

**Respected Sir/Madam,**

The leaked hashes use MD5 hashing algorithm, which according to my observation is providing very little protection in case of database leaking.

The hashing algorithms like MD5 and SHA-family of algorithms are the standard one's but not that strong.

After trying to crack the passwords I came across certain drawbacks of company's policy.

1. The passwords were using very common combinations and there was no specific rules on their creation.
2. The length was short which in case of cracking could be an advantage for the hackers.
3. Salting was not implemented as it creates a strong hash value.
4. Strong hashing algorithms were not used.

The changes I would suggest in the password policy are:

1. Creating combination of letters, numbers and symbols is the best approach to begin with.
2. Don't let users use common words, their username, personal information or combination of that as a password.
3. The length should be increased.
4. Hashing algorithms like bcrypt, scrypt or PBKDF2 can be used. It is ought to increase the time in cracking.

**OBSERVATIONS:**

**Security Algorithm used : MD5**

experthead:e10adc3949ba59abbe56e057f20f883e  
interestec:25f9e794323b453885f5181f1b624d0b  
ortspoon:d8578edf8458ce06fbc5bb76a58c5ca4  
reallychel:5f4dcc3b5aa765d61d8327deb882cf99  
simmson56:96e79218965eb72c92a549dd5a330112  
bookma:25d55ad283aa400af464c76d713c07ad  
popularkiya7:e99a18c428cb38d5f260853678922e03  
eatingcake1994:fcea920f7412b5da7be0cf42b8c93759  
heroanhart:7c6a180b36896a0a8c02787eeafb0e4c  
edi\_tesla89:6c569aabbf7775ef8fc570e228c16b98  
liveltekah:3f230640b78d7e71ac5514e57935eb69  
blikimore:917eb5e9d6d6bca820922a0c6f7cc28b  
johnwick007:f6a0cb102c62879d397b12b62c092c06  
flamesbria2001:9b3b269ad0a208090309f091b3aba9db  
oranolio:16ced47d3fc931483e24933665cded6d  
spuffyffet:1f5c5683982d7c3814d4d9e6d749b21e  
moodie:8d763385e0476ae208f21bc63956f748  
nabox:defebde7b6ab6f24d5824682a16c3ae4  
bandalls:bdda5f03128bcbdfa78d8934529048cf

**Cracked Passwords:**

e10adc3949ba59abbe56e057f20f883e:123456  
e99a18c428cb38d5f260853678922e03:abc123  
d8578edf8458ce06fbc5bb76a58c5ca4:qwerty  
96e79218965eb72c92a549dd5a330112:111111  
3f230640b78d7e71ac5514e57935eb69:qazxsw  
fcea920f7412b5da7be0cf42b8c93759:1234567  
f6a0cb102c62879d397b12b62c092c06:bluered  
25d55ad283aa400af464c76d713c07ad:12345678  
5f4dcc3b5aa765d61d8327deb882cf99:password  
8d763385e0476ae208f21bc63956f748:moodie00

Thank you,  
Rishaw.