

Application Priority

When multiple applications share a device it may be desirable to assign them different priorities. Contrary to the traditional "rm -rf/" school of thought, a video recording application could for example block other applications from changing video controls or switching the current TV channel. Another objective is to permit low priority applications working in background, which can be preempted by user controlled applications and automatically regain control of the device at a later time.

Since these features cannot be implemented entirely in user space V4L2 defines the [ref`VIDIOC_G_PRIORITY`](#) `<VIDIOC_G_PRIORITY>` and [ref`VIDIOC_S_PRIORITY`](#) `<VIDIOC_G_PRIORITY>` ioctls to request and query the access priority associate with a file descriptor. Opening a device assigns a medium priority, compatible with earlier versions of V4L2 and drivers not supporting these ioctls. Applications requiring a different priority will usually call [ref`VIDIOC_S_PRIORITY`](#) `<VIDIOC_G_PRIORITY>` after verifying the device with the [ref`VIDIOC_QUERYCAP`](#) ioctl.

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Ioctls changing driver properties, such as [ref`VIDIOC_S_INPUT`](#) `<VIDIOC_G_INPUT>`, return an `EBUSY` error code after another application obtained higher priority.

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