

Game Data File (GDF) Format – Version 5.2

The following describes the general format of version 5.2 of a game data file. You may create higher versions with added features if you wish, but they should be backwards compatible with version 5.2.

GDF 5.2 Environment Name // Magic word, version number and environment name.
// Comments are ignored, as are blank lines

PLACES nPlaces // Place section keyword, followed by an integer number of places, > 0
// By default the first place listed is the starting point for this environment. See also below.

nPlaces
times { ID **lightValue harmfulValue magicValue** long_name_with_spaces // ID is a unique integer,
≥ 2, in the range of a 32-bit signed int
// ID numbers 0 and 1 are reserved
// All ID numbers are non-negative (see below)
// followed by the name of the Place (remainder of line except comments)
ndescr // Number of description lines to follow, an integer > 0
description // ndescr lines of text describing the Place
// **lightValue, harmfulValue, and magicValue are either 0 or 1**
// **Places with a lightValue of 0 need a lamp in the player's inventory to be visible**
// **Places with a harmfulValue of 1 will damage characters in the place**
// **Places with a magicValue of 1 can use magic wands**

DIRECTIONS nDirections // Direction section keyword, followed by a number of directions >0

nDirections
times { ID source direction destination lockPattern
// ID is a unique integer, ≥ 0, in the range of 32-bit signed ints
// source and destination correspond to Place IDs
// A negative destination indicates a locked direction. (Actual destination is positive.)
// Destination 1 exits the program
// Destination 0 leads “nowhere”, and implies the direction is locked and must stay locked
// (Provides for future expansion of the environment)
// direction indicates the direction from source to destination, and must be one of:
// N, S, E, W, U, D, NE, NW, SE, SW,
// NNE, NNW, SSE, SSW, ENE, ESE, WNW, WSW
// lockPattern is a 32-bit int, ≥ 0, indicating the pattern of the lock on this direction
// lockPattern = 0 indicates there is no key that can change this lock status

CHARACTERS nCharacters // Character section keyword, and # of characters, ≥ 0

nCharacters
times { **TYPE** // For now TYPE must be one of “PLAYER” or “NPC”.
PlaceID // PlaceID ≥ 0
// PlaceID > 0 indicates the starting place for this character
// PlaceID = 0 indicates a random starting place for this character
ID long_name_with_spaces // ID is a unique positive integer, > 0
// Additional fields may be added in later versions of the GDF, as you wish.
ndescr // Number of description lines to follow, an integer > 0
description // ndescr lines of text describing the Place

ARTIFACTS nArtifacts // Artifacts section keyword, followed by an integer # of artifacts, ≥ 0

nArtifacts
times:

TYPE // Type must be KEY, LAMP, BOOK, FOOD, MEDICINE, MAGICWAND, GOLDENSKULL, or OTHER

placeOrCharID // Place where this artifact should be put initially.

// < 0 for a character's possessions. (Character ID is the positive value.)

// $= 0$ to put the artifact in a random Place

// > 0 to put the artifact in a specified Place

ID value mobility keyPattern name

// ID is a unique integer, > 0 , in the range of 32-bit signed ints

// value can be used for scoring points, or eventually for bartering & trade (integer)

// mobility is < 0 for immovable objects, ≥ 0 for movable objects (integer)

// keyPattern is a 32-bit int, ≥ 0 . This key operates any item with a matching lockPattern

// keyPattern = 0 opens no locks

// name allows user to refer to this object, and may contain spaces but not tabs

// Additional fields may be added in later versions of the GDF, as you wish.

ndescr // Number of description lines to follow

description // ndescr lines of text describing the Artifact

// The following fields are only present for BOOK artifacts

nText // The number of lines of text in the book

text // nText lines of text (contents of the book)

// OTHER artifacts cannot be meaningfully used, while the remaining types can be used

// Higher versions of the GDF file format may contain additional sections.

// All sections are required, but CHARACTERS and ARTIFACTS may have zero items.