

# Notable Attacks

- **Heartbleed** (CVE-2014-0160)  
Bounds check failure in OpenSSL's Heartbeat extension revealing private keys
- **Ghost Vulnerability** (CVE-2015-0235)  
Buffer overflow in glibc `gethostbyname( )` allowing remote code execution through DNS lookups
- **EternalBlue** (CVE-2017-0144)  
Buffer overflow that allows remote execution code in Samba Windows Service resulting in malware: *WannaCry* and *NotPetya*

TOCTOU attacks - Time Of Check to Time Of Use  
(also called race condition attack)