

ioctl CEC_ADAP_G_CAPS

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-caps.rst, line 2)

Unknown directive type "c:namespace".

.. c:namespace:: CEC

Name

CEC_ADAP_G_CAPS - Query device capabilities

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-caps.rst, line 18)

Unknown directive type "c:macro".

.. c:macro:: CEC_ADAP_G_CAPS

```
int ioctl(int fd, CEC_ADAP_G_CAPS, struct cec_caps *argp)
```

Arguments

fd

File descriptor returned by `c:func:open()`.

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Unknown interpreted text role "c:func".

argp

Description

All cec devices must support `ref:ioctl CEC_ADAP_G_CAPS <CEC_ADAP_G_CAPS>`. To query device information, applications call the ioctl with a pointer to a struct `c:type:cec_caps`. The driver fills the structure and returns the information to the application. The ioctl never fails.

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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-caps.rst, line 33); [backlink](#)

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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-caps.rst, line 38)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{1.2cm}|p{2.5cm}|p{13.6cm}|
```

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-caps.rst, line 40)

Unknown directive type "c.type".

```
.. c:type:: cec_caps
```

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Unknown directive type "flat-table".

```
.. flat-table:: struct cec_caps
  :header-rows: 0
  :stub-columns: 0
  :widths:      1 1 16

  * - char
    - ``driver[32]``
    - The name of the cec adapter driver.
  * - char
    - ``name[32]``
    - The name of this CEC adapter. The combination ``driver`` and
      ``name`` must be unique.
  * - _u32
    - ``available_log_addrs``
    - The maximum number of logical addresses that can be configured.
  * - _u32
    - ``capabilities``
    - The capabilities of the CEC adapter, see
      :ref:`cec-capabilities`.
  * - _u32
    - ``version``
    - CEC Framework API version, formatted with the ``KERNEL_VERSION()``
      macro.
```

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Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{4.4cm}|p{2.5cm}|p{10.4cm}|
```

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-caps.rst, line 70)

Unknown directive type "flat-table".

```
.. flat-table:: CEC Capabilities Flags
  :header-rows: 0
  :stub-columns: 0
  :widths:      3 1 8

  * .. _`CEC-CAP-PHYS-ADDR`:
    - ``CEC_CAP_PHYS_ADDR``
    - 0x00000001
    - Userspace has to configure the physical address by calling
      :ref:`ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>`. If
      this capability isn't set, then setting the physical address is
      handled by the kernel whenever the EDID is set (for an HDMI
      receiver) or read (for an HDMI transmitter).
  * .. _`CEC-CAP-LOG-ADDRES`:
    - ``CEC_CAP_LOG_ADDRS``
    - 0x00000002
```

```

- Userspace has to configure the logical addresses by calling
:ref:`ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>`. If
this capability isn't set, then the kernel will have configured
this.
* .. _`CEC-CAP-TRANSMIT`:

- ``CEC_CAP_TRANSMIT``
- 0x00000004
- Userspace can transmit CEC messages by calling
:ref:`ioctl CEC_TRANSMIT <CEC_TRANSMIT>`. This implies that
userspace can be a follower as well, since being able to transmit
messages is a prerequisite of becoming a follower. If this
capability isn't set, then the kernel will handle all CEC
transmits and process all CEC messages it receives.
* .. _`CEC-CAP-PASSTHROUGH`:

- ``CEC_CAP_PASSTHROUGH``
- 0x00000008
- Userspace can use the passthrough mode by calling
:ref:`ioctl CEC_S_MODE <CEC_S_MODE>`.
* .. _`CEC-CAP-RC`:

- ``CEC_CAP_RC``
- 0x00000010
- This adapter supports the remote control protocol.
* .. _`CEC-CAP-MONITOR-ALL`:

- ``CEC_CAP_MONITOR_ALL``
- 0x00000020
- The CEC hardware can monitor all messages, not just directed and
broadcast messages.
* .. _`CEC-CAP-NEEDS-HPD`:

- ``CEC_CAP_NEEDS_HPD``
- 0x00000040
- The CEC hardware is only active if the HDMI Hotplug Detect pin is
high. This makes it impossible to use CEC to wake up displays that
set the HPD pin low when in standby mode, but keep the CEC bus
alive.
* .. _`CEC-CAP-MONITOR-PIN`:

- ``CEC_CAP_MONITOR_PIN``
- 0x00000080
- The CEC hardware can monitor CEC pin changes from low to high voltage
and vice versa. When in pin monitoring mode the application will
receive ``CEC_EVENT_PIN_CEC_LOW`` and ``CEC_EVENT_PIN_CEC_HIGH`` events.
* .. _`CEC-CAP-CONNECTOR-INFO`:

- ``CEC_CAP_CONNECTOR_INFO``
- 0x00000100
- If this capability is set, then :ref:`CEC_ADAP_G_CONNECTOR_INFO` can
be used.

```

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.

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