Server Security Checklist

Secure Connections

- [ ] Use SSH for secure remote access.
- [ ] Change the default SSH port from 22 to a higher, non-standard port.

SSH Key Authentication

- [ ] Implement SSH key pairs instead of passwords for authentication.
- [ ] Store private keys securely and do not share them.

Secure File Transfer Protocol (FTPS)

- [ ] Use FTPS for encrypted file transfers.
- [ ] Encrypt files before transfer for additional security.

SSL Certificates

- [ ] Install SSL certificates to secure web administration areas.
- [ ] Ensure all web traffic uses HTTPS.

Private and Virtual Private Networks

- [ ] Implement VPNs for secure remote access.
- [ ] Use private networks for internal server communication.

Login Attempt Monitoring

- [ ] Use intrusion prevention software.
- [ ] Monitor and limit login attempts.

User Access Management

- [ ] Disable root account SSH login.
- [ ] Create limited user accounts to restrict user access based on roles and responsibilities.

Firewall Configuration

- [ ] Install and configure a firewall to manage incoming and outgoing traffic.
- [ ] Regularly review firewall rules and access controls.

Password Policies

- [ ] Enforce strong password policies (length, complexity).
- [ ] Implement two-factor authentication.

Software Updates

- [ ] Regularly update all software to patch known vulnerabilities.
- [ ] Test updates in a staging environment before deploying in production.

Remove Unnecessary Services

- [ ] Disable or uninstall non-essential services to reduce the attack surface.

Data Backup

- [ ] Perform regular backups of critical data.
- [ ] Store backups offsite and test them regularly.

Hide Server Information

- [ ] Adjust HTTP headers to hide software versions and system details.
- [ ] Modify error messages to avoid revealing system info to unauthorized users.

Intrusion Detection Systems

- [ ] Use an IDS to monitor and alert to suspicious activities.

Service and File Auditing

- [ ] Regularly audit files and services for unauthorized changes.
- [ ] Implement file integrity monitoring systems.

Multi-Server and Virtual Environments

- [ ] Use dedicated servers or virtual environments to isolate different applications and services.

Security Audits

- [ ] Conduct regular security audits to identify and address vulnerabilities.
- [ ] Review and update security policies and practices based on audit findings.

Employee Training

- [ ] Train employees in security best practices and threat awareness.
- [ ] Revise and improve security procedures based on the outcomes of simulations and real incidents.

AI and Machine Learning

- [ ] Integrate AI and ML tools into your security infrastructure to enhance threat detection capabilities.