

Hardware Encryption Capabilities for Apple Hardware

What

From a security perspective, it is important to understand the encryption capabilities of devices.

When/Why

In FileWave 14.6.0 some reporting was added to report on `HardwareEncryptionCaps` (https://developer.apple.com/documentation/devicemanagement/securityinforesponse/securityinfo?changes=latest_minor) as reported through Apple's MDM framework.

How

- Hardware Encryption Capabilities has been added as a field for iOS 4+ and tvOS 6+ devices to report the supported encryption.
- Passcode Present had its description updated to explain how it ties to Hardware Encryption Capabilities and also is for iOS 4+ and tvOS 6+.
- Is Recovery Lock Enabled was added for macOS devices to reflect if Recovery Lock is enabled on Apple Silicon running macOS 11.5+.

Digging Deeper

`HardwareEncryptionCaps` is an integer that indicates the underlying hardware encryption capabilities of the device, which is one of the following values:

- 1 : Block-level encryption
- 2 : File-level encryption
- 3 : Both block-level and file-level encryption

This value is available in iOS 4 and later, and tvOS 6 and later.

i For a device to have data protection, `HardwareEncryptionCaps` must be 3 and `PasscodePresent` must be `true`.

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