

NAME

g_read_data, **g_write_data** - read/write data from/to GEOM consumer

SYNOPSIS

```
#include <geom/geom.h>
```

```
void *
```

```
g_read_data(struct g_consumer *cp, off_t offset, off_t length, int *error);
```

```
int
```

```
g_write_data(struct g_consumer *cp, off_t offset, void *ptr, off_t length);
```

DESCRIPTION

The **g_read_data()** function reads *length* bytes of data from the provider attached to consumer *cp*, starting at offset *offset*. The buffer returned from **g_read_data()** is allocated with **g_malloc()**, so it should be freed by the caller with **g_free()** after use. If the operation fails, an error value will be stored in the *error* argument if it is not NULL.

The **g_write_data()** function writes *length* bytes of data from the buffer pointed to by *ptr* to the provider attached to consumer *cp*, starting at offset *offset*.

RESTRICTIONS/CONDITIONS

The *length* argument should be a multiple of the provider's sectorsize and less than or equal to DFLTPHYS (DFLTPHYS is defined in *<sys/param.h>*).

The topology lock must not be held.

RETURN VALUES

The **g_read_data()** function returns a pointer to a data buffer or NULL if an error occurred. In that case an error value is stored in the *error* argument unless it is NULL.

The **g_write_data()** function returns 0 if successful; otherwise an error code is returned.

ERRORS

Possible errors:

[EIO] An I/O error occurred while reading from or writing to the consumer.

[EINTEGRITY] Corrupted data was detected while reading from the consumer.

SEE ALSO

geom(4), DECLARE_GEOM_CLASS(9), g_access(9), g_attach(9), g_bio(9), g_consumer(9), g_event(9), g_geom(9), g_provider(9), g_provider_by_name(9), g_wither_geom(9)

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