
Overwatch Highlights

JCM

Apr 13, 2020

Contents

1	Introduction	1
2	Location	3
3	Structure	5
4	Values	7

CHAPTER 1

Introduction

A highlight video file generated by *Overwatch* contains a structure with useful information about the recorded highlight. Anything I have discovered about this structure yet is documented in this file.

CHAPTER 2

Location

The structure is located in the last 315 byte of the MP4 video file. It consists of multiple Base64 encoded strings. This documents only deals with one of those: It start at byte 95 of the previously described buffer and has a length of 128 bytes. The charset encoding the string is UTF-16 with little-endian byte order (StandardCharsets.UTF_16LE in Java). Therefore the string consists of only 64 characters, but has a length of 128 bytes. Before applying the structure described here to it, it obviously has to be decoded using Base64.

CHAPTER 3

Structure

Offset(h)	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00000000	Map								Hero							
00000010	Skin															
00000020									Type							

Note: Every `short` (values consisting of 2 bytes) is in little-endian byte order. You could of course also interpret them as big-endian (as long as you always interpret them as big-endian), but as the values are always lower in little-endian byte order, I've chosen little-endian.

Warning: There are many bytes of which I haven't discovered a use yet. Some of these seem to be constant and some change sometimes.

CHAPTER 4

Values

Possible values for fields shown in the table above are defined in the following Java enumerations:

Field	Java enumeration
Map	<code>de.jcm.overwatch.highlight.Map</code>
Hero	<code>de.jcm.overwatch.highlight.Hero</code>
Type	<code>de.jcm.overwatch.highlight.HighlightType</code>
Skin	Values for skins are not discovered yet.

Warning: Since the whole program is still WIP some enumerations are still incomplete and/or missing. Those have an id of `-1` in Java enumerations.

Note: On first sight it looked like the hero IDs would be ascending by the time the heros where added. But that doesn't seem to be true for every hero: e.g. Tracer is first hero according to Overwatch Wiki, but has ID 2. Also Orisa(318) was added before Doomfist(303), but has higher ID.

Tip: The Java enumerations contain more information than just the id. If you are searching only for the id (short/byte value in structure) simply look at the first constructor argument.

Note: I'm working on completing them, but I sadly don't have enough different highlights. Therefore I'd be very thankful for people sending me the last bytes of their highlights together with a short description of it. contributing
