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Example hashes

If you get a “line length exception” error in hashcat, it is often because the hash mode that you have requested does not match the hash. To verify, you can test your commands against example hashes.

Unless otherwise noted, the password for all example hashes is **hashcat**.

Note also that for many algorithms, when the raw hashes that are components of compound hashes such as sha1(sha1(pass)), the hash byte sequence being hashed is the 'hex' ([ASCII](#)) form of the hash. The exception is when the suffix `_bin` is present, which indicates that the raw/binary form of the inner hash is what is being hashed by the outer hash function.

Generic hash types

Hash-Mode	Hash-Name	Example
0	MD5	8743b52063cd84097a65d1633f5c74f5
10	md5(\$pass.\$salt)	01dfae6e5d4d90d9892622325959afbe:7050461
20	md5(\$salt.\$pass)	f0fda58630310a6dd91a7d8f0a4ceda2:4225637426
30	md5(utf16le(\$pass).\$salt)	b31d032cfdcf47a399990a71e43c5d2a:144816
40	md5(\$salt.utf16le(\$pass))	d63d0e21fdc05f618d55ef306c54af82:13288442151473
50	HMAC-MD5 (key = \$pass)	fc741db0a2968c39d9c2a5cc75b05370:1234
60	HMAC-MD5 (key = \$salt)	bfd280436f45fa38eaacac3b00518f29:1234
70	md5(utf16le(\$pass))	2303b15bfa48c74a74758135a0df1201
100	SHA1	b89eaac7e61417341b710b727768294d0e6a277b
110	sha1(\$pass.\$salt)	2fc5a684737ce1bf7b3b239df432416e0dd07357:2014
120	sha1(\$salt.\$pass)	cac35ec206d868b7d7cb0b55f31d9425b075082b:5363620024
130	sha1(utf16le(\$pass).\$salt)	c57f6ac1b71f45a07dbd91a59fa47c23abcd87c2:631225
140	sha1(\$salt.utf16le(\$pass))	5db61e4cd8776c7969cfd62456da639a4c87683a:8763434884872
150	HMAC-SHA1 (key = \$pass)	c898896f3f70f61bc3fb19bef222aa860e5ea717:1234
160	HMAC-SHA1 (key = \$salt)	d89c92b4400b15c39e462a8caa939ab40c3aeaaa:1234
170	sha1(utf16le(\$pass))	b9798556b741befdbddcbf640d1dd59d19b1e193
200	MySQL323	7196759210defdc0
300	MySQL4.1/MySQL5	fcf7c1b8749cf99d88e5f34271d636178fb5d130
400	phpass, WordPress (MD5), Joomla (MD5)	\$P\$984478476IagS59wHZvyQMArxfx58u.
400	phpass, phpBB3 (MD5)	\$H\$984478476IagS59wHZvyQMArxfx58u.
500	md5crypt, MD5 (Unix), Cisco-IOS \$1\$ (MD5) <sup>2</sup>	\$1\$28772684\$iEwNOgGugqO9.bIz5sk8k/
501	Juniper IVE	3u+UR6n8AgABAAAHHxxdXKmiOmUoqKnZlF8lTOhIPYy93EAKbPfs5+49YLFd/B1+omSKbW7DoqNM40/EeVnwJ8kYoXv9zy9D5C5m5A==
600	BLAKE2b-512	\$BLAKE2\$296c269e70ac5F0095e6fb47693480f07b97c0d037f5c3bfa4df8f5ca5c9308a0e7108e0a0a9c0ebb715e8b7109b072046c6cd5e1!
610	BLAKE2b-512(\$pass.\$salt)	\$BLAKE2\$41fcd44c789c735c08b43a871b81c8f617ca43918d38aee6cf8291c58a0b00a03115857425e5ff6f044be7a5bec8536b52d6c9992e2:
620	BLAKE2b-512(\$salt.\$pass)	\$BLAKE2\$f0325fdfcf3f82a014935442f7adbcb069d4636d67276a85b09f8de368f122cf5195a0b780d7fee709fbf1dcd02ddcb581df84508cf1fb0f:
900	MD4	afe04867ec7a3845145579a95f72eca7
1000	NTLM	b4b9b02e6f09a9bd760f388b67351e2b
1100	Domain Cached Credentials (DCC), MS Cache	4dd8965d1d476fa0d026722989a6b772:3060147285011
1300	SHA2-224	e4fa1555ad877bf0ec455483371867200eee89550a93eff2f95a6198
1400	SHA2-256	127e6fbfe24a750e72930c220a8e138275656b8e5d8f48a98c3c92df2caba935
1410	sha256(\$pass.\$salt)	c73d08de890479518ed60cf670d17faa26a4a71f995c1dcc978165399401a6c4:53743528
1420	sha256(\$salt.\$pass)	eb368a2dfd38b405f014118c7d9747fcc97f4f0ee75c05963cd9da6ee65ef498:560407001617
1430	sha256(utf16le(\$pass).\$salt)	4cc8eb60476c32edac52b5a7548c2c50ef0f9e31ce656c6f4b213f901bc87421:890128
1440	sha256(\$salt.utf16le(\$pass))	a4bd999e1e0aba51814e81388badb23ecc560312c4324b2018ea76393ea1cac9:12345678
1450	HMAC-SHA256 (key = \$pass)	abaf88d66bf2334a4a8b207cc61a96bf46c3e38e882e6f6886742f688b8588c:1234
1460	HMAC-SHA256 (key = \$salt)	8efbef4cec28f228fa948daaf4893ac3638fbae81358ff9020be1d7a9a509fc6:1234
1470	sha256(utf16le(\$pass))	9e9283e633f4a7a42d3abc93701155be8afe5660da24c8758e7d3533ce2f2dc82
1500	descript, DES (Unix), Traditional DES	48c/R8JAv757A
1600	Apache \$apr1\$ MD5, md5apr1, MD5 (APR) <sup>2</sup>	\$apr1\$71850310\$gh9m4xcAn3MGxogwX/ztb.
1700	SHA2-512	82a9dda829eb7f8ffe9f9be49e45d47d2dad9664fbb7adf72492e3c81ebd3e29134d9bc12212bf83c6840f10e8246b9db54a4859b7ccd0123d86e
1710	sha512(\$pass.\$salt)	e5c3ede3e49fb86592fb03f471c35ba13e8d89b8ab65142c9a8fdaf635fa2223c24e5558df9313e8995019dcbec1fb584146b7bb12685c7765fc
1720	sha512(\$salt.\$pass)	976b451818634a1e2acba682da3fd6efa72ad8fa7a08d7939550c244b237c72c7d42367544e826c0c83f5c02f97c0373b6b1386cc794bf0d21c
1730	sha512(utf16le(\$pass).\$salt)	13070359002b6fbb3d28e50fba55efcf3d7cc115fe6e3f6c98bf0e3210f1c6923427a1e1a3b214c1de92c467683f6466727ba3a51684022be5cc2
1740	sha512(\$salt.utf16le(\$pass))	bae3a3358b3459c761a3ed40d34022f0609a02d90a0d7274610b16147e58ece00cd849a0bd5cf6a92ee5eb5687075b4e754324dfa70deca699
1750	HMAC-SHA512 (key = \$pass)	94cb9e31137913665dbea7b058e10be5f050cc356062a2c9679ed0ad6119648e7be620e9d4e1199220cd02db9efb2b1c78234fa1000c728f82bl
1760	HMAC-SHA512 (key = \$salt)	7ccc966f5503e292a51381f238d071971ad5442488f340f98e379b3aeae2f33778e3e732fcc2f7bdcd04f3d460eebf6f8cb77da32df25500c09160r
1770	sha512(utf16le(\$pass))	79bba09eb9354412d0f2c037c22a777b8bf549ab12d49b77d5b25faa839e4378d8f6fa11aceb6d9413977ae5ad5d011568bad2de4f998d75fd4
1800	sha512crypt \$6\$, SHA512 (Unix) <sup>2</sup>	\$6\$52450745\$k5ka2p8bFuSMoVT1tzOyyuaREkkKBcCNqoDKZyIJL9RaE8yMnPgh2XzzF0NDRUhgrcLwg78xs1w5pJiypEdFX/
2000	STDOUT	n/a
2100	Domain Cached Credentials 2 (DCC2), MS Cache 2	\$DCC2\$10240#tom#e4e938d12fe5974dc42a90120bd9c90f
2400	Cisco-PIX MD5	dRRvNUmUHXOHT9nknk

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Hash-Mode	Hash-Name	Example
10810	sha384(\$pass.\$salt)	ca1c843a7a336234baf9db2e10bc38824ce523402fbd7741286b1602bdf6cb869a45289bb9fb706bd404b9f3842ff729:274646079704982073
10820	sha384(\$salt.\$pass)	63f63d7f82d4a4cb6b9ff37a6bc7c5ec39faaf9c078551f5cbf7960e76ded87b643d37ac5345bc544325e7ff83a1f2:93362
10830	sha384(utf16le(\$pass).\$salt)	3516a589d2ed4071bf5e36f22e11212b3ad9050b9094b23067103d51e99dcb25c4dc397dba8034fed11a8184acfb699:577730514588712
10840	sha384(\$salt.\$salt.utf16le(\$pass))	316e93ea8e04de3e5a90c53d36923a31a16c1b9e89b44201d6082f87ca49c5bca53cad65f685207db3ea2ccc7ca40f8:700067651
10870	sha384(utf16le(\$pass))	48e61d68e93027fae35d405ed16cd01b6f1ae66267833b4a7aa1759e45bab9bba652da2e40c7c155a3d8cf1d81f3a7e8
10900	PBKDF2-HMAC-SHA256	sha256:1000:MTc3MTA0MTQwMjQxNzY=:PYJCU215Mi57AYPKva9j7mvF4Rc5bCnt
10901	RedHat 389-DS LDAP (PBKDF2-HMAC-SHA256)	{PBKDF2_SHA256}AAAgADkxMjMNTIzMzgzMjQ3MjI4MDAwNTk5OTAYOTk4NDI2MjkyMzAzNjg0NjQwOTMxNjI3OTMzNjg0MDI0OTY5NTeSUL
11000	PrestaShop	810e3d12f0f10777a679d9ca1ad7a8d9:M2uZ122bSHJ4Mi54tXGY0lqcV1r28mUluSkyw37ou5oia4239ujqw0l
11100	PostgreSQL CRAM (MD5)	\$postgres\$postgres*f0784ea5*2091bb7d4725d1ca85e8de6ec349baf6
11200	MySQL CRAM (SHA1)	\$mysqlna\$c24ab8d0ee94d70ab1f2e814d8f0948a14d10b9*437e93572f18ae44d9e779160c2505271f85821d
11300	Bitcoin/Litecoin wallet.dat	\$bitcoin\$96\$d011a1b6a8d675b7a36d0cd2efaca32a9f8cd1d57d6d01a58399ea04e703e8bbb44899039326f7a00f171a7bbc854a54\$16\$156:
11400	SIP digest authentication (MD5)	\$sip\$*192.168.100.100*192.168.100.121*username*asterisk*REGISTER*sip*192.168.100.121**2b01df0b****MD5*ad0520061ca07c12
11500	CRC32 ^5	c762de4a:00000000
11600	7-Zip	\$7z\$0\$19\$0\$salt\$8\$f6196259a7326e3f0000000000000000\$185065650\$112\$98\$f3bc2a88062c419a25acd40c0c2d75421cf23263f69c51b:
11700	GOST R 34.11-2012 (Streebog) 256-bit, big-endian	57e9e50caec93d72e9498c211d6dc4f4d328248b48ecf46ba7abfa874f666e36
11750	HMAC-Streebog-256 (key = \$pass), big-endian	0f71c7c82700c904ca95ee3d804cc283b53bec49428a9ef8da7b34effb3ba:08151337
11760	HMAC-Streebog-256 (key = \$salt), big-endian	d5c6b874338a492ac57ddc6871afc3c70dcfd264185a69d84c8f39a07ef92b2c:08151337
11800	GOST R 34.11-2012 (Streebog) 512-bit, big-endian	5d5bdba48c8f89ee6c0a0e11023540424283e84902de08013aeeb626e819950bb32842903593a1d2e8f71897ff7e72e17ac9ba8ce1d1d2f7e9
11850	HMAC-Streebog-512 (key = \$pass), big-endian	be4555415af4a05708dc260bb3c0a35948135df3dbf93f7c8b80574ceb0d71ea4312127839b7707bf39ccc932d9e7cb799671183455889e8dc
11860	HMAC-Streebog-512 (key = \$salt), big-endian	beb6831b3f9f958abc345a88cb98f30cb374cff13e6012818487c8dc8d5857f23bca2caed280195ad558b8ce393503e632e901e8d1eb2ccb34f
11900	PBKDF2-HMAC-MD5	md5:1000:MTg1MzA=:Lz84V0crMde699Edsj34PP98+f4f3S0rTz4KHAIHoAjs=
12000	PBKDF2-HMAC-SHA1	sha1:1000:MzU4NTA4MzIzNA1MDQ=:19ofiy+ahBXhvkDsp0j2ww==
12100	PBKDF2-HMAC-SHA512	sha512:1000:ODQyMDEwNjQyODY=:MKaHNWxUsuJB3IEwBhm3w==
12200	eCryptfs	\$ecryptfs\$0\$1\$7c95c46e82f364b3\$60bba503f0a42d0c
12300	Oracle T: Type (Oracle 12+)	78281A9C0CF626BD05EFC4F41B515B61D6C4D95A250CD4A605CA0EF97168D670EBCB5673B6F5A2FB9CC4E0C0101E659C0C4E3B9B3BEI
12400	BSDI Crypt, Extended DES	_9G_.8147mpcfKT8g0U.
12500	RAR3-hp	\$RAR3\$*0*45109af8ab5f297a*adbfc65385d7a40373e8f77d7b89d317
12600	ColdFusion 10+	ae9edab5653f509c4c63e559a5e967b4c112273bc6bd84525e630a3f9028dcb:51362568667837773345747837828104107068832332114
12700	Blockchain, My Wallet	\$blockchain\$288\$5420055827231730710301348670802335e45a6f5f631113cb1148a6e96ce645ac69881625a115fd35256636d090821718
12800	MS-AzureSync PBKDF2-HMAC-SHA256	v1:PPH1_MD4,484840328224366186645,100,005a491d8bf3715085d69f934ee7fb19a15ffc233b5382d9827910bc32f3506
12900	Android FDE (Samsung DEK)	38421854118412625768408160477112384218541184126257684081604771129b6c258eb22f8cb9d08e04e6450f72b987527d4fcd6fb6ae
13000	RAR5	\$rar5\$16\$74575567518807622265582327032280\$15\$f8b4064de34ac02ecabfe9abd93ed6a8\$9843834ed0f7c754
13100	Kerberos 5, etype 23, TGS-REP	\$krb5tgs\$23\$*user\$realm\$test\$spn*\$63386d22d359fe42230300d56852c9eb\$891ad31d09ab89c6b3b8c5e5de6c06a7f49fd559d7a9a3c325
13200	AxCrypt 1	\$axcrypt\$*1*10000*af4a5b4a718551fea2585ed69fe246*45c616e901e48c6cac7ff14e8cd99113393be259c595325e
13300	AxCrypt 1 in-memory SHA1 ^13	\$axcrypt_sha1\$b98eaac7e61417341b710b727768294d0e6a277b
13400	KeePass 1 AES / without keyfile	\$keepass\$*1*50000*0*375756b9e6c72891a8e5645a3338b8c8*82afc053e8e1a6cfa39adae4f5fe5e59f545a54d6956593d1709b39cacd77f5
13400	KeePass 2 AES / without keyfile	\$keepass\$*2*6000*222*a279e37c38b0124559a83fa452a0269d56dc4119a5866d18e76f1f3fd536d64d*7ec7a06bc975ea2ae7c8dcb99e826
13400	KeePass 1 Twofish / with keyfile	\$keepass\$*1*6000*1*31c087828b0bb76362c10cae773aacdf*6d6c78b4f82ecbcd3b96670cf490914c25ea8c31bc3aeb3fc56e65fac16d721f*
13400	Keepass 2 AES / with keyfile	\$keepass\$*2*6000*222*15b6b685bae998f2f608c909dc554e514f2843fbac3c7c16ea3600cc0de30212*c417098b445cfc7a87d56ba172008:
13500	PeopleSoft PS_TOKEN	b5e335754127b25ba6f99a94c738e24cd634c35a:aa07d396f5038a6cbded88d78d1d6c907e4079b3dc2e12fddee409a51cc05ae73e8cc24d5
13600	WinZip	\$zip2\$*0*3*0*e322d3b65b5a2785b192d31e39ff9de*1320*e*19648c3e063c82a9d3ef08ed833*3135c79ecb86cd6f48fc*\$zip2\$
13711	VeraCrypt PBKDF2-HMAC-RIPEMD160 + AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd160_aes_13711.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd
13712	VeraCrypt PBKDF2-HMAC-RIPEMD160 + AES-Twofish (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd160_aes-twofish_13712.vc [https://hashcat.net/misc/example_hashes/vc/hashca
13711	VeraCrypt PBKDF2-HMAC-RIPEMD160 + Serpent (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd160_serpent_13711.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_rip
13712	VeraCrypt PBKDF2-HMAC-RIPEMD160 + Serpent-AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd160_serpent-aes_13712.vc [https://hashcat.net/misc/example_hashes/vc/hashcz
13713	VeraCrypt PBKDF2-HMAC-RIPEMD160 + Serpent-Twofish-AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd160_serpent-twofish-aes_13713.vc [https://hashcat.net/misc/example_hashes/v
13711	VeraCrypt PBKDF2-HMAC-RIPEMD160 + Twofish (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd160_twofish_13711.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_rip
13712	VeraCrypt PBKDF2-HMAC-RIPEMD160 + Twofish-Serpent (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_riplemd160_twofish-serpent_13712.vc [https://hashcat.net/misc/example_hashes/vc/ha
13751	VeraCrypt PBKDF2-HMAC-SHA256 + AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_aes_13751.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_ae
13752	VeraCrypt PBKDF2-HMAC-SHA256 + AES-Twofish (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_aes-twofish_13752.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sl
13751	VeraCrypt PBKDF2-HMAC-SHA256 + Serpent (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_serpent_13751.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sha25
13752	VeraCrypt PBKDF2-HMAC-SHA256 + Serpent-AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_serpent-aes_13752.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sl
13753	VeraCrypt PBKDF2-HMAC-SHA256 + Serpent-Twofish-AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_serpent-twofish-aes_13753.vc [https://hashcat.net/misc/example_hashes/vc/h
13751	VeraCrypt PBKDF2-HMAC-SHA256 + Twofish (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_twofish_13751.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sha25
13752	VeraCrypt PBKDF2-HMAC-SHA256 + Twofish-Serpent (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha256_twofish-serpent_13752.vc [https://hashcat.net/misc/example_hashes/vc/hashc
13721	VeraCrypt PBKDF2-HMAC-SHA512 + AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_aes_13721.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_ae
13722	VeraCrypt PBKDF2-HMAC-SHA512 + AES-Twofish (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_aes-twofish_13722.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sl
13721	VeraCrypt PBKDF2-HMAC-SHA512 + Serpent (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_serpent_13721.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sha51
13722	VeraCrypt PBKDF2-HMAC-SHA512 + Serpent-AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_serpent-aes_13722.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sl
13723	VeraCrypt PBKDF2-HMAC-SHA512 + Serpent-Twofish-AES (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_serpent-twofish-aes_13723.vc [https://hashcat.net/misc/example_hashes/vc/h
13721	VeraCrypt PBKDF2-HMAC-SHA512 + Twofish (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_twofish_13721.vc [https://hashcat.net/misc/example_hashes/vc/hashcat_sha51:
13722	VeraCrypt PBKDF2-HMAC-SHA512 + Twofish-Serpent (legacy)	https://hashcat.net/misc/example_hashes/vc/hashcat_sha512_twofish-serpent_13722.vc [https://hashcat.net/misc/example_hashes/vc/hashc

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Hash-Mode	Hash-Name	Example
17300	SHA3-224	412ef78534ba6ab0e9b1607d3e9767a25c1ea9d5e83176b4c2817a6c
17400	SHA3-256	d60fc6585da4e17224f58858970f0ed5ab042c3916b76b0b828e62eaf636cbd
17500	SHA3-384	983ba28532c6320d04f20fa485bcdcb38bddd666eca5f1e5aa279ff1c6244fe5f83cf4bbf05b95ff378dd2353617221
17600	SHA3-512	72cd1d743735d4e069f3bda85b1b7e9172033dfdd8cd599ca094ef8570f3930c3f2c0b7afc8d6152ce4eaad6057a2ff22e71934b3a3dd0fb55a7
17700	Keccak-224	e1dfad9bafae6ef15f5bb16cf4c26f09f5f1e7870581962fc84636
17800	Keccak-256	203f88777f18bb4ee1226627b547808f38d90d3e106262b5de9ca943b57137b6
17900	Keccak-384	5804b7ada5806ba795a0100e9a7ef493654ff2a21d94d4f2ce4bf69abba5d94bf03701fe9525a15dfdc625bfbdb769701
18000	Keccak-512	2fbf5c9080f0a704de2e915ba8fdae6ab00bb026b2c1c8fa07da1239381c6b7f4dfd399bf9652500da723694a4c719587dd0219cb30eabe6121
18100	TOTP (HMAC-SHA1)	597056:3600
18200	Kerberos 5, etype 23, AS-REP	\$krb5asrep\$23\$user@domain.com:3e156ada591263b8aab0965f5aebd837\$007497cb51b6c8116d6407a782ea0e1c5402b17db7afa6b05a6
18300	Apple File System (APFS)	\$fvde\$2\$16\$58778104701476542047675521040224\$20000\$39602e86b7cea4a34f4ff69ff6ed706d68954ee474de1d2a9f6a6f2d24d172001
18400	Open Document Format (ODF) 1.2 (SHA-256, AES)	\$odf\$*1*1*100000*32*751854d8b90731ce0579f96beaf0d4ac2fb2f546b31f1b6af9a5f66952a0bf4*16*2185a966155baa9e2fb597298fe
18500	sha1(md5(\$pass))	888a2ffc3854fba0321110c5d0d434ad1aa2880
18600	Open Document Format (ODF) 1.1 (SHA-1, Blowfish)	\$odf\$*0*0*1024*16*bff753835f4ea15644b8a2f8e4b5e3d147b9576*8*ee371da34333b69d*16*a902eff54a4d782a26a899a31f97bef4*0
18700	Java Object hashCode()	29937c08
18800	Blockchain, My Wallet, Second Password (SHA256)	YnM6WYERjfhjxwepT7zV6odWoEuz1X4esYQb4bQ3KZ7bbZAYOtC1MDM30TC1NjMyODA0ECcAAD3v0Fc=
18900	Android Backup	\$ab\$5*0*10000*b8900e4885ff9cad801ee1957a43bd633fea12491440514ae272aa83f2f5c006ec7e7fa0bce040add619919b4eb60680304b7
19000	QNX /etc/shadow (MD5)	@m@75f6f129f9c9e77b6b1b78f791ed764a@8741857532330050
19100	QNX /etc/shadow (SHA256)	@s@0b365cab7e17ee1e7e1a90078501cc1aa85888d6da34e2f5b04f5c614b882a93@5498317092471604
19200	QNX /etc/shadow (SHA512)	@S@715df9e94c097805dd1e13c6a40f331d02ce589765a2100ec7435e76b978d5efc364ce10870780622cee003c9951bd92ec1020c924b124
19300	sha1(\$salt1.\$pass.\$salt2)	630d2e918ab98e5fad9c61c0e4697654c4c16d73:18463812876898603420835420139870031762867:44495164251936059797606429276
19500	Ruby on Rails Restful-Authentication	d7d5ea3e09391da412b653ae6c8d7431ec273ea2:238769868762:8962783556527653675
19600	Kerberos 5, etype 17, TGS-REP (AES128-CTS-HMAC-SHA1-96)	\$krb5tgs\$17\$user\$realm\$a8434177efd09be5bc2eff8\$90b4ce5b266821adc26c4f71958a475c9348f6c5096190be04f8430c4e0d554c86c
19700	Kerberos 5, etype 18, TGS-REP (AES256-CTS-HMAC-SHA1-96)	\$krb5tgs\$18\$user\$realm\$8efd91bb01cc69dd07e46009\$7352410d6aafd72c64972a66058b02aa1c28ac580ba41137d5a170467f06f17faf5df
19800	Kerberos 5, etype 17, Pre-Auth	\$krb5pa\$17\$hashcat\$HASHCATDOMAIN.COM\$a17776abe5383236c58582f515843e029ecbf43706d177651b7b6cbd2713b17597ddb35b1c5
19900	Kerberos 5, etype 18, Pre-Auth	\$krb5pa\$18\$hashcat\$HASHCATDOMAIN.COM\$96c289009b05181bfd32062962740b1b1ce5f74eb12e0266cde74e81094661addab08c0c1a1:
20011	DiskCryptor SHA512 + XTS 512 bit (AES)	https://hashcat.net/misc/example_hashes/dc/hashcat_aes.dc [https://hashcat.net/misc/example_hashes/dc/hashcat_aes.dc]
20011	DiskCryptor SHA512 + XTS 512 bit (Twofish)	https://hashcat.net/misc/example_hashes/dc/hashcat_twofish.dc [https://hashcat.net/misc/example_hashes/dc/hashcat_twofish.dc]
20011	DiskCryptor SHA512 + XTS 512 bit (Serpent)	https://hashcat.net/misc/example_hashes/dc/hashcat_serpent.dc [https://hashcat.net/misc/example_hashes/dc/hashcat_serpent.dc]
20012	DiskCryptor SHA512 + XTS 1024 bit (AES-Twofish)	https://hashcat.net/misc/example_hashes/dc/hashcat_aes_twofish.dc [https://hashcat.net/misc/example_hashes/dc/hashcat_aes_twofish.dc]
20012	DiskCryptor SHA512 + XTS 1024 bit (Twofish-Serpent)	https://hashcat.net/misc/example_hashes/dc/hashcat_twofish_serpent.dc [https://hashcat.net/misc/example_hashes/dc/hashcat_twofish_serpent.dc]
20012	DiskCryptor SHA512 + XTS 1024 bit (Serpent-AES)	https://hashcat.net/misc/example_hashes/dc/hashcat_serpent_aes.dc [https://hashcat.net/misc/example_hashes/dc/hashcat_serpent_aes.dc]
20013	DiskCryptor SHA512 + XTS 1536 bit (AES-Twofish-Serpent)	https://hashcat.net/misc/example_hashes/dc/hashcat_aes_twofish_serpent.dc [https://hashcat.net/misc/example_hashes/dc/hashcat_aes_twofish_serpent.dc]
20200	Python passlib pbkdf2-sha512	\$pbkdf2-sha512\$25000\$LyWeOhrP2RsjZcXlDGMFKQ\$1vC5Ohk2mCS9b6akqsEfgEb4l74SF8XjH.SlJfX3dMLHdlY1GK9ojcCKts6/asR4aPqmK7
20300	Python passlib pbkdf2-sha256	\$pbkdf2-sha256\$29000\$9xh7j/Ge8x6DMEao1VqrDQ\$kra3R1wEnY8mPdDWOpTqOTINaAmZvRmCYd8u5OBQP9A
20400	Python passlib pbkdf2-sha1	\$pbkdf2\$131000\$5WythYixPgQ2jt3buXcg\$8Kdr.QQEOaZIXNOrnu36l/.6Po
20500	PKZIP Master Key	f1eff5c0368d10311dcf419
20510	PKZIP Master Key (6 byte optimization) <sup>17</sup>	f1eff5c0368d10311dcf419
20600	Oracle Transportation Management (SHA256)	otm_sha256:1000:1234567890:S5Q9Kc0ETy6ZpYQU+JYY60aFJaJuZaSinggmzU8PC4=
20710	sha256(\$ha256(\$pass).\$salt)	bfede293ecf6539211a7305ea218b9f3f608953130405cda9eaba6fb6250f824:7218532375810603
20712	RSA Security Analytics / NetWitness (sha256) *	6F48F44C46F5ADC534597687B086278F0AAF7D262ADDB3978562A7D55BDDF467:MDAwMzY1NzYwODI4MQ==
20720	sha256(\$salt.sha256(\$pass))	bae9edada8358fcbcd811f7d362f46277fb9d488379869fba65d79701d48b8b:869dc2ed80187919
20800	sha256(md5(\$pass))	74ee1fae245edd6f27bf36efc3604942479fceeefbadab5dc5c0b538c196eb0f1
20900	md5(\$ha1(\$pass).md5(\$pass).\$ha1(\$pass))	100b3a4fc1dc8d60d9bf40688d8b740a
21000	BitShares v0.x - sha512(\$ha512_bin(\$pass))	caec04bdf7c17f763a9ec7439f7c9abada112f1bfc9b1bb684fef9b6142636979b9896cf236896d821a69a961a143dd19c96d59777258201f1bbe
21100	sha1(md5(\$pass.\$salt))	aade80a61c6e3cd3cac614f47c1991e0a87dd028:6
21200	md5(\$ha1(\$salt).md5(\$pass))	e69b7a7fe1bf2ad9ef116f79551ee919:baa038987e582431a6d
21300	md5(\$salt.sha1(\$salt.\$pass))	799dc7d9aa4d3f404cc21a4936dbdcde:68617368636174
21310	md5(\$salt1.sha1(\$salt2.\$pass)) *	dc91b5a658ef4b7d859e90742f340e24:708237:d270e9eea5802e346bcaa9b229f37766
21400	sha256(\$ha256_bin(\$pass))	0cc1b58a543f373272aa0281e97ab456e345267ee46feabf7709515debb7ec43c
21420	sha256(\$salt.sha256_bin(\$pass))	5934ea4d670c12a7f1155fabca42056b252f71bdc9215d31108990c11bf3d98b3:926977135627009931143276535452263518529106417540
21500	SolarWinds Orion	\$solarwinds\$0\$admin\$fj4EBQewCQUZ7YIH0L8uj9kQ5Bb3m7N4u0crKK0Uj9rbbAnSrBMX07oWx9KqL3sCzwncvPZ9hyDV9QCFTg==
21501	SolarWinds Orion v2	\$solarwinds\$1\$3pHk55NTyPAev3EJcAww==N4Ii2Pxx/bTZZwslQLIKrp0wvfZ5A9n9hpyiR896g3dJMTP01Q7BK1Eht8Vh14kXq/42Vn2zp3qY
21600	Web2py pbkdf2-sha512	pbkdf2(1000,20,\$ha512)\$744943\$c5f8cdef76e3327c908d8d96d4abdb3d8caba14c
21700	Electrum Wallet (Salt-Type 4)	\$electrum\$4*03eae309d8bda5dcbddaae8145469193152763894b7260a6c4ba181b3ac2ed5653*8c594086a64dc87a9c1f8a69f646e31e8d3:
21800	Electrum Wallet (Salt-Type 5)	\$electrum\$5*02170fee7c35f1ef3b229edc90fbd0793b688a0d6f41137a97aab2343d135ce16*94cf72d8f5d774932b41a43344984859e4372
22000	WPA-PBKDF2-PMKID+EAPOl <sup>1</sup>	WPA*01*4d4fe7aac3a2cecab195321ceb99a7d0*fc690c158264*f4747f87f9f4*6860173686361742d65f73736964***
22000	WPA-PBKDF2-PMKID+EAPOl <sup>1</sup>	WPA*02*24022795224bfacca452763762686*6466b38ec3fc*225edc49b7aa*54502d64c494e4b5f484153484341545f54455354*10e3be3
22001	WPA-PMK-PMKID+EAPOl <sup>18</sup>	WPA*01*5ce7ebe97a1bbfbef2822ae627b726d5b*27462da350ac*accd10fb464e*686173686361742d65f73736964***
22100	BitLocker	\$bitlocker\$1\$16\$6f972989ddc209f1eccf07313a7266a2\$1048576\$12\$3a33a8eaff5e6f81d907b591\$60\$316b0f6d4cb445fb056f0e3e0633c4
22200	Citrix NetScaler (SHA512)	2f9282ade42ce148175dc3b4d8b5916dae5211eee49886c37cc768fb9f2eb982a5ac2f2672a0223999bfd15349093278ad1f26f276e8b61dac
22300	sha256(\$salt.\$pass.\$salt)	755a8ce4e0c0fbaee41d714aa35c9fca803106608f718f973eab006578285007:11265
22400	AES Crypt (SHA256)	\$aescript\$1*efc648908ca7ec727f37f3316dffd885c*eff5c87a35545406a57b56de57bd0554*3a66401271a0c08cbd10cf2070332214093a33f:
22500	MultiBit Classic .key (MD5)	\$multibit\$1*e5912fe5c84af3d5*050391c219e8ef62c06505b1f6232858f5bcaa739c2b471d45dd0bd8345334de
22600	Telegram Desktop < v2.1.14 (PBKDF2-HMAC-SHA1)	\$telegram\$1*4000*913a7e42143be4eed0fb532dacf0a4e3a0eae036ae66dd02de76323046c575531*cde5f7a3bda3812b4a3cd4df1269c6be1:
22700	MultiBit HD (scrypt)	\$multibit\$2*2e311aa2cc5ec99f7073cacc8a2d1938*e3ad782e7f92d66a3cdfaec43a46be29*5d1cabd4f4a50ba125f88c47027fff9b
22911	RSA/DSA/EC/OpenSSH Private Keys (\$0\$)	\$sshng\$0\$8\$7532262427635482\$1224\$e1b1690703b3fd0ab6677c89a00dfce57fc2f345ebd2b2993bf0d8bb267449d08839213dc234dd23
22921	RSA/DSA/EC/OpenSSH Private Keys (\$6\$)	\$sshng\$6\$8\$7620048997557487\$1224\$13517a1204dc69528c474ef5cbb02d548698771f2a607c04ea54eb92f13dedba0f2185d2884b4db0c
22931	RSA/DSA/EC/OpenSSH Private Keys (\$1, \$3\$)	\$sshng\$1\$16\$14987802644369864387956120434709\$1232\$ffa56007ed83e49f4dc439c776a90dec9656521385073bf71931a2c6503c93917e

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Hash-Mode	Hash-Name	Example
28506	Bitcoin WIF private key (P2SH(P2WPKH)), uncompressed <sup>31</sup>	3LovFvX5zBrVusVcj7pf3jXvV946kjKhKu
28600	PostgreSQL SCRAM-SHA-256	SCRAM-SHA-256\$4096:IKfxzJ8Nq4PkLJCfKcPmA==#sRw3qWt18uaBnsTOEEbxtgWdKeBmBSNzVqD4sdqLQ=:hPcIc1CcnBna3szR8MF3MV
28700	Amazon AWS4-HMAC-SHA256	\$AWS-Sig-v4\$0\$20220221T000000Z\$us-east-1\$3\$421ab6e4af9f49fa30fa9c253fcfeb2ce91668e139e6b23303c5f75b04f8a3c4\$3755ed2bc
28800	Kerberos 5, etype 17, DB	\$krb5db\$17\$test\$TEST.LOCAL\$1c41586d6c060071e08186ee214e725e
28900	Kerberos 5, etype 18, DB	\$krb5db\$18\$test\$TEST.LOCAL\$266b5a53a6d663c3f69174f3309acada8e467c097c7973699f86286a6cf1a6c7
29000	sha1(\$salt.sha1(utf16le(\$username)).':.utf16le(\$pass))	339b5eaa53f28516008e9ca710857d3a4785b6fc:PCA064ff42cab5a8f0692544b8dd3d3054bd73fe9afaa08c6b6b310538cc9a7:757365726e6
29100	Flask Session Cookie (\$salt.\$salt.\$pass)	ey1l2c2VybmFtZSI6ImFkbWUuIn0.YjdjRQ.1TOTf1PD0H9wXsu..qS0aywAJVD8
29200	Radmin3	\$radmin3\$75007300650072006e001006d006500*c63bf695069d564844c4849e7df6d41f1bc5f3a7df8e27c5f20545a238398fa*0062fb848
29311	TrueCrypt RIPEMD160 + XTS 512 bit	\$truecrypt\$87914967f14737a67fb460f7b8aeb81de2b41bf2740b3dd78784e02763951daa47c7ca235e75c22ec8d959d6b67f7eedefad61e6c
29312	TrueCrypt RIPEMD160 + XTS 1024 bit	\$truecrypt\$d6e1644acd373e6fdb8c8aaeb0c400d22eaa0b02e2a6649e065ad50f91e2f81fc5e1600d1cdf3b4ee72a7326a9a28d336ec5adfd2c
29313	TrueCrypt RIPEMD160 + XTS 1536 bit	\$truecrypt\$3916e924d246e5ceb17b140211fff57b67150b3dee53fa75261d465b0ee3e56ee820e6ba3958d84c61508f028b2a112e9005877f
29321	TrueCrypt SHA512 + XTS 512 bit	\$truecrypt\$5ebf76b4050aaa3374f9946166a9c4134dd3ec0df1176da2fb103909d20e8b3c9b95cbdd6d1a7ad05411a1443ad6254e059e924d7
29322	TrueCrypt SHA512 + XTS 1024 bit	\$truecrypt\$9f207bec0ded18a1b2e324d0f5d2f3f0bd1aeb43db65d33242fa48ac960fad4c14d04c5530e6ad47e7e39d16e0a654ad35fb0b
29323	TrueCrypt SHA512 + XTS 1536 bit	\$truecrypt\$721a7f40d2b88de8e11f1a203b04ffa97a1f5671623c6783f984cc7c55e04665f95a7f3fd52f402898aaaded68d048cc4c4fabf81c268:
29331	TrueCrypt Whirlpool + XTS 512 bit	\$truecrypt\$cf53d4153414b3285e701e52c2d99e148c6ccc4508132f82cb41862d0a0ac9ea16274285ac261c339c1508ee9fca54c33e38245f
29332	TrueCrypt Whirlpool + XTS 1024 bit	\$truecrypt\$e9e503972b72dee996b0bfced2df003a54b42399e3586520cf1f69475ba32aff564e40e604a505af95ce152207558ae815e94ce495:
29333	TrueCrypt Whirlpool + XTS 1536 bit	\$truecrypt\$de7d6725c4c910a7e96307df69d41335e64d17b4425ca5bf1730f27820f92df9f20f3e55d8566e5b525592153f98734879666c8
29341	TrueCrypt RIPEMD160 + XTS 512 bit + boot-mode	\$truecrypt\$2b5da9924119fde5270f712ba3c3e4974460416e8465f222149499908c2fca0a4753b581f26625d11c4d3f49ddeb1c95bc3e17629:
29342	TrueCrypt RIPEMD160 + XTS 1024 bit + boot-mode	\$truecrypt\$debbcc7a74b72ac4b7eaa4ac8b6d6431da1d9579f4f760b31f07b3d36e65099daca9e4ae569114b3cb6e64d7b62062ba6b31a
29343	TrueCrypt RIPEMD160 + XTS 1536 bit + boot-mode	\$truecrypt\$5e6628907291b0b7444f3a23fb0693ac71c4379c3a3cc0eafbab40036bbdadfed179e04484aca0f5b6ec7c7e8abe61d683be6:
29411	VeraCrypt RIPEMD160 + XTS 512 bit	\$veracrypt\$531aca1fa6db5118506320114cb11a9f00daded61720533fc12982b28ec71a1a3856ac6ee44b4acc207c8230352208d5f0dc37bf75:
29412	VeraCrypt RIPEMD160 + XTS 1024 bit	\$veracrypt\$531aca1fa6db5118506320114cb11a9f00daded61720533fc12982b28ec71a1a3856ac6ee44b4acc207c8230352208d5f0dc37bf75:
29413	VeraCrypt RIPEMD160 + XTS 1536 bit	\$veracrypt\$531aca1fa6db5118506320114cb11a9f00daded61720533fc12982b28ec71a1a3856ac6ee44b4acc207c8230352208d5f0dc37bf75:
29421	VeraCrypt SHA512 + XTS 512 bit	\$veracrypt\$2be2b6279d8d2694e0ad1e5049902e717f1bdf741b6d678bf307d510741b649d78c54dca46fb2c92723afd9a40769b295e66d445:
29422	VeraCrypt SHA512 + XTS 1024 bit	\$veracrypt\$37e6db10454a5d74c1e75eca0bc8a70e67ac032357e4db6a4315c0174c9780f92d10d06a5e977969f2890828d446a3c317dc40:
29423	VeraCrypt SHA512 + XTS 1536 bit	\$veracrypt\$d44f26d1742260f88023d825729cc5a64cf8475d887632a2fb4a84af27af138f9ad24bcb1122f6ba68339ae8427d1f72c0c4eeef041:
29431	VeraCrypt Whirlpool + XTS 512 bit	\$veracrypt\$48f79476aa0aa8327a8a9056e61450f4e2883c9e9669142f2e2f022c2f85303b897d088dea03d64329f6c402a56fed05b39197159:
29432	VeraCrypt Whirlpool + XTS 1024 bit	\$veracrypt\$1b721942019ebe8cedddbed7744a0702c0e053281a467e0ed69bf875c7406407d72eb8f2aea21270e41898c0a2c14382f86e04c1:
29433	VeraCrypt Whirlpool + XTS 1536 bit	\$veracrypt\$5eb128daef63eff7e6db6aa10a8858f89964f47844acca8d8f2ebb2e73866fa75e3b7a53f9d2ff1ecdd1f4dc90e9c0df51f60d11b19
29441	VeraCrypt RIPEMD160 + XTS 512 bit + boot-mode	\$veracrypt\$528c2997054ce1d22cbc5233463df8119a0318ab94aa715e6e686c898f36690b443221a18f578fb893e0db1e4b875cc711eab542e
29442	VeraCrypt RIPEMD160 + XTS 1024 bit + boot-mode	\$veracrypt\$a3c0fa4cae59bf7a3eed64bf70b8a60623664502eeb972eb51fa25ee921d813f8e45d3e1ab1c0088a62482b78c6e07308d2308d3
29443	VeraCrypt RIPEMD160 + XTS 1536 bit + boot-mode	\$veracrypt\$1a8c0135f94567aa866740cb27c5b9763c95be3ac0b7b5c744a36e48c08ae38d6d06ae59b296c64d05295fc134fb4d8aa96a7b
29451	VeraCrypt SHA256 + XTS 512 bit	\$veracrypt\$b8a19a544414e540172595aef79e6616f504799b40a407edfb69d405349e3f0b0db3187876f0b7a21739b3a9bb02bd4752eac4d20
29452	VeraCrypt SHA256 + XTS 1024 bit	\$veracrypt\$1c3197f32cd5b72bd4d6047a7a43afefb0d2e856a8fc4957c3fb1188b62cb0ca002f585c125bb33c5a5e85a665afae9fce15cb127c2:
29453	VeraCrypt SHA256 + XTS 1536 bit	\$veracrypt\$f421bdc1087b8319c12d84a680ceab0102e8e41c9ccfe76dbe0215dcfb7b543f3e1bbdd099eb8646823dae5bad8468b7243696:
29461	VeraCrypt SHA256 + XTS 512 bit + boot-mode	\$veracrypt\$c8a5f07efc320ecd797ac2c5b911b0f7ee688f59890dd3fa39b4808eb3113219e2bf1517f46a20feba286a3f3e997c80361132262b
29462	VeraCrypt SHA256 + XTS 1024 bit + boot-mode	\$veracrypt\$6bb6eef1a5f5eb2b2849e1fc9c90c08f0705010efa643581111216b3e145201374bb8e62de4d94a4ce7ecabb11aa57610063fcedd:
29463	VeraCrypt SHA256 + XTS 1536 bit + boot-mode	\$veracrypt\$f95b222552195378a228d932f73dc4a59b6db12899be43944ba2e9bf47967ba35da17bf69cc3f424521983989a66df3c7865af6c
29471	VeraCrypt Streebog-512 + XTS 512 bit	\$veracrypt\$444ec71554f0a2989b34bd8a5750ae7b5ed8b1ccdead29120fc030bd5186f312a7fa18ab4f4389d7798e4c3073afd1e71dda2052d
29472	VeraCrypt Streebog-512 + XTS 1024 bit	\$veracrypt\$0f5da0b17c60edcd392058752ec29c389b140b54cd1f94de43dceca703b1fd37936e75a500b7f9d4e94e7f214c4696c051be96977:
29473	VeraCrypt Streebog-512 + XTS 1536 bit	\$veracrypt\$18d2e8314961850f8fc26d2bc6f896db9c4ee301b5fa7295615166552b2422042c6cf6212187ec9c0234908e7934009c23ceed0c:
29481	VeraCrypt Streebog-512 + XTS 512 bit + boot-mode	\$veracrypt\$2bfe4a72e13388a9ce074bbe0711a48d62f123df85b09e0350771edc4a0e4f397038a49b900275c9158145a96b52f95e92f927b3f
29482	VeraCrypt Streebog-512 + XTS 1024 bit + boot-mode	\$veracrypt\$a7f64c7c81f608527552532cc7049b0d369e2ce20202d7a41ffb94300cb9c7ce2130247f49ba4ce4c1512f3c1d1b4289ca965e8eb06:
29483	VeraCrypt Streebog-512 + XTS 1536 bit + boot-mode	\$veracrypt\$0c9d7444e9e64a838e857163787bf26349224dbd4bbf788ce25156c870514226674725be93cf2a2c2ee8adbfb8bb3ec1405a33:
29511	LUKS v1 SHA-1 + AES	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha1_aes_cbc-essiv_128.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha1_aes_cbc-essiv_128.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat_luks">https://hashcat.net/misc/example_hashes/hashcat_luks</a> ]
29512	LUKS v1 SHA-1 + Serpent	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha1_serpent_cbc-plain64_256.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha1_serpent_cbc-plain64_256.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29513	LUKS v1 SHA-1 + Twofish	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha1_twofish_xts-plain64_256.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha1_twofish_xts-plain64_256.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29521	LUKS v1 SHA-256 + AES	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha256_aes_cbc-plain64_128.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha256_aes_cbc-plain64_128.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29522	LUKS v1 SHA-256 + Serpent	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha256_serpent_xts-plain64_512.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha256_serpent_xts-plain64_512.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29523	LUKS v1 SHA-256 + Twofish	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha256_twofish_cbc-essiv_256.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha256_twofish_cbc-essiv_256.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29531	LUKS v1 SHA-512 + AES	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha512_aes_cbc-plain64_256.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha512_aes_cbc-plain64_256.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29532	LUKS v1 SHA-512 + Serpent	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha512_serpent_cbc-essiv_128.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha512_serpent_cbc-essiv_128.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29533	LUKS v1 SHA-512 + Twofish	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_sha512_twofish_cbc-plain64_256.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_sha512_twofish_cbc-plain64_256.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29541	LUKS v1 RIPEMD-160 + AES	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_ripemd160_aes_cbc-essiv_256.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_ripemd160_aes_cbc-essiv_256.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29542	LUKS v1 RIPEMD-160 + Serpent	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_ripemd160_serpent_xts-plain64_256.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_ripemd160_serpent_xts-plain64_256.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29543	LUKS v1 RIPEMD-160 + Twofish	<a href="https://hashcat.net/misc/example_hashes/hashcat_luks_ripemd160_twofish_cbc-plain64_128.txt">https://hashcat.net/misc/example_hashes/hashcat_luks_ripemd160_twofish_cbc-plain64_128.txt</a> [ <a href="https://hashcat.net/misc/example_hashes/hashcat">https://hashcat.net/misc/example_hashes/hashcat</a> ]
29700	KeePass 1 (AES/Twofish) and KeePass 2 (AES) - keyfile only mode <sup>32</sup>	\$keepass\$*2*60000*0*020784460c3c837003f22ee2ba42b3ac2a9ad9e913efb61349b3f91aacdb004*c901781373cb6806df4b4c7b427ba6
29800	Bisq .wallet (scrypt) *	\$bisq\$3*32768*8*6*31d838af87f99cb8*5c9b7bf3228d9e865881156e17b1866589ffa6b757011e25d1319083595236d2
29910	ENCsecurity Datavault (PBKDF2/no keychain) *	\$encdv-pbkdf2\$1\$1\$121f89edc51ffb2\$14e6bf4e9256f9e4\$32\$19724898538822546447951015990635790978126618888136525973800
29920	ENCsecurity Datavault (PBKDF2/keychain) *	\$encdv-pbkdf2\$3\$1\$c232aba45699c80b\$473d5dd2e0833ac7\$32\$44547169263224935811140426163715827822052349398354157789:
29930	ENCsecurity Datavault (MD5/no keychain) *	\$encdv\$1\$1\$3a427b9ee5851118\$4f52176bb9a1b3b6
29940	ENCsecurity Datavault (MD5/keychain) *	\$encdv\$3\$1\$91b9babb3820527\$1ff4cb6657adad34\$d9067c4d059879dfce2edeb3999871973d422ff5fa868c51b025d07f644187889dc550:
30000	Python Werkzeug MD5 (HMAC-MD5 (key = \$salt)) *	md5\$84143\$7f51edecfa6fb401a0b5e63d33fc80e
30120	Python Werkzeug SHA256 (HMAC-SHA256 (key = \$salt)) *	sha256\$70108387805\$8b9472281c36c3a693703de0
30420	DANE RFC7929/RFC8162 SHA2-256 *	127e6fbfe24a750e72930c220a8e138275656b8e5d8f48a98c3c92df
30500	md5(md5(\$salt).md5(md5(\$pass))) *	e13bb4b8e5a98db7277df344aa3363cf:28945624531
30600	bcrypt(\$sha256(\$pass)) / bcryptsha256 *	\$2b\$10\$FxDtpTNaL303lCwtd6LF0U20eGc3VJ07qycHcfqQQ71GhO/qSzu
30700	Anope IRC Services (enc_sha256) *	sha256:ab67666e1f91cd38c0ab5bee9c8d2132eca7460354477109a739d4e735b14131:47bcfd0d573653943231df07445da774e5d06465c8:



Hash-Mode	Hash-Name	Example
30901	Bitcoin raw private key (P2PKH), compressed <sup>33</sup> *	14Fqy5AGRehazZ4NLzxFWy2E4BiNfDH9Ut
30902	Bitcoin raw private key (P2PKH), uncompressed <sup>34</sup> *	12sLRz1TKPZurKCwVqeT5FkW3Y7usipPbZ
30903	Bitcoin raw private key (P2WPKH, Bech32), compressed <sup>35</sup> *	bc1q926ca6n7wz7gm2gfd8xc5p0vu687ngvnknp74
30904	Bitcoin raw private key (P2WPKH, Bech32), uncompressed <sup>36</sup> *	bc1qq6samcuksd2f6rsc48eu3lkq87zp33vfud0p0t
30905	Bitcoin raw private key (P2SH(P2WPKH)), compressed <sup>37</sup> *	3JqAMRQN3Gd6i8yV3Kw7v55RmFxW7iW2Aq
30906	Bitcoin raw private key (P2SH(P2WPKH)), uncompressed <sup>38</sup> *	3PmD8zdrFD8KVgLrguVDCP2RJB4Rh35G9Z
31000	BLAKE2s-256 *	\$BLAKE2\$2c719b484789ad5f6fc1739012182169b25484af156adc91d4f64f72400e574a
31100	SM3 *	51227e48ea74827b77fc142c3ec21d25cc42c794e6ac422825cd47ad4ac7913d
31200	Veeam VBK *	\$vbk\$*54731702769149752741495960625996207399688284541933702394775960978730695504382155223405444342855920150089
31300	MS SNTP *	\$sntp-ms\$fcf7023381cf6bb474cdcbeb0a67bdb3\$90773369753681134296214095556710852648962471656669697133878443898610397
99999	Plaintext	hashcat

- \* In beta or not yet released
- <sup>1</sup> Password: "hashcat!"
- <sup>2</sup> rounds=[# of iterations] is **optional** here, after signature, e.g. \$5\$rounds=5000
- <sup>3</sup> Same format as in <sup>2</sup> but the number of rounds **must** be specified
- <sup>4</sup> The hash used here is **not** the one sent via e.g. the web interface to LastPass servers (pbkdf2\_sha256\_hex (pbkdf2\_sha256 (\$pass, \$email, \$iterations), \$pass, 1) but instead the one stored (by e.g. your browser or the pocket version) to disk. For instance, Opera and Chrome store the hash in local SQLite databases; Firefox uses files ending with "lpall.slps" - for Linux: 2nd line is interesting / base64 decode it; for Windows, see here [https://hashcat.net/forum/thread-2701-post-16111.html#pid16111] - and\_key.itr
- <sup>5</sup> You can consider the second part as a "salt". If it is equal to 00000000, the CRC32 code will be considered as "not salted"
- <sup>6</sup> The raw sha256 output is used for base64() encoding (not the hexadecimal output)
- <sup>7</sup> The format is hash:salt:id
- <sup>8</sup> Password: "hashcat1"
- <sup>9</sup> Password: "hashcat1hashcat1hashcat1"
- <sup>10</sup> This file actually contains several examples of the different hash+cipher combinations. The password is stored in the pw file.
- <sup>11</sup> You can use itunes\_backup2hashcat [https://github.com/philismd/itunes\_backup2hashcat/] to extract the hashes from the Manifest.plist file
- <sup>12</sup> Password: "hashcat!!!". Min/max password length is exactly 10 characters/bytes.
- <sup>13</sup> You can use Axsuite by Fist0urs [https://github.com/Fist0urs/Axsuite] to retrieve the hashes.
- <sup>14</sup> Password: a288fcf0caaacd9a9f58633ff35e8992a01d9c10ba5e02efd8cb5d730ce7bc
- <sup>15</sup> Password: 5b13d4babb3714ccc62c9f71864bc984efd6a55f237c7a87fc2151e1ca658a9d
- <sup>16</sup> PIM: 500
- <sup>17</sup> full password in output is hashcat, but input provided must be without the first 6 bytes (therefore just: t)
- <sup>18</sup> 88f43854ae7b1624fc2ab7724859e795130f4843c7535729e819cf92f39535dc
- <sup>19</sup> use this SQL query to extract the hashes:

```
SELECT user, CONCAT('$mysql', SUBSTR(authentication_string,1,3), LPAD(CONV(SUBSTR(authentication_string,4,3),16,10),4,0),'*',INSERT(HEX(SUBSTR(authentication_string,8)),41,0,'*')) AS hash
```

- <sup>20</sup> Password: "hashcat\_hashcat\_hashcat\_hashcat\_"
- <sup>21</sup> you can extract the hashes with https://github.com/0x6470/bitwarden2hashcat [https://github.com/0x6470/bitwarden2hashcat]
- <sup>22</sup> Password: b4b9b02e6f09a9bd760f388b67351e2b
- <sup>23</sup> Password: \$HEX[91b2e062b9]
- <sup>24</sup> Password: \$HEX[b8f63619ca]
- <sup>25</sup> Password: \$HEX[6a8aedccb7]
- <sup>26</sup> Password: KxhashcatxhXkULNJYF8Fu46G28SJrC7x2qwFtRuf38kVjkWxHg3
- <sup>27</sup> Password: 5KcL859EUUnBDtVG76134U6DZWnVmpE996emJnWmTLRW2hashcat
- <sup>28</sup> Password: KyhashcatpL2CQmMUDVMVuEXqdLSvfQ6TbjkUuytSvBa7GMiuLi
- <sup>29</sup> Password: 5HzV19ffW9QTnmZHbwETRpPHm1d4hAP8PG1etUb3T3jjhashcat
- <sup>30</sup> Password: L4hashcat7q6HMnMFcukyvxvVjvpabXYjxXLey8846NtWUyX4YLl
- <sup>31</sup> Password: 5JjDR424kMePbt5Uxnm2t1NizhdiVPcf8gCj68PQP2ihashcat
- <sup>32</sup> Password: 127e6fbfe24a750e72930c220a8e138275656b8e5d8f48a98c3c92df2caba935
- <sup>33</sup> Password: 59887ec9920239bd45b6a9f82b7c4e024f80beaf887e5ee6aac5de0a899d3068
- <sup>34</sup> Password: 2006a306cf8f61c18c4e78e5fc0f5a7aa473b5ffb41f34344a32f8e042786fa1
- <sup>35</sup> Password: 4d1987d7a341d51557af59996845740135ab2506515426ada57cc8ec05adf794
- <sup>36</sup> Password: 25c9f8f734d87aacd9308705ca50b9819a57425ffbfcae41cef869b19764d72c2
- <sup>37</sup> Password: 83b45ff8d85f37aafc05a8accd1f1cd5e50868b57e2ef0ef6f287bb4d8d17786
- <sup>38</sup> Password: 4c969ccc86d9e1f557b4ff1f19badc9a99718dd2aec8fc66460612e05f5f7dd

## Specific hash types

These hash types are usually only found on a specific platform.

Hash-Mode	Hash-Name	Example
11	Joomla < 2.5.18	19e0e8d91c722e7091ca7a6a6bf0f4fa:54718031842521651757785603028777
12	PostgreSQL	a6343a68d964ca596d9752250d54bb8a:postgres
21	osCommerce, xt:Commerce	374996a5e8a5e57fd97d893f7df79824:36
22	Juniper NetScreen/SSG (ScreenOS)	nNxKL2rOEkbBc9BFLsVGG6OtOUO/8n:user
23	Skype	3af0389f093b181ae26452015f4ae728:user

## Legacy hash types

Hash-Mode	Hash-Name	Example
123	EPi	0x326CD7B4E4F794B79474E36704F35723958397163735263516265456E31 0xAFC55E260B8F45C0C6512BCE776C1AD8312B56E6
190	sha1(LinkedIn) <sup>2</sup>	b89eaac7e61417341b710b727768294d0e6a277b
1431	base64(sha256(unicode(\$pass))) <sup>1</sup>	npKD5jP0p6QtOryTcBFVvor+VmDaJmH1jn01M+Ly3II=
3300	MD5(Sun) <sup>1</sup>	\$md5\$rounds=904\$iPPKEBnEkp3JV8uX\$0L6m7rOFTVFn.SGqo2M9W1
3610	md5(md5(\$salt).\$pass) <sup>1</sup>	7b57255a15958ef898543ea6cc3313bc:1234
3720	md5(\$pass.md5(\$salt)) <sup>1</sup>	10ce488714fdbde9453670e0e4cbe99c:1234
3721	WebEdition_CMS <sup>1</sup>	fa01af9f0de5f377ae8befb03865178e:5678
4210	md5(\$username.0.\$pass) <sup>1</sup>	09ea048c345ad336ebe38ae5b6c4de24:1234
4600	sha1(sha1(sha1(\$pass))) <sup>1</sup>	dc57f246485e62d99a5110afc9264b4ccbfcf3cc

<sup>2</sup> Supported in oclHashcat

## Superseded hash types

Hash-Mode	Hash-Name	Example	
5000	SHA-3 (Keccak)	203f88777f18bb4ee1226627b547808f38d903de106262b5de9ca943b57137b6	replaced by specific Keccak types in hashcat 5.0.0

[https://hashcat.net/wiki/doku.php?id=example\\_hashes](https://hashcat.net/wiki/doku.php?id=example_hashes)