ioctls CEC_ADAP_G_LOG_ADDRS and CEC_ADAP_S_LOG_ADDRS

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-log-addrs.rst, line 2)

Unknown directive type "c:namespace".

```
.. c:namespace:: CEC
```

Name

CEC_ADAP_G_LOG_ADDRS, CEC_ADAP_S_LOG_ADDRS - Get or set the logical addresses

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-log-addrs.rst, line 20)

Unknown directive type "c:macro".

```
.. c:macro:: CEC_ADAP_G_LOG_ADDRS
```

```
int ioctl(int fd, CEC_ADAP_G_LOG_ADDRS, struct cec_log_addrs *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-log-addrs.rst, line 24)

Unknown directive type "c:macro".

```
.. c:macro:: CEC_ADAP_S_LOG_ADDRS
```

```
int ioctl(int fd, CEC_ADAP_S_LOG_ADDRS, struct cec_log_addrs *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-log-addrs.rst, line 32); *backlink*

Unknown interpreted text role "c:func".

`argp`

Pointer to struct :c:type:`cec_log_addrs`.

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-log-addrs.rst, line 35); *backlink*

Unknown interpreted text role "c:type".

Description

To query the current CEC logical addresses, applications call :ref:`ioctl CEC_ADAP_G_LOG_ADDRS

<CEC_ADAP_G_LOG_ADDRS>` with a pointer to a struct :c:type:`cec_log_addrs` where the driver stores the logical addresses.

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-log-addrs.rst`, line 40); *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-log-addrs.rst`, line 40); *backlink*

Unknown interpreted text role "c:type".

To set new logical addresses, applications fill in struct :c:type:`cec_log_addrs` and call :ref:`ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>` with a pointer to this struct. The :ref:`ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>` is only available if `CEC_CAP_LOG_ADDRS` is set (the `ENOTTY` error code is returned otherwise). The :ref:`ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>` 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-log-addrs.rst`, line 44); *backlink*

Unknown interpreted text role "c:type".

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-log-addrs.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-log-addrs.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-log-addrs.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-log-addrs.rst`, line 44); *backlink*

Unknown interpreted text role "ref".

To clear existing logical addresses set `num_log_addrs` to 0. All other fields will be ignored in that case. The adapter will go to the unconfigured state and the `cec_version`, `vendor_id` and `osd_name` fields are all reset to their default values (CEC version 2.0, no vendor ID and an empty OSD name).

If the physical address is valid (see :ref:`ioctl CEC_ADAP_S_PHYS_ADDR <CEC_ADAP_S_PHYS_ADDR>`), 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-log-addrs.rst`, line 57); *backlink*

Unknown interpreted text role "ref".

A :ref:`CEC_EVENT_STATE_CHANGE <CEC-EVENT-STATE-CHANGE>` event is sent when the logical addresses are claimed or cleared.

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-log-addrs.rst, line 62); *backlink*

Unknown interpreted text role "ref".

Attempting to call :ref:`ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>` when logical address types are already defined will return with error EBUSY.

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-log-addrs.rst, line 65); *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-log-addrs.rst, line 68)

Unknown directive type "c:type".

```
.. c:type:: cec_log_addrs
```

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-log-addrs.rst, line 70)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{1.0cm}|p{8.0cm}|p{8.0cm}|
```

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-log-addrs.rst, line 72)

Unknown directive type "cssclass".

```
.. cssclass:: longtable
```

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-log-addrs.rst, line 74)

Unknown directive type "flat-table".

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

    * - __u8
      - ``log_addr[CEC_MAX_LOG_ADDRS]``
      - The actual logical addresses that were claimed. This is set by the
        driver. If no logical address could be claimed, then it is set to
        ``CEC_LOG_ADDR_INVALID``. If this adapter is Unregistered, then
        ``log_addr[0]`` is set to 0xf and all others to
        ``CEC_LOG_ADDR_INVALID``.
    * - __u16
      - ``log_addr_mask``
      - The bitmask of all logical addresses this adapter has claimed. If
        this adapter is Unregistered then ``log_addr_mask`` sets bit 15
        and clears all other bits. If this adapter is not configured at
        all, then ``log_addr_mask`` is set to 0. Set by the driver.
    * - __u8
      - ``cec_version``
      - The CEC version that this adapter shall use. See
        :ref:`cec-versions`. Used to implement the
        ``CEC_MSG_CEC_VERSION`` and ``CEC_MSG_REPORT_FEATURES`` messages.
        Note that :ref:`CEC_OP_CEC_VERSION_1_3A <CEC-OP-CEC-VERSION-1-3A>` is not allowed by the CE
        framework.
    * - __u8
      - ``num_log_addrs``
```

```
      - Number of logical addresses to set up. Must be â‰¤
        ``available_log_addrs`` as returned by
        :ref:`CEC_ADAP_G_CAPS`. All arrays in
        this structure are only filled up to index
        ``available_log_addrs``-1. The remaining array elements will be
        ignored. Note that the CEC 2.0 standard allows for a maximum of 2
        logical addresses, although some hardware has support for more.
        ``CEC_MAX_LOG_ADDRS`` is 4. The driver will return the actual
        number of logical addresses it could claim, which may be less than
        what was requested. If this field is set to 0, then the CEC
        adapter shall clear all claimed logical addresses and all other
        fields will be ignored.
    * - __u32
      - ``vendor_id``
      - The vendor ID is a 24-bit number that identifies the specific
        vendor or entity. Based on this ID vendor specific commands may be
        defined. If you do not want a vendor ID then set it to
        ``CEC_VENDOR_ID_NONE``.
    * - __u32
      - ``flags``
      - Flags. See :ref:`cec-log-addrs-flags` for a list of available flags.
    * - char
      - ``osd_name[15]``
      - The On-Screen Display name as is returned by the
        ``CEC_MSG_SET_OSD_NAME`` message.
    * - __u8
      - ``primary_device_type[CEC_MAX_LOG_ADDRS]``
      - Primary device type for each logical address. See
        :ref:`cec-prim-dev-types` for possible types.
    * - __u8
      - ``log_addr_type[CEC_MAX_LOG_ADDRS]``
      - Logical address types. See :ref:`cec-log-addr-types` for
        possible types. The driver will update this with the actual
        logical address type that it claimed (e.g. it may have to fallback
        to :ref:`CEC_LOG_ADDR_TYPE_UNREGISTERED <CEC-LOG-ADDR-TYPE-UNREGISTERED>`).
    * - __u8
      - ``all_device_types[CEC_MAX_LOG_ADDRS]``
      - CEC 2.0 specific: the bit mask of all device types. See
        :ref:`cec-all-dev-types-flags`. It is used in the CEC 2.0
        ``CEC_MSG_REPORT_FEATURES`` message. For CEC 1.4 you can either leave
        this field to 0, or fill it in according to the CEC 2.0 guidelines to
        give the CEC framework more information about the device type, even
        though the framework won't use it directly in the CEC message.
    * - __u8
      - ``features[CEC_MAX_LOG_ADDRS][12]``
      - Features for each logical address. It is used in the CEC 2.0
        ``CEC_MSG_REPORT_FEATURES`` message. The 12 bytes include both the
        RC Profile and the Device Features. For CEC 1.4 you can either leave
        this field to all 0, or fill it in according to the CEC 2.0 guidelines to
        give the CEC framework more information about the device type, even
        though the framework won't use it directly in the CEC message.
```

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-log-addrs.rst, line 153)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{7.8cm}|p{1.0cm}|p{8.5cm}|
```

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-log-addrs.rst, line 157)

Unknown directive type "flat-table".

```
.. flat-table:: Flags for struct cec_log_addrs
    :header-rows:  0
    :stub-columns: 0
    :widths:       3 1 4

    * .. _`CEC-LOG-ADDRS-FL-ALLOW-UNREG-FALLBACK`:

      - ``CEC_LOG_ADDRS_FL_ALLOW_UNREG_FALLBACK``
      - 1
      - By default if no logical address of the requested type can be claimed, then
        it will go back to the unconfigured state. If this flag is set, then it will
        fallback to the Unregistered logical address. Note that if the Unregistered
        logical address was explicitly requested, then this flag has no effect.
```

```
    * .. _`CEC-LOG-ADDRS-FL-ALLOW-RC-PASSTHRU`:

      - ``CEC_LOG_ADDRS_FL_ALLOW_RC_PASSTHRU``
      - 2
      - By default the ``CEC_MSG_USER_CONTROL_PRESSED`` and ``CEC_MSG_USER_CONTROL_RELEASED``
        messages are only passed on to the follower(s), if any. If this flag is set,
        then these messages are also passed on to the remote control input subsystem
        and will appear as keystrokes. This features needs to be enabled explicitly.
        If CEC is used to enter e.g. passwords, then you may not want to enable this
        to avoid trivial snooping of the keystrokes.
    * .. _`CEC-LOG-ADDRS-FL-CDC-ONLY`:

      - ``CEC_LOG_ADDRS_FL_CDC_ONLY``
      - 4
      - If this flag is set, then the device is CDC-Only. CDC-Only CEC devices
        are CEC devices that can only handle CDC messages.

        All other messages are ignored.
```

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-log-addrs.rst, line 189)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{7.8cm}|p{1.0cm}|p{8.5cm}|
```

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-log-addrs.rst, line 193)

Unknown directive type "flat-table".

```
.. flat-table:: CEC Versions
    :header-rows:  0
    :stub-columns: 0
    :widths:       3 1 4

    * .. _`CEC-OP-CEC-VERSION-1-3A`:

      - ``CEC_OP_CEC_VERSION_1_3A``
      - 4
      - CEC version according to the HDMI 1.3a standard.
    * .. _`CEC-OP-CEC-VERSION-1-4B`:

      - ``CEC_OP_CEC_VERSION_1_4B``
      - 5
      - CEC version according to the HDMI 1.4b standard.
    * .. _`CEC-OP-CEC-VERSION-2-0`:

      - ``CEC_OP_CEC_VERSION_2_0``
      - 6
      - CEC version according to the HDMI 2.0 standard.
```

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-log-addrs.rst, line 214)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{6.6cm}|p{2.2cm}|p{8.5cm}|
```

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-log-addrs.rst, line 218)

Unknown directive type "flat-table".

```
.. flat-table:: CEC Primary Device Types
    :header-rows:  0
    :stub-columns: 0
    :widths:       3 1 4

    * .. _`CEC-OP-PRIM-DEVTYPE-TV`:
```

```
  - ``CEC_OP_PRIM_DEVTYPE_TV``
  - 0
  - Use for a TV.
* .. _`CEC-OP-PRIM-DEVTYPE-RECORD`:

  - ``CEC_OP_PRIM_DEVTYPE_RECORD``
  - 1
  - Use for a recording device.
* .. _`CEC-OP-PRIM-DEVTYPE-TUNER`:

  - ``CEC_OP_PRIM_DEVTYPE_TUNER``
  - 3
  - Use for a device with a tuner.
* .. _`CEC-OP-PRIM-DEVTYPE-PLAYBACK`:

  - ``CEC_OP_PRIM_DEVTYPE_PLAYBACK``
  - 4
  - Use for a playback device.
* .. _`CEC-OP-PRIM-DEVTYPE-AUDIOSYSTEM`:

  - ``CEC_OP_PRIM_DEVTYPE_AUDIOSYSTEM``
  - 5
  - Use for an audio system (e.g. an audio/video receiver).
* .. _`CEC-OP-PRIM-DEVTYPE-SWITCH`:

  - ``CEC_OP_PRIM_DEVTYPE_SWITCH``
  - 6
  - Use for a CEC switch.
* .. _`CEC-OP-PRIM-DEVTYPE-VIDEOPROC`:

  - ``CEC_OP_PRIM_DEVTYPE_VIDEOPROC``
  - 7
  - Use for a video processor device.
```

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-log-addrs.rst, line 259)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{6.6cm}|p{2.2cm}|p{8.5cm}|
```

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-log-addrs.rst, line 263)

Unknown directive type "flat-table".

```
.. flat-table:: CEC Logical Address Types
    :header-rows:  0
    :stub-columns: 0
    :widths:       3 1 16

    * .. _`CEC-LOG-ADDR-TYPE-TV`:

      - ``CEC_LOG_ADDR_TYPE_TV``
      - 0
      - Use for a TV.
    * .. _`CEC-LOG-ADDR-TYPE-RECORD`:

      - ``CEC_LOG_ADDR_TYPE_RECORD``
      - 1
      - Use for a recording device.
    * .. _`CEC-LOG-ADDR-TYPE-TUNER`:

      - ``CEC_LOG_ADDR_TYPE_TUNER``
      - 2
      - Use for a tuner device.
    * .. _`CEC-LOG-ADDR-TYPE-PLAYBACK`:

      - ``CEC_LOG_ADDR_TYPE_PLAYBACK``
      - 3
      - Use for a playback device.
    * .. _`CEC-LOG-ADDR-TYPE-AUDIOSYSTEM`:

      - ``CEC_LOG_ADDR_TYPE_AUDIOSYSTEM``
      - 4
      - Use for an audio system device.
    * .. _`CEC-LOG-ADDR-TYPE-SPECIFIC`:
```

```
  - ``CEC_LOG_ADDR_TYPE_SPECIFIC``
  - 5
  - Use for a second TV or for a video processor device.
* .. _`CEC-LOG-ADDR-TYPE-UNREGISTERED`:

  - ``CEC_LOG_ADDR_TYPE_UNREGISTERED``
  - 6
  - Use this if you just want to remain unregistered. Used for pure
    CEC switches or CDC-only devices (CDC: Capability Discovery and
    Control).
```

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-log-addrs.rst, line 307)

Unknown directive type "tabularcolumns".

```
.. tabularcolumns:: |p{6.6cm}|p{2.2cm}|p{8.5cm}|
```

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-log-addrs.rst, line 311)

Unknown directive type "flat-table".

```
.. flat-table:: CEC All Device Types Flags
    :header-rows:  0
    :stub-columns: 0
    :widths:       3 1 4

    * .. _`CEC-OP-ALL-DEVTYPE-TV`:

      - ``CEC_OP_ALL_DEVTYPE_TV``
      - 0x80
      - This supports the TV type.
    * .. _`CEC-OP-ALL-DEVTYPE-RECORD`:

      - ``CEC_OP_ALL_DEVTYPE_RECORD``
      - 0x40
      - This supports the Recording type.
    * .. _`CEC-OP-ALL-DEVTYPE-TUNER`:

      - ``CEC_OP_ALL_DEVTYPE_TUNER``
      - 0x20
      - This supports the Tuner type.
    * .. _`CEC-OP-ALL-DEVTYPE-PLAYBACK`:

      - ``CEC_OP_ALL_DEVTYPE_PLAYBACK``
      - 0x10
      - This supports the Playback type.
    * .. _`CEC-OP-ALL-DEVTYPE-AUDIOSYSTEM`:

      - ``CEC_OP_ALL_DEVTYPE_AUDIOSYSTEM``
      - 0x08
      - This supports the Audio System type.
    * .. _`CEC-OP-ALL-DEVTYPE-SWITCH`:

      - ``CEC_OP_ALL_DEVTYPE_SWITCH``
      - 0x04
      - This supports the CEC Switch or Video Processing type.
```

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-log-addrs.rst, line 351); *backlink*

Unknown interpreted text role "ref".

The :ref:`ioctl CEC_ADAP_S_LOG_ADDRS <CEC_ADAP_S_LOG_ADDRS>` 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-log-addrs.rst, line 355); *backlink*

Unknown interpreted text role "ref".

ENOTTY

The `CEC_CAP_LOG_ADDRS` capability wasn't set, so this ioctl is not supported.

EBUSY

The CEC adapter is currently configuring itself, or it is already configured and `num_log_addrs` is non-zero, or another filehandle is in exclusive follower or initiator mode, or the filehandle is in mode `CEC_MODE_NO_INITIATOR`.

EINVAL

The contents of struct :c:type:`cec_log_addrs` is invalid.

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-log-addrs.rst, line 367); *backlink*

Unknown interpreted text role "c:type".