



# OpenCore

Reference Manual (0.8.~~3~~.4)

[2022.08.09]



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.

- 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,\([^,]*\),.*\/\1/'); \
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-000-0000-00-00 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 `EnabledPasswordEnablePassword` 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. Enabled
 

**Type:** plist boolean  
**Failsafe:** false  
**Description:** Set to `true` activate this entry.
5. Flavour
 

**Type:** plist string  
**Failsafe:** Auto  
**Description:** Specify the content flavour for this entry. See `OC_ATTR_USE_FLAVOUR_ICON` flag for documentation.
6. [FullNvramAccess](#)

**Type:** [plist boolean](#)  
**Failsafe:** [false](#)  
**Description:** [Disable OpenRuntime NVRAM protection during usage of a tool.](#)  
[This disables all of the NVRAM 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 \(is always false\).](#)
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 `mementest86` (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.