ioctls CEC_ADAP_G_PHYS_ADDR and CEC_ADAP_S_PHYS_ADDR

> **System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst`, line 2)**
>
> Unknown directive type "c:namespace".
>
> ```
>     .. c:namespace:: CEC
> ```

Name

CEC_ADAP_G_PHYS_ADDR, CEC_ADAP_S_PHYS_ADDR - Get or set the physical address

Synopsis

> **System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst`, line 20)**
>
> Unknown directive type "c:macro".
>
> ```
>     .. c:macro:: CEC_ADAP_G_PHYS_ADDR
> ```

```
int ioctl(int fd, CEC_ADAP_G_PHYS_ADDR, __u16 *argp)
```

> **System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst`, line 24)**
>
> Unknown directive type "c:macro".
>
> ```
>     .. c:macro:: CEC_ADAP_S_PHYS_ADDR
> ```

```
int ioctl(int fd, CEC_ADAP_S_PHYS_ADDR, __u16 *argp)
```

Arguments

fd

> File descriptor returned by :c:func:`open()`.
>
> > **System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst`, line 32); *backlink***
> >
> > Unknown interpreted text role "c:func".

argp

> Pointer to the CEC address.

Description

To query the current physical address applications call :ref:`ioctl CEC_ADAP_G_PHYS_ADDR <CEC_ADAP_G_PHYS_ADDR>` with a pointer to a __u16 where the driver stores the physical address.

> **System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst`, line 40); *backlink***

Unknown interpreted text role "ref".

To set a new physical address applications store the physical address in a __u16 and call :ref:`ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` with a pointer to this integer. The :ref:`ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` is only available if CEC_CAP_PHYS_ADDR is set (the ENOTTY error code will be returned otherwise). The :ref:`ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` can only be called by a file descriptor in initiator mode (see :ref:`CEC_S_MODE`), if not the EBUSY error code will be returned.

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 44); backlink`
>
> Unknown interpreted text role "ref".

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 44); backlink`
>
> Unknown interpreted text role "ref".

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 44); backlink`
>
> Unknown interpreted text role "ref".

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 44); backlink`
>
> Unknown interpreted text role "ref".

To clear an existing physical address use CEC_PHYS_ADDR_INVALID. The adapter will go to the unconfigured state.

If logical address types have been defined (see :ref:`ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>`), then this ioctl will block until all requested logical addresses have been claimed. If the file descriptor is in non-blocking mode then it will not wait for the logical addresses to be claimed, instead it just returns 0.

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 55); backlink`
>
> Unknown interpreted text role "ref".

A :ref:`CEC_EVENT_STATE_CHANGE <CEC-EVENT-STATE-CHANGE>` event is sent when the physical address changes.

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 60); backlink`
>
> Unknown interpreted text role "ref".

The physical address is a 16-bit number where each group of 4 bits represent a digit of the physical address a.b.c.d where the most significant 4 bits represent 'a'. The CEC root device (usually the TV) has address 0.0.0.0. Every device that is hooked up to an input of the TV has address a.0.0.0 (where 'a' is ≥ 1), devices hooked up to those in turn have addresses a.b.0.0, etc. So a topology of up to 5 devices deep is supported. The physical address a device shall use is stored in the EDID of the sink.

For example, the EDID for each HDMI input of the TV will have a different physical address of the form a.0.0.0 that the sources will read out and use as their physical address.

Return Value

On success 0 is returned, on error -1 and the errno variable is set appropriately. The generic error codes are described at the :ref:`Generic Error Codes <gen-errors>` chapter.

> **System Message: ERROR/3** (`D:\onboarding-resources\sample-onboarding-resources\linux-`

master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 79); *backlink*

Unknown interpreted text role "ref".

The :ref:`ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>` can return the following error codes:

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\userspace-api\media\cec\[linux-master][Documentation][userspace-api][media][cec]cec-ioc-adap-g-phys-addr.rst, line 83); *backlink*

Unknown interpreted text role "ref".

ENOTTY
> The `CEC_CAP_PHYS_ADDR` capability wasn't set, so this ioctl is not supported.

EBUSY
> Another filehandle is in exclusive follower or initiator mode, or the filehandle is in mode `CEC_MODE_NO_INITIATOR`.

EINVAL
> The physical address is malformed.