The Future of Privileged Access Management

Key Aspects and Emerging Trends for the Next 3 Years



Key Aspects of Privileged Access Management (PAM)



Identity and Access Governance



- Defining roles and permissions
- Ensuring least privilege access



Two Important Factors the Next 3 Years:

- Identity Fabric approach integrating various identity sources seamlessly.
- Policy-based automation of identity lifecycle management.





• Static access reviews performed periodically instead of continuous monitoring.



Privileged Account Discovery and Management

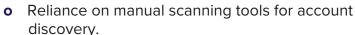


- Detecting and managing privileged accounts across systems
- Automated discovery tools for visibility



- Integration of discovery tools with Al for real-time privileged account monitoring.
- Automated deprovisioning of unused privileged accounts to minimize risk.





 Managing privileged accounts with long-term static credentials.



Credential Vaulting and Rotation



- Securely storing privileged credentials
- Enforcing password rotation policies



- Full transition to passwordless authentication for privileged access.
- Secure enclave-based credential storage to reduce attack surface.

Two Aspects No Longer Relevant in 3 Years



- Scheduled password rotations as the primary security measure.
- Storing credentials in on-premise-only vaults without cloud accessibility.



Session Management and Monitoring



- Recording and monitoring privileged sessions
- Implementing just-in-time access controls



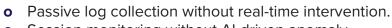
Two Important Factors the Next 3 Years:

Two Important

Factors the Next 3 Years:

- Real-time behavioral analytics integrated with session monitoring.
- Zero-trust-based session validation for every privileged activity.





• Session monitoring without Al-driven anomaly detection.



Multi-Factor Authentication (MFA) for Privileged Access



- Adding additional security layers for privileged users
- Adaptive authentication based



Two Important Factors the Next 3 Years:

- o Continuous authentication based on user behavior and context.
- Use of hardware security keys and biometric authentication over passwords.



Two Aspects No Longer Relevant in 3 Years:



- SMS-based MFA due to security vulnerabilities.
- One-time passwords (OTP) as the primary authentication method.









Just-In-Time (JIT) Access Management



- Granting temporary privileged access as needed
- Reducing standing privileges and exposure



Two Important Factors the Next 3 Years:

- Al-driven risk-based JIT provisioning.
- Self-service JIT access with automated approval workflows.



- Static, pre-assigned privileged access roles.
- Manual approval processes for privileged access requests.



Privileged Access Risk Analytics



- Using AI/ML for behavior-based risk assessment
- Detecting anomalies and potential insider threats



Two Important Factors the Next 3 Years:

- Autonomous response to risky privileged
- Deep learning-driven anomaly detection with contextual awareness.



Two Aspects No Longer Relevant in 3 Years:

- Threshold-based anomaly detection models with static rules.
- Reactive security responses instead of proactive threat mitigation.



Cloud and Hybrid PAM Integration



- Extending PAM capabilities to multi-cloud environments
- Managing non-human identities (NHIs) like service accounts and **APIs**



Two Important Factors the Next 3 Years:

- Centralized PAM for hybrid and multi-cloud environments.
- Automated identity governance for cloud workloads.



- PAM systems designed only for on-premise environments.
- Manual tracking of cloud service identities.



Third-Party and Remote Access Management



- Securing vendor and contractor access
- Implementing zero-trust principles for external users



Two Important Factors the Next 3 Years:

- Al-driven risk assessment for third-party access.
- Integration of continuous authentication for external users.



- VPN-based third-party access without real-time monitoring.
- Static access provisioning for contractors.



Compliance and Audit Reporting



- Ensuring adherence to industry regulations
- Automating reporting for audits and compliance checks



An Important **Factor the Next 3 Years:**

• Al-driven real-time compliance reporting.

Two Aspects No Longer Relevant in 3 Years:



- Periodic manual audits instead of continuous compliance monitoring.
- Siloed compliance reporting without centralized governance.

As PAM continues to evolve, the focus will shift towards Al-driven automation, adaptive security, and seamless integration with zero-trust frameworks. Organizations must stay ahead by adopting next-gen PAM solutions to protect their critical assets effectively.



