

LEGO Rock Raiders (PC) Technical Docs

Technical game documentation for LEGO Rock Raiders for Windows.

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LEGO Config

This chapter documents the core game configuration file (LEGO.cfg). To learn more about the CFG file format and similar types, see the [CFG Format](#) page.

Definitions

The LEGO Rock Raiders configuration file (LEGO.cfg) contains several definitions regarding time and measurements for various properties.

Units

There are several different units used in the game for time and distances.

Time Ticks

Time ticks are based on the game's base FPS (Frames Per Second). Each second is equal to the number of game frames per second. Based on the default LEGO Rock Raiders FPS of 25, 25 ticks is equal to 1 second.

Example: $60 \text{ seconds} \times 25 \text{ fps} = 1500 \text{ ticks}$.

Distance

Blocks

Value Types

Integer

(int)

Character Array

(char*) Null terminated string

Boolean

(bool) TRUE/FALSE or YES/NO

Main

The "Main" property block is the first block to appear in the LEGO configuration file. This block contains global properties for the game such as splash screen times, graphics settings, loading screens and credits.

Property	Value	Description	TextureUsage	(uint) size	Memory texture usage. Maximum value is <u>58804224</u> .
CreditsTextFile	(char*) path	Relative file path to the game credits text.			
CreditsBackAVI	(char*) path	Relative file path to the background AVI of the credits.			
LoadScreen	(char*) path	Relative file path to the Loading screen background.			

Property	Value	Description
ShutdownScreen	(char*) path	Relative file path to the Shutdown screen background (not used).
ProgressBar	(char*) path	Relative file path to the stretchable progress bar image.
ProgressWindow	R: (int) x, (int) y, (int) w, (int) h	The position of the progress bar on the load screen.

¹ This property either does not work or is otherwise not used in the release version of the game.

File Formats

This chapter documents various file formats used in LEGO Rock Raiders.

WAD File

The **WAD** (or **WWAD**) file is a container file format which is not compressed¹ or encrypted. It is used to combine multiple files into a single file. Its name was possibly derived from *Where's **All the Data*** similar to that of the game DOOM which uses a similar resource archive of the same name.

Structure

The structure of the WAD file is relatively simple and can be broken down into five sections:

1. Header
2. Relative File Path Index
3. Full File Path Index
4. File Meta Index
5. File Data

Header

CHAR[4] "WWAD" UINT32 File Count

Relative Path Index

CHAR[n] Null terminated string

Full Path Index

CHAR[n] Null terminated string

Meta Index

UINT32 Compression Flag
UINT32 Data Size Uncompressed
UINT32 Data Size Compressed
UINT32 Data Offset

File Data

The File Data section contains the raw file data from all the files added into the WAD file. It remains unchanged from their original sources and can be extracted as-is.

LRR Usage

In LEGO Rock Raiders (Windows) there are 2 WAD resource archives *LegoRR0.wad* & *LegoRR1.wad* It is used to hold game assets such a configuration, images, 3D models and more.

Extraction Tools

Several tools have been developed that support extraction and/or building of WAD files for LEGO Rock Raiders.

- WAD Recycler (*by Cyrem*)
- WAD Refinery (*by Cyrem*)
- Cafeferia (*by Cyrem*)
- WAD CLI Tool (*by ogun*)
- WAD Tool (*by Strider*)

¹ While it appears compression could have been supported, there is no evidence to show it was ever used.