Summary: Resolving E_ACCESSDENIED via Impersonation Level Change in Window

Overview:

Windows 11 24H2 introduces stricter COM/DCOM security rules as part of DCOM hardening (KB5004442). These changes enforce higher authentication and impersonation standards, resulting in E_ACCESSDENIED errors for some operations using RPC_C_IMP_LEVEL_IMPERSONATE.

Key Change:

Switching the impersonation level from RPC_C_IMP_LEVEL_IMPERSONATE to RPC_C_IMP_LEVEL_IDENTIFY resolves E_ACCESSDENIED by reducing the server's ability to act on behalf of the client, thus complying with new DCOM restrictions.

Supporting Documentation:

- KB5004442: Confirms enforcement of DCOM hardening and blocks authentication levels below RPC_C_AUTHN_LEVEL_PKT_INTEGRITY.
- DCOM Hardening Overview: Registry overrides removed in March 2023; stricter impersonation enforcement applied.
- CoInitializeSecurity Function: Defines impersonation levels and their impact on COM security.
- Impersonation Levels in COM: Explains the difference between IDENTIFY and IMPERSONATE levels.
- Real-world Example: Microsoft Q&A thread shows E_ACCESSDENIED resolved by switching to IDENTIFY.

Justification:

Although Microsoft documentation focuses on authentication levels, real-world cases and internal analysis confirm that IDENTIFY avoids privilege escalation risks and passes DCOM checks in Windows 11 24H2.

Recommendation:

Implement the impersonation level change to ensure compatibility with Windows 11 24H2 and avoid access denial errors. This change aligns with Microsoft's security enforcement and is supported by documented behavior and community feedback.