

Respected Sir/Ma'am

After trying to crack all the leaked hashes, I found several vulnerabilities in your password policy and this email concludes all the findings and suggestions to improve your password policy.

Message Digest (MD5) is the standard cryptographic hash functions used to provide data security for authentication which is a comparatively pretty weak hash.

All the passwords which are compromised were using MD5 which is a weaker hash algorithm and is prone to collisions.

It was very easy to crack through hashcat and rockyou.txt and many other wordlists via terminal and the same can also be done using Cloud GPU's which help achieving the same in very less time.

I would suggest that you use a very strong password encryption mechanism to create hashes for the passwords based on SHA like SHA256/SHA512.

After cracking the passwords, a careful look over the recovered passwords we find the following things about organisation's password policy:

- Minimum length for password is set to 6.
 - There is no specific requirement for the password creation.
- Users can use any combination of word and letters to create a password.

You can include several new things in your password policy. My recommendations are:

- Salting
- Avoid common words and character combinations in your password.
- Longer the passwords, the better they are. 8 characters at a minimum and can go up to 64 characters.
- Don't allow reusing of passwords.
- Mandatory use of combinations of special character, Capital and Small letters, numbers in your password.
- Don't let users include their personal information like username, actual name, date of birth and others while creating a password.
- Train your users to follow these policies to keep their passwords safe.
- Implement multi-factor authentication mandatory for organisation employees and if necessary, for normal users.

Thanking you,

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Observations :

HASH	- HASH ALGORITHM
experthead:e10adc3949ba59abbe56e057f20f883e	- MD5
interestec:25f9e794323b453885f5181f1b624d0b	- MD5
ortspoon:d8578edf8458ce06fbc5bb76a58c5ca4	- MD5
reallychel:5f4dcc3b5aa765d61d8327deb882cf99	- MD5
simmson56:96e79218965eb72c92a549dd5a330112	- MD5
bookma:25d55ad283aa400af464c76d713c07ad	- MD5
popularkiya7:e99a18c428cb38d5f260853678922e03	- MD5
eatingcake1994:fcea920f7412b5da7be0cf42b8c93759	- MD5
heroanhart:7c6a180b36896a0a8c02787eeafb0e4c	- MD5
edi_tesla89:6c569aabbf7775ef8fc570e228c16b98	- MD5

liveltekah:3f230640b78d7e71ac5514e57935eb69 - MD5
blikimore:917eb5e9d6d6bca820922a0c6f7cc28b - MD5
johnwick007:f6a0cb102c62879d397b12b62c092c06 - MD5
flamesbria2001:9b3b269ad0a208090309f091b3aba9db - MD5
oranolio:16ced47d3fc931483e24933665cded6d - MD5
spuffyffet:1f5c5683982d7c3814d4d9e6d749b21e - MD5
moodie:8d763385e0476ae208f21bc63956f748 - MD5
nabox:defebde7b6ab6f24d5824682a16c3ae4 - MD5
bandalls:bdda5f03128bcbdfa78d8934529048cf - MD5

HASH - CRACKED HASH

experthead:e10adc3949ba59abbe56e057f20f883e - 123456
interestec:25f9e794323b453885f5181f1b624d0b - 123456789
ortspoon:d8578edf8458ce06fbc5bb76a58c5ca4 - qwerty
reallychel:5f4dcc3b5aa765d61d8327deb882cf99 - password
simmson56:96e79218965eb72c92a549dd5a330112 - 111111
bookma:25d55ad283aa400af464c76d713c07ad - 12345678
popularkiya7:e99a18c428cb38d5f260853678922e03 - abc123
eatingcake1994:fcea920f7412b5da7be0cf42b8c93759 - 1234567
heroanhart:7c6a180b36896a0a8c02787eeafb0e4c - password1
edi_tesla89:6c569aabbf7775ef8fc570e228c16b98 - password!
liveltekah:3f230640b78d7e71ac5514e57935eb69 - qazxsw
blikimore:917eb5e9d6d6bca820922a0c6f7cc28b - Pa\$\$word1
johnwick007:f6a0cb102c62879d397b12b62c092c06 - bluered
flamesbria2001:9b3b269ad0a208090309f091b3aba9db - Flamesbria2001
oranolio:16ced47d3fc931483e24933665cded6d - Oranolio1994
spuffyffet:1f5c5683982d7c3814d4d9e6d749b21e - Spuffyffet12
moodie:8d763385e0476ae208f21bc63956f748 - moodie00
nabox:defebde7b6ab6f24d5824682a16c3ae4 - nAbox!l
bandalls:bdda5f03128bcbdfa78d8934529048cf - Banda11s