

Improving Password Management and Reset Procedures in IT Support Environments

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Executive Summary

Password-related issues are among the most frequent helpdesk requests, often consuming up to 30–50% of IT support resources. This briefing outlines a streamlined password reset procedure that improves security, enhances user experience, and reduces helpdesk workload through automation and self-service tools.

Objectives

- Reduce support tickets related to password issues
 - Enhance security around identity verification
 - Improve user autonomy and satisfaction
 - Ensure compliance with organizational and industry security policies
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Current Challenges

- **High Volume of Requests:** Frequent forgotten password tickets burden IT teams.
 - **Manual Verification:** Identity checks via phone/email are time-consuming and error-prone.
 - **Security Risks:** Poor password practices and phishing vulnerabilities during reset processes.
 - **Inconsistent Procedures:** Lack of a standardized reset workflow across departments.
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Proposed Solution

Implement a **Self-Service Password Reset (SSPR) System** integrated with identity verification and logging.

Key Features:

- Integration with Active Directory or Azure AD

- Multi-Factor Authentication (MFA) for secure verification
- Web portal and mobile access
- Audit logging for compliance and security

Technology Stack (Example):

- Microsoft Entra ID (Azure AD) SSPR
- Duo MFA or Authenticator apps
- PowerShell scripting for AD automation
- Log aggregation tools like Splunk or ELK for monitoring

Expected Outcomes

Metric	Before	After
Daily password reset tickets	30–50	< 10
Average resolution time	10+ min	< 2 min
User satisfaction (survey)	70%	90%+
Security incidents from reset process	Moderate	Low

Implementation Plan

1. **Pilot Rollout:** Test with a small user group or in a sandbox
 2. **Documentation:** Develop reset procedures and user guides
 3. **Training:** Train IT staff and end-users
 4. **Full Deployment:** Gradual rollout by department
 5. **Monitor & Optimize:** Use feedback and metrics to iterate
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Security Considerations

- Use MFA or biometric verification

- Encrypt reset communication channels (SSL/TLS)
 - Log and monitor reset activity
 - Apply lockout thresholds for brute-force attempts
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Conclusion

Automating and securing the password reset process offers measurable improvements in both operational efficiency and security posture. This is a critical initiative for any IT support environment aiming for scalability and resilience.