# Planning Documents for PAM Implementation Use Cases



# Just-in-Time (JIT) Privileged Access & Password Vaulting



#### **Objective:**

- o Implement JIT access to minimize standing privileges.
- o Utilize password vaulting with automated rotation.



#### **Key Components:**

- o Privileged access requests approval process.
- o Time-bound access enforcement.
- o Secure vault storage for shared credentials.
- Automated password rotation and retrieval policies.



#### Implementation Steps:

- o Identify privileged accounts requiring JIT access.
- o Define approval workflows and expiration
- o Deploy and configure a privileged access vault.
- o Test JIT access request and password retrieval mechanisms.
- o Monitor and review access logs regularly.



#### **Expected Outcome:**

- o Reduced risk of credential exposure.
- o Minimized attack surface.
- o Enhanced accountability for privileged

# Session Monitoring & Multi-Factor Authentication (MFA) for Privileged Access



#### **Objective:**

- Enable real-time session monitoring and recording.
- o Enforce MFA for privileged access authentication.



#### **Key Components:**

- o Session recording and playback capabilities.
- o Behavioral anomaly detection mechanisms.
- o MFA integration with privileged accounts.



#### **Implementation Steps:**

- Deploy session monitoring tools for privileged accounts.
- o Configure real-time alerting on suspicious activities.
- o Integrate MFA solutions (e.g., OTP, biometrics).
- o Enforce MFA for all privileged account logins.
- Conduct regular security audits on monitored sessions.



#### **Expected Outcome:**

- o Stronger authentication barriers.
- Improved security visibility.
- o Reduced risk of insider threats.

# Least Privilege for Application-to-Application (A2A) & Privileged Access Review



#### **Objective:**

- Enforce least privilege principles for A2A communications.
- o Conduct regular privileged access reviews and certifications.



#### **Key Components:**

- o Role-based access control (RBAC) enforcement.
- o Periodic access reviews by business owners.
- o Automated deprovisioning of unnecessary privileges.



#### **Implementation Steps:**

- o Identify applications requiring A2A communication.
- Define and implement the principle of least privilege.
- o Establish periodic access review policies.
- o Automate privilege revocation for unused accounts.
- o Audit compliance with security policies regularly.



#### **Expected Outcome:**

- o Reduced lateral movement risks.
- o Improved governance over privileged access.
- o Stronger enforcement of least privilege principles.



# **Zero Trust-Based Privileged Access Control**



#### **Objective:**

- o Implement Zero Trust-based privileged access policies.
- o Grant access dynamically based on risk factors.



#### **Key Components:**

- o Risk-based authentication mechanisms.
- o Endpoint health verification.
- o Dynamic access provisioning.



#### **Implementation Steps:**

- Define risk-based policies for privileged access.
- o Integrate real-time user behavior analysis.
- o Enforce endpoint security checks before access approval.
- o Implement continuous access validation.
- Regularly refine policies based on security assessments.



#### **Expected Outcome:**

- o Enhanced access control with risk-based validation.
- Minimized exposure to credential-based attacks.
- o Continuous security improvements based on user behavior analytics.

## **Additional Planning Documents for PAM Implementation Use Cases**

# **Automated Privileged Access Deprovisioning**



#### **Objective:**

- Ensure automatic deprovisioning of privileged accounts when no longer needed.
- o Reduce security risks associated with orphaned accounts.



#### **Key Components:**

- o Automated lifecycle management.
- o Integration with HR and IT systems.
- o Access review and expiration policies.



#### **Implementation Steps:**

- o Identify and classify privileged accounts.
- o Implement an automated deprovisioning system.
- o Define role-based expiration policies.
- o Integrate with HR and IT management systems.
- o Continuously monitor and audit deprovisioning processes.



#### **Expected Outcome:**

- o Minimized risk of privilege escalation.
- o Enhanced compliance and governance.
- o Reduced attack surface.

# Privileged Access Risk Scoring & Anomaly Detection



#### **Objective:**

- o Implement risk-based scoring to assess privileged access threats.
- o Detect and respond to anomalous privileged activities.



#### **Key Components:**

- o Al-driven risk analysis.
- o Real-time behavioral monitoring.
- o Automated incident response.



#### Implementation Steps:

- o Define risk factors for privileged access.
- o Deploy machine learning-based threat detection.
- o Establish real-time alerting mechanisms.
- o Automate response workflows for high-risk events.
- o Conduct periodic model tuning and policy refinement.



#### **Expected Outcome:**

- o Proactive threat mitigation.
- o Improved privileged access oversight.
- o Automated security response to potential breaches.



# **Cloud Privileged Access Management**



## **Objective:**

- o Secure privileged access in multi-cloud environments.
- o Implement centralized control over cloud-based privileged accounts.



## **Key Components:**

- o Cloud-native access controls.
- o Least privilege enforcement.
- o Secure identity federation.



## **Implementation Steps:**

- o Identify cloud-based privileged accounts and services.
- o Implement role-based access control (RBAC) for cloud services.
- o Enforce conditional access policies.
- o Monitor and audit cloud privilege escalations.
- o Regularly review and optimize access policies.



## **Expected Outcome:**

- o Consistent privileged access security across cloud platforms.
- o Reduced risk of unauthorized cloud access.
- o Stronger compliance with cloud security frameworks.

## **Endpoint Privileged Access Management (EPAM)**



### **Objective:**

- o Secure privileged access on endpoints (workstations, servers, etc.).
- o Prevent unauthorized elevation of privileges.



#### **Key Components:**

- o Local administrator rights management.
- o Endpoint privilege escalation monitoring.
- o Just-in-Time elevation for endpoint tasks.



#### **Implementation Steps:**

- o Identify endpoints requiring privilege management.
- o Deploy endpoint privilege management tools.
- o Configure policies for Just-in-Time elevation.
- o Implement real-time alerting on suspicious privilege escalations.
- o Conduct regular policy reviews and updates.



## **Expected Outcome:**

- o Reduced risk of endpoint privilege abuse.
- o Improved security posture on workstations and servers.
- o Minimized need for standing administrator rights.

