

USB Forensics and Pentesting

Dr. Phil Polstra
PhD, CISSP, CEH

@ppolstra
<http://philpolstra.com>

Certifications:

<http://www.securitytube-training.com>

Pentester Academy:

<http://www.PentesterAcademy.com>

USB Basics: History

USB History

- Non-universal serial, PS/2 ports, & LPT
- 1996 USB 1.0 (1.5 or 12 Mbps)
- 1998 USB 1.1
- 2000 USB 2.0 (1.5, 12, or 480 Mbps)
- Long pause
- 2008 USB 3.0 (up to 5 Gbps)

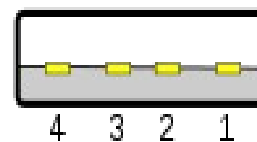
USB Basics: Hardware

USB Hardware

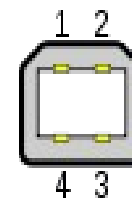
- Simple 4-wire connection (power, ground, 2 data wires)
- Cabling prevents improper connections
- Hot pluggable
- Differential voltages provide greater immunity to noise
- Cable lengths up to 16 feet are possible

USB Hardware

Pin	Name	Cable color	Description
1	VBUS	Red	+5 V
2	D-	White	Data -
3	D+	Green	Data +
4	GND	Black	Ground



Type A



Type B



Mini-A



Mini-B



Micro-A



Micro-B

Demo: using lsusb