**Password Protection Policy**

**Last Update Status:** *Updated October 2022*

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1. **Overview**

Passwords are a critical aspect of computer security. A weak or compromised password can result in unauthorized access to our most sensitive data and/or exploitation of our resources. All staff, including contractors and vendors with access to <Company Name> systems, are responsible for taking the appropriate steps, as outlined below, to select and secure their passwords.

1. **Purpose**

The purpose of this policy is to establish a standard for the secure use and protection of all work related passwords.

1. **Scope**

The scope of this policy includes all personnel who have or are responsible for an account (or any form of access that supports or requires a password) on any system that resides at any <Company Name> facility, has access to the <Company Name> network, or stores any non-public <Company Name> information.

1. **Policy**

# Password Creation and Use

# 4.1.1 All user-level and system-level passwords must conform to the *Password Construction Guidelines*. The passwords should be at least 12-20 characters, one uppercase, one lowercase, one number, one special character, nonconsecutive characters and no dictionary numbers.

# 4.1.2 Users must use a separate, unique password for each of their work related accounts. Users may not use any work related passwords for their own, personal accounts.

# 4.1.3 Staff are allowed to use authorized, approved password managers to securely store and manage all their work related passwords.

# 4.1.4 User accounts that have system-level privileges granted through group memberships or programs such as sudo must have a unique password from all other accounts held by that user to access system-level privileges. In addition, it is highly recommended that some form of multi-factor authentication is used for any privileged accounts.

# Password Change

# Passwords should be changed only when there is reason to believe a password has been compromised or fails to meet our Password Creation Requirements. We do not recommend the use or setting of regular [password expiration](https://passwordclinic.com/creating-the-safest-password/why-password-expiration-policies-can-lead-to-weaker-passwords-and-what-to-do-about-it/) policies like minimum or maximum age.

# Password Protection

# Passwords must not be shared with anyone, including supervisors and coworkers. All passwords are to be treated as sensitive, Confidential <Company Name> information. Corporate Information Security recognizes that legacy applications do not support proxy systems in place. Please refer to the technical reference for additional details.

# Passwords must not be inserted into email messages or other forms of electronic communication, nor revealed over the phone to anyone.

# Passwords may be stored only in password managers authorized by the organization.

# Do not use the "Remember Password" feature of applications (for example, web browsers).

# Any individual suspecting that their password may have been compromised must report the incident and change all relevants passwords.

# Application Development

Application developers must ensure that their programs contain the following security precautions:

* + 1. Applications must support authentication of individual users, not groups.
    2. Applications must not store passwords in clear text or in any easily reversible form.
    3. Applications must not transmit passwords in clear text over the network.
    4. Applications must provide for some sort of role management, such that one user can take over the functions of another without having to know the other's password.

# Multi-Factor Authentication

* + 1. Multi-factor authentication is highly encouraged and should be used whenever possible, not only for work related accounts but personal accounts also
    2. Security keys like Yubikey will be provided by the company. Loss of hardware keys should be reported immediately to \_\_\_\_\_\_\_\_\_ and a replacement key will be paid out-of-pocket.
    3. (unknown if security keys should be left in the slot due to the hardware cycle. USB-A for example has 1000 plug-unplug cycles and USB-C for example has 10000 plug-unplug cycles).

# Password Manager

* + 1. The password manager provided by the company would be 1Password or Bitwarden. [Password managers](https://support.1password.com/1password-privacy/) shall have strong encryption, have end-to-end encryption, have account privacy and metadata privacy.

1. **Policy Compliance**
   1. Compliance Measurement

The Infosec team will verify compliance to this policy through various methods, including but not limited to, business tool reports, internal and external audits, and feedback to the policy owner.

* 1. Exceptions

Any exception to the policy must be approved by the Infosec team in advance.

* 1. Non-Compliance

An employee found to have violated this policy may be subject to disciplinary action, up to and including termination of employment.

1. **Related Standards, Policies and Processes**

• Password Construction Guidelines

1. **Revision History**

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| **Date of Change** | **Responsible** | **Summary of Change** |
| June 2014 | SANS Policy Team | Updated and converted to new format. |
| October, 2017 | SANS Policy Team | Updated to confirm with new NIST SP800-63.3 standards. |
| October 2022 | SANS Policy Team | Updated and converted to new format. |