

To ensure the network and connected systems are available 24/7, reliable, and can recover quickly in case of interruptions, the network security administrator should implement the following strategies: 1. By implementing these strategies, the network security administrator can effectively protect the company's data, systems, and operations, ensuring availability, reliability, and quick recovery in the face of potential threats or interruptions.

- Physical Security**: – Secure physical access to network components such as servers, routers, and switches by implementing measures like biometric authentication, access control systems, and surveillance cameras.
- Password Management**: – Enforce strong password policies requiring complex passwords that are regularly updated. – Utilize digital signatures and certificates to authenticate users and devices.
- Antiviruses**: – Install and regularly update antivirus software on all network-connected devices. – Implement environmental controls to safeguard networking equipment from physical threats like fire, water damage, and power surges.
- Cryptography (Encryption and Decryption)**: – Encrypt sensitive data both in transit and at rest using secure encryption algorithms. – Implement email filtering to prevent phishing attacks and malware distribution. – Implement automated backup solutions to avoid human errors and ensure consistency. – Implement multi-factor authentication to add an extra layer of security.

2.3.4.5.6.7.