

# CTAP 2.1 Errata

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<https://fidoalliance.org/specs/fido-v2.1-ps-20210615/fido-client-to-authenticator-protocol-v2.1-errata-20220621.html>

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## Abstract

The errata document for [FIDO Client to Authenticator Protocol v2.1](#).

## Table of Contents

1	<b>Introduction</b>
2	<b>Section 5. Terminology</b>
3	<b>Section 6.4. authenticatorGetInfo (0x04)</b>
4	<b>Section 6.5.8. PRF values used</b>
	<b>Index</b>
	Terms defined by this specification

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## 1. Introduction§

This document contains errata to [FIDO Client to Authenticator Protocol v2.1](#).

## 2. Section 5. Terminology§

See <https://fidoalliance.org/specs/fido-v2.1-ps-20210615/fido-client-to-authenticator-protocol-v2.1-ps-20210615.html#sctn-terminology>

The definition for NFC under Evidence of user interaction did not sufficiently define a specific error for User Interaction when using an NFC transport.

### Original Text

Upon the platform subsequently invoking either [authenticatorMakeCredential](#) or [authenticatorGetAssertion](#) (e.g., with the "up" option key set to 'true'):

1. If [evidence of user interaction](#) is requested then:
  1. If the [NFC userPresent flag](#)'s value is true, then consider the user as having granted permission, and set the [NFC userPresent flag](#) to false.
  2. Otherwise, do not consider the user as having granted permission.

Upon expiry of the [NFC user presence maximum time limit](#), the [NFC userPresent flag](#) is set to `false` if it is not already `false`.

## Corrected Text

Upon the platform subsequently invoking either [authenticatorMakeCredential](#) or [authenticatorGetAssertion](#) (e.g., with the "up" option key set to 'true'):

1. If [evidence of user interaction](#) is requested then:
  1. If the platform sends a zero length [pinUvAuthParam](#) then return either `CTAP2_ERR_PIN_NOT_SET` if PIN is not set or `CTAP2_ERR_PIN_INVALID` if PIN has been set.

Note: This is done for backwards compatibility with CTAP2.0 platforms in the case where multiple authenticators are attached to the platform. In this case the authenticator must not consume the [NFC userPresent flag](#) or it will prevent authentication with some CTAP2.0 platforms.
  2. If the [NFC userPresent flag](#)'s value is `true`, then consider the user as having granted permission, and set the [NFC userPresent flag](#) to `false`.
  3. Otherwise, do not consider the user as having granted permission. End the operation by returning `CTAP2_ERR_UP_REQUIRED`.

Upon expiry of the [NFC user presence maximum time limit](#), the [NFC userPresent flag](#) is set to `false` if it is not already `false`.

## 3. Section 6.4. [authenticatorGetInfo \(0x04\)](#)§

See <https://fidoalliance.org/specs/fido-v2.1-ps-20210615/fido-client-to-authenticator-protocol-v2.1-ps-20210615.html#authenticatorGetInfo>

The text and links for `userVerificationMgmtPreview` were incorrect.

## Original Text

user verification: Indicates that the authenticator supports a [built-in user verification method](#). For example, devices with UI, biometrics fall into this category.

If present and set to true, it indicates that the device is capable of [built-in user verification](#) and its user verification feature is presently configured.

Not  
Supported

uv

If present and set to false, it indicates that the authenticator is capable of [built-in user verification](#) and its user verification feature is not presently configured. For example, an authenticator featuring a built-in biometric user verification feature that is not presently configured will return this "uv" [option id](#) set to false.

If absent, it indicates that the authenticator does not have a [built-in user verification](#) capability.

A device that can only do Client PIN will not return the "uv" [option id](#).

If a device is capable of both [built-in user verification](#) and Client PIN, the authenticator will return both the "uv" and the "clientPin" [option ids](#).

### Corrected Text

uv

user verification: Indicates that the authenticator supports a [built-in user verification method](#). For example, devices with UI, biometrics fall into this category.

If present and set to true, it indicates that the device is capable of [built-in user verification](#) and its user verification feature is presently configured.

If present and set to false, it indicates that the authenticator is capable of [built-in user verification](#) and its user verification feature is not presently configured. For example, an authenticator featuring a built-in biometric user verification feature that is not presently configured will return this "uv" [option id](#) set to false.

If absent, it indicates that the authenticator does not have a [built-in user verification](#) capability.

A device that can only do Client PIN will not return the "uv" [option id](#).

If a device is capable of both [built-in user verification](#) and Client PIN, the authenticator will return both the "uv" and the "clientPin" [option ids](#).

Not  
Supported

## 4. Section 6.5.8. PRF values used§

See <https://fidoalliance.org/specs/fido-v2.1-ps-20210615/fido-client-to-authenticator-protocol-v2.1-ps->

The description of authenticatorClientPIN was removed and new values were added to authenticatorBioEnrollment and authenticatorCredentialManagement

## Original Text

Context	Pattern of PRF argument
authenticatorMakeCredential	32 arbitrary bytes
authenticatorGetAssertion	32 arbitrary bytes
authenticatorClientPIN	32×0xff    0608    32-bit value    CBOR array
authenticatorBioEnrollment	0101    CBOR map 0102    CBOR map 0104 0105    CBOR map
authenticatorCredentialManagement	01 02 04    CBOR map 06    CBOR map
authenticatorLargeBlobs	32×0xff    0c00    32-bit value    SHA-256(contents of set byte string, i.e. <i>not</i> including an outer CBOR tag with major type two)
authenticatorConfig	32×0xff    0d    8-bit value    CBOR map

## Index§

### Terms defined by this specification§

uv

[dfn for getInfo](#), in §3

[dfn for getInfo-old](#), in §3