

# **OpenCore**

Reference Manual (0.8.3.4)

[2022.08.04]

mode) are not allowed without explicit user authentication by a custom password. Currently, password and salt are hashed with 5000000 iterations of SHA-512.

Note: This functionality is still under development and is not ready for production environments.

## 7. ExposeSensitiveData

Type: plist integer

Failsafe: 0x6

**Description**: Sensitive data exposure bitmask (sum) to operating system.

- $\bullet\,$  0x01 Expose the printable booter path as a UEFI variable.
- 0x02 Expose the OpenCore version as a UEFI variable.
- 0x04 Expose the OpenCore version in the OpenCore picker menu title.
- 0x08 Expose OEM information as a set of UEFI variables.

The exposed booter path points to OpenCore.efi or its booter depending on the load order. To obtain the booter path, use the following command in macOS:

```
nvram 4D1FDA02-38C7-4A6A-9CC6-4BCCA8B30102:boot-path
```

To use a booter path to mount a booter volume, use the following command in macOS:

```
 u = (nvram \ 4D1FDA02 - 38C7 - 4A6A - 9CC6 - 4BCCA8B30102:boot-path \ | \ sed \ 's/.*GPT, \ ([^,]*\ ), .*/\ |'); \ | \ if \ ["$u" \ != ""]; \ then \ sudo \ diskutil \ mount \ $u \ ; \ fi \ |'
```

To obtain the current OpenCore version, use the following command in macOS:

```
nvram 4D1FDA02-38C7-4A6A-9CC6-4BCCA8B30102:opencore-version
```

If the OpenCore version is not exposed the variable will contain UNK-000-0000-00 sequence.

To obtain OEM information, use the following commands in macOS:

```
nvram
4D1FDA02-38C7-4A6A-9CC6-4BCCA8B30102:oem-product
# SMBIOS
Type1
ProductName

nvram
4D1FDA02-38C7-4A6A-9CC6-4BCCA8B30102:oem-vendor
# SMBIOS
Type2
Manufacturer

nvram
4D1FDA02-38C7-4A6A-9CC6-4BCCA8B30102:oem-board
# SMBIOS
Type2
ProductName
```

# 8. HaltLevel

Type: plist integer, 64 bit

Failsafe: 0x80000000 (DEBUG\_ERROR)

**Description**: EDK II debug level bitmask (sum) causing CPU to halt (stop execution) after obtaining a message of HaltLevel. Possible values match DisplayLevel values.

## 9. PasswordHash

Type: plist data 64 bytes

Failsafe: all zero

Description: Password hash used when EnabledPasswordEnablePassword is set.

## 10. PasswordSalt

Type: plist data Failsafe: empty

Description: Password salt used when EnabledPassword EnablePassword is set.

# 11. Vault

Type: plist string Failsafe: Secure

**Description**: Enables the OpenCore vaulting mechanism.

Valid values:

- Optional require nothing, no vault is enforced, insecure.
- Basic require vault.plist file present in OC directory. This provides basic filesystem integrity verification and may protect from unintentional filesystem corruption.

## 2. Auxiliary

Type: plist boolean Failsafe: false

Description: Set to true to hide this entry when HideAuxiliary is also set to true. Press the Spacebar key

to enter "Extended Mode" and display the entry when hidden.

## 3. Comment

Type: plist string Failsafe: Empty

**Description**: Arbitrary ASCII string used to provide a human readable reference for the entry. Whether this

value is used is implementation defined.

# 4. DisableFirmwareRuntime

Type: plist boolean

Failsafe: false

**Description**: Disable firmware runtime during usage of a tool.

This disables all of the firmware runtime protections provided by OpenRuntime.efi during the time a tool is in use. It should normally be avoided, but may be required for instance if a tool needs to access NVRAM directly without the redirections put in place by RequestBootVarRouting.

Note: This option is only valid for Tools and cannot be specified for Entries (is always false).

## 5. Enabled

Type: plist boolean Failsafe: false

**Description**: Set to true activate this entry.

## 6. Flavour

Type: plist string Failsafe: Auto

Description: Specify the content flavour for this entry. See OC ATTR USE FLAVOUR ICON flag for documentation.

#### 7. Name

Type: plist string Failsafe: Empty

**Description**: Human readable entry name displayed in the OpenCore picker.

# 8. Path

Type: plist string Failsafe: Empty

**Description**: Entry location depending on entry type.

- Entries specify external boot options, and therefore take device paths in the Path key. Care should be exercised as these values are not checked. Example: PciRoot(0x0)/Pci(0x1,0x1)/.../\EFI\COOL.EFI
- Tools specify internal boot options, which are part of the bootloader vault, and therefore take file paths relative to the OC/Tools directory. Example: OpenShell.efi.

# 9. RealPath

Type: plist boolean Failsafe: false

**Description**: Pass full path to the tool when launching.

This should typically be disabled as passing the tool directory may be unsafe with tools that accidentally attempt to access files without checking their integrity. Reasons to enable this property may include cases where tools cannot work without external files or may need them for enhanced functionality such as memtest86 (for logging and configuration), or Shell (for automatic script execution).

Note: This property option is only valid for Tools and cannot be specified for Entries (is always true).

#### 10. TextMode

Type: plist boolean

Failsafe: false

**Description**: Run the entry in text mode instead of graphics mode.