

Section 1: **Purpose**

The purpose of this policy is to specify guidelines for use of passwords. Most importantly, this policy will help users understand why strong passwords are a necessity, and help them create passwords that are both secure and useable. Lastly, this policy will educate users on the secure use of passwords. A solid password policy is perhaps the most important security control an organization can employ. Since the responsibility for choosing good passwords falls on the users, a detailed and easy-to-understand policy is essential.

Section 2: **Scope**

This policy applies to any person who is provided an account on the organization's network or systems, including: employees, guests, contractors, partners, vendors, etc.

Section 3: **Policy**

1. **Construction**

The best security against a password incident is simple: following a sound password construction strategy. The organization mandates that users adhere to the following guidelines on password construction:

- Passwords should be at least 8 characters
- Passwords should be comprised of a mix of letters, numbers and special characters (punctuation marks and symbols)
- Passwords should be comprised of a mix of upper and lower case characters
- Passwords should not be comprised of, or otherwise utilize, words that can be found in a dictionary
- Passwords should not be comprised of an obvious keyboard sequence (i.e., qwerty)
- Passwords should not include "guessable" data such as personal information about yourself, your spouse, your pet, your children, birthdays, addresses, phone numbers, locations, etc.

Creating and remembering strong passwords does not have to be difficult. Substituting numbers for letters is a common way to introduce extra characters - a '3' can be used for an 'E,' a '4' can be used for an 'A,' or a '0' for an 'O.' Symbols can be introduced this way as well: an 'S' can become a `,' or an 'i' can be changed to a '!.'

Another way to create an easy-to-remember strong password is to think of a sentence, and

then use the first letter of each word as a password. The sentence: 'The quick brown fox jumps over the lazy dog!' easily becomes the password 'Tqbfjotld!'. Of course, users may need to add additional characters and symbols required by the Password Policy, but this technique will help make strong passwords easier for users to remember.

2. **Confidentiality**

Passwords should be considered confidential data and treated with the same discretion as any of the organization's proprietary information. The following guidelines apply to the confidentiality of organization passwords:

- Users must not disclose their passwords to anyone
- Users must not share their passwords with others (co-workers, supervisors, family, etc.)
- Users must not write down their passwords and leave them unsecured
- Users must not check the "save password" box when authenticating to applications
- Users must not send passwords via email
- Users must not re-use passwords

3. **Change Frequency**

In order to maintain good security, passwords should be periodically changed. This limits the damage an attacker can do as well as helps to frustrate brute-force attempts. At a minimum, users must change passwords every 100 days. The organization may use software that enforces this policy by expiring users' passwords after this time period.

4. **Incident Reporting**

Since compromise of a single password can have a catastrophic impact on network security, it is the user's responsibility to immediately report any suspicious activity involving his or her passwords to the Information Technology (IT) Manager. Any request for passwords over the phone or email, whether the request came from organization personnel or not, should be expediently reported. When a password is suspected to have been compromised, the IT Manager will request that the user, or users, change all of his or her passwords.

5. **Applicability of Other Policies**

This document is part of the organization's cohesive set of security policies. Other policies may apply to the topics covered in this document and, as such, the applicable policies should be reviewed as needed.

Section 4: **Enforcement**

This policy will be enforced by the IT Manager, who may use automated tools to audit and enforce compliance. Violations may result in disciplinary action, which may include suspension, restriction of access, or more-severe penalties up to and including termination of employment.

Section 5: **Definitions**

Authentication: A security method used to verify the identity of a user and authorize access to a system or network.

Password: A sequence of characters that is used to authenticate a user to a file, computer, network, or other device. Also known as a passphrase or passcode.

Two-Factor Authentication: A means of authenticating a user that utilizes two methods: something the user has, and something the user knows. Examples are smart cards, tokens, or biometrics, in combination with a password.