Benchmarks

Benchmarks mit John the Ripper und Hashcat

Tom Gries

Dokumenten URL: http://docs.tx7.de/TT-BNC
Autor: Tom Gries <TT-BNC@tx7.de>
@tomo@chaos.social

Version: 7.2.0 vom 02.02.2024

John Benchmark - Yoga C940 (docker)

```
┌──(root㉿kali-docker)-[~]
└─# date
Fri Jan 13 00:02:13 UTC 2023

┌──(root㉿kali-docker)-[~]
└─# john --format=descrypt --test
Will run 8 OpenMP threads
Benchmarking: descrypt, traditional crypt(3) [DES 512/512 AVX512F]... (8xOMP) DONE
Many salts:     40798K c/s real, 5577K c/s virtual
Only one salt:  22370K c/s real, 3035K c/s virtual


┌──(root㉿kali-docker)-[~]
└─# john --format=LM --test
Will run 8 OpenMP threads
Benchmarking: LM [DES 512/512 AVX512F]... (8xOMP) DONE
Raw:    52490K c/s real, 6975K c/s virtual


┌──(root㉿kali-docker)-[~]
└─# john --format=NT --test
Benchmarking: NT [MD4 512/512 AVX512BW 16x3]... DONE
Raw:    58049K c/s real, 58341K c/s virtual
```

John Benchmark - Hetzner AX41 (docker)

```
┌──(root㉿kali-docker)-[~]
└─# date
Fri Jan 13 00:18:59 UTC 2023

┌──(root㉿kali-docker)-[~]
└─# john --format=descrypt --test
Will run 12 OpenMP threads
Benchmarking: descrypt, traditional crypt(3) [DES 256/256 AVX2]... (12xOMP) DONE
Many salts:     102445K c/s real, 8537K c/s virtual
Only one salt:  47812K c/s real, 3991K c/s virtual


┌──(root㉿kali-docker)-[~]
└─# john --format=LM --test
Will run 12 OpenMP threads
Benchmarking: LM [DES 256/256 AVX2]... (12xOMP) DONE
Raw:    85979K c/s real, 7197K c/s virtual


┌──(root㉿kali-docker)-[~]
└─# john --format=NT --test
Benchmarking: NT [MD4 256/256 AVX2 8x3]... DONE
Raw:    73254K c/s real, 73254K c/s virtual
```

John Benchmark - Hetzner AX101 (docker)

```
┌──(root㉿Password-Cracking)-[~]
└─# date
Sat Mar 11 16:47:54 UTC 2023

┌──(root㉿Password-Cracking)-[~]
└─# john --format=descrypt --test
Will run 32 OpenMP threads
Benchmarking: descrypt, traditional crypt(3) [DES 256/256 AVX2]... (32xOMP) DONE
Many salts:     253034K c/s real, 7909K c/s virtual
Only one salt:  61046K c/s real, 1908K c/s virtual


┌──(root㉿Password-Cracking)-[~]
└─# john --format=LM --test
Will run 32 OpenMP threads
Benchmarking: LM [DES 256/256 AVX2]... (32xOMP) DONE
Raw:    93880K c/s real, 2936K c/s virtual


┌──(root㉿Password-Cracking)-[~]
└─# john --format=NT --test
Benchmarking: NT [MD4 256/256 AVX2 8x3]... DONE
Raw:    78209K c/s real, 78209K c/s virtual
```

Hashcat Benchmark - GeForce GTX 1660 Ti

```
$ hashcat -b -m 1500 -w 3
   Hashtype: descrypt, DES (Unix)
   Speed.Dev.#3.....:  786.8 MH/s

$ hashcat -b -m 3000 -w 3
   Hashtype: LM
   Speed.Dev.#3.....:  19241.4 MH/s

$ hashcat -b -m 1000 -w 3
   Hashtype: NTLM
   Speed.Dev.#3.....:  35765.0 MH/s
```

Mit hashcat 6.x im September 2019 getestet

Hashcat Benchmark - GeForce GTX 1660 Ti

```
$ hashcat -b -m 1600 -w 3
  Hashtype: Apache $apr1$ MD5, md5apr1, MD5 (APR)
  Speed.Dev.#3.....:      9808.9 kH/s

$ hashcat -b -m 8900 -w 3
  Hashtype: scrypt
  Speed.Dev.#3.....:  857.6 kH/s

$ hashcat -b -m 3200 -w 3
  Hashtype: bcrypt $2*$, Blowfish (Unix)
  Speed.Dev.#3.....:  10260 H/s
```

Mit hashcat 6.x im September 2019 getestet

Hashcat Benchmark – über 100 GH/s

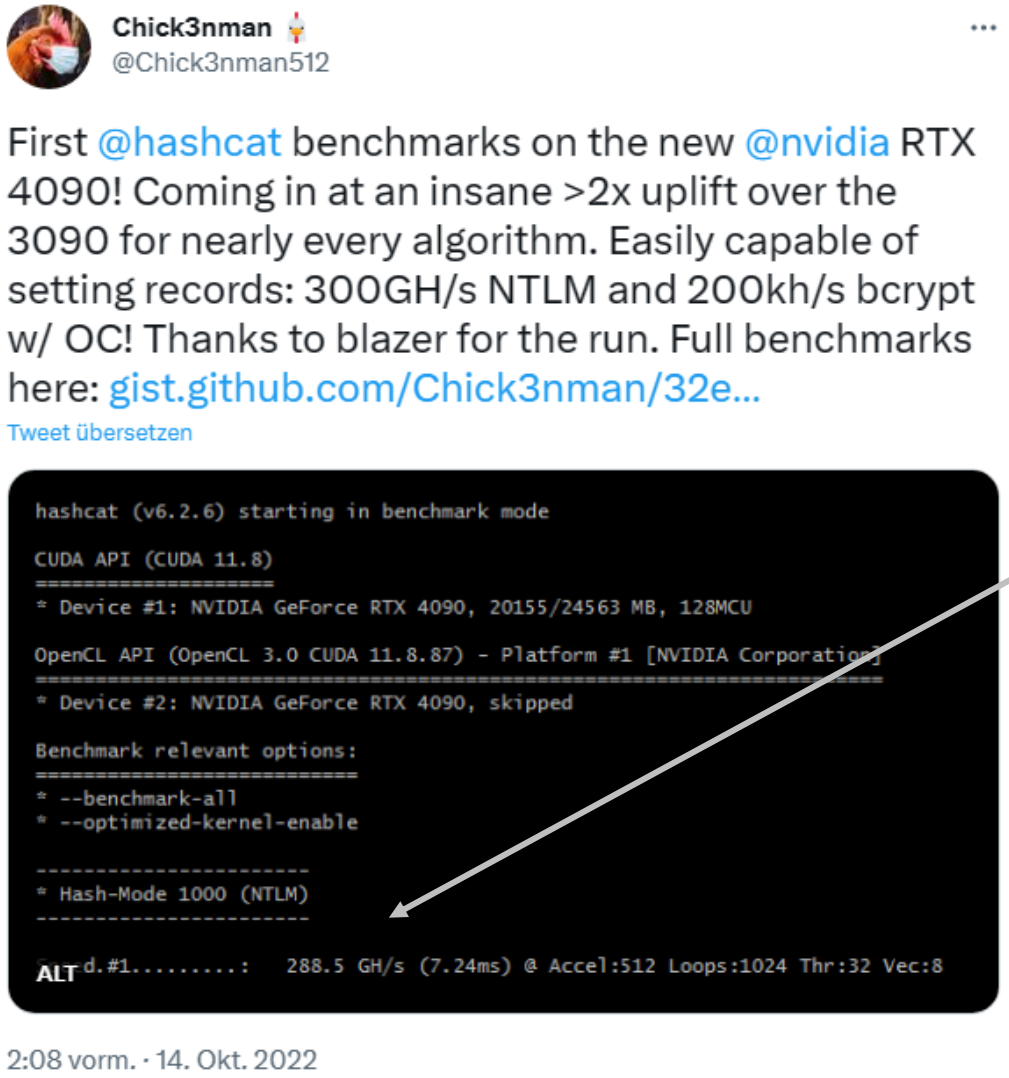
hashcat
@hashcat

hand-tuned hashcat 6.0.0 beta and 2080Ti (stock clocks) breaks NTLM cracking speed mark of 100GH/s on a single compute device

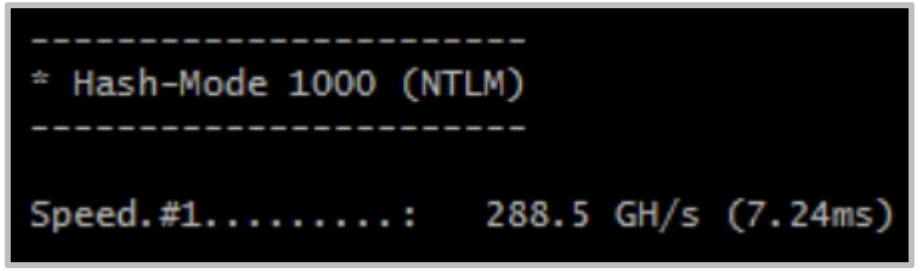
102,8 Milliarden Hashe/Sek.
Tweet vom Februar 2019

```
C:\Windows\System32\cmd.exe

d:\tools\hashcat-6.0.0>hashcat64 -b -m 1000 -u 1024 -n 512 --opencl-vector-width 8 --force -O

OpenCL Platform #1: NVIDIA Corporation
======================================
* Device #1: GeForce RTX 2080 Ti, 2816/11264 MB allocatable, 68MCU

Benchmark relevant options:
===========================
* --force
* --optimized-kernel-enable
* --opencl-vector-width=8
* --kernel-accel=512

Hashmode: 1000 - NTLM

Speed.#1.........:   102.8 GH/s (10.48ms) @ Accel:512 Loops:1024 Thr:32 Vec:8

Started: Wed Feb 13 22:57:19 2019
Stopped: Wed Feb 13 22:57:26 2019

d:\tools\hashcat-6.0.0>
```

Hashcat Benchmark – Stand heute (2022/23)



288,5 Milliarden Hashe/Sek.
Tweet vom Oktober 2022



Mehr Benchmarks:
https://t.co/Bftucib7P9

Anmerkungen oder Fragen?