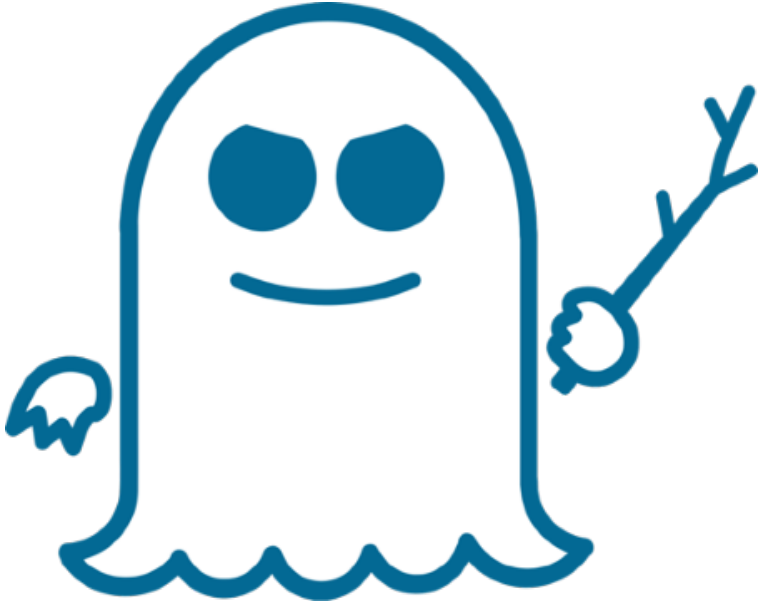




SPECTRE



- ▶ **Result:** Programs can read all memory
- ▶ **Affects:** All modern CPU/OS
- ▶ **Vector:** Uses *speculative execution* to read forbidden memory and *cache timing* to exfiltrate data
- ▶ **How bad:** Very bad
- ▶ **Fixes:** Needs changes in CPU and/or changes in programs. Performance impact varies and depends on CPU and workload type.

THREAT-0-METER

Threat - 0 - Meter

LOW RISK

Exploit unlikely or
running
untrusted code already
worst case

MEDIUM RISK

Exploit possible but
needs another
successful attack to run
attackers code

HIGH RISK

Exploit possible and
runs untrusted code "by
design"

SPECTRE



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