

26. Device Authentication

The Device Authentication feature is used to verify the authenticity and/or identity of an Apple device.

26.1 Device Authentication Requirements

All accessories that support the Device Authentication feature via iAP2 must send or receive the following iAP2 control session message(s):

[RequestDeviceAuthenticationCertificate](#) (page 839)

[DeviceAuthenticationCertificate](#) (page 839)

[RequestDeviceAuthenticationChallengeResponse](#) (page 839)

[DeviceAuthenticationResponse](#) (page 840)

[DeviceAuthenticationSucceeded](#) (page 840)

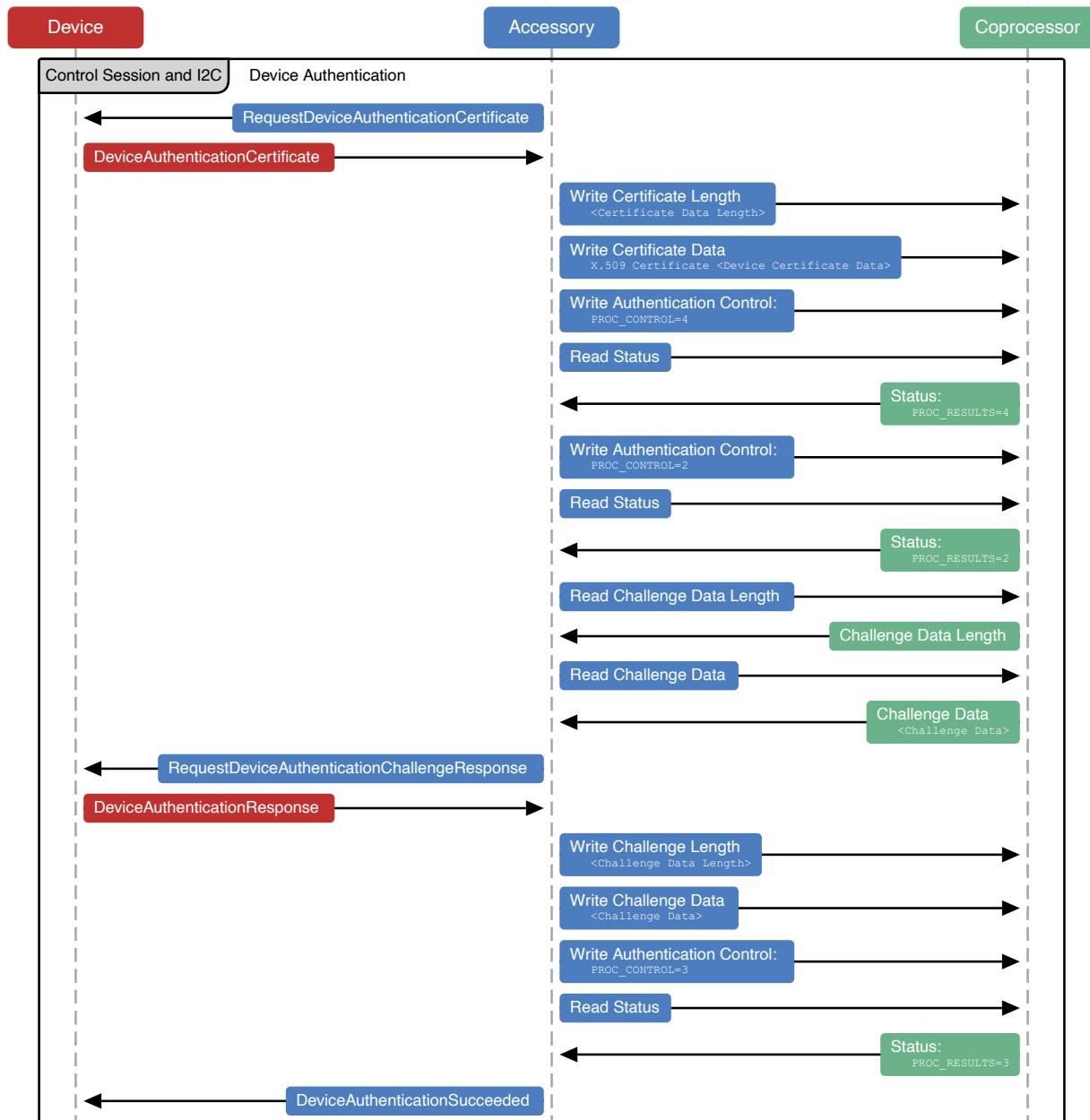
[DeviceAuthenticationFailed](#) (page 840)

26.2 Device Authentication Usage

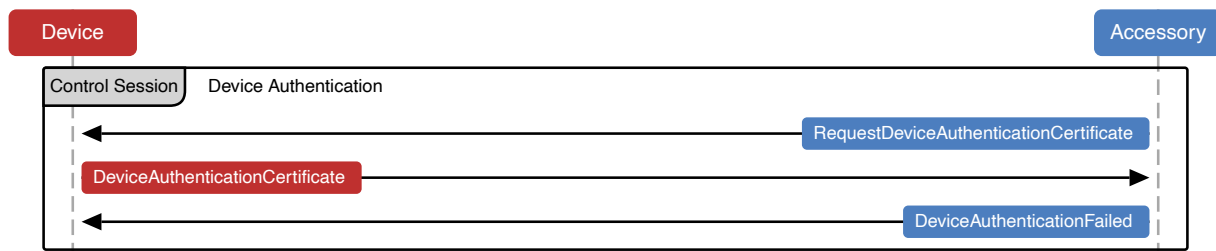
The Device Authentication process is the same as that specified in [Accessory Authentication](#) (page 261) except that the roles are reversed, and the accessory must terminate the iAP2 connection if the device fails to authenticate. For example, the accessory may continue to communicate with the device but with restricted (non-iAP2) functionality. [Accessory Authentication](#) (page 261) and [Accessory Identification](#) (page 265) must take place before Device Authentication may occur.

26.3 Device Authentication Examples

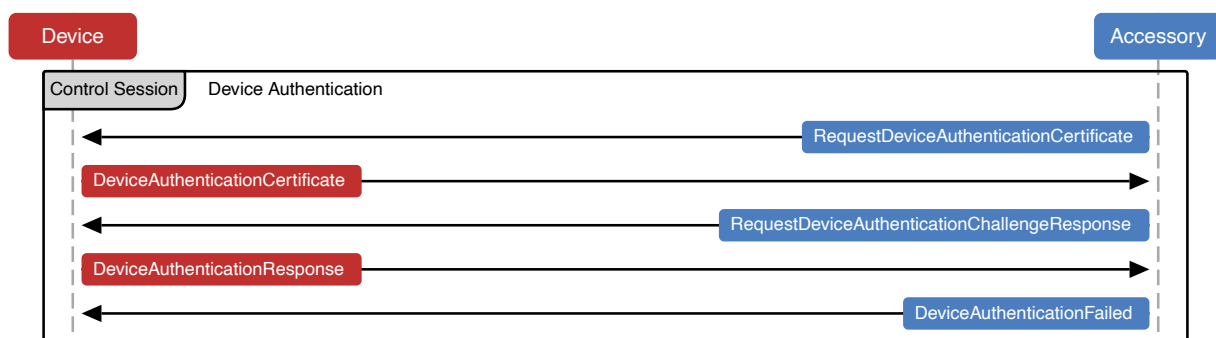
26.3.1 Typical Device Authentication



26.3.2 Device Authentication Failure Due To Invalid Certificate



26.3.3 Device Authentication Failure Due To Invalid Response



26.4 Test Procedures

26.4.1 iAP2

Verify that the following iAP2 control session message(s) are sent or received:

- [RequestDeviceAuthenticationCertificate](#) (page 839)
- [DeviceAuthenticationCertificate](#) (page 839)
- [RequestDeviceAuthenticationChallengeResponse](#) (page 839)
- [DeviceAuthenticationResponse](#) (page 840)
- [DeviceAuthenticationSucceeded](#) (page 840)
- [DeviceAuthenticationFailed](#) (page 840)

27. Device Notifications

An accessory that supports the Device Notifications feature can register for messages from the Apple device that convey various parts of device state. Device information that can be provided includes:

- Human-readable name as set by the user (i.e. "John Doe's iPhone")
- Current UI language
- Current date/time information

27.1 Device Notifications Requirements

All accessories that support the Device Notifications feature via iAP2 may also send or receive the following iAP2 control session message(s):

[DeviceInformationUpdate](#) (page 841)

[DeviceLanguageUpdate](#) (page 841)

[DeviceTimeUpdate](#) (page 841)

[DeviceUUIDUpdate](#) (page 842)

All messages related to this feature are optional.

27.2 Device Notifications Usage

The Apple device will automatically send update messages if the accessory claims to receive them during Accessory Identification. After successful identification, the Apple device will send one update message to inform the accessory of initial state, and will send additional messages if that state changes. Accessories must be prepared to receive multiple update messages while connected to the device.

After receiving [DeviceTimeUpdate](#) (page 841), the accessory must maintain its own clock. Subsequent notifications will be sent when there is a significant change, e.g., a device time zone or daylight savings time change.

The [DeviceUUIDUpdate](#) (page 842) can be used by accessories to determine if they are connected to the same device over multiple transports. The UUID will remain constant as long as there are any iAP accessories connected to the device (over any transport). The UUID will be changed no less than one minute after all iAP accessories disconnect.