Windows Service Account Password Update Automation – Client Success Story

Title of the Story

Automating Windows Service Account Password Updates Using CyberArk to Improve Efficiency and Reduce Operational Risk

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Context Setting

Many enterprise environments rely heavily on Windows services that run under privileged service accounts. These accounts require regular password rotation as part of security best practices and compliance mandates. However, for this client, **Automatic Password Management for Windows Service Accounts was not enabled** in CyberArk. As a result, password updates were performed manually, creating operational delays and increasing the risk of service outages.

To address this gap, we developed and delivered a custom Windows automation script that retrieves the rotated password from CyberArk and updates all associated services quickly and consistently.

Client Introduction

The client is a large enterprise organization with a complex Windows service environment supporting critical business applications. Service account management is essential for their compliance, stability, and cybersecurity posture.

Their infrastructure includes: - Dozens of Windows services relying on a single service account - Strict password rotation policies - CyberArk for privileged account management - Limited maintenance windows for updates

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Client Relationship

We have been a trusted security and automation partner for this client, working across identity security, privileged access management, and operational automation initiatives. Our ongoing relationship enabled rapid understanding of their environment and seamless delivery of this solution.

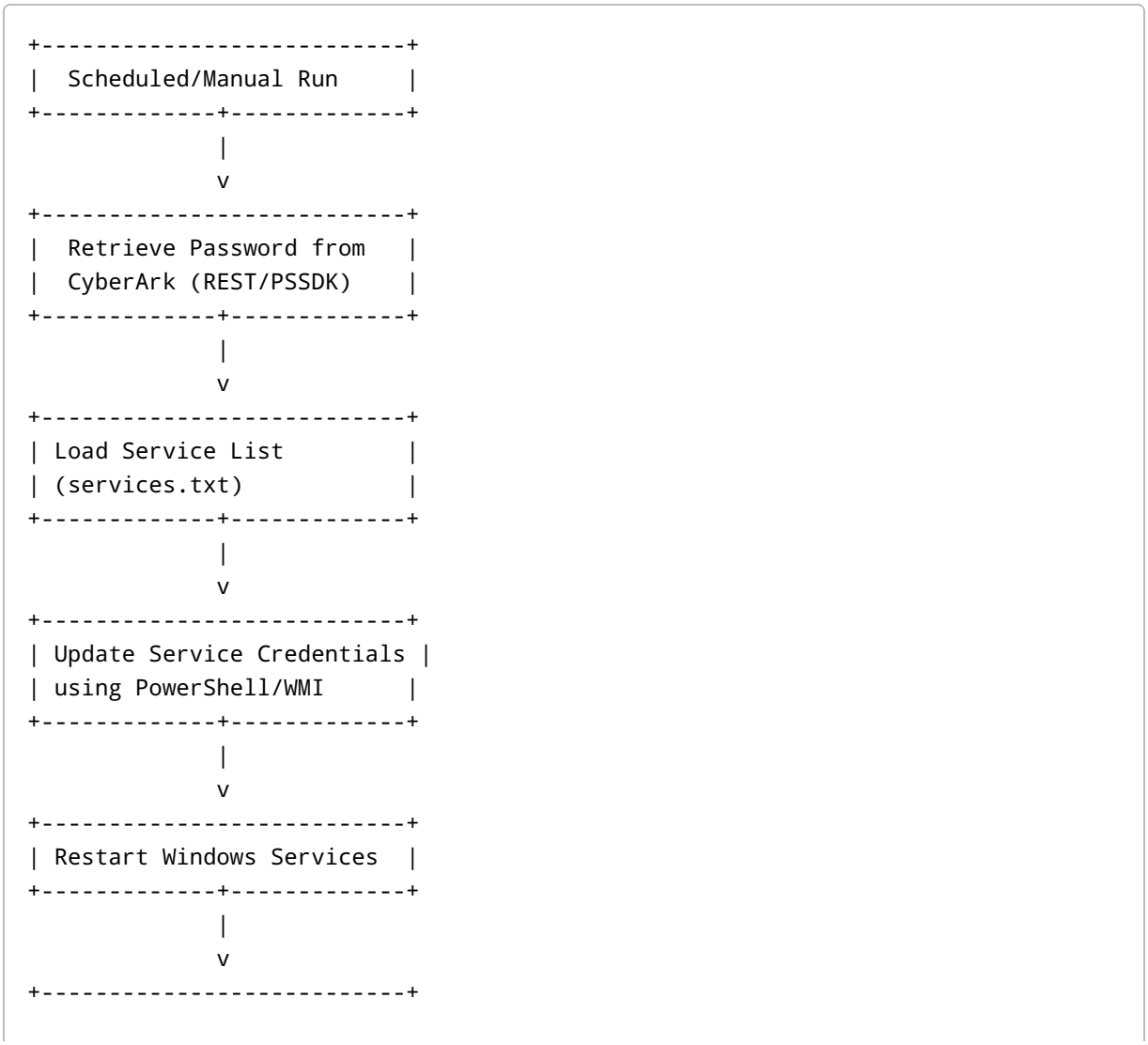
Context – Master Background

Before introducing the automated solution, the client faced several challenges: - Password rotation for service accounts required **manual updates** on multiple servers. - Manual updates often caused **service outages** due to timing mismatches. - The process consumed significant IT operational hours every rotation cycle. - CyberArk's native automatic management for Windows services was not enabled due to environment constraints.

This created operational inefficiencies and increased the risk of downtime—especially when maintenance windows were missed.

Solution Provided

Solution Workflow Diagram



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| Logging & Audit Output    |
+---------------------------+
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We developed a **Windows Automation Script** that performs the following:

1. Retrieve Password from CyberArk

The script securely connects to CyberArk via REST API or PSSDK to fetch the latest rotated service account password.

2. Update All Mapped Windows Services

It reads a predefined list of services running under the target service account and applies the updated credentials using PowerShell.

3. Restart Services Automatically

After updating credentials, the script restarts each service to ensure synchronization.

4. Logging and Audit Trail

All actions—including success, warning, and failure events—are logged for compliance and troubleshooting.

5. Repeatable and Secure Automation

The script is designed to run on-demand, scheduled, or integrated into rotation workflows.

Client Benefit

Implementing this automated password update solution provided the client with several measurable benefits:

1. Significant Time Savings

Manual updates that previously took **hours** were reduced to **seconds**.

2. Reduced Operational Risk

Eliminated service failures caused by mismatched or outdated passwords.

3. Improved Compliance

Ensured password rotation remained aligned with internal cybersecurity policies.

4. Enhanced Security Posture

Guaranteed consistent use of updated passwords across all Windows services.

5. No Need to Change Existing CyberArk Setup

Delivered automation **without requiring native CyberArk automatic Windows service management**—ideal for restricted environments.

Accolades

Following the implementation, the client shared several positive outcomes:

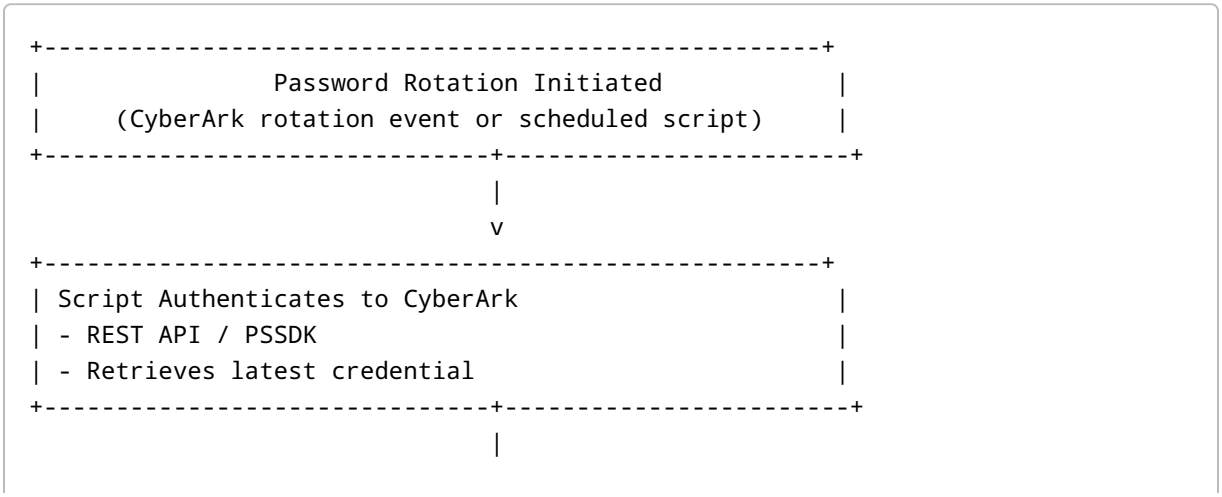
- **"This automation saved us countless hours and reduced outage incidents to zero."** – IT Operations Lead
- **"Finally, no more late-night maintenance calls because a service failed after rotation."** – Application Support Manager
- **"The solution fit perfectly into our CyberArk model without requiring additional licensing or configuration changes."** – Security Manager

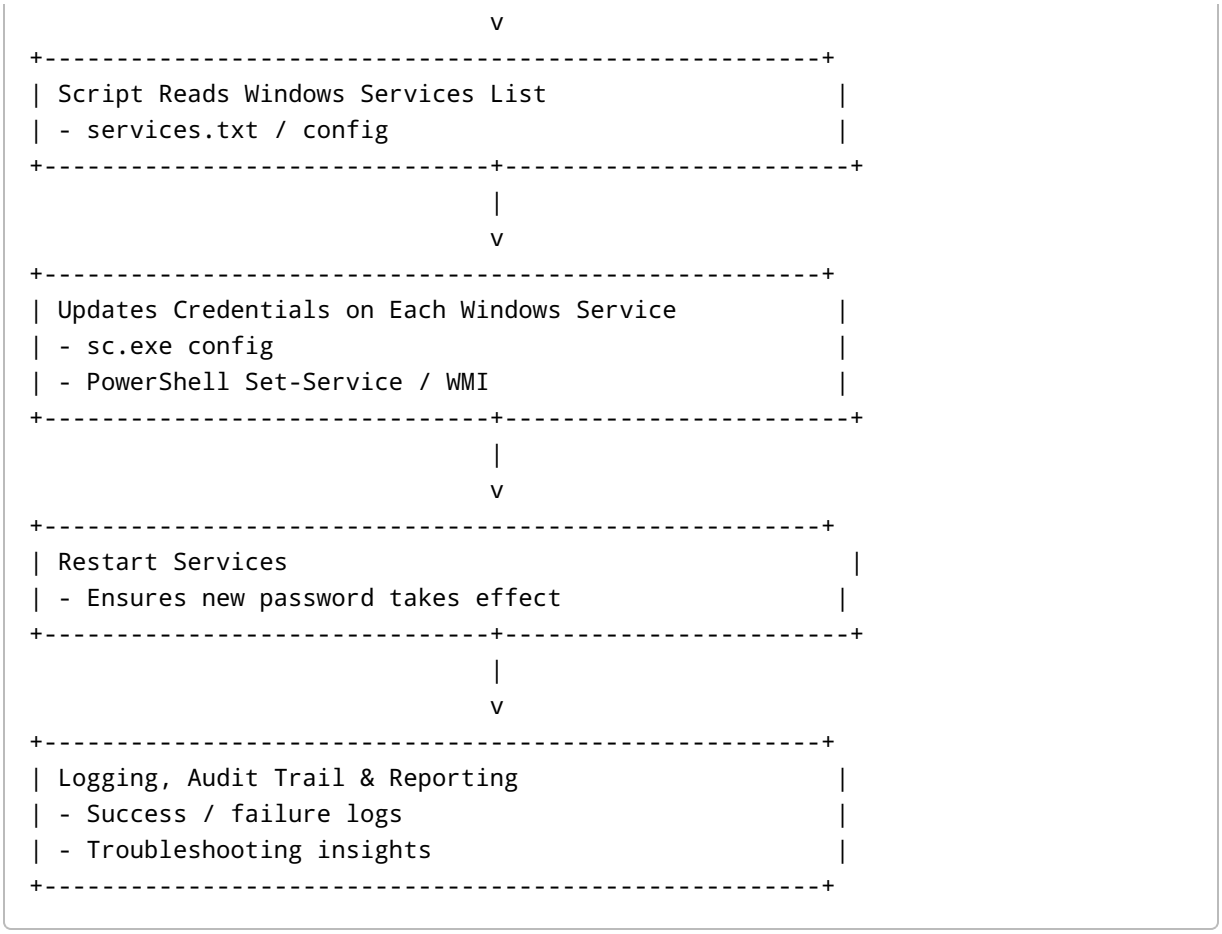
The success of this solution strengthened the relationship with the client and positioned our team as a strategic partner for further security and automation initiatives.

If you want, I can also add: - A workflow diagram - Sample PowerShell script - A professional PDF or Word export - Visual architecture - Executive summary

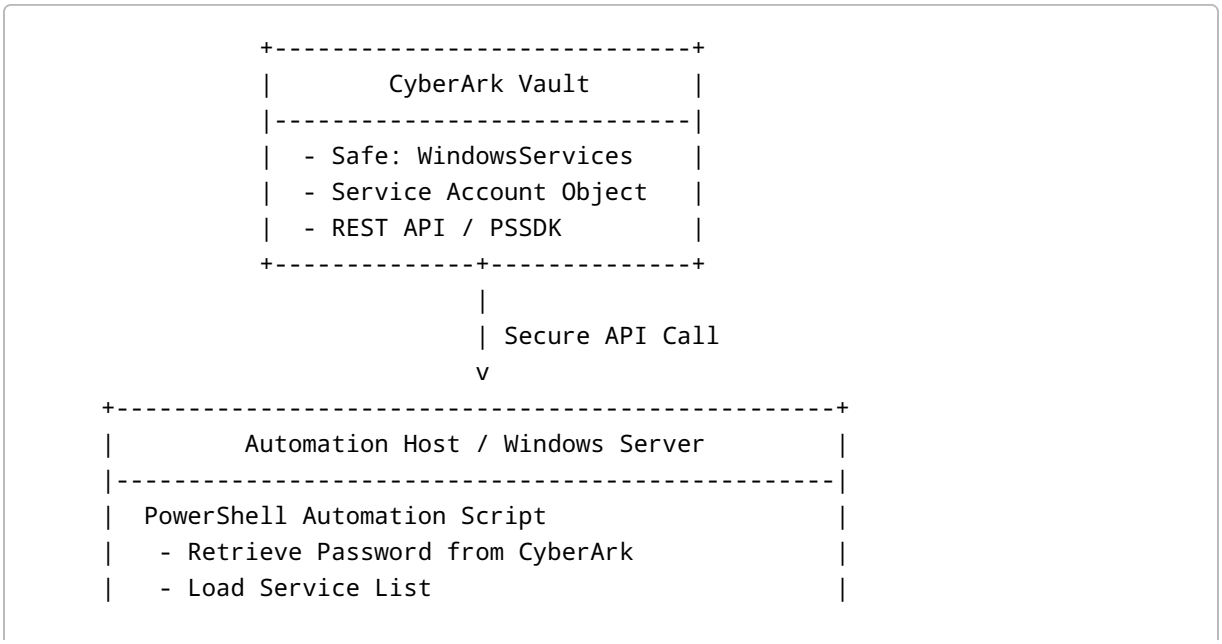
Just tell me!

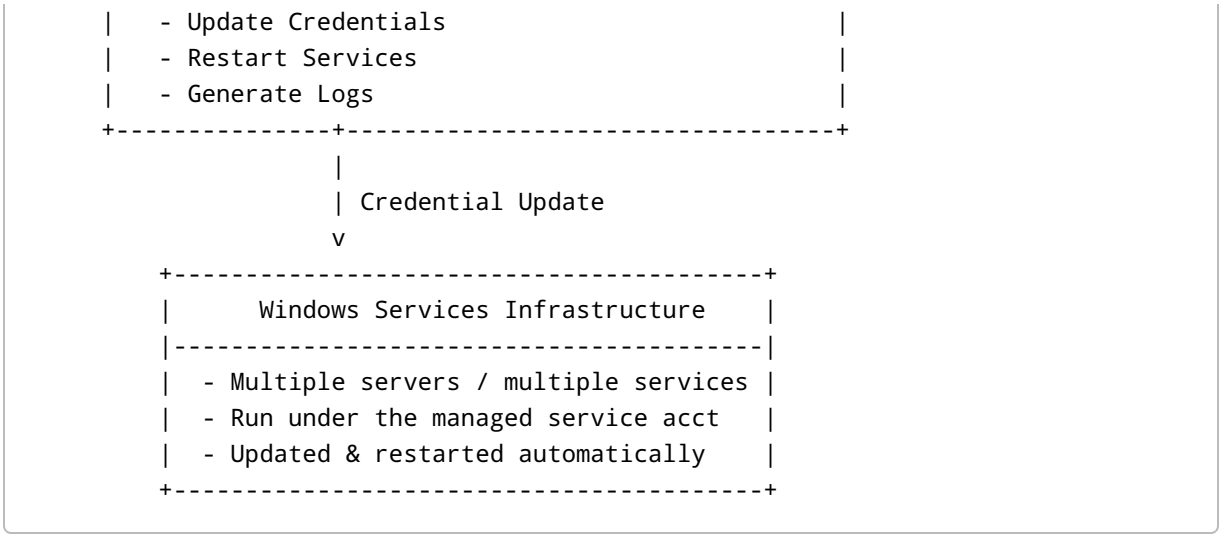
Additional Workflow Diagram – End-to-End Process





Visual Architecture Diagram




- Update Credentials
- Restart Services
- Generate Logs
Credential Update
Windows Services Infrastructure
- Multiple servers / multiple services
- Run under the managed service acct
- Updated & restarted automatically