

GETPAGESIZES(3)

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**NAME**

getpagesizes - Get the system supported huge page sizes

**SYNOPSIS**

```
#include <hugetlbfs.h>
```

```
int getpagesizes(long pagesizes[], int n_elem);
```

**DESCRIPTION**

The `getpagesizes()` function returns either the number of system supported page sizes or the sizes themselves. If **pagesizes** is `NULL` and **n\_elem** is 0, then the number of pages the system supports is returned. Otherwise, **pagesizes** is filled with at most **n\_elem** page sizes.

**RETURN VALUE**

On success, either the number of page sizes supported by the system or the number of page sizes stored in **pagesizes** is returned. On failure, -1 is returned and `errno` is set appropriately.

**ERRORS****EINVAL**

**n\_elem** is less than zero or **n\_elem** is greater than zero and **pagesizes** is `NULL`.

Also see `opendir(3)` for other possible values for `errno`. This error occurs when the `sysfs` directory exists but cannot be opened.

**NOTES**

This call will return all page sizes as reported by the kernel. Not all of these sizes may be usable by the programmer since mount points may not be available for the huge page sizes. To test whether a size will be usable by **libhugetlbfs**, `hugetlbfs_find_path_for_size()` can be called on a specific size to see if a mount point is configured.

**SEE ALSO**

*oprofile(1)*, *opendir(3)*, *gethugepagesizes(3)*, *libhugetlbfs(7)*

**AUTHORS**

`libhugetlbfs` was written by various people on the `libhugetlbfs-devel` mailing list.

