## Operating System Patch Management RMF Compliance

\*\*\* System Overview \*\*\*

The system currently running is a Debian-based operating system with the name "kb322-18". The system's operating system version is #1 SMP PREEMPT\_DYNAMIC Debian 6.1.129-1 (2025-03-06), and its computer name is also "kb322-18". The system has an IP address of 140.160.138.147.

\*\*\* Patch Status Summary \*\*\*

Several patches are currently pending updates, which are related to security. These patches include:

- \* A code update with a version number 1.99.0-1743632463
- \* Security updates for liblzma-dev and liblzma5 with version numbers 5.4.1-1
- \* A security update for xz-utils with the same version number

These pending updates are relevant to security, as they address potential vulnerabilities in the system.

\*\*\* Compliance with RMF Controls \*\*\*

To ensure compliance with the Risk Management Framework (RMF), it is essential to identify and remediate any identified vulnerabilities. The following steps should be taken:

- \* Identify vulnerable systems: Use the system's computer name and IP address to locate all systems that are running the same operating system version as "kb322-18".
- \* Report findings: Document all vulnerable systems and their corresponding CVE information.
- \* Remediation plan: Develop a remediation plan that includes scheduling patch deployments, configuration management, and vulnerability checks.

\*\*\* Recommended next steps \*\*\*

To proceed with the RMF process, we recommend:

- \* Reviewing and assessing updates for all pending patches
- \* Scheduling patch deployments for vulnerable systems
- \* Creating update documentation that outlines the patches applied to each system

\*\*\* Risk Assessment\*\*\*

The potential risk associated with these pending patches is significant, as they address potential vulnerabilities in the system. If left unaddressed, these vulnerabilities could allow unauthorized access to the system or lead to denial of service.

The impact level of this risk is high, as it could compromise the security and integrity of the system.

To mitigate this risk, we recommend:

- \* Implementing a regular patch management schedule for all vulnerable systems
- \* Ensuring that configuration management practices are in place to prevent unauthorized changes to the system
- \* Conducting vulnerability checks on all systems on a regular basis to identify potential security issues.