

drpm

Generated by Doxygen 1.8.6

Fri Feb 13 2015 17:50:56



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### 1.1 Data Structures

Here are the data structures with brief descriptions:

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## Chapter 2

# File Index

### 2.1 File List

Here is a list of all documented files with brief descriptions:

<a href="#">drpm.h</a>	.....	??
<b>drpm_private.h</b>	.....	??





## Chapter 3

# Data Structure Documentation

### 3.1 compstrm Struct Reference

#### Data Fields

- char \* **data**
  - size\_t **data\_len**
  - size\_t **data\_pos**
  - int **filedesc**
- 
- int(\* **read\_chunk** )(struct **compstrm** \*)

void(\* **finish** )(struct **compstrm** \*)

The documentation for this struct was generated from the following file:

- drpm\_compstrm.c

### 3.2 drpm Struct Reference

#### Data Fields

- char \* **filename**
- uint32\_t **version**
- uint32\_t **type**
- uint32\_t **comp**
- char \* **sequence**
- char \* **src\_nevr**
- char \* **tgt\_nevr**
- uint32\_t **tgt\_size**
- char **tgt\_md5** [MD5\_BYTES \*2+1]

The documentation for this struct was generated from the following file:

- drpm\_private.h



# Chapter 4

## File Documentation

### 4.1 drpm.h File Reference

#### Macros

##### errors

- `#define DRPM_ERR_OK 0`
- `#define DRPM_ERR_MEMORY 1`
- `#define DRPM_ERR_ARGS 2`
- `#define DRPM_ERR_IO 3`
- `#define DRPM_ERR_FORMAT 4`
- `#define DRPM_ERR_CONFIG 5`
- `#define DRPM_ERR_OTHER 6`

##### delta types

- `#define DRPM_TYPE_STANDARD 0`
- `#define DRPM_TYPE_RPMONLY 1`

##### compression types

- `#define DRPM_COMP_NONE 0`
- `#define DRPM_COMP_GZIP 1`
- `#define DRPM_COMP_BZIP2 2`
- `#define DRPM_COMP_LZMA 3`
- `#define DRPM_COMP_XZ 4`

##### info tags

- `#define DRPM_TAG_FILENAME 0`
- `#define DRPM_TAG_VERSION 1`
- `#define DRPM_TAG_TYPE 2`
- `#define DRPM_TAG_COMP 3`
- `#define DRPM_TAG_SEQUENCE 4`
- `#define DRPM_TAG_SRCNEVR 5`
- `#define DRPM_TAG_TGTNEVR 6`
- `#define DRPM_TAG_TGTSIZE 7`
- `#define DRPM_TAG_TGTMD5 8`

#### Typedefs

- `typedef struct drpm drpm`

## Functions

- int `drpm_destroy` (`drpm **delta`)  
*Frees memory pointed to by `*delta` and sets `*delta` to `NULL`.*
- int `drpm_get_uint` (`drpm *delta`, int tag, unsigned \*target)  
*Fetches information representable as an unsigned integer.*
- int `drpm_get_string` (`drpm *delta`, int tag, char \*\*target)  
*Fetches information representable as a string.*
- int `drpm_read` (`drpm **delta`, const char \*filename)  
*Reads information from a deltarp package `filename` into `*delta`.*

### 4.1.1 Macro Definition Documentation

#### 4.1.1.1 `#define DRPM_COMP_BZIP2 2`

bzip2

#### 4.1.1.2 `#define DRPM_COMP_GZIP 1`

gzip

#### 4.1.1.3 `#define DRPM_COMP_LZMA 3`

lzma

#### 4.1.1.4 `#define DRPM_COMP_NONE 0`

no compression

#### 4.1.1.5 `#define DRPM_COMP_XZ 4`

xz

#### 4.1.1.6 `#define DRPM_ERR_ARGS 2`

bad arguments

#### 4.1.1.7 `#define DRPM_ERR_CONFIG 5`

misconfigured external library

#### 4.1.1.8 `#define DRPM_ERR_FORMAT 4`

wrong file format

#### 4.1.1.9 `#define DRPM_ERR_IO 3`

I/O error

**4.1.1.10 #define DRPM\_ERR\_MEMORY 1**

memory allocation error

**4.1.1.11 #define DRPM\_ERR\_OK 0**

no error

**4.1.1.12 #define DRPM\_ERR\_OTHER 6**

unspecified/unknown error

**4.1.1.13 #define DRPM\_TAG\_COMP 3**

compression type

**4.1.1.14 #define DRPM\_TAG\_FILENAME 0**

file name

**4.1.1.15 #define DRPM\_TAG\_SEQUENCE 4**

sequence

**4.1.1.16 #define DRPM\_TAG\_SRCNEVR 5**

source NEVR (name-epoch:version-release)

**4.1.1.17 #define DRPM\_TAG\_TGTMD5 8**

target MD5

**4.1.1.18 #define DRPM\_TAG\_TGTNEVR 6**

target NEVR (name-epoch:version-release)

**4.1.1.19 #define DRPM\_TAG\_TGTSIZE 7**

target size

**4.1.1.20 #define DRPM\_TAG\_TYPE 2**

delta type

**4.1.1.21 #define DRPM\_TAG\_VERSION 1**

version

#### 4.1.1.22 `#define DRPM_TYPE_RPMONLY 1`

rpm-only deltarpm

#### 4.1.1.23 `#define DRPM_TYPE_STANDARD 0`

standard deltarpm

### 4.1.2 Typedef Documentation

#### 4.1.2.1 typedef struct drpm drpm

abstract data type of deltarpm structure

### 4.1.3 Function Documentation

#### 4.1.3.1 `int drpm_destroy ( drpm ** delta )`

Frees memory pointed to by *\*delta* and sets *\*delta* to NULL.

Example of usage:

```
int error = drpm_destroy(&delta);
if (error != DRPM_ERR_OK)
    return error;
```

##### Parameters

out	<i>delta</i>	deltarpm that is to be freed
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##### Returns

error number

##### Warning

Must be preceded by call to [drpm\\_read\(\)](#).

#### 4.1.3.2 `int drpm_get_string ( drpm * delta, int tag, char ** target )`

Fetches information representable as a string.

Fetches string-type information identified by *tag* from *delta*, copies it to space previously allocated by the function itself and saves the adress to *\*target*.

Example of usage:

```
char *tgt_nevr;
int error = drpm_get_string(delta, DRPM_TAG_TGTNEVR, &tgt_nevr);
if (error != DRPM_ERR_OK)
    return error;
printf("Target NEVR: %s\n", tgt_nevr);
free(tgt_nevr);
```

## Parameters

in	<i>delta</i>	deltarpm containing required info
in	<i>tag</i>	symbolic value identifying which info is required
out	<i>target</i>	tagged info will be copied here

## Returns

error number

## Note

\*target should be freed manually by the user when no longer needed.

## Warning

Must be preceded by call to [drpm\\_read\(\)](#).

#### 4.1.3.3 int drpm\_get\_uint ( drpm \* delta, int tag, unsigned \* target )

Fetches information representable as an unsigned integer.

Fetches information identified by tag from delta and copies it to adress pointed to by target.

Example of usage:

```
unsigned type;
int error = drpm_get_uint(delta, DRPM_TAG_TYPE, &type);
if (error != DRPM_ERR_OK)
    return error;
printf("This is a %s deltarpm\n", comp_type == DRPM_TYPE_STANDARD ? "standard" : "
    rpm-only");
```

## Parameters

in	<i>delta</i>	deltarpm containing required info
in	<i>tag</i>	symbolic value identifying which info is required
out	<i>target</i>	tagged info will be copied here

## Returns

error number

## Warning

Must be preceded by call to [drpm\\_read\(\)](#).

#### 4.1.3.4 int drpm\_read ( drpm \*\* delta, const char \* filename )

Reads information from a deltarpm package filename into \*delta.

Example of usage:

```
drpm *delta;
int error = drpm_read(&delta, argv[1]);
if (error != DRPM_ERR_OK)
    return error;
```

**Parameters**

out	<i>delta</i>	deltarpm to be filled with info
in	<i>filename</i>	name of deltarpm file whose data is to be read

**Returns**

error number

**Note**

Memory allocated by calling [drpm\\_read\(\)](#) should later be freed by calling [drpm\\_destroy\(\)](#).