

Digital Credentials API

Web Platform and App Platform Layering / Interactions

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- ◆ "Standardized API (W3C)" = Digital Credentials Web Platform API
- ◆ "Standardized API (Other)" = currently FIDO CTAP 2.2 (hybrid transport)
- ◆ "Platform-specific web translation API" = platform abstraction of web platform API for verifiers *
- ◆ "Platform-specific function API" = independent platform native API *
- ◆ "Protocol-specific" = Protocol or deployment specific request/response

* on some platforms, these will be the same

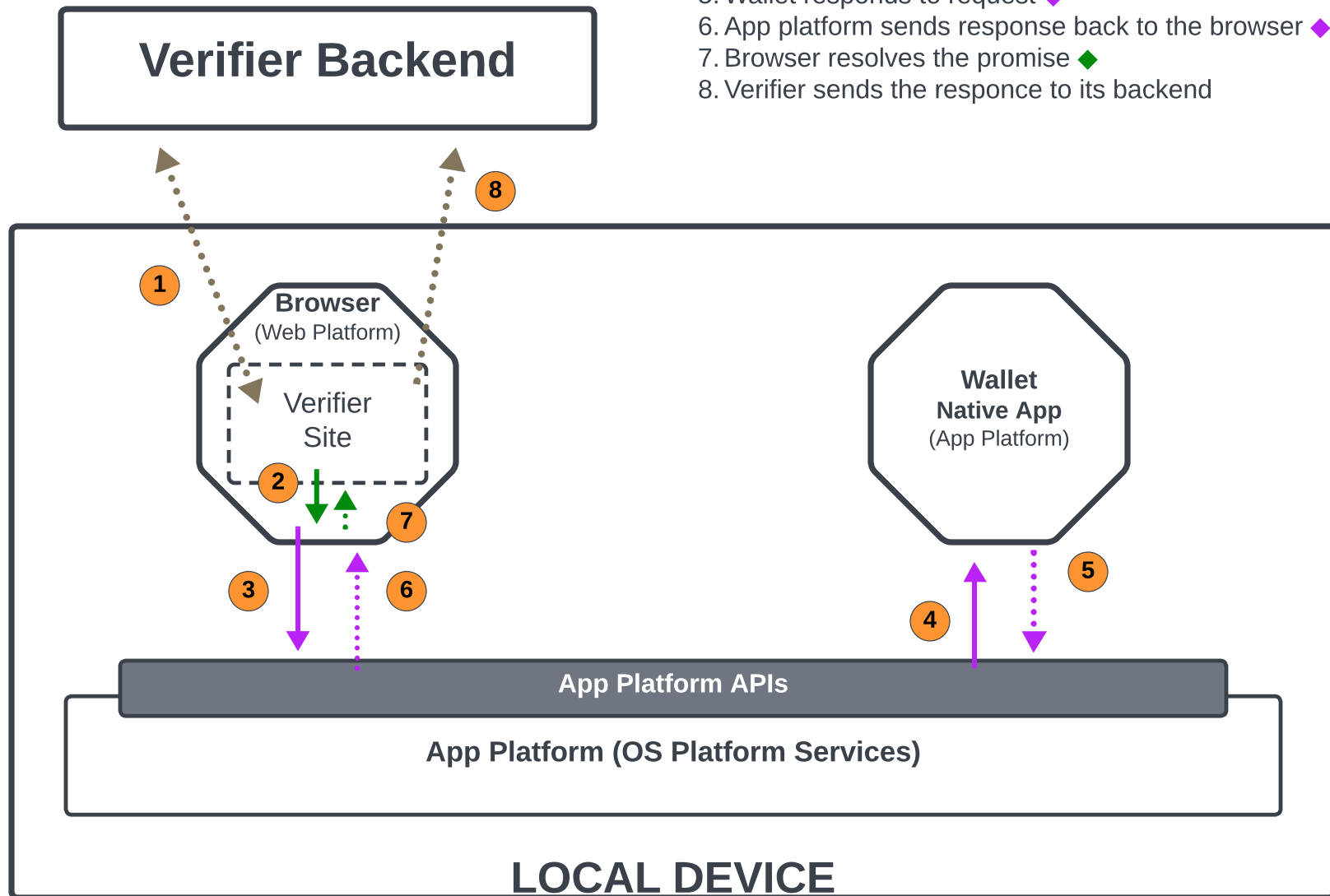
SCENARIO

same-device

web-based verifier

native app wallet

1. Verifier site loaded in browser, request initiated
2. Web platform API request initiated ◆
3. Browser processes request and routes to the app platform ◆
4. App platform processes request and routes to wallet ◆
5. Wallet responds to request ◆
6. App platform sends response back to the browser ◆
7. Browser resolves the promise ◆
8. Verifier sends the response to its backend



standardized API (W3C)

standardized API (Other)

platform-specific function API

platform-specific web translation API

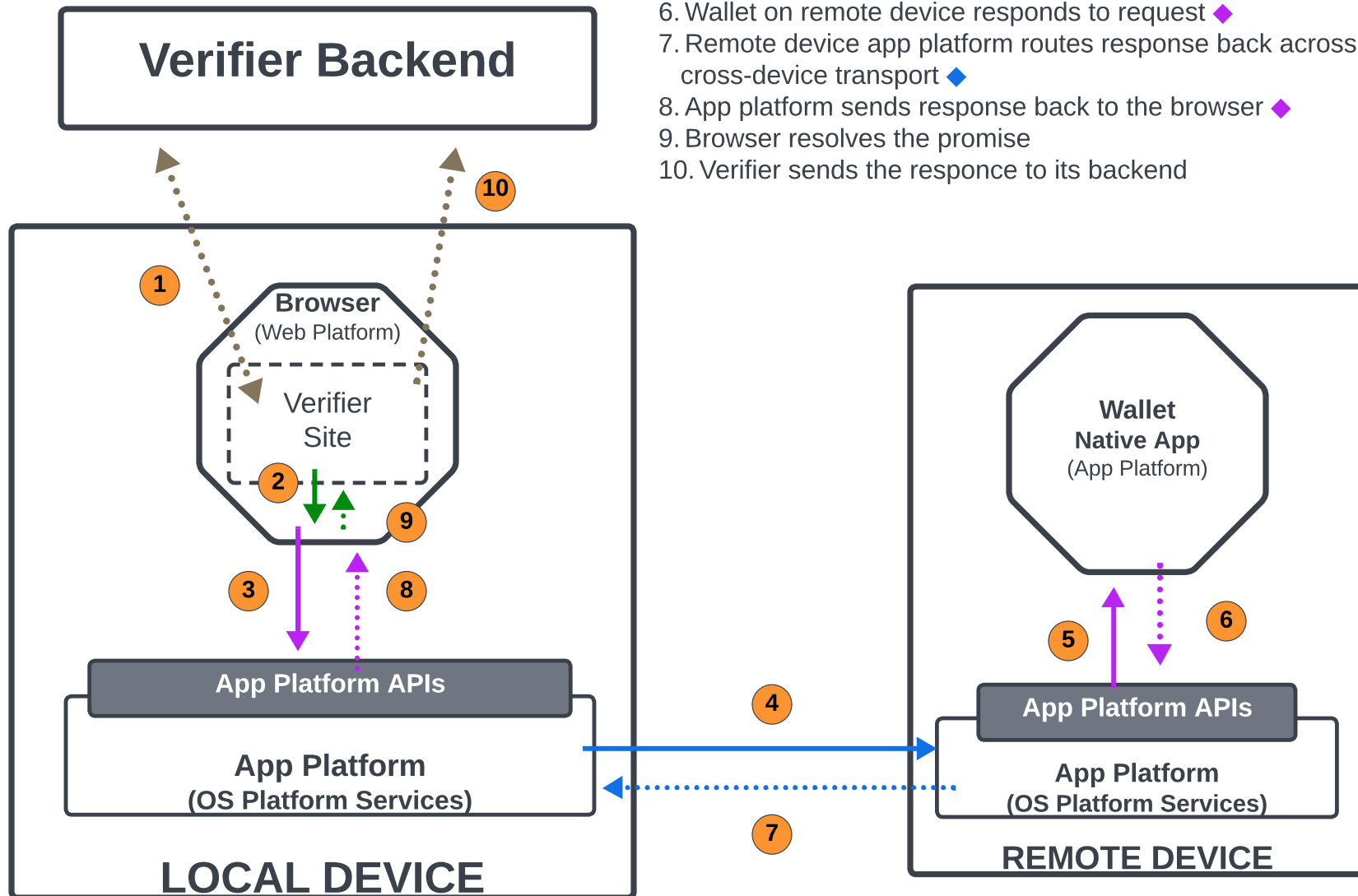
protocol-specific

SCENARIO

cross-device

web-based verifier

native app wallet



1. Verifier site loaded in browser, request initiated
2. Web platform API request initiated ◆
3. Browser processes request and routes to the app platform ◆
4. App platform processes request and initiates cross-device transport ◆
5. Remote device app platform processes request and routes to wallet ◆
6. Wallet on remote device responds to request ◆
7. Remote device app platform routes response back across established cross-device transport ◆
8. App platform sends response back to the browser ◆
9. Browser resolves the promise
10. Verifier sends the response to its backend

standardized API (W3C)

standardized API (Other)

platform-specific function API

platform-specific web translation API

protocol-specific

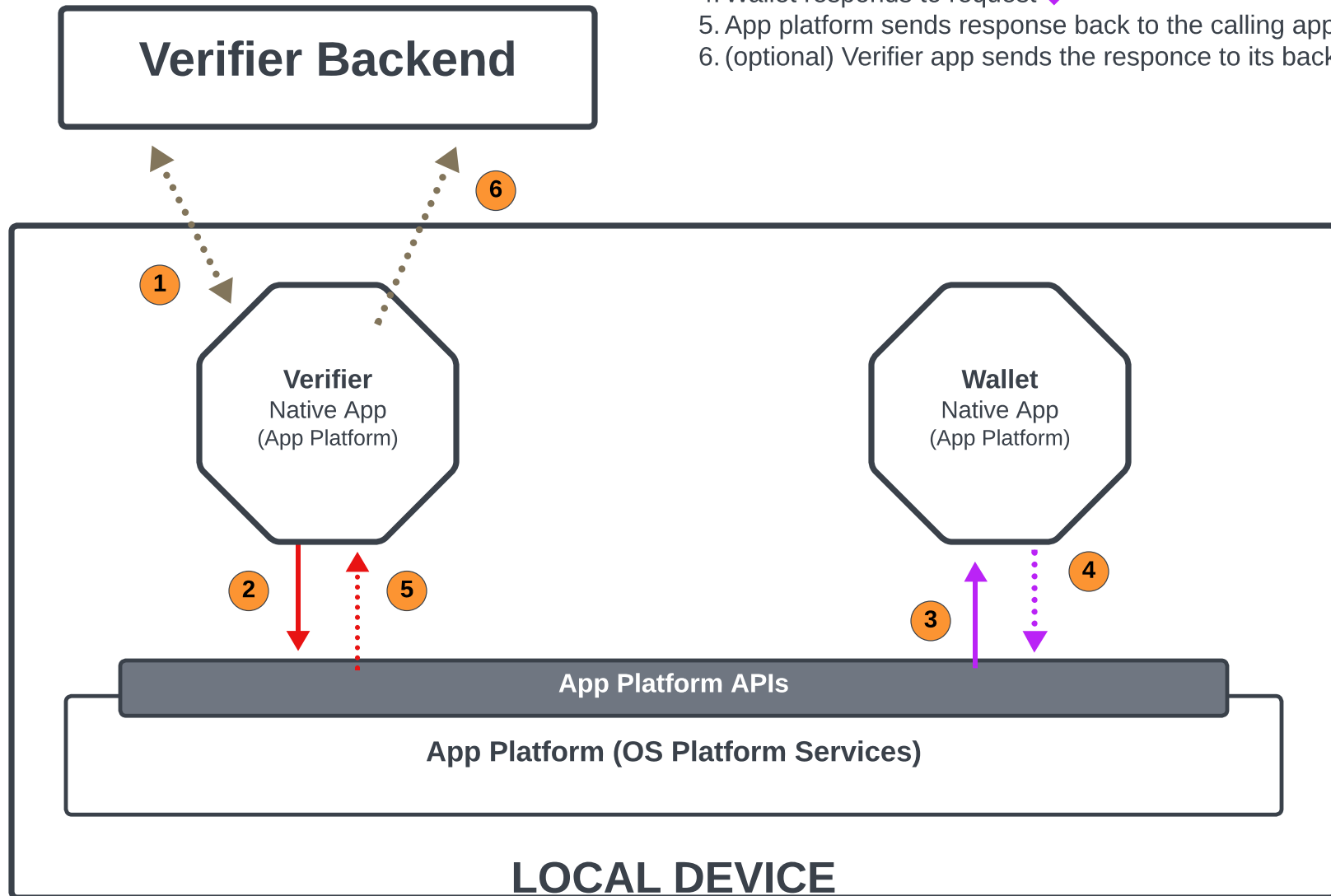
SCENARIO

same-device

native app-based verifier

native app wallet

1. (optional) Verifier app loads request data from backend
2. Verifier app initiates request via platform APIs ♦
3. App platform processes request and routes to wallet ♦
4. Wallet responds to request ♦
5. App platform sends response back to the calling app ♦
6. (optional) Verifier app sends the response to its backend



standardized API (W3C)

standardized API (Other)

platform-specific function API

platform-specific web translation API

protocol-specific

SCENARIO

cross-device

native app-based verifier

native app wallet

1. (optional) Verifier app loads request data from backend
2. Verifier app initiates request via platform APIs ♦
3. App platform processes request and initiates cross-device transport ♦
4. Remote device app platform processes request and routes to wallet ♦
5. Wallet on remote device responds to request ♦
6. Remote device app platform routes response back across established cross-device transport ♦
7. App platform sends response back to the calling app ♦
8. (optional) Verifier app sends the response to its backend

