

HID Device Report Flow

Winedevice Process

Winebus device report thread

Platform generates a device report

Common hid bus device code receives report and sends it to pending IOCTLS

Point of Pain

Pending IOCTL_HID_READ_REPORT ioctls are signaled

Report as added to the ring buffer

Pending ReadFile requests are signaled

IOCTL_HID_READ_REPORT is sent to the minidriver for the next report.

IOCTL_HID_READ_REPORT is left pending

IOCTL_HID_READ_REPORT is sent to the forwarded down the driver stack to the bus driver.

Hidclass device report thread

Win32 API / Native application

Winehid.sys (3rd party driver)

Winebus.sys (3rd party driver)

Application Process

Application gets the device report

Application used the HID data

Application does a read

If the ring buffer is empty, the read is left pending.