

UPDC

Unity to PokEngine Data Converter

User Manual

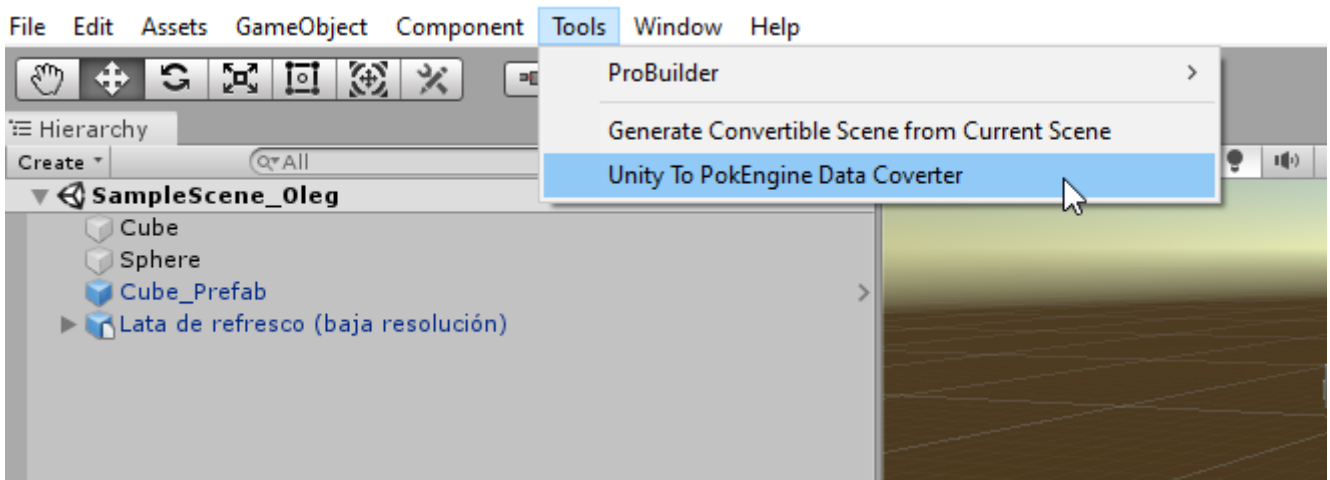
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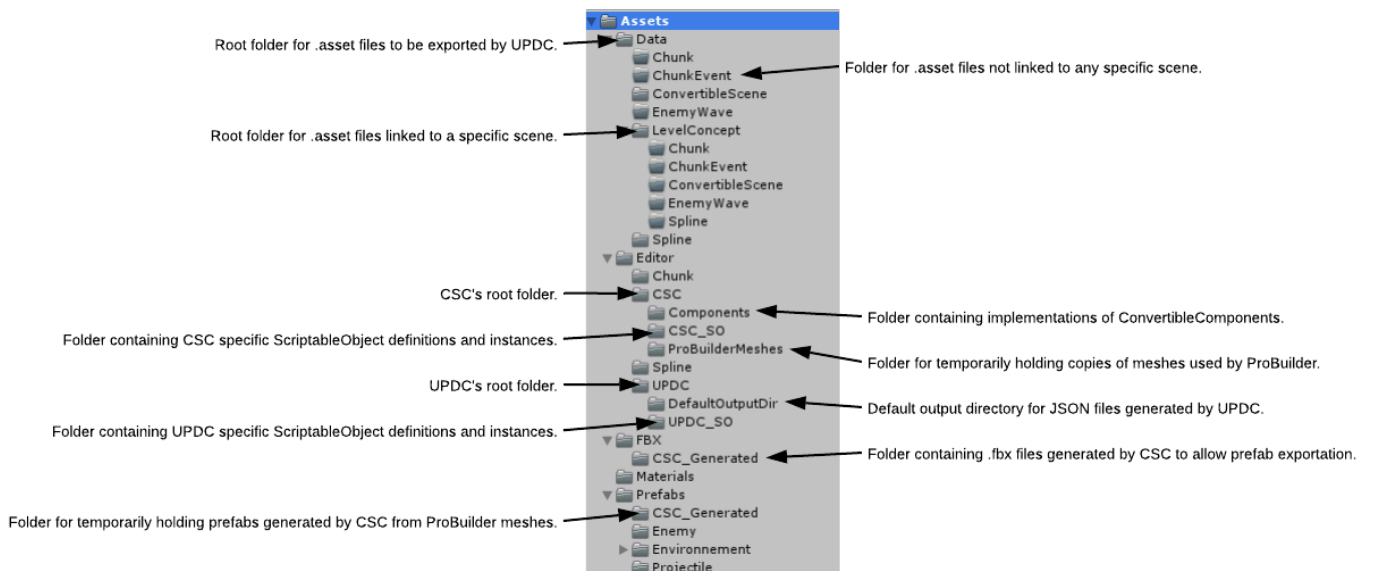
1 Introduction

The **Unity to PokEngine Data Converter**, or **UPDC for short**, is a Unity tool used to **export ScriptableObject** inheriting **.asset** files **into JSON** files that end with extensions that specify their type. These JSON files can then be read by the PokEngine's parser.

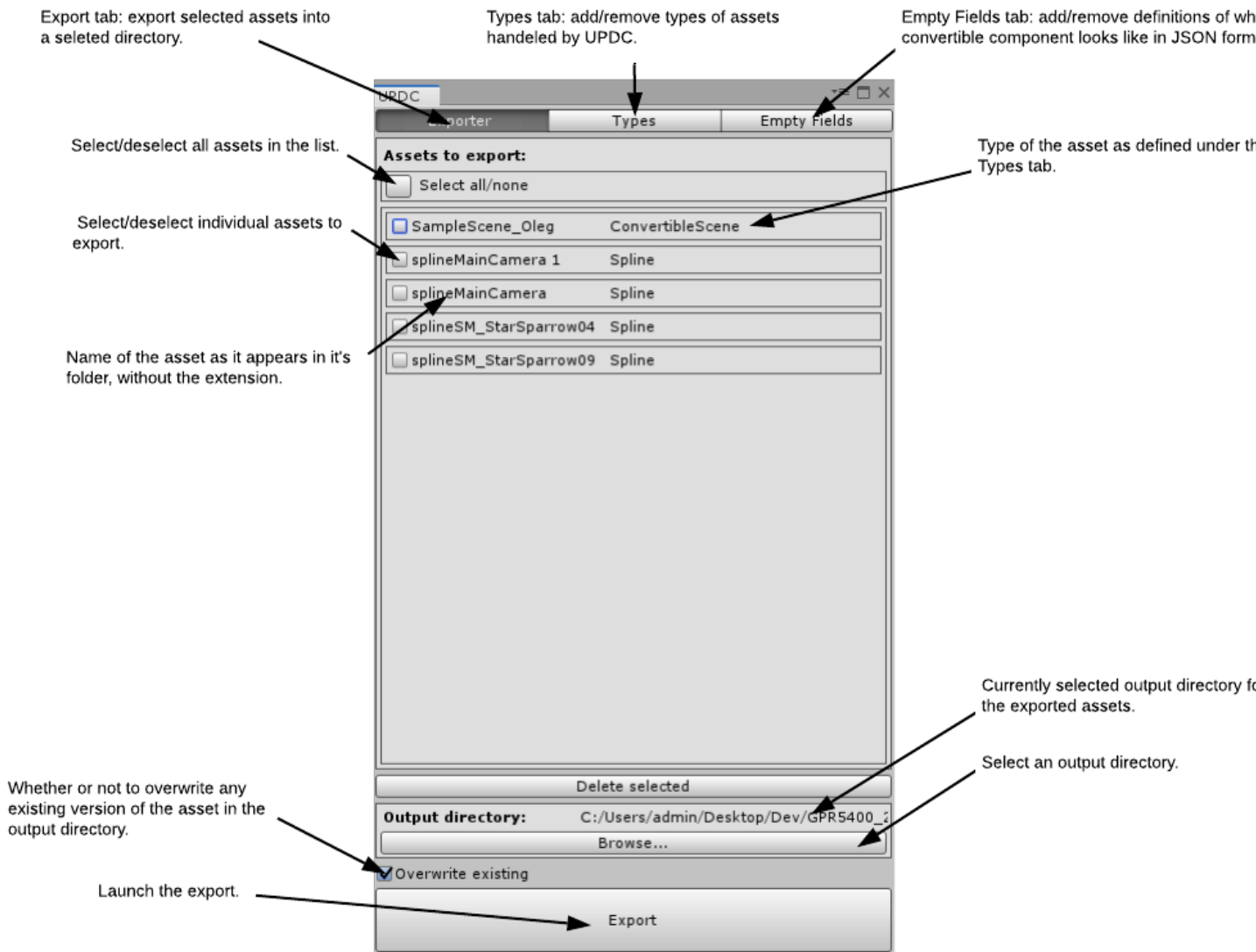
2 Accessing the Tool



3 Folder Hierarchy



4 The Exporter Tab



The tool is separated between **two tabs**. In the **Exporter tab**, you can **select the .asset files located in the Assets/Data/...** folders **you wish to export**. You can **select the output directory** for the files generated. By default, the tool outputs the files into Assets/Editor/UPDC/DefaultOutputDir you have previously defined. Upon exportation, **directories will be generated in the output directory** to mirror the structure seen in Assets/Data. Finally, you can choose whether to **overwrite any existing files** or not.

5 Integrating with UPDC

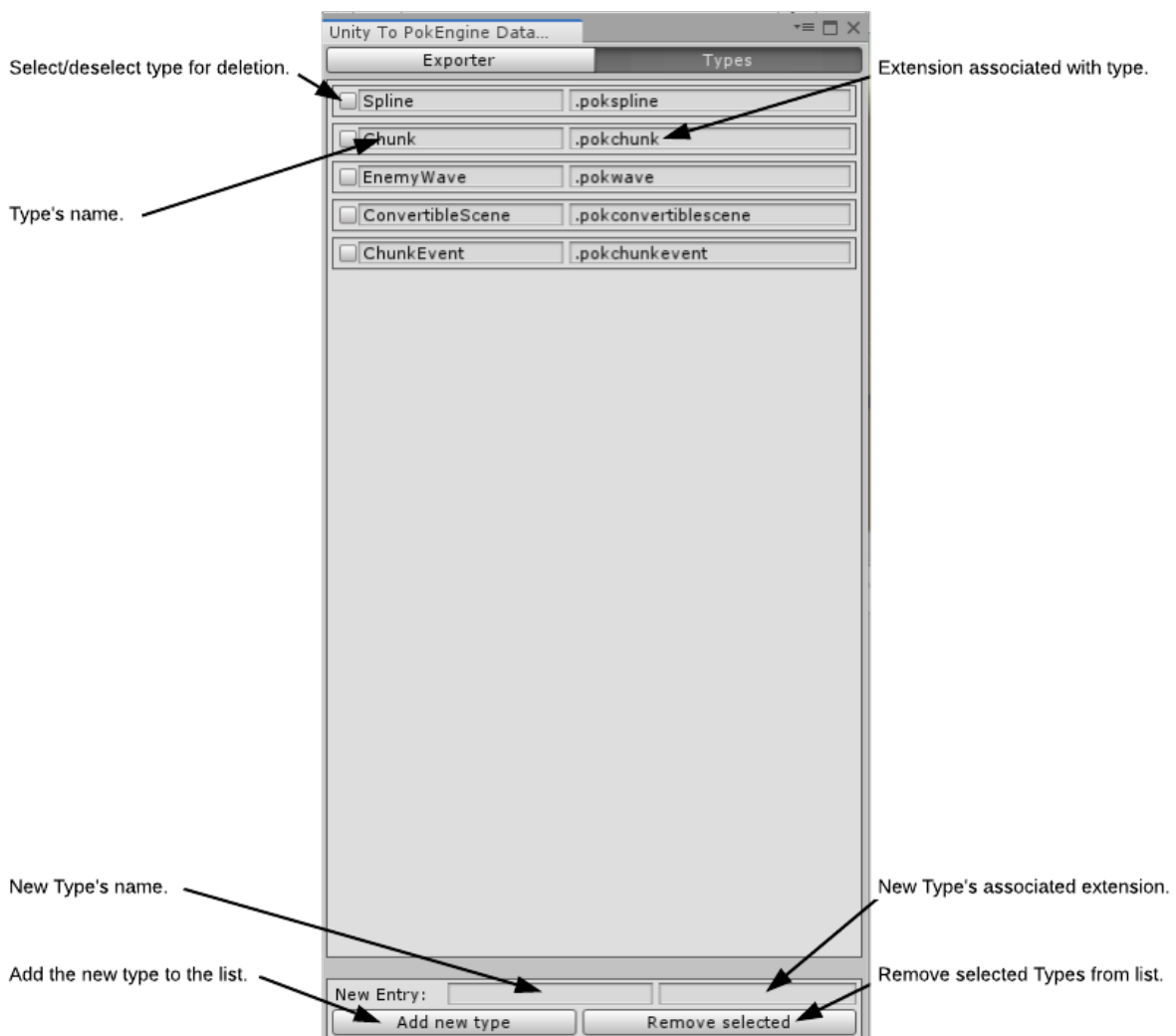
UPDC converts .asset files of types inheriting from the ScriptableObject class.

If you wish to export your data using UPDC, you will therefore need to **create your ScriptableObject inheriting class** as such:

```
1 using UnityEngine;
2
3 public class MyScriptableObject : ScriptableObject
4 {
5     public string someData;
6     public int moreData;
7 }
```

Instances of your ScriptableObject inheriting class will need to be stored in Assets/Data/yourTypeFolder for UPDC to manage them. **This must be done on your side** as UPDC does not provide any automatic way to put your .asset files into their corresponding folders. Next, you will need to **define your new class with UPDC** via the "Types" tab.

6 The Types Tab



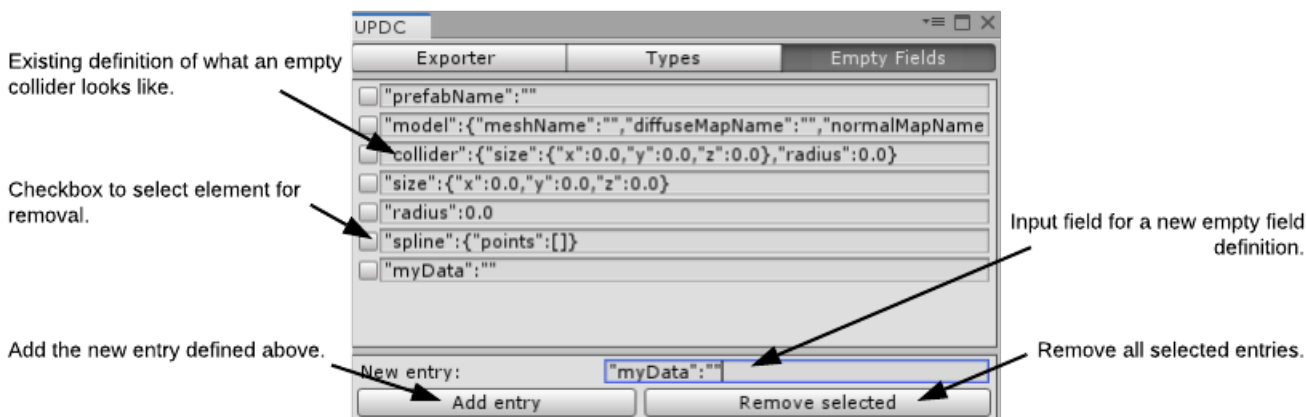
The **Types** tab contains a list of **tuples that define a type's name and its corresponding extension**. The type's name is used for generating appropriately named folders and the extension is appended to the JSONs generated for your custom class to be used by the PokEngine's parser to identify the asset's type. **To integrate your newly created class with UPDC, simply enter it's name and it's extension in the "New entry" fields and press the "Add new type" button.** A folder for your new .asset files will be automatically generated in Assets/Data and the files will be visible in the "Export" tab.

To **remove a type**, simply **select it** in the list and press the **"Remove selected"** button.

7 The Empty Fields Tab

Unity's **JSONUtility** used for exporting ScriptableObject fills **any uninitialized fields** of a ScriptableObject **with default empty values**. This adds a lot of **useless contents in the output JSON file**. **UPDC therefore removes those empty fields** before writing the final version of the JSON to disk.

The **tool does however need to know what an empty field looks like**. If you don't want your JSON file to contain empty fields, **add a new definition of the string to be removed** from the resulting JSON like so:



This results in a JSON file containing only the initialized values like so:

```
1 {
2   "myData":
3   [
4     {"value": 25.458742},
5     {"value": 0},
6     {"value": 0},
7     {"value": 0}
8   ]
9 }
```



```
1 {
2   "myData":
3   [
4     {"value": 25.458742}
5   ]
6 }
```