# **Project File**

## **High Level Overview**

Each COLDSTEEL Sprite Studio project is saved as <a href=".ctsp">.ctsp</a> file (COLDSTEEL Sprite Studio Project). This single file contains all the needed information to load and restore a previously created project. The name preceding the file extension is the name of the project.

### **Description**

ctsp files are located within the data/projects/ folder within the archive of the installation of the program. The file contains all needed information about the project itself, palettes, animations, layers, and artboards.

# Layout

This is the .ctsp file format:

Entry Name	Entry Type
Project Name	String
Channels Per Pixel	Byte
Number of Source Artboards	Integer
Number of Visual Layers	Integer
Number of NonVisual Layers	Integer
Number of Animations	Integer
Palette Chunks	List of Palette Chunks
Visual Layer(s)	List of Visual Layer Prototypes
NonVisual Layer(s)	List of NonVisual Layer Prototypes
Artboard Chunk(s)	Artboard Chunk List
Animation Chunk(s)	Animation Chunk List

Palette Chunks is a list of palette chunks. Each palette chunk contains data needed to create a color palette from which color indices apply. There will always be five palette

chunks because there are five palettes in the program.

Entry Name	Entry Type
Palette Width	Integer
Palette Height	Integer
Palette Channels Per Pixel	Byte
Palette Data	Byte Array

The second composite type within the format is the Visual Layer(s) entry, which is a list of strings which hold the names of visual layers.

The Visual Layer(s) format:

Entry Name	Entry Type
Visual Layer Names	String Array

The third composite type within the format is the NonVisual Layer(s) entry, which is a list of strings and bytes representing the names of the nonvisual layers and how many bytes each layer is

The NonVisual Layer(s) format:

Entry Name	Entry Type
Nonvisual Layer Names	String
Size	Byte

The next composite type within the format is the artboard chunk entry. An artboard chunk contains necessary information about artboards. Each artboard has its own chunk and there will be Number Of Source Artboards artboard chunks.

#### Artboard Chunk(s)

Entry Name	Entry Type
Artboard Name	String
Artboard Width	Int
Artboard Height	Int
Active Layer Index	Int
Is Active Layer Visual	Boolean

Visual Layer Data Chunk(s)	Visual Layer Data Chunk(s)
Nonvisual Layer Data Chunk(s)	Nonvisual Layer Data Chunk(s)

Visual Layer Data Chunks are sub chunks found within artboard chunks that store data about visual layers. Some data about visual layers can delegate to the artboard, which is width, height, and channels per pixel.

Visual Layer Data Chunk(s)

Entry Name	Entry Type
Name	String
Locked	Boolean
Hiding	Boolean
Is Compressed	Boolean
Pixel Data	Byte Array

Nonvisual Layer Data Chunks are sub chunks found within artboard chunks that store data about nonvisual layers. Some data about visual layers can delegate to the artboard, that being width and height.

Entry Name	Entry Type
Name	String
Locked	Boolean
Hiding	Boolean
Bytes Per Pixel	Byte
Is Compressed	Boolean
Pixel Data	Byte Array

The last chunk is the animation chunk list. Each animation for the project is encapsulated in an animation chunk and numberAnimations chunks are found after artboards.

Entry Name	Entry Type
Animation Name	String
Number Frames	Integer
Default Swap Time	Float

Default Updates	Integer
Default Swap Type	String
Animation Frame Chunk(s)	Animation Frame Chunk LiSt

The Animation Frame Chunk List is a list of Animation Frame Chunk's, each of which contain data about a single animation frame. There will be a Number Frames number of animation frame chunks in the Animation Frame Chunk(s) entry.

Entry Name	Entry Type
Artboard Name	String
Frame Time	Float
Frame Updates	Integer
Swap Type	String