

Security risk assessment report

Part 1: Select up to three hardening tools and methods to implement

Multi-Factor Authentication(MFA), Password Policies, Firewall Maintenance

Part 2: Explain your recommendations

The implementation of robust Password Policies is essential to enhance the security posture of the organization's authentication mechanisms. These policies serve the critical purpose of thwarting attackers from easily guessing user passwords, thereby mitigating the risk of unauthorized access attempts. Moreover, educating employees about the perils associated with password sharing and neglecting to change default passwords is of paramount importance. Raising awareness among employees about these security risks will instill a sense of vigilance and responsibility when it comes to safeguarding their passwords. By enforcing Password Policies, employees will be enlightened about the significance of creating strong, unique passwords and adhering to best practices for password management. Such policies can include guidelines on password complexity, length, and expiration, ensuring that passwords remain secure over time.

It is highly recommended to implement Multi-Factor Authentication (MFA) as a security measure to mitigate the risks associated with password sharing among employees. Sharing passwords can result in unauthorized access to user accounts, potentially exposing sensitive company data. As employee accounts vary in permissions and access levels, the prospect of a shared password leading to complications is a valid concern. MFA, on the other hand, enforces a two or more-step verification process to authenticate users attempting to access a system or network. By requiring users to verify their identity through multiple means, such as something they know (password), something they have (a mobile device), and/or something they are (biometric data), MFA significantly enhances the security posture and safeguards against unauthorized access attempts. Implementing MFA not only fortifies the authentication process but also fosters a culture of heightened security

awareness within the organization. Consequently, it is imperative to consider the implementation of MFA as a vital step in safeguarding sensitive data and protecting the integrity of the company's systems and networks.

The implementation of Firewall Maintenance is of utmost importance to ensure the effective protection of the network. Without proper firewall rules in place to filter incoming and outgoing traffic, the network becomes vulnerable to significant security breaches and potential data compromises. Firewall maintenance should be done regularly.