

UNBLOCK THE BALL

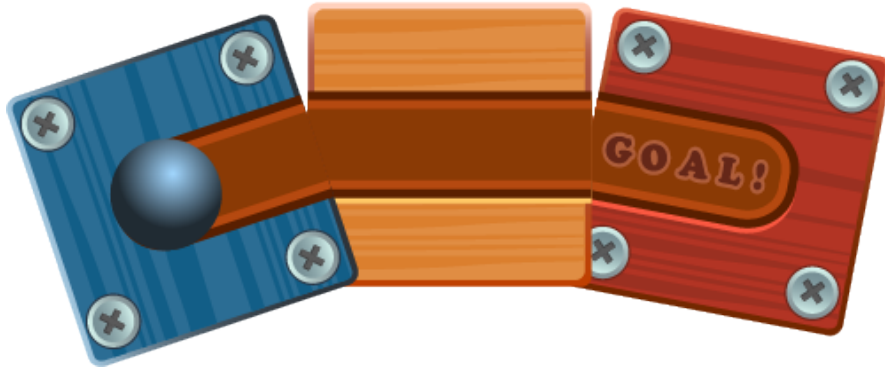


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1. Importing asset into Unity 3D

Create a new Unity 2D project. Go to **Assets→Import Package→Custom Package**.

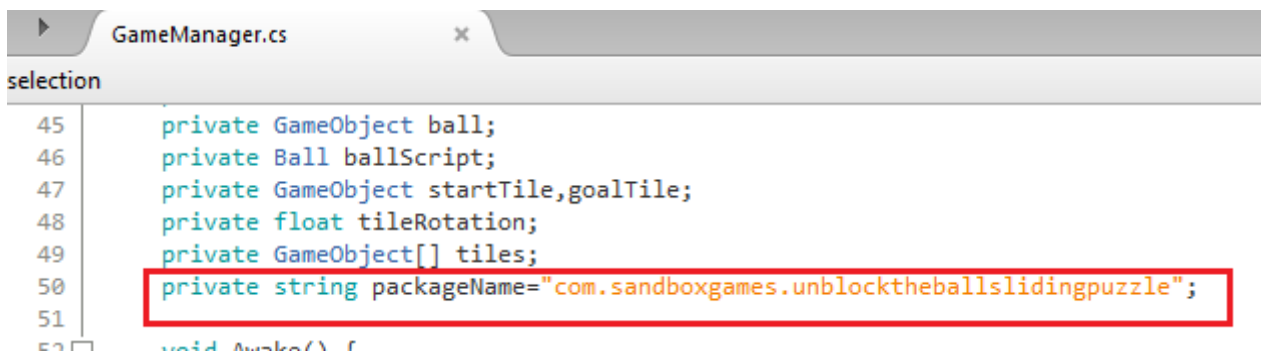
Navigate to your downloaded package. If you see an empty scene, just open HomeScene from "Unblock the Ball/Scenes" folder.

After importing all the content of the package, go to

File→Build Settings, select **Android platform** and click Switch Platform button.

2. Quick start guide

- * Import the asset into Unity
- * Go to **File→Build Settings** and be sure Platform is switched to **Android Platform**
- * Choose your Ad Network. Go to File→Build Settings, click Player Settings button, in Inspector View expand **Other Settings**. Find **Scripting Define Symbols** text field.
If you want use Admob, type **ADMOB** in the text field and press ENTER.
If you want use Chartboost, type **CHARTBOOST** in the text field and press ENTER.
- * Configure your Ads' id
- * Change the **Bundle Identifier** (package name)
- * In GameManager.cs file set the variable **packageName** the same as your Bundle Identifier
- * Change some graphics and sounds



```
GameManager.cs
selection
45 private GameObject ball;
46 private Ball ballScript;
47 private GameObject startTile,goalTile;
48 private float tileRotation;
49 private GameObject[] tiles;
50 private string packageName="com.sandboxgames.unblocktheballslidingpuzzle";
51
52 void Awake() {
```

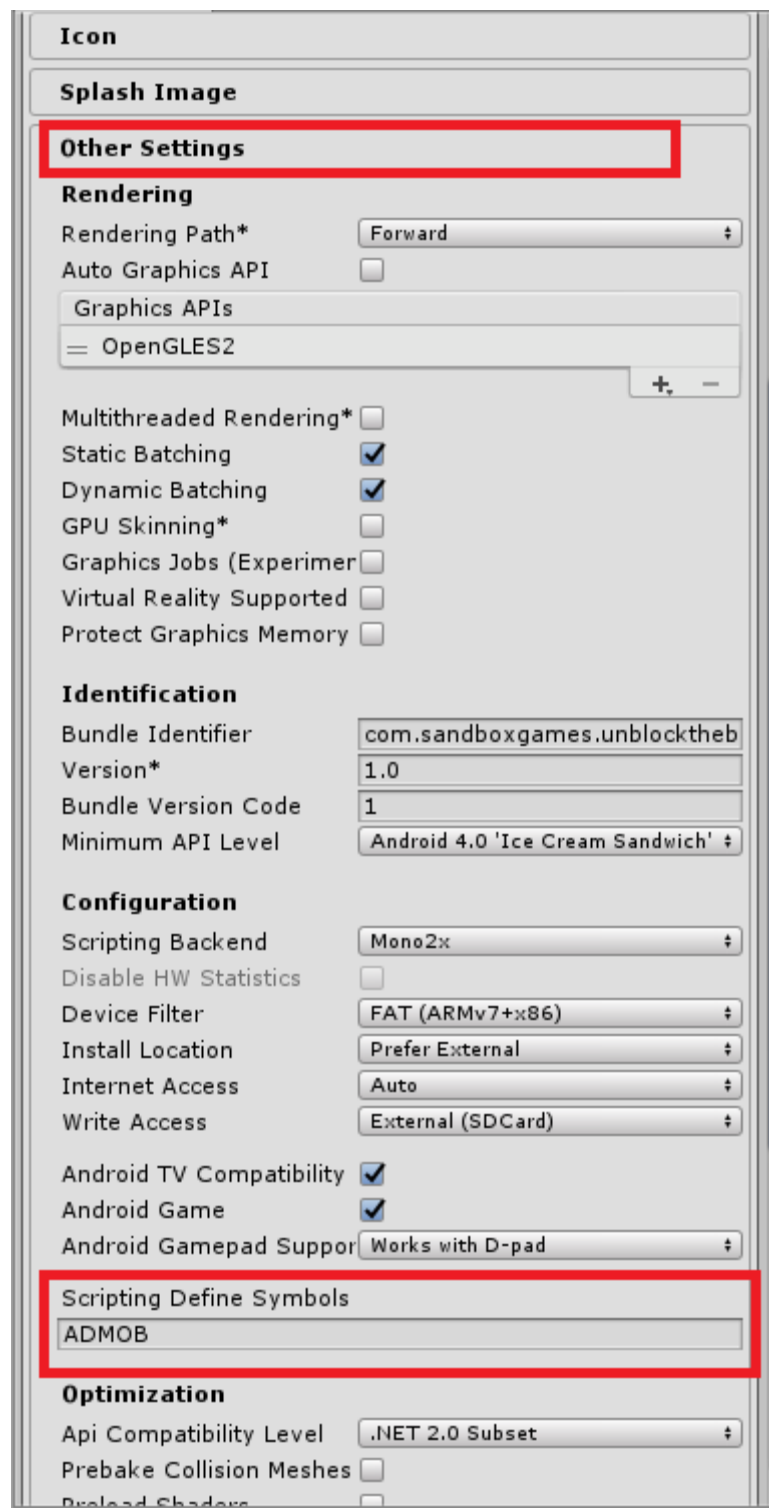
3. Setting up Ad Network

The source code supports Admob and Chartboost ad networks. To switch ad network, go to File->Build Settings, click Player Settings button, in Inspector View expand

Other Settings. Find **Scripting Define Symbols** text field.

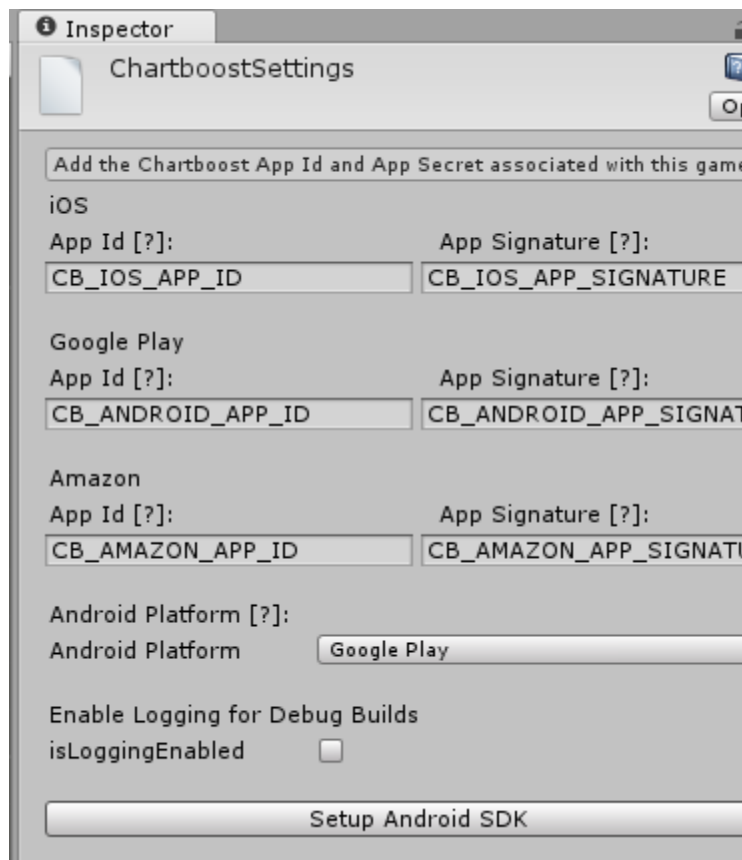
If you want use Admob, type **ADMOB** in the text field and press ENTER.

If you want use Chartboost, type **CHARTBOOST** in the text field and press ENTER.



3. Setting up Ad Network

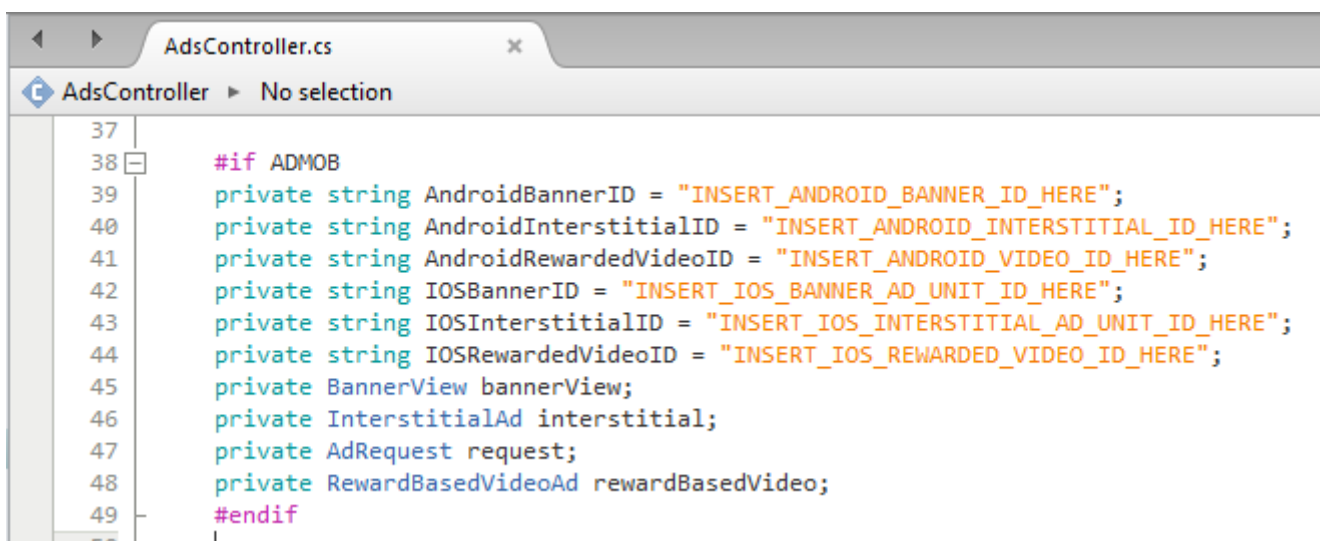
If you want to configure Chartboost, go to **Chartboost**→**Edit Settings** in the main menu. Then fill required fields.



The Inspector window displays the ChartboostSettings form. It includes instructions to add Chartboost App Id and App Secret. The form has sections for iOS, Google Play, and Amazon, each with fields for App Id and App Signature. There is also a dropdown for Android Platform (set to Google Play) and a checkbox for Enable Logging for Debug Builds (isLoggingEnabled). A Setup Android SDK button is at the bottom.

Add the Chartboost App Id and App Secret associated with this game	
iOS	
App Id [?]:	App Signature [?]:
CB_IOS_APP_ID	CB_IOS_APP_SIGNATURE
Google Play	
App Id [?]:	App Signature [?]:
CB_ANDROID_APP_ID	CB_ANDROID_APP_SIGNATURE
Amazon	
App Id [?]:	App Signature [?]:
CB_AMAZON_APP_ID	CB_AMAZON_APP_SIGNATURE
Android Platform [?]:	
Android Platform	Google Play
Enable Logging for Debug Builds	
isLoggingEnabled	<input type="checkbox"/>
Setup Android SDK	

If you want to configure Admob, open **AdsController.cs file**, located in **Assets/Scripts** folder and change required variables.



```
37
38 #if ADMOB
39 private string AndroidBannerID = "INSERT_ANDROID_BANNER_ID_HERE";
40 private string AndroidInterstitialID = "INSERT_ANDROID_INTERSTITIAL_ID_HERE";
41 private string AndroidRewardedVideoID = "INSERT_ANDROID_VIDEO_ID_HERE";
42 private string IOSBannerID = "INSERT_IOS_BANNER_AD_UNIT_ID_HERE";
43 private string IOSInterstitialID = "INSERT_IOS_INTERSTITIAL_AD_UNIT_ID_HERE";
44 private string IOSRewardedVideoID = "INSERT_IOS_REWARDED_VIDEO_ID_HERE";
45 private BannerView bannerView;
46 private InterstitialAd interstitial;
47 private AdRequest request;
48 private RewardBasedVideoAd rewardBasedVideo;
49 #endif
50
```

3. Setting up Ad Network

Here are variables which control the ads:

public int adsCounter = 3; How often the interstitials (fullscreen) ads will be shown. That means after every 3rd time the game starts, the ads will be shown

The method void **didCompleteRewardedVideo()** Inside this method is a line **GameManager.hintCount += 3;** which means amount of hints rewarded for watching a video.

The method **ShowRewardedVideo()** is used for showing rewarded video ads

The method **ShowInterstitialAds()** is used for showing interstitials ads

4. How to change images and sounds

All images are located in the "Assets/Sprites" folder. All sounds are located in the "Assets/Sounds" folder. For changing image or sound, just replace it with your own.

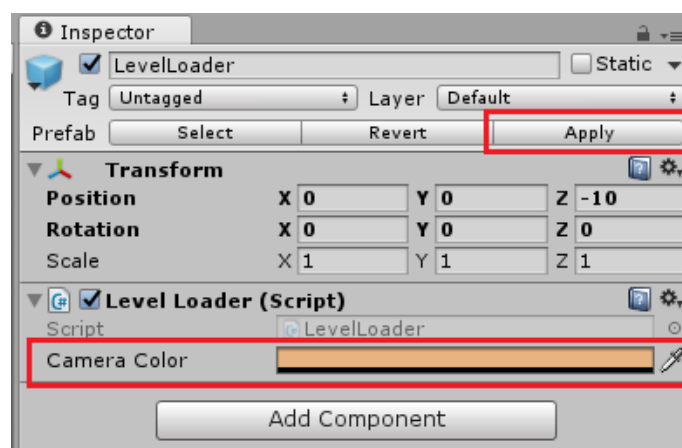
Tile images must be combined into one file. This can be achieved in any graphics editor. Currently used tileset has 160x160 pixels per one tile + 2 pixels margin and padding between tiles.

I have included source files of the tileset in "Graphics Source" folder. It contains vector Adobe Illustrator AI file and raster layered Photoshop PSD file.

Working with Prefabs

The game has many levels (scenes). In order to change images or game objects, you don't need to edit it in every game scene. There are prefabs which are reusable objects. All prefabs are located in **Assets/Prefabs** folder.

For example, if you want to **change the background color**, which is represented as main camera's color, you should edit **LevelLoader** prefab. Open any level scene, click on LevelLoader game object in Hierarchy View. In Inspector View, change the color and click **Apply** button. Now the color will be changed in all scenes.



5. Building a signed APK file

- * Select "**File**→**Build Settings**" from the main menu
- * If Android platform is not specified, select Android platform and click "Switch Platform" button.
- * Click on "Player Settings" button
- * Change the "**Product Name**".
- * Change the **Bundle Identifier** from "**Other Settings**" tab
- * Select your keystore file or create a new one from "Publishing Settings"
- * Click on "Build" or "Build & Run" button.

6. How to use Level Editor

Video tutorial: <https://www.youtube.com/watch?v=8NbAtFRdAVs>

Here is a quick guide to creating a new level pack and editing puzzles:

- * All the levels for a level pack are in an appropriate folder. So in order to create a new level pack, first create a new folder inside "Scenes" folder. You can start building a new level by using Template_Puzzle4x4 or Template_Puzzle5x5 file inside "Scenes" folder. Duplicate it and drag and drop into a newly created folder. Rename it according to the next important rules: A level name must be started with "LP[pack number]_" and then "level-[level number]" should go. For example, if your newly created pack is 5th, so the level name must be started with LP5_ strictly. So the first level must be named LP5_level-1. Next level will be LP5_level-2 and so on.
- * Open the level scene. In the Hierarchy view, there is a Board game object, which also contains Tiles game object.
- * When you click on Tiles game object, the editor become activated and settings appear in its Inspector View
- * Go to "**Window**→**Tile Picker**". The Tile Picker window should appear. Now you can choose any tile in the **Tile Picker** window.
- * Note that the editor is only available if Tiles game object is selected from the Hierarchy view. So if you lost it, just select Tiles game object again.
- * For editing tiles, the Scene view must be focused on. Just click anywhere inside the Scene View to focus on it.

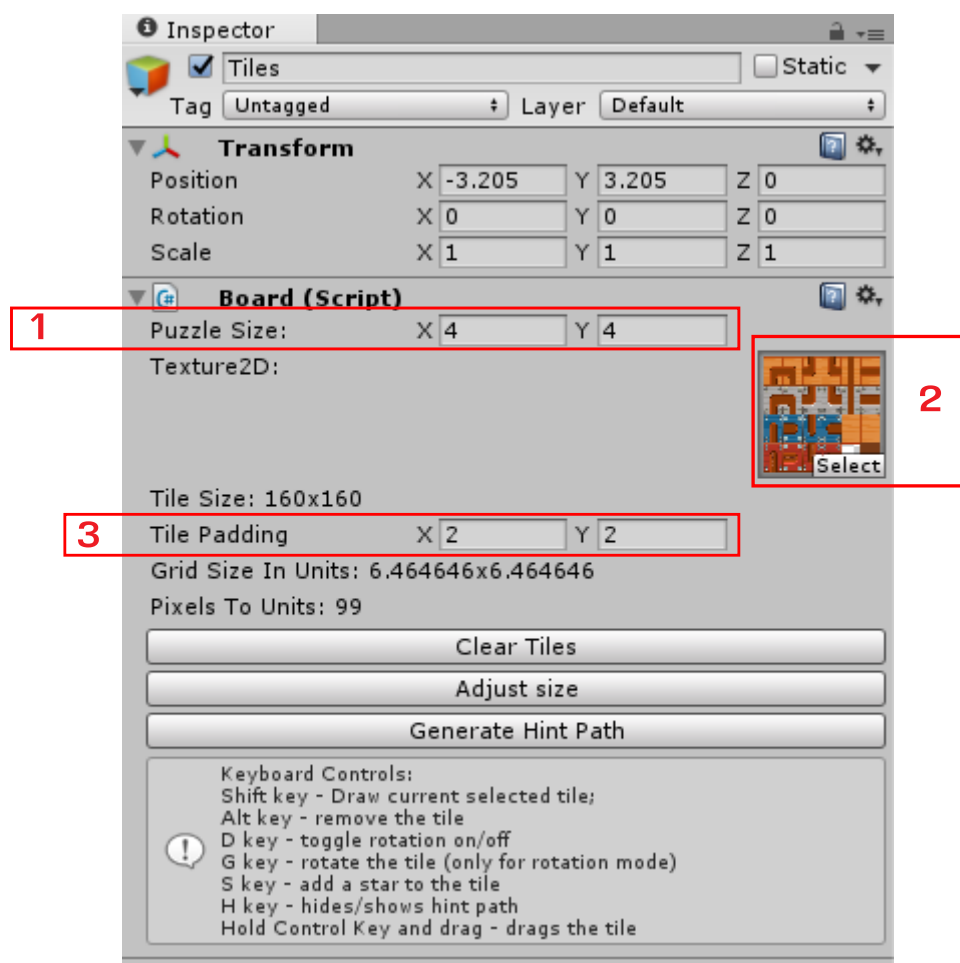
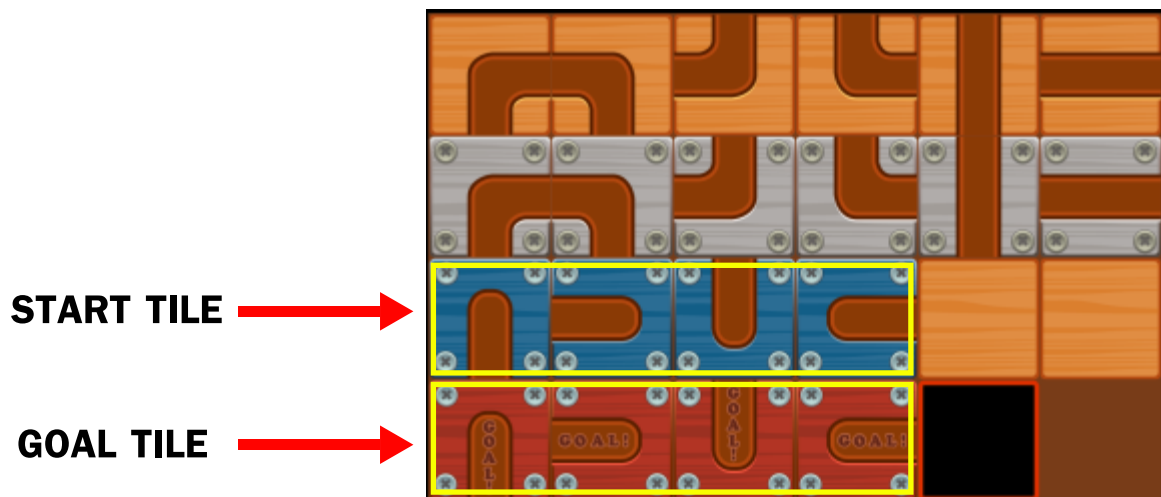
6. How to use the editor

Move a mouse cursor within the puzzle area in Scene View. The tile position will be calculated automatically.

- * Set up a board size. In Inspector View, change **Puzzle Size**. If the board doesn't fit into game area, click **Adjust Size** button. It will resize the board to fit the camera.
- * Go to **Window->Tile Picker** to open **Tile Picker** window.
- * Press **Shift** key in order to add a new tile.
- * Press **Alt** key in order to delete a tile.
- * Press **D** key to toggle tile state between rotatable/non-rotatable.
- * If the tile is rotatable, click **G** key to rotate it.
- * Press **S** key to add/remove a star from the tile.
- * Hold **Control** key and move a mouse in order to move the tile inside the board.

Here is a common scenario for creating new puzzle:

- * First of all, build a completed path. The completed path must always be started with Start Tile and must be always be ended with Goal Tile.
- * When the completed path is done, add some additional fake tiles for more challenge.
- * Add 3 stars to any tiles in the completed path: use S key for adding or deleting a star.
- * The completed path must contain 3 stars.
- * When the path was done, click "Generate Hint Path".
- * For further editing, it is useful to temporarily hide the hint path. Use H key to hide or show the hint path.
- * Now you have to shuffle the tiles. Point to a tile with the mouse cursor and hold Control key and move the mouse cursor.
- * After you have created the completed path, the hint path, have added stars and have shuffled tiles, don't forget to enable the hint path and save the scene. Go to "File->Save Scene".
- * Use the same way to create all other levels. Open GameMabager.cs file and edit maxPacks variable according to your count of level packs.



1. Specified Puzzle Size.
2. Tileset
3. Tile Padding for Tile set. By default, tile set consists of several sprites, separated from each other by 2 pixel padding. This setting should be set correctly for correct work of Tile Picker window.