



# Centurion Technologies

A quick note about USB classes

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Technical Support Available

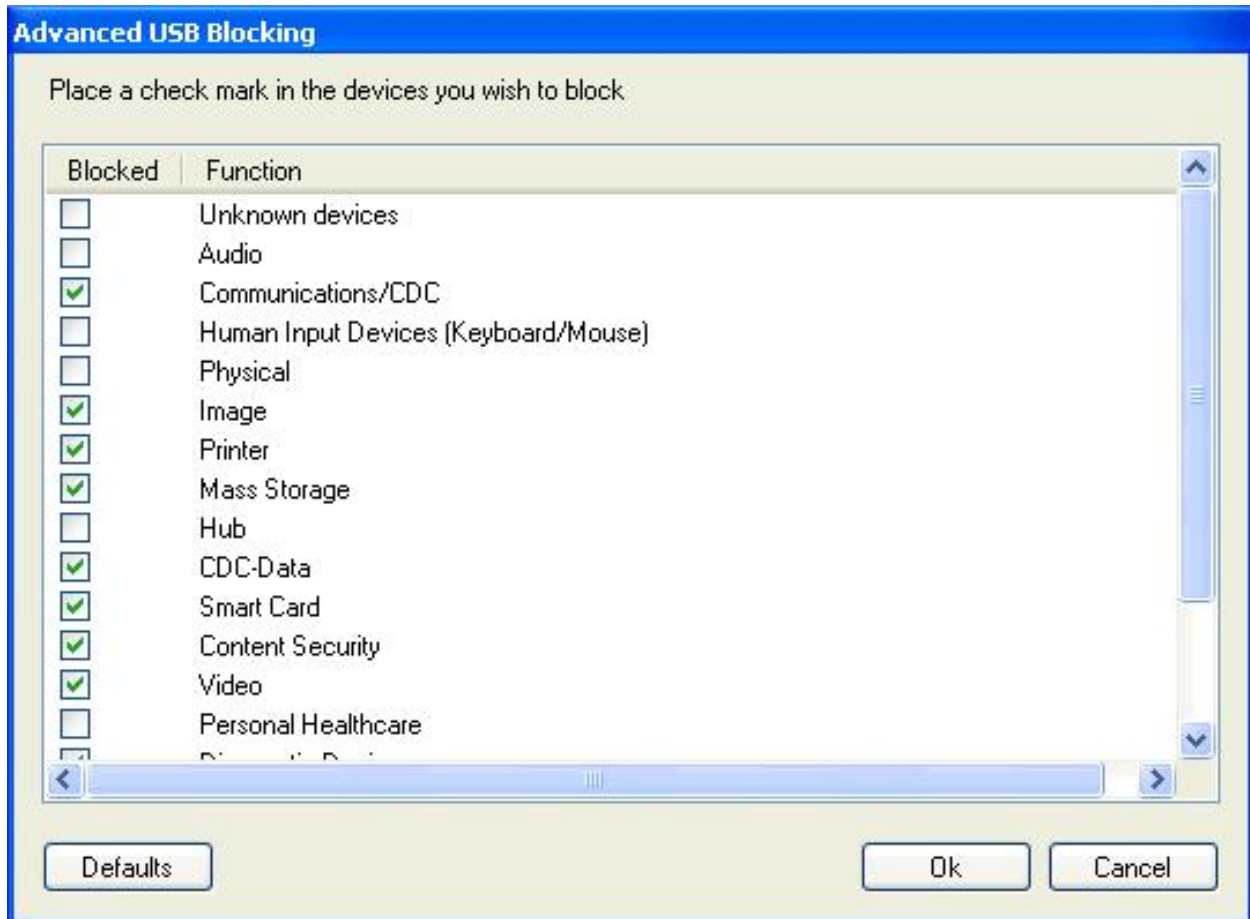
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## USB Classes

One of our customers recently brought to our attention that there is confusion about the USB classes listed in our USB blocking functionality. The customer wanted to know what would block when each class was blocked.



Unfortunately, providing a list of every USB device and what class they belong to is impossible. There are cases when a keyboard is more than just a keyboard. We have a USB keyboard in our office that also has a smart card reader built into it. If you were to try to block the keyboard using the “Human Input Devices (Keyboard/Mouse)” blocking, the keyboard and mouse input would be blocked, but the smart card reader on the keyboard would still function until the “Smart Card” class was also blocked.

There are also cases where a device may not be what it appears. A digital camera normally appears as a “Mass Storage Device” when hooked up to a computer to download photos. However, it is possible to control digital cameras via software. We have seen instances where a digital camera hooked up to a computer registers as a “Personal Healthcare” device.

Centurion recommends taking a cautious approach when blocking USB devices. Protecting your computers and your users should be your first priority if you are unsure. The advanced USB blocking screen has a “Defaults” button which takes care of most cases. When in doubt, test a specific device or call our technical support line for assistance. We are always happy to talk to our customers!

Now for the list of USB devices I promised. This list is edited from information on [Wikipedia](#).

| Description                     | Examples  |
|---------------------------------|---|
| Unspecified <sup>[14]</sup>     | (Device class is unspecified. Interface descriptors are used for determining the required drivers.)   |
| Audio                           | <a href="#">Speaker</a> , <a href="#">microphone</a> , <a href="#">sound card</a> , <a href="#">MIDI</a>  |
| Communications and CDC Control  | <a href="#">Modem</a> , <a href="#">Ethernet adapter</a> , <a href="#">Wi-Fi adapter</a>  |
| Human interface device (HID)    | <a href="#">Keyboard</a> , <a href="#">mouse</a> , <a href="#">joystick</a>   |
| Physical Interface Device (PID) | <a href="#">Force feedback joystick</a>   |
| Image                           | <a href="#">Webcam</a> , <a href="#">scanner</a>  |
| Printer                         | <a href="#">Laser printer</a> , <a href="#">inkjet printer</a> , <a href="#">CNC machine</a>  |
| Mass storage                    | <a href="#">USB flash drive</a> , <a href="#">memory card reader</a> , <a href="#">digital audio player</a> , <a href="#">digital camera</a> , <a href="#">external drive</a> |
| USB hub                         | <a href="#">Full bandwidth hub</a>  |
| CDC-Data                        | (This class is used together with class 02h—Communications and CDC Control.)  |
| Smart Card                      | <a href="#">USB smart card reader</a>   |
| Content security                | <a href="#">Fingerprint reader</a>  |
| Video                           | <a href="#">Webcam</a>  |
| Personal Healthcare             | <a href="#">Pulse monitor (watch)</a>   |
| Diagnostic Device               | <a href="#">USB compliance testing device</a>   |
| Wireless Controller             | <a href="#">Bluetooth adapter</a> , <a href="#">Microsoft RNDIS</a>   |
| Miscellaneous                   | <a href="#">ActiveSync device</a>   |
| Application-specific            | <a href="#">IrDA Bridge</a> , <a href="#">Test &amp; Measurement Class (USBTMC)</a> , <sup>[15]</sup> <a href="#">USB DFU (Direct Firmware update)</a> <sup>[16]</sup>        |
| Vendor-specific                 | (This class code indicates that the device needs vendor specific drivers.)  |