

SPC pilot findings

Imran Ahmed

TPAC September 11 2023

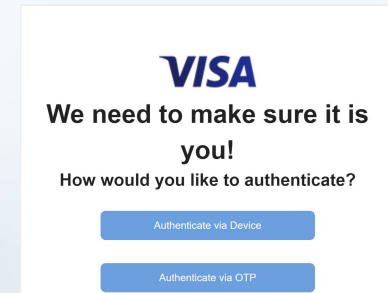
Summary of findings

1. User activation requirement
2. Additional device registration
3. Username on registration and authentication
4. Credential sharing on device(s)
5. Future SPC considerations/clarifications

Summary of SPC pilot findings

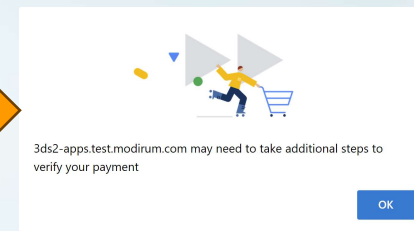
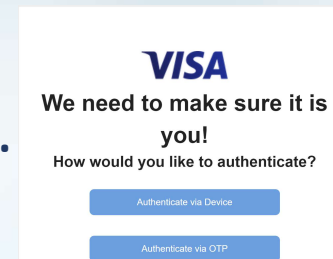
1. User activation requirement

- Payment Request API → Transient user activation required.
- Implementation approach for pilot: Dual authentication option.
- Removal of user activation in upcoming Chrome ver 118.



2. Additional device registration

- RP (ACS) returns credential list.
- Credential not recognised → Failed authentication.
- Challenge → Registration on new device.
- User Interface has two additional steps in journey.



3. Username on registration and authentication

- WebAuthn maps user identity during registration to `name` field. Tied to user, not device.
- Platform dependent: Windows: shown on registration and authentication.
Android/Mac: shown on registration only.
- Considerations: PAN, Masked PAN, Set by user during registration.

modirum

Summary of SPC pilot observations

4. Credential sharing on device(s)

- **SPC credential = Unique identifier. User identity + RP ID + device platform authenticator.**
- **Browser → {SPC credential list}. Platform authenticator → {FIDO credentials}.**
- **Case 1: Cross-browser, same device:**
 - **Browsers not sharing of SPC credentials.**
 - **Platform dependent: Android shares at platform not browser level. Windows/Mac do not.**
- **Case 2: Cross-device via passkeys:**
 - **Windows 11 passkey synced to all devices.**
 - **SPC will fail as browsers will not have synced SPC credentials.**
 - **Registration on new device fails, platform authenticator reports existing credential exists.**

5. Future SPC considerations/clarifications

- **Importance of Biometrics in 3DS.**
- **Issuer and Payment system logos in SPC UI?**
- **Webauthn device public key extension effect on SPC?**
- **Roaming authenticators like Yubico?**

modirum
3-D Secure Solutions

Thank you