The buttons of the GUI

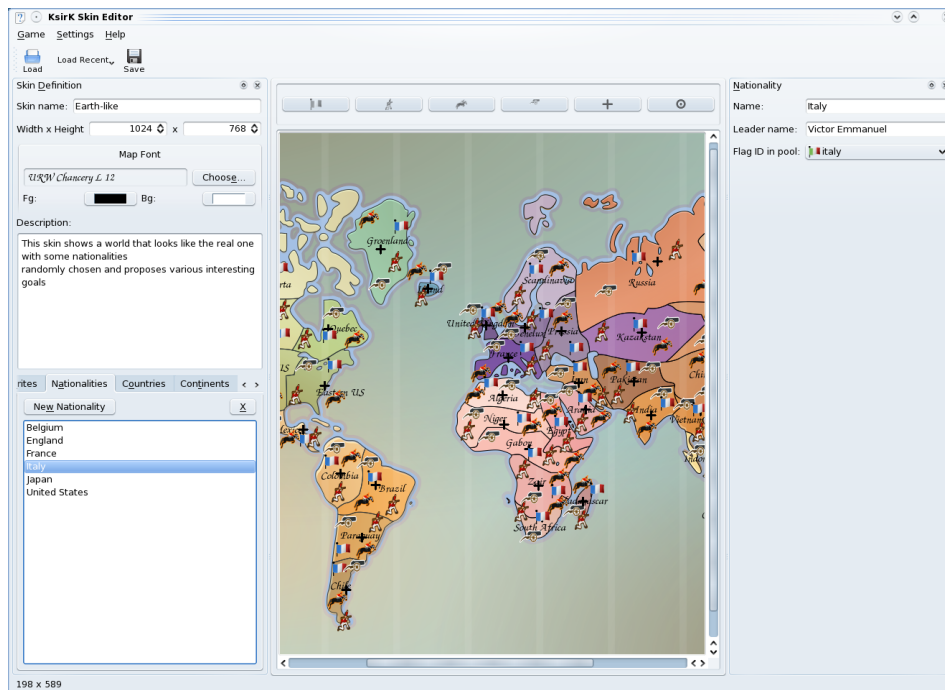
### 2.1.3 The Sounds folder

This folder contains three sound files:

- roll.wav played when armies are moving
- cannon.wav played when firing and
- crash.wav played when a cannon explodes

## 2.2 Using the KsirK Skin Editor

After creating the graphics in the right folder and SVG file, you just have to create countries, players, etc. and associate them with the right SVG element in the pool. This can be done with the KsirK Skin Editor. Note that each part of this application is auto-described by tooltips and contextual help usually reachable through the Ctrl+F1 shortcut.



## Chapter 3

# Command Reference

### 3.1 The main KsirK Skin Editor window

#### 3.1.1 The buttons



##### **Load**

Causes the program to load an existing skin.



##### **Save**

Saves the currently edited skin

## Chapter 4

# Developer's Guide to KsirK Skin Editor

Please refer to <http://api.kde.org/> for the documentation of the API.



## Chapter 5

# Questions and Answers

This document may have been updated since your installation. You can find the latest version at <http://docs.kde.org/>.

## Chapter 6

# Credits and License

KsirK Skin Editor

Program copyright 2009 Gael de Chalendar [kleag@free.fr](mailto:kleag@free.fr)

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## Appendix A

# Installation

### A.1 How to obtain KsirK Skin Editor

KsirK Skin Editor is part of the KDE project <http://www.kde.org/>.

KsirK Skin Editor can be found on the [download site](#) of the KDE project.

### A.2 Compilation and Installation

For information on how to compile and install KDE applications visit the [KDE Techbase](#)

Since KDE uses **cmake** you should have no trouble compiling it. Should you run into problems please report them to the KDE mailing lists.