

# Hashcat v3.10

[Hashcat v3.10](#): The world's fastest password cracker, and the world's first and only in-kernel rule engine

- Added some workarounds to deal with problems caused by broken OpenCL installation on the host system
- Improved rule-engine: Enabled support to use the missing @ rule on GPU
- Improved rule-engine: On Nvidia, the rule-engine got a small performance improvement