2. RACI Chart: System Patching Process

Task	IT Supervisor	System Admin	Security Analyst	Support Team
Identify systems for patching	A	R	C	I
Test patches in the sandbox	I	R	C	I
Approve the patch release	A	C	R	I
Schedule deployment	R	A	C	I
Communicate downtime	A	I	I	R
Monitor post-patch behavior	I	R	A	C
Document completion	R	C	I	A

Key: R – Responsible, A – Accountable, C – Consulted, I – Informed

The above RACI chart indicates the roles and cooperation principles of a system patching process in an IT organization. The role of the IT Supervisor is accountable (A) to perform important oversight roles that include identification of systems, approval of patches, communication of downtime, and documentation. The System Administrator is chiefly involved (R) in technical implementation- testing patches, deployment scheduling, and system performance monitoring (Martin & Rey, 2024). The Security Analyst is involved in a consulting (C) role to guarantee compliance, risk reduction, and secure configurations. At each level, the Support Team is notified (I) but is responsible for notifying about downtime and contributing to documentation. This architecture will represent the deliberate, security-conscious updating of a system, with the least amount of interruption to ongoing work, at the highest level of responsibility. Organizational responses can be improved by striking a balance between the ambiguity associated with determining what each stakeholder is supposed to do and a patchy approach to patch release and incident response (Ansell et al.,

2024). This can be achieved by clearly designating what each stakeholder should do, such as act, approve, consult, or be informed. The team effort helps minimize risks and ensure continuous service provision.

References

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Martin, F. A., & Rey, W. P. (2024, July). Patch Perfect: System Administrator Strategies for Effective Patch Management and Securing Systems, Minimizing Risks. In *2024 International Conference on Control, Robotics and Informatics (ICCRI)* (pp. 1-6). IEEE. https://ieeexplore.ieee.org/abstract/document/10896295/