

# PokScene JSON Format

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Doc git repo: <https://github.com/LoshkinOleg/DocPokScene>

**DISCLAIMER:** Document probably will be modified to accomodate for parent/child relationships between prefabs/prefabs and prefabs/game objects.

## 1 Files location

Currently .pokscene files are located under **"save/Scenes"** instead of AppData. This will need to be addressed at some point since scenes need to be in the Switch as assets.

## 2 Arrays

Arrays are fields that look like **"someField": []**. These are preceded by the **length of the array** with a name of **fieldName + "Count"** like so: **"someFieldCount": 0**.

**WARNING: Array indices begin at 1 instead of 0.** Value of 0 is reserved for the default index that indicates it is not a valid one (ex: game object with "parent": 0 field signifies it has no parent. Game object with "parent: 1" signifies that the game object at the first position in the array is it's parent.).

## 3 Empty or default fields

**Empty or default fields** such as "position": "x":0.0,"y":0.0,"z":0.0 or "parent":0 **are automatically removed upon .pokscene file generation. If you don't find a particular field somewhere, it means it is set to the default value.**

## 4 Overall Format

**The jsons in this documentation are formatted for easy reading.** This will not be the case in the .pokscene file. Needless formatting will be removed.

```
{
  "resources": // Hash - filename pairs for ressources to load.
  {
    ...
  },
  "gameObjectsCount": ... ,
  "gameObjects": // Non prefab game object instances.
  [
    ...
  ],
  "skybox": // Textures used by the skybox in scene.
  {
    ...
  },
  "prefabsCount": ... ,
  "prefabs": // Instances of prefabs in scene.
  [
    ...
  ],
  "chunksCount": ... ,
  "chunks": // Scene's chunks with indices to game objects and prefabs they contain.
  [
    ...
  ],
  "chunkTimeEventsCount": ... ,
  "chunkTimeEvents": // ChunkTimeEvents with indices to chunks.
  [
    ...
  ],
  "chunkTriggerEventsCount": ... ,
  "chunkTriggerEvents": // ChunkTriggerEvents with indices to chunks.
  [
    ...
  ]
}
```

## 5 resources

```
"resources":
{
  "0Count": 1,
  "0": // Enum index corresponding to ResourceType defined in resource_type.h.
  [
    {
      "hash": 68431, // Generated with engine's hasher from the string below.
      "name": someTexture.png"
    }
  ],
  "1Count": 1,
  "1":
  [
    {
      "hash": 68431,
      "name": someMesh.obj"
    }
  ]
}
```

## 6 gameObjects

The first game object shows a game object with only "parent" field removed since it has no parent. The second game object shows one with all fields set to default values except "parent" which is set to the index of the first one. (NOTE: see "Arrays" section of the document as to why indices start at 1 instead of 0.)

```
"gameObjectsCount": 2,
"gameObjects":
[
  { // This is game object at index 1.
    "isActive": true, // Only present if "isActive" is true, else "isActive" is removed
    .
    "transform": // Values are relative to parent.
    {
      "position":
      {
        "x": 50.0, // Default values of 0.0 .
        "y": 50.0,
        "z": 50.0
      },
      "rotation":
      {
        "x": 50.0,
        "y": 50.0,
        "z": 50.0
      },
      "scale":
      {
        "x": 50.0,
        "y": 50.0,
        "z": 50.0
      }
    },
    "model":
    {
      "meshName": 843148, // Hash of the resource located in the "resources" section.
      "diffuseMapName": 32156,
      "normalMapName": 2148435,
      "occlusionMapName": 410216, // Default value of 0.
      "roughness": 1.0, // Default value of 0.0 .
      "diffuseColor":
      {
        "r": 1.0, // Default values of 0.0 .
        "g": 1.0,
        "b": 1.0,
        "a": 1.0
      }
    },
    "spline":
    {
      "pointsCount": 2,
      "points":
      [
        {
          "x": 1.0,
          "y": 25.0,
          "z": 30.0
        },
        {
          "x": 2.0,
          "y": 25.0,
          "z": 30.0
        }
      ]
    }
  },

```

```

    "collider":
    {
        "size":
        {
            "x": 1.0, // Default value of 0.0 .
            "y": 25.0,
            "z": 1.0
        },
        "radius": 35.0 // Default value of 0 .
    },
    {
    {
        "parent": 1
    }
}
]

```

## 7 skybox

A skybox is composed of **6 textures for each face of the skybox**. The order of the textures is left, right, bottom, top, back, front.

```

"skybox":
{
    "left": 555550,
    "right": 555551,
    "bottom": 555552,
    "top": 555553,
    "back": 555554,
    "front": 555555
}

```

## 8 prefabs

**Prefabs are identified with "id" fields.** These correspond to the **"id" value in .pokprefab files** located under **"save/prefabs"**.

NOTE: Currently, prefabs cannot be children. Need to establish if this is a problem.

```
"prefabsCount": 1
```

```
"prefabs":
```

```
[
  { // Prefab at index 1.
    "id": 5, // Might be the id of "Player.pokprefab" for instance. Default value is 0.
    "isActive": true, // Default value is false.
    "transform": // Values are relative to parent.
    {
      "position":
      {
        "x": 50.0, // Default values of 0.0 .
        "y": 50.0,
        "z": 50.0
      },
      "rotation":
      {
        "x": 50.0,
        "y": 50.0,
        "z": 50.0
      },
      "scale":
      {
        "x": 50.0,
        "y": 50.0,
        "z": 50.0
      }
    }
  }
]
```

## 9 chunks

**"gameObjects" and "prefabs" fields are always present, even if empty.** This is because chunks may be empty at the start of a scene until something moves within it's bounds during gameplay (like the player).

"chunksCount": 2

"chunks":

```
[
  { // Chunk at index 1.
    "position":
    {
      "x": 10.0, // Default value of 0.0 .
      "y": 25.0,
      "z": 30.0
    },
    "size":
    {
      "x": 2.0, // Default value of 1.0 .
      "y": 3.0,
      "z": 50.0
    },
    "gameObjects": // ALWAYS PRESENT. Has no default value.
    {
      3, // Index of the game object in "gameObjects" field. Default value of 0.
      25,
      1
    },
    "prefabs": // ALWAYS PRESENT. Has no default value.
    {
      1, // Index of the game object in "prefabs" field. Default value of 0.
      13
    }
  }
]
```

## 10 chunkTimeEvents

```
"chunkTimeEventsCount": 1
"chunkTimeEvents":
[
  { // Event at index 1.
    "time": 34.126, // Default value of -1.0f .
    "toShowCount": 1, // Default value of 0.
    "toShow":
      [
        2 // Index of the chunk to show in "chunks" field.
      ],
    "toActivateCount": 1,
    "toActivate":
      [
        2
      ],
    "toHideCount": 2,
    "toHide":
      [
        1,
        3
      ],
    "toDestroyCount": 1,
    "toDestroy":
      [
        1
      ],
  }
]
```

## 11 chunkTriggerEvents

```
"chunkTriggerEventsCount": 1
"chunkTriggerEvents":
[
  { // Event at index 1.
    "chunk": 2, // Index of the chunk that triggers this event. Default value of 0.
    "toShowCount": 1, // Default value of 0.
    "toShow":
      [
        2 // Index of the chunk to show in "chunks" field.
      ],
    "toActivateCount": 1,
    "toActivate":
      [
        2
      ],
    "toHideCount": 2,
    "toHide":
      [
        1,
        3
      ],
    "toDestroyCount": 1,
    "toDestroy":
      [
        1
      ],
  }
]
```