

ab包遇到的问题：

升级版本之后AB包变大了

两次AB建构不一致

AB包是个黑盒子，不知道里面包含什么

资源跟ab的管理都不好搞

被重复打包

工具： Asset Bundle Graph Tool（资源管理 依赖处理）

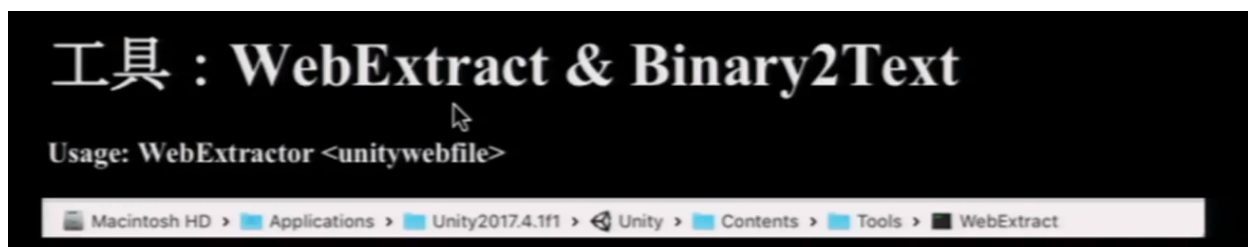
Asset Bundle Browser Tool(显示ab的空余资源)

主要工具：

1. WebExtract（解压ab）

升级版本之后AB包变大了

两次AB建构不一致



Asset Bundles的一些細節

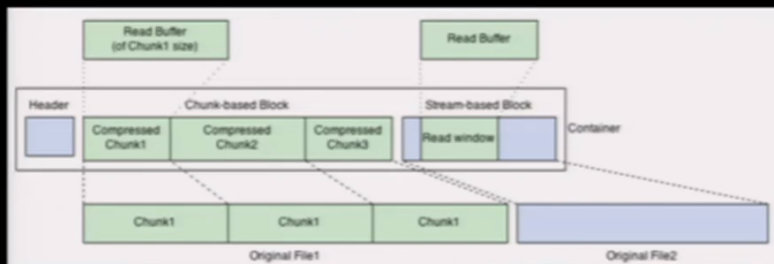
- Directory
 - Scene的AB解開為BuildPlayer-<SceneName>和BuildPlayer-<SceneName>.sharedAssets
 - 普通的AB解開為一個CAB-<GUIDString>的檔
 - BuildPlayer-<SceneName>和CAB-<GUIDString>對應的就是Profiler裏面Others/SerializedFile裏面的名字

Asset Bundles的一些細節

- Header資訊

```
Extracting file 'prefab'...  
version;                               ///< Archive version.  
unityWebBundleVersion;                 ///< Unity bundle version.  
unityWebMinimumRevision;               ///< The minimum required unity revision.  
size;                                  ///< Total size of the compressed archive (header + blocks/directory + data).  
creating folder 'prefab_data'  
All ok!
```

- Blocks (LZ4&LZMA)



2. Binary2Text

工具：WebExtract & Binary2Text

Usage: binary2text inputbinaryfile [outputtextfile] [-detailed] [-largebinaryhashonly] [-hexfloat]

Macintosh HD > Applications > Unity2017.4.1f1 > Unity > Contents > Tools > binary2text

-detailed

-hexfloat

-detailed判断大小 以此判断占用资源，进一步优化

-hexfloat 转float

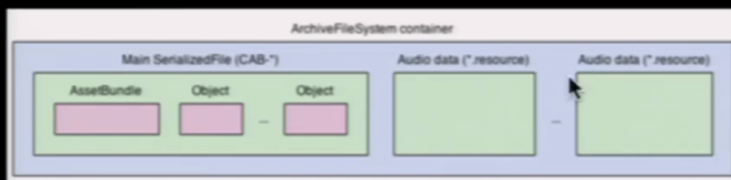
```
01427249]
1: m_GameObject (PPtr<GameObject>) [size: 12, children: 2]
2: m_FileID (int)
3: m_PathID 1541272931482364826 (SInt64)
4: m_Enabled 1 (UInt8)
5: m_Script (PPtr<MonoScript>) [size: 12, children: 2]
6: m_FileID (int)
```

```
m_LocalRotation (Quaternionf)
x 0(0x0) (float)
y 0(0x0) (float)
z 0(0x0) (float)
w 1(0x3f800000) (float)
m_LocalPosition (0(0x0) 0(0x0) 0(0x0))
```

松散的ab 和 场景ab

Asset Bundles的一些細節

普通的AB



場景的AB



1. Asesets是如何重建的?

工具：Asset Bundle Inspector

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

0 references
public class ABInspector : MonoBehaviour
{
    2 references
    public string targetABName = null;
    3 references
    public AssetBundle target = null;

    0 references
    void OnGUI()
    {
        if (GUI.Button(new Rect(0, 0, 100, 100), "Load Target AB"))
        {
            if (target != null)
                target.Unload(true);

            if (!string.IsNullOrEmpty(targetABName))
                target = AssetBundle.LoadFromFile(Application.streamingAssetsPath + "/" + targetABName);
        }
    }
}
```



- SerializedFile是什麼？怎麼那麼大？如何減少呢？
- SerializedFile記錄著重建資源所需的資訊
- Profiler內的SerializedFile的大體組成(Unity 2017.4.1f Mobile & Editor)
 - 14KB File Read Cache
 - (較大)TypeTree
 - (如果存有外部引用)72KB+ External References
 - (較小,但與AB內的Object數量相關)Object map & infos
- BuildAssetBundleOptions. DisableWriteTypeTree
- 後續版本優化External References 到4KB

Asset Bundles的未來

- Addressable Assets & Resource Manager, (可尋址資產系統和資源管理器解析)
- <https://forum.unity.com/threads/addressables-are-here.536304/>

