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MSP Security Best Practices:
Ransomware Attack Prevention

Identity and Access Management

☐ Conduct an audit of all technology solutions, user accounts, and roles. Repeat this process on a quarterly basis (at least).

☐ Conduct phishing simulations and training for both MSP staff and clients.

☐ Disable accounts upon employee technology offboarding, or update permissions and access upon role change.

☐ Disable inactive or underutilized employee accounts if they are unused or inactive for long periods of time.

☐ Use a password manager to create strong, unique passwords per technology solution and enable multi-factor authentication (MFA) on the password manager. Do not allow storage of credentials in web browser.

☐ Protect any API keys in use.

- ☐ Use different keys for different integrations, rotating them periodically.
- ☐ Use IP restrictions where possible.
- ☐ Store keys securely.
- ☐ Enable MFA on all accounts that are allowed to via API keys anywhere they are configured for use.

Network Access

☐ Restrict RDP access to LAN only - do not configure internet access to RDP.

☐ Use a VPN to restrict access to admin tools (RMM, Remote Access, etc.). Use MFA on the VPN.

Protection and Detection

☐ Deploy Advanced Threat Protection for email to stop phishing, ransomware and other types of malware before they reach end-users.

☐ Define and apply DMARC checks on emails to avoid spoofing.

☐ Use Antivirus and advanced endpoint security on all endpoints to detect ransomware early and isolate infected devices.

Patching Your Channel Technology

☐ Update all endpoints and technology software to versions that are free of known material vulnerabilities.

☐ Review vendor practices for discovery, patching, and notification of vulnerabilities.

Protection of Local and Cloud Backups

☐ Act on your vendors' recommended guidance or best practices for the protection of your backup technology.

☐ Move away from shared login accounts on appliances and technology portals.

☐ Enable MFA on access to technology portals and appliances.

☐ Store copies of backups offsite, or in an isolated network or file share location that is inaccessible from servers or workstations, thus making backups harder to access, encrypt, or destroy.

☐ Monitor and alert for backup deletion. Some vendors offer "soft" delete so backups are not immediately removed. Understand your vendors' capabilities.

☐ Test your backups. Determine how long it takes to do a restore, and set accurate expectations should the need arise.

Lower Priority: Items to consider when expanding security best practices

Identity and Access Management

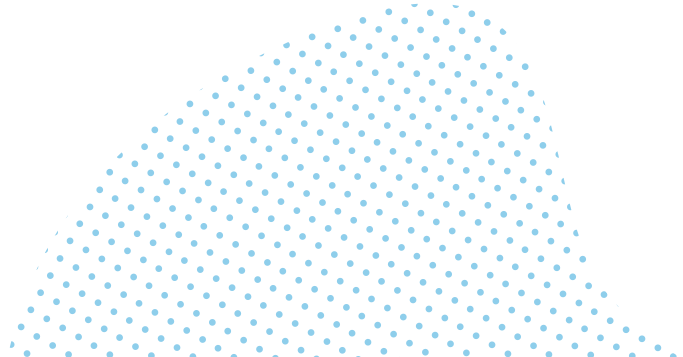
- ☐ Monitor accounts for exposed credentials using free or commercial tools.
- ☐ Consider device trust or network IP whitelists for accessing technology portals and appliances.
- ☐ Avoid shared accounts. MFA is designed for a single user. As a result, it is difficult to manage on shared accounts.
- ☐ Make sure techs follow your policies on storage and MFA for these tools!

Network Access

- ☐ MSPs whose clients are an extension of the MSP's network should reconsider this design choice as one customer or MSP compromised = game over for all clients.
- ☐ Vendors that have site-to-site VPNs (L2Ls) into an MSP network to augment staff or technology should have their network security vetted and access controls on L2Ls should be tightly limited.
- ☐ Consider the time of day restrictions for access to RA VPN endpoints.

Protection and Detection

- ☐ Deploy Advanced Threat Protection for the full Microsoft 365 suite and collaboration platforms other than email (such as cloud drives, instant messaging and video conferencing).
- ☐ Use EDR (Endpoint Detection & Response) or MDR (Managed Detection & Response) for immediate d etection and response in case of a ransomware attack.



Leverage your Relationships to Gain Intelligence on Current Threat Environment

- ☐ Talk to your vendors about what they are seeing and what their road map is to address shifts in the cyber landscape.
- ☐ Partner with vendors and other MSPs to collaborate on how to best configure your technology to mitigate cyber threat risks.
- ☐ Join a peer group, and start discussions with other MSPs to learn about their best practices.
- ☐ If you've been attacked and your business has survived, share your knowledge.

Cybersecurity Insurance

- ☐ Invest in cybersecurity insurance, but do not make the fact you have it public knowledge.
  - ☐ Extortion coverage should cover your business into the low to mid-six figures.
  - ☐ Verify that there are no wartime exclusions with your carrier.
  - ☐ Verify that the insurance carrier will pay for a preferred incident response and forensics provider, or become comfortable with and accept the one the carrier offers.
- ☐ Understand prior acts, exclusions, and timelines for each of these policy areas.
- ☐ Run an MSP ransomware attack tabletop scenario with the broker and carrier to understand the limits of coverage based on a real-world scenario.