# APPLE HOMEPOD AND HOMEKIT FORENSICS

MATTIA EPIFANI

SANS DFIR SUMMIT

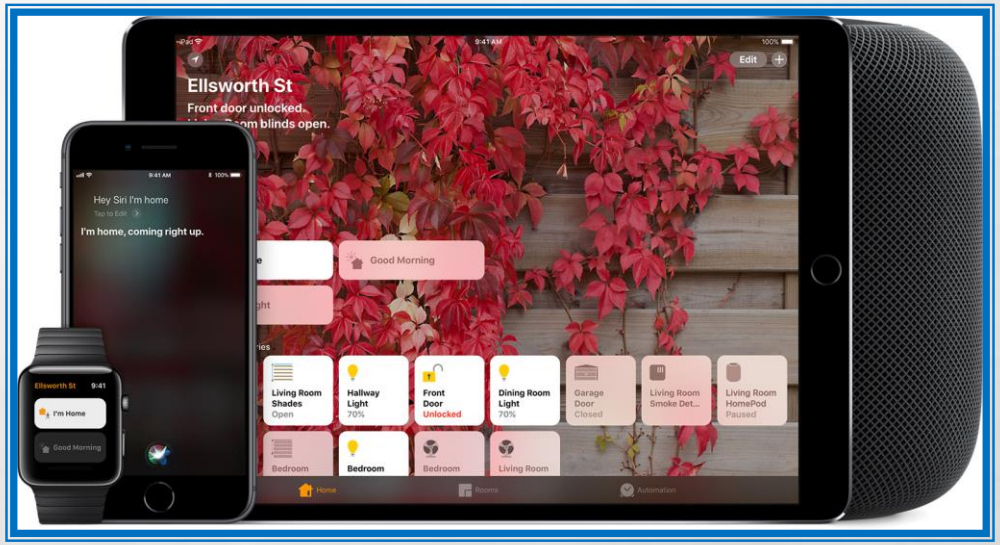
17TH JULY 2020

# WHO AM I

- I live and work in Italy
- Master's Degree in IT in 2002
- Founder and CEO @ REALITY NET
- Digital Forensics Analyst
- SANS Instructor FOR585/FOR500
- Researcher at IGSG – CNR (Italian National Council of Research)

# APPLE HOMEKIT

- Software framework for **home automation**
- **Apple-certified** smart accessories
- Accessories are grouped by **Rooms**



# CASE STUDY SCENARIO

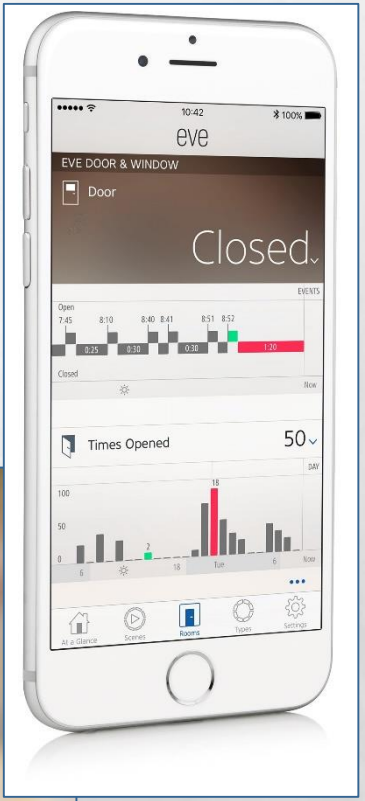
1. Eve Door Sensor
2. Apple HomePod
3. Apple iPhone 7

# APPLE HOMEPOD

- **Smart Speaker** developed by Apple
- Designed to work with other Apple devices (i.e. iPhone and iPad)
- It works with **Apple Music** and the **Home** app
- It integrates **Siri** and other **HomeKit devices**

# EVE DOOR SENSOR

- Connected via **Bluetooth**
- **Apple HomeKit** enabled
- Remotely controlled by the **HomePod**




# DEVICE IDENTIFICATION

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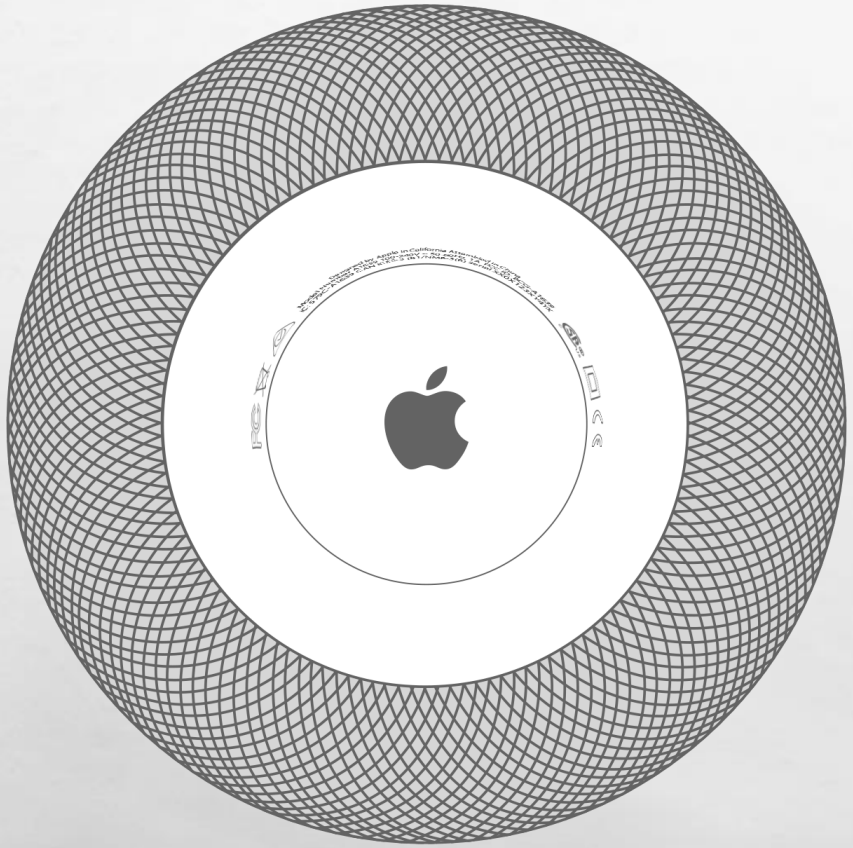
# APPLE HOMEPOD – IDENTIFICATION (DEVICE)

https://support.apple.com/en-us/HT208347



The **Serial Number** and the **Model Number** are on the bottom of the HomePod

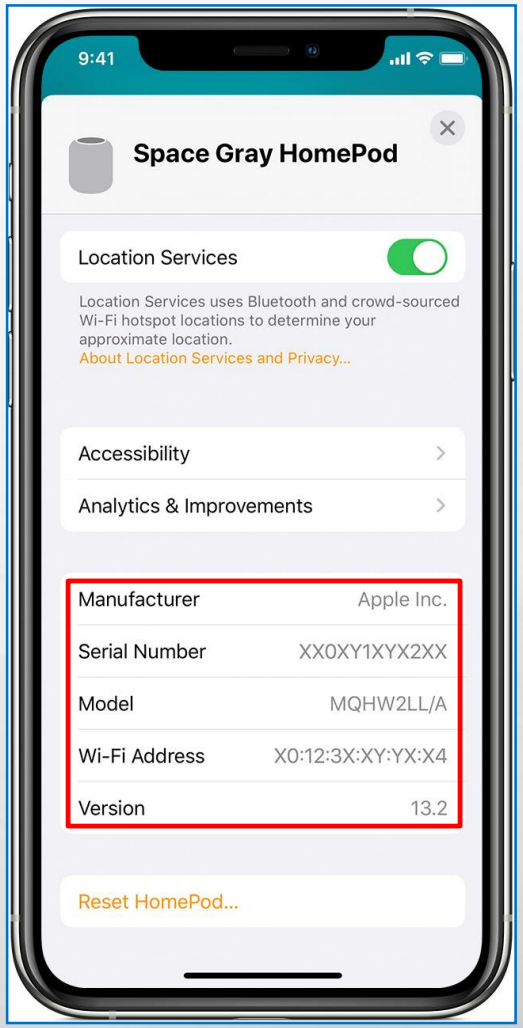
# APPLE HOMEPOD – IDENTIFICATION (IPHONE)

https://support.apple.com/en-us/HT208347

**Serial number, Model Number,**

**Wi-Fi Address and iOS/tvOS version**

are available in the **Home** app



# DATA EXTRACTION

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# APPLE HOMEKIT / HOMEPOD ACQUISITION

- **HomePod**
  - Direct connection (?)
  - HomePod Sysdiagnose
- **Synced iPhone(s)/iPad(s)**

# APPLE HOMEPOD – THE HIDDEN 14-PIN PORT

https://www.macrumors.com/2018/02/12/homepod-teardown-ifixit/

*"[…]* ***iFixit*** *found a hidden* ***14-pin connector*** *that they speculate is probably used to test or program HomePods on pogo pins during assembly […].*

*Given the port sits below a layer of strong adhesive, it's unclear if it will be used for any other purpose, such as* ***diagnostic testing****."*

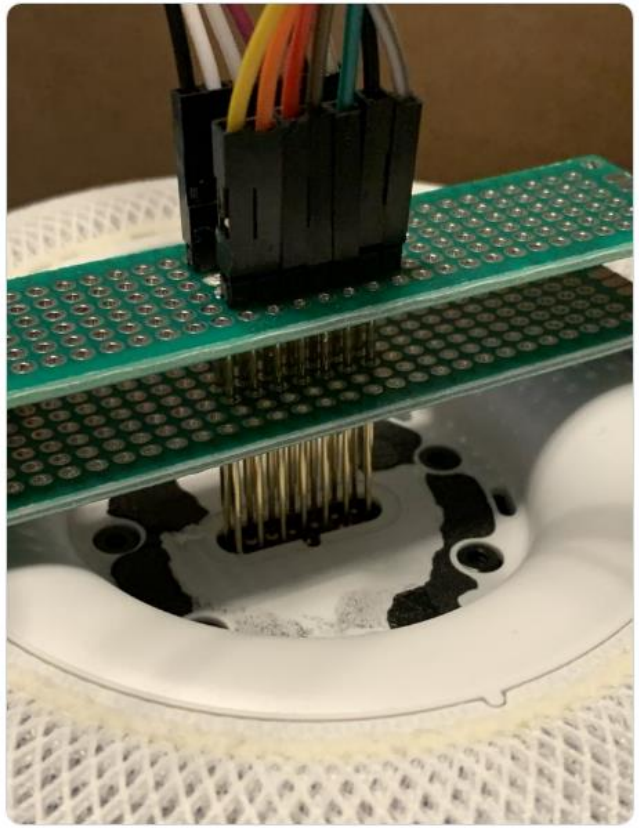
https://www.ifixit.com/Teardown/HomePod+Teardown/103133
https://en.wikipedia.org/wiki/Pogo_pin

# APPLE HOMEPOD – THE HIDDEN 14-PIN PORT

https://mobile.twitter.com/_l1ngl1ng_/status/1207027058875875328

L1ngL1ing
@_L1ngL1ng_

I heard you were interested in Homepods... @axi0mX

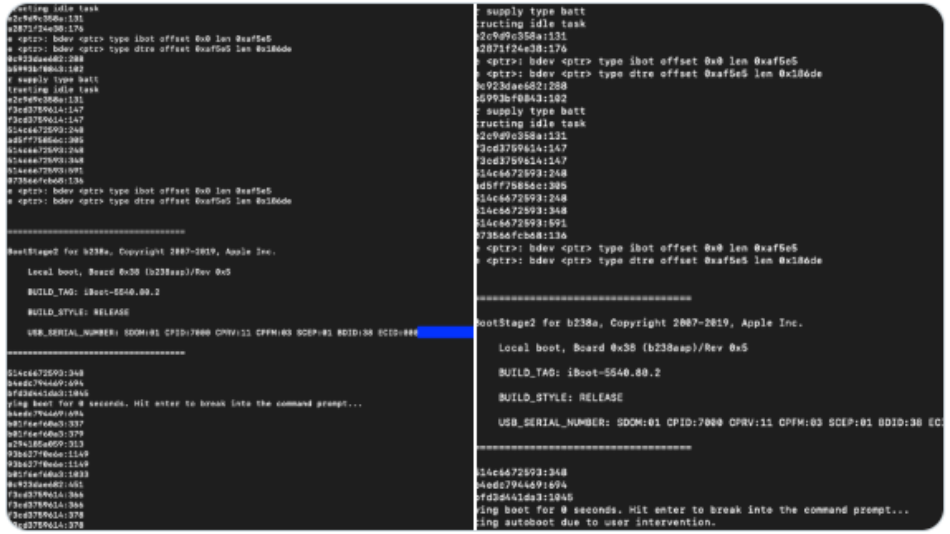


8:57 PM · Dec 17, 2019 · Twitter Web App

L1ngL1ng
@_L1ngL1ng_

Hello Homepod UART console. No special adapters needed. Next up -- let's get this DFU-ed and checkm8-ed.

Traduci il Tweet



3:10 AM · 21 feb 2020 · Twitter Web App

**25** Retweet **206** Mi piace

# APPLE SYSDIAGNOSE

- Apple provides "*A web-based tool that developers can use to report issues with Apple software and services*"

- To correctly use this tool it is mandatory to "**collect and attach any relevant logs**" extracted from the device

# APPLE SYSDIAGNOSE

## Using Apple "Bug Reporting" for forensic purposes

- Mattia Epifani, Heather Mahalik and @cheeky4n6monkey wrote a document describing their research about these logs

  HTTPS://WWW.FOR585.COM/SYSDIAGNOSE

- We also developed scripts to parse some of the files available in a sysdiagnose acquisition

  HTTPS://GITHUB.COM/CHEEKY4N6MONKEY/IOS_SYSDIAGNOSE_FORENSIC_SCRIPTS

# SYSDIAGNOSE ON HOMEPOD

https://download.developer.apple.com/iOS/iOS_Logs/HomePod_Logging_Instructions.pdf

# HomePod

For issues with your HomePod, please follow the instructions below to gather logging.

## Enabling Logging

**Notes:**

- This profile will automatically delete from the device after 3 days. If the issue is not reproduced and a sysdiagnose is not triggered within that time, the profile will need to be re-installed.
- The HomePod must be running 11.4 or later.

1. Download the profile and install it on the iOS device.
   If necessary, email the profile or use AirDrop to transfer the profile to the iOS device.
   **Important:** Install logging profile onto the iOS device, not the HomePod. If the profile is installed on the HomePod the 'Export Analytics' button will not show up when collecting logs.

# SYSDIAGNOSE ON HOMEPOD

## https://download.developer.apple.com/iOS/iOS_Logs/HomePod_Logging_Instructions.pdf

2. Restart the device if prompted.
3. Reproduce the issue.
   **Important:** Note the date and time issue occurred and add this information to your report.
4. Trigger a sysdiagnose using the following steps:
   1. Open the 'Home' app on the iOS device.
   2. Long press on the HomePod tile to reveal options.
   3. Tap 'Settings' (Previously called 'Details').
   4. Tap 'Analytics'.
   5. Tap 'Export Analytics'.
   6. Wait for the logs to finish gathering. When logs are collected, the HomePod will AirDrop them to the iOS device.
   7. From the AirDrop menu, choose 'iCloud Drive' or the 'Files app' and tap 'Add'.
   8. Tap 'Done' when the file transfer has completed.

# SYSDIAGNOSE ON HOMEPOD

## https://download.developer.apple.com/iOS/iOS_Logs/HomePod_Logging_Instructions.pdf

**HomePod**

For issues with your HomePod, please follow the instructions below to gather logging.

### Uploading the Log File to Your Report

1. Locate the HomePod sysdiagnose file on iCloud Drive or the Files app on your iOS device (whichever location you saved the file to), and download or AirDrop the file to your macOS system.
   **Note:** Filename will be something like: *sysdiagnose_[Date]_[Time]_iPhone_OS_AudioAccessory_[nnxnnn]*
2. Attach the file to your report. <https://feedbackassistant.apple.com/welcome>

# SYNCED IPHONE

## https://github.com/RealityNet/ios_triage


- Full file system acquisition using

  **checkra1n jailbreak**

  - Community project based on the '**checkm8**' bootrom exploit
  - **iPhone 5s – iPhone X, iOS 12.3 and up**
  - Open source script '**ios_triage**' developed "*to extract data from a "chekcra1ned" iOS device*"

# DATA ANALYSIS - IPHONE

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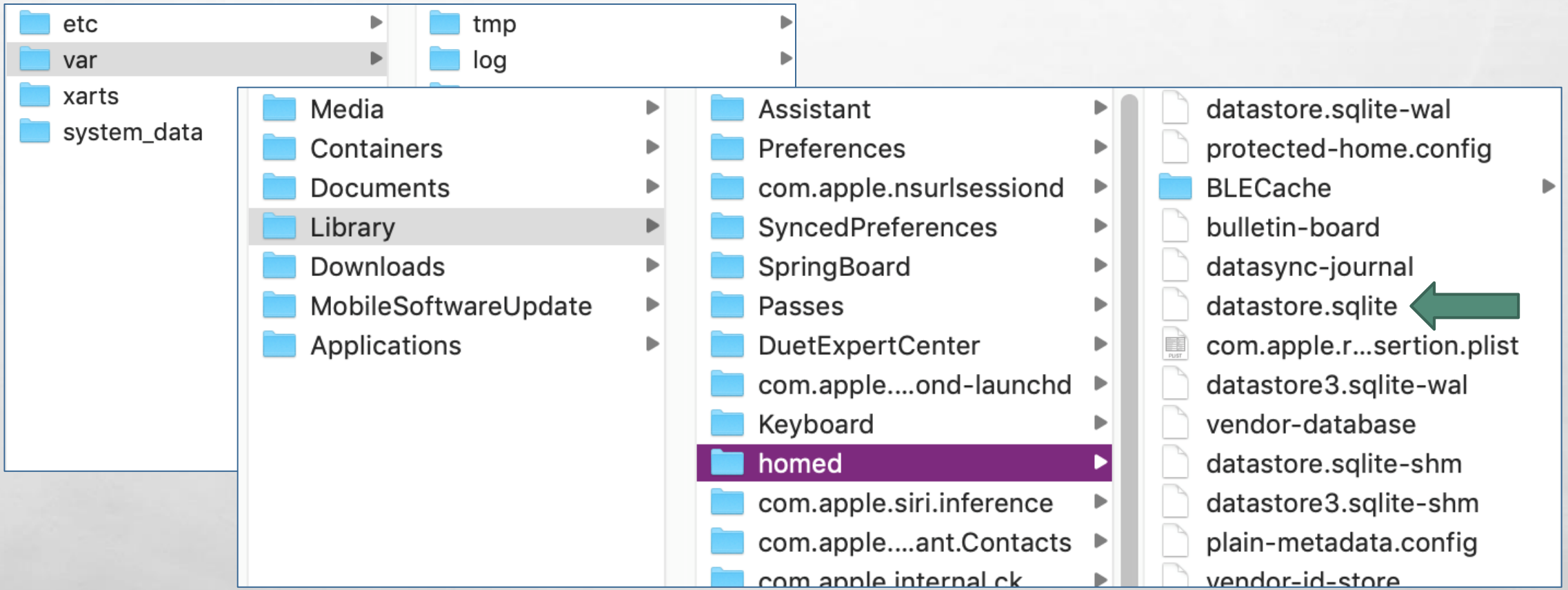
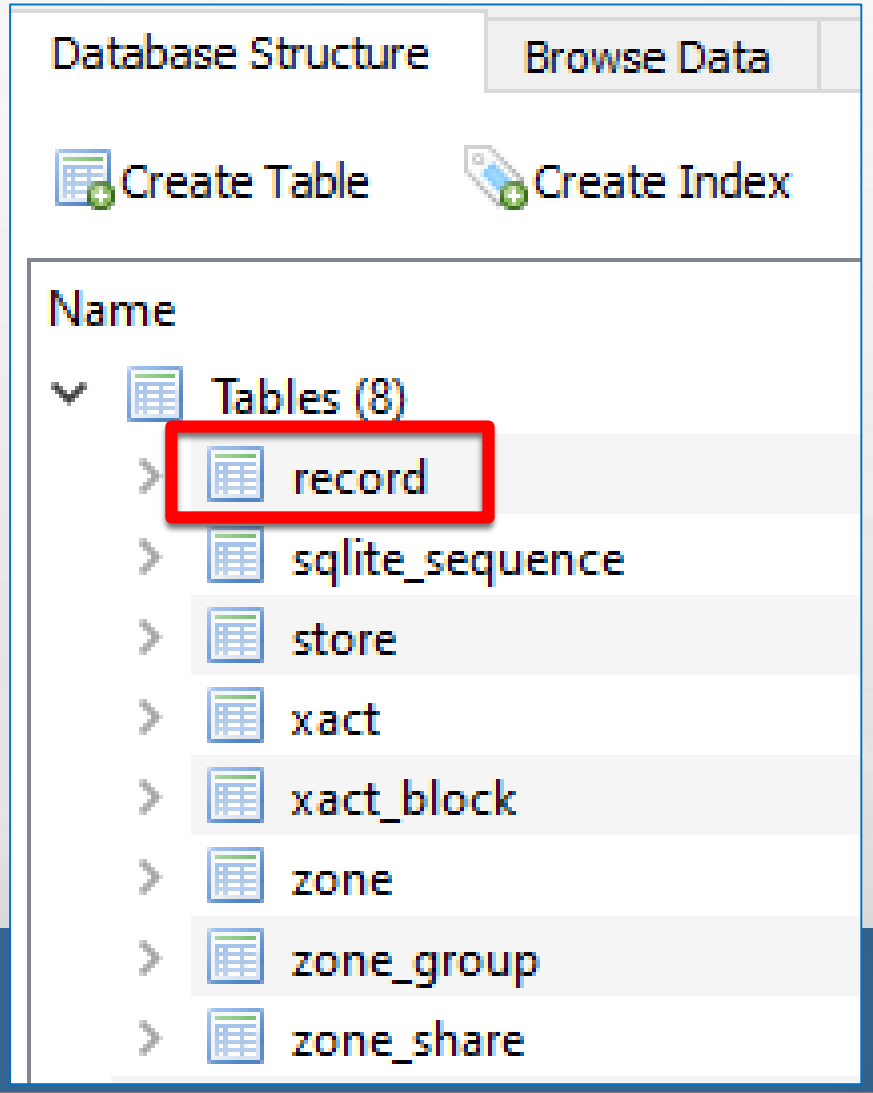
# HOMEKIT/HOMEPOD MAIN FOLDER

## /private/var/mobile/Library/homed/



# DATASTORE.SQLITE



# DATASTORE.SQLITE

## HMDHomeManagerModel / HMDHomeModel

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

Filter in any column

| | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 1 | 9C3BF4D1-C7CF-4217-BCD2-0F7E96D5B300 | HMDCloudLegacyModelObject | [illegible] | NULL | 1 | BLOB | BLOB |
| 2 | EAE83F8B-F492-4683-9593-DE83B17A1E58 | HMDHomeManagerModel | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | NULL | 1 | BLOB | BLOB |

Database Structure | Browse Data | Edit Pragmas | Execute SQL

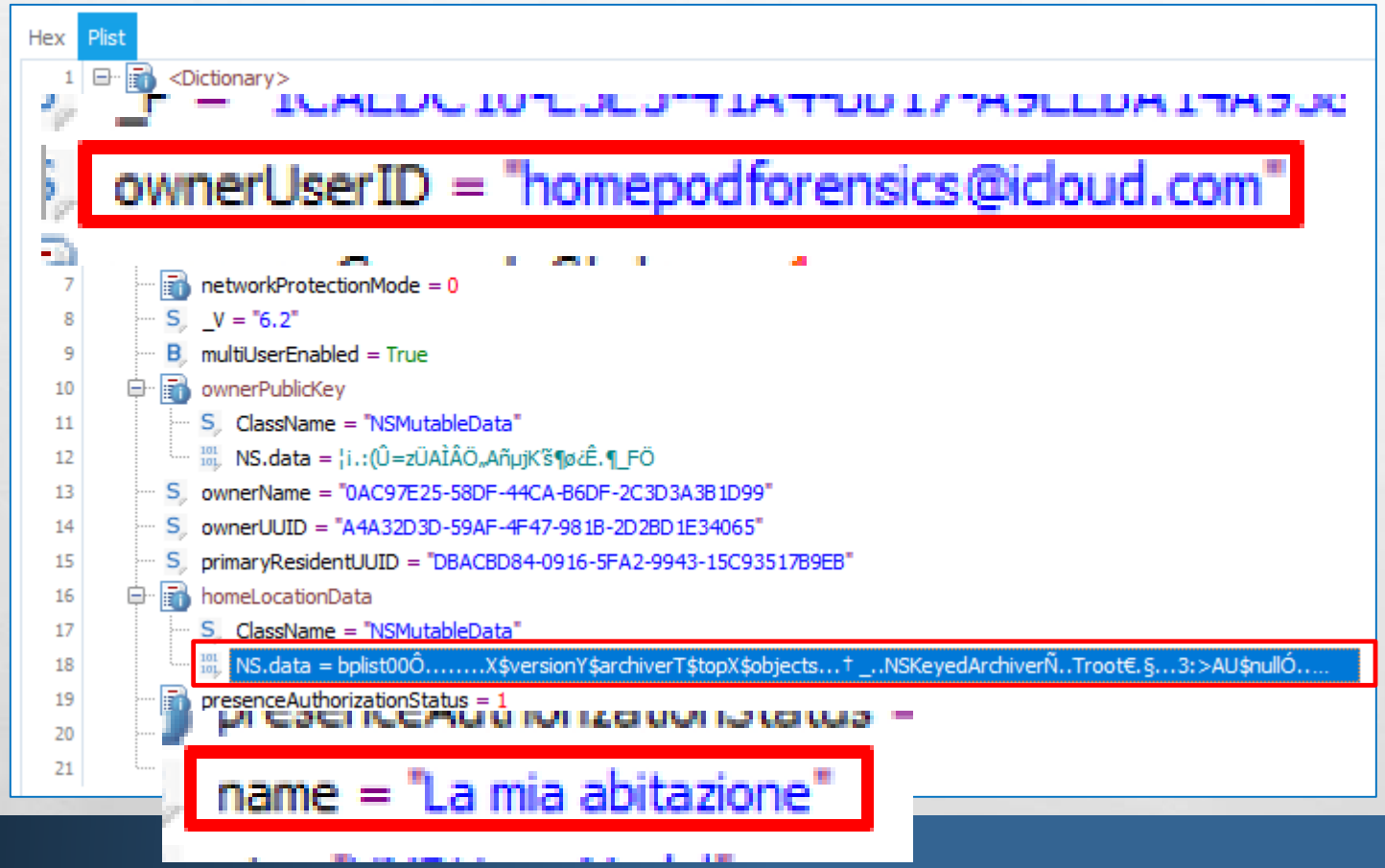
Table: record

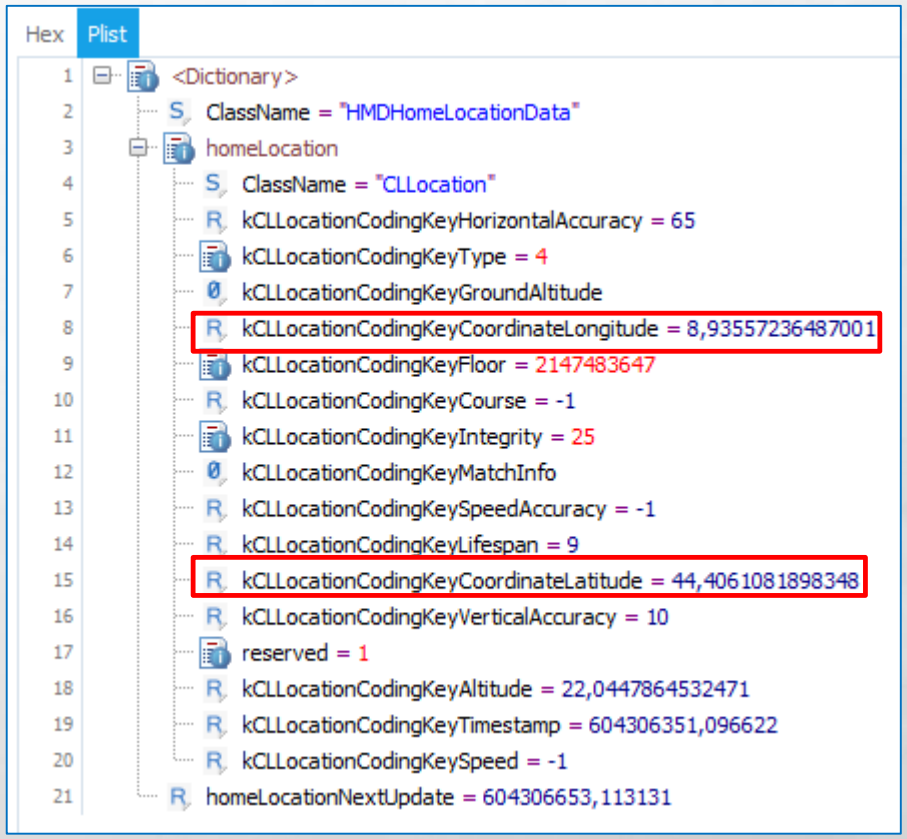
Filter in any column

| | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 15 | BA9E0595-3ECD-4DDE-BB12-A2C492A93F4F | HMDApplicationDataModel | D162EAEF-8138-5E87-9A01-29F8B9A950A7 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 16 | D085FF04-C62E-43ED-BB51-7D5C74D4B702 | HMDAccountModel | 9FBF2C67-799C-5466-A728-B73931E44C15 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 17 | 8E134E11-9C6F-42BF-B5AB-E2D80E407E5A | HMDCloudZoneInformationModel | 2FE62FEA-AA25-5787-AD39-27647760D442 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 18 | 351C6C93-6422-426E-9DF1-4CC7374B1D3A | HMDHAPMetadataModel | 9C7B07AE-AB5E-58F8-99B8-22ED7732C292 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 19 | 92FCA088-C8C9-453C-891B-511B0708B4E4 | HMDHomeModel | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |

# HOME NAME, HOME GEOLOCATION AND USER ID

## HMDHomeModel



# DATASTORE.SQLITE

## HMDRoomModel / HMDAppleMediaAccessoryModel

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

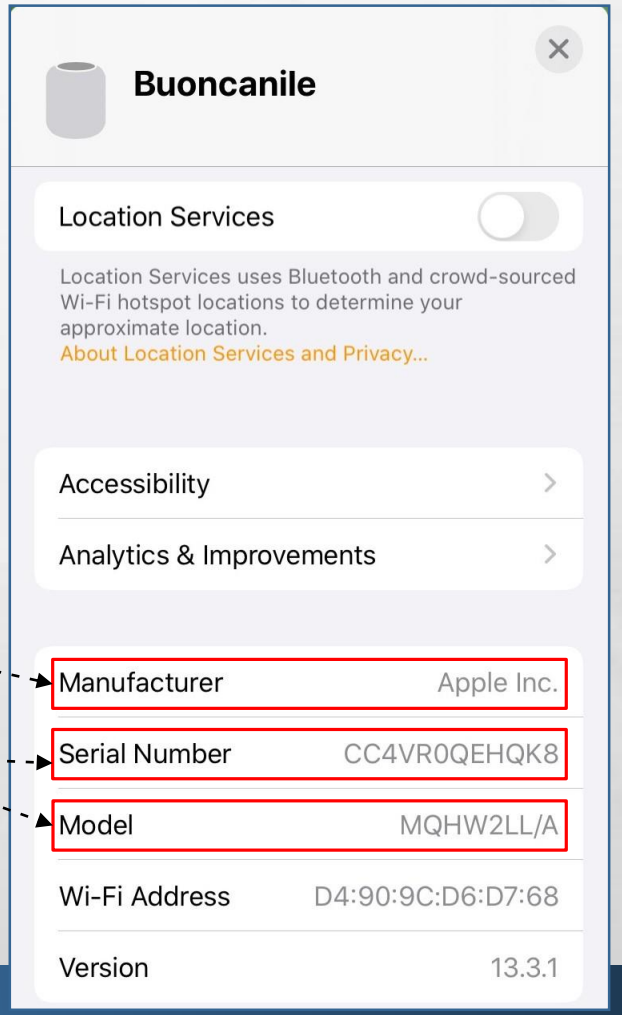
Filter in any column

| | _id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|
| | | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 73 | 1 | 9BF59942-0654-4350-8125-4133A1850961 | HMDActionSetModel | 976D30EC-E24A-52DA-921B-83B9B6685934 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 74 | 1 | B5094766-7F20-4C73-8188-EA51CD5786CC | HMDUserModel | A4A32D3D-59AF-4F47-981B-2D2BD1E34065 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 75 | 1 | 93B78C42-E385-493D-B4A9-264CE1589117 | HMDActionSetModel | E1AAAE36-31B5-5433-B73C-1A82AD218D1A | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 76 | 1 | 41396CF7-DECC-414E-BC5E-8098A6ECF15D | HMDHomeNetworkRouterSettingsModel | 4C439A6B-F1E4-52DB-A541-8B2FC9D745EC | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 77 | 1 | EA9CE1F7-66E3-4BDC-B4C2-F1E16E86FBCA | HMDHomeNetworkRouterManagingDeviceSetting... | EC205060-73E2-5550-AACA-D4B09573B160 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 78 | 1 | 3A56BCA1-E636-48D7-B9A3-3F | | 113E9DA9-9B4D-58B0-B8D5-0C5EFBE3580F | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 79 | 1 | 66F2DE08-8ED5-4BA5-AFBD-EA | | C612DD2C-E416-55BD-AD8A-2EA4C23C776C | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 80 | 1 | 5DECAF1E-C6FB-41EB-9833-2CE | | | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 81 | 1 | 6CA11486-01E1-46D5-968A-8F3 | | 6B76D45C-3257-4DE9-A00F-8F724CB0D4E8 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 82 | 1 | D50296B2-138D-4245-B28F-15A | | 8E714D75-8B62-50B7-9D94-3A9839F2BCE9 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 83 | 1 | 83026FA1-202C-4DD5-ABEF-A1 | | 3C8210A3-D3E4-5662-A9A0-ECA8464DC528 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 84 | 1 | D563AB7A-21CC-49C3-809C-7D3B82660EE7 | HMDResidentDeviceModel | DBACBD84-0916-5FA2-9943-15C93517B9EB | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 85 | 1 | BDDA5512-7F96-4655-9D6D-776ECA3BE456 | HMDRoomModel | 32180983-7A6E-4C41-8EC8-0E1D348BBD60 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 86 | 1 | D13BB7B2-9501-475B-AA9B-9CEA534D0D08 | HMDRoomModel | 3886FDCB-7840-47FA-B0B8-A8DC389F31B5 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 87 | 1 | A40327ED-116E-487F-8068-C0B846 | HMDActionSetModel | -B210-50C268CC6645 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 88 | 1 | F0200FCB-61F8-41C6-9766-4F1964 | | -831C-C11FA06536A3 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 89 | 1 | 525B1827-0333-4B40-8E8D-DBF473 | HMDAppleMediaAccessoryModel | -ABF3-C8B0BDB1E256 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 90 | 1 | 38E268B0-9334-45FF-8719-40F8EF | | -BEAE-07A03DFA0D76 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 91 | 1 | 1204E7FF-407D-4699-A563-2FAB0A | HMDAccessoryTransaction | -A4A3-569D81B296A4 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |

# HOMEPOD INFORMATION

## HMDAppleMediaAccessoryModel

| Key | Type | Value |
|---|---|---|
| accessoryCategory | Integer | 25 |
| appleMediaAccessoryChan... | String | A06CAAF2-0049-4037-85BA-827E66C3AF62 |
| configurationAppIdentifier | String | com.apple.SharingViewService |
| configuredName | String | Buoncanile |
| **device** | Array | 2 objects |
| deviceUUID | String | DAD423DA-F06A-58A9-9205-BA4F6F838DD8 |
| firmwareVersion | String | 13.3.1 (17D50) |
| identifier | String | B40BD6EA-126C-4C38-AE0F-698CE3048132 |
| **loggedInAccount** | Array | 2 objects |
| manufacturer | String | Apple Inc. |
| model | String | MQHW2LL/A |
| name | String | Buoncanile |
| **pairingIdentity** | Array | 2 objects |
| providedName | String | HomePod |
| roomUUID | String | 3886FDCB-7840-47FA-B0B8-A8DC389F31B5 |
| serialNumber | String | CC4VR0QEHQK8 |
| **softwareVersion** | Array | 2 objects |
| **symptoms** | Array | 2 objects |
| **wifiNetworkInfo** | Array | 2 objects |
| _P | String | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 |
| _t | String | HMDAppleMediaAccessoryModel |
| _u | String | 4952117C-F0B4-57A1-ABF3-C8B0BDB1E256 |
| _V | String | 6.2 |

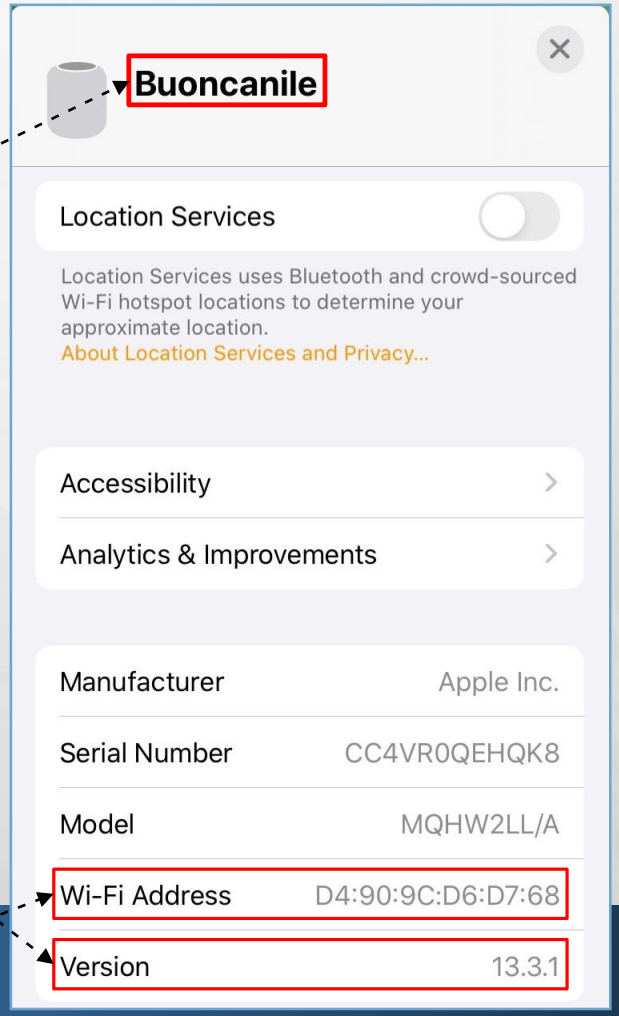


# HOMEPOD INFORMATION

## HMDAppleMediaAccessoryModel

| Key | Type | Value |
|---|---|---|
| accessoryCategory | Integer | 25 |
| appleMediaAccessoryChan... | String | A06CAAF2-0049-4037-85BA-827E66C3AF62 |
| configurationAppIdentifier | String | com.apple.SharingViewService |
| configuredName | String | Buoncanile |
| **device** | Array | 2 objects |
| deviceUUID | String | DAD423DA-F06A-58A9-9205-BA4F6F838DD8 |
| firmwareVersion | String | 13.3.1 (17D50) |
| identifier | String | B40BD6EA-126C-4C38-AE0F-698CE3048132 |
| **loggedInAccount** | Array | 2 objects |
| manufacturer | String | Apple Inc. |
| model | String | MQHW2LL/A |
| name | String | Buoncanile |
| **pairingIdentity** | Array | 2 objects |
| providedName | String | HomePod |
| roomUUID | String | 3886FDCB-7840-47FA-B0B8-A8DC389F31B5 |
| serialNumber | String | CC4VR0QEHQK8 |
| **softwareVersion** | Array | 2 objects |
| **symptoms** | Array | 2 objects |
| **wifiNetworkInfo** | Array | 2 objects |
| _P | String | 8F4D7D36-91CB-43EA-82 |
| _t | String | HMDAppleMediaAccessory |
| _u | String | 4952117C-F0B4-57A1-AB |
| _v | String | 6.2 |

wifiNetworkInfo : bplist = {
HMF.SSID : AsciiString = rnsys
HMF.MACAddress : HMFMACAddress = {
HMF.data : data = D4 90 9C D6 D7 68

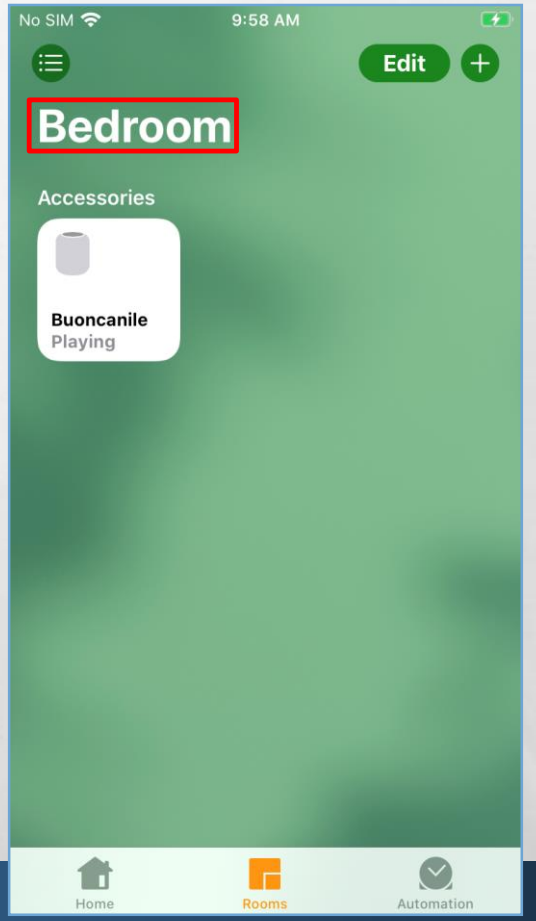


# HOMEPOD ROOM INFORMATION

## HMDAppleMediaAccessoryModel / HMDRoomModel

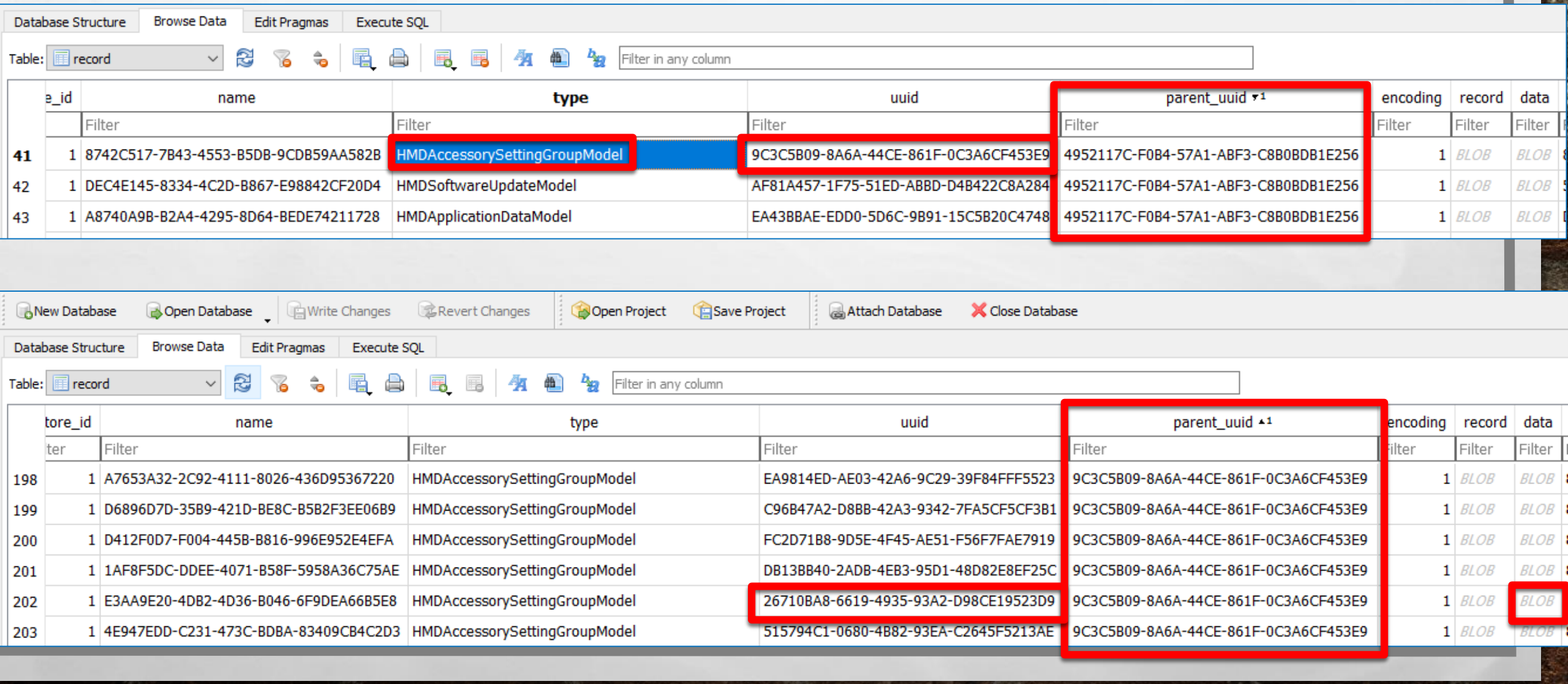
| Key | Type | Value |
|---|---|---|
| accessoryCategory | Integer | 25 |
| appleMediaAccessoryChan… | String | A06CAAF2-0049-4037-85BA-827E66C |
| configurationAppIdentifier | String | com.apple.SharingViewService |
| configuredName | String | Buoncanile |
| **device** | Array | 2 objects |
| deviceUUID | String | DAD423DA-F06A-58A9-9205-BA4F6F8 |
| firmwareVersion | String | 13.3.1 (17D50) |
| identifier | String | B40BD6EA-126C-4C38-AE0F-698CE30 |
| **loggedInAccount** | Array | 2 objects |
| manufacturer | String | Apple Inc. |
| model | String | MQHW2LL/A |
| **pairingIdentity** | Array | 2 objects |
| providedName | String | HomePod |
| roomUUID | String | 3886FDCB-7840-47FA-B0B8-A8DC389F31B5 |
| serialNumber | String | CC4VR0QEHQK8 |
| **softwareVersion** | Array | 2 objects |
| **symptoms** | Array | 2 objects |
| **wifiNetworkInfo** | Array | 2 objects |
| _P | | 4952117C-F0B4-57A1-ABF3-C8808DB1E256 |
| _t | | |
| _u | | |
| _V | | |

```
NSMutableDictionary = {
    _P : AsciiString = 8F4D7D36-91CB-43EA-8250-31FEC09DE463
    _V : AsciiString = 6.2
    name : AsciiString = Bedroom
    _u : AsciiString = 3886FDCB-7840-47FA-B0B8-A8DC389F31B5
    _t : AsciiString = HMDRoomModel
```

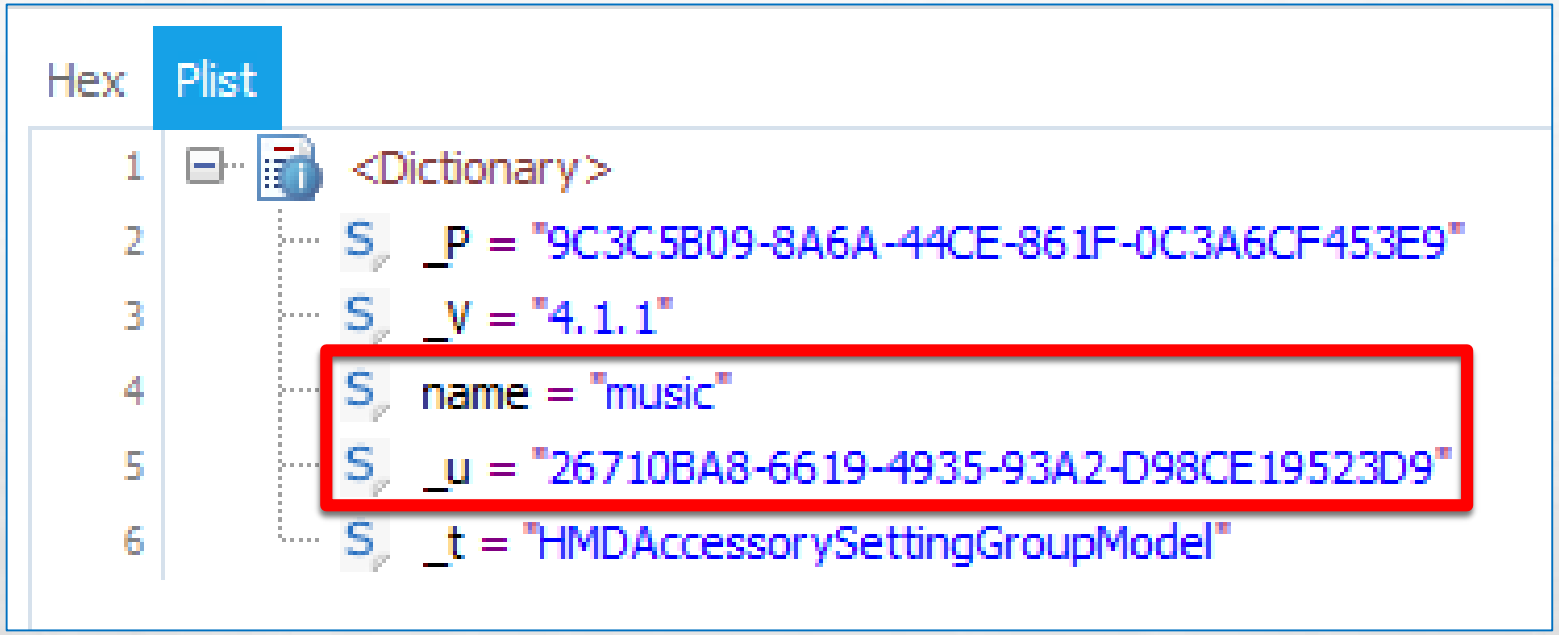


# DATASTORE.SQLITE

## HMDAccessorySettingGroupModel



# HOMEPOD MUSIC SETTINGS



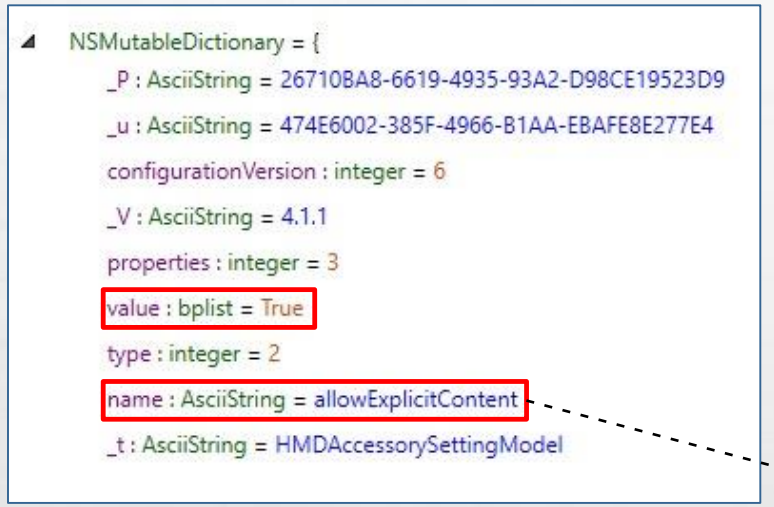

Database Structure | Browse Data | Edit Pragmas | Execute SQL

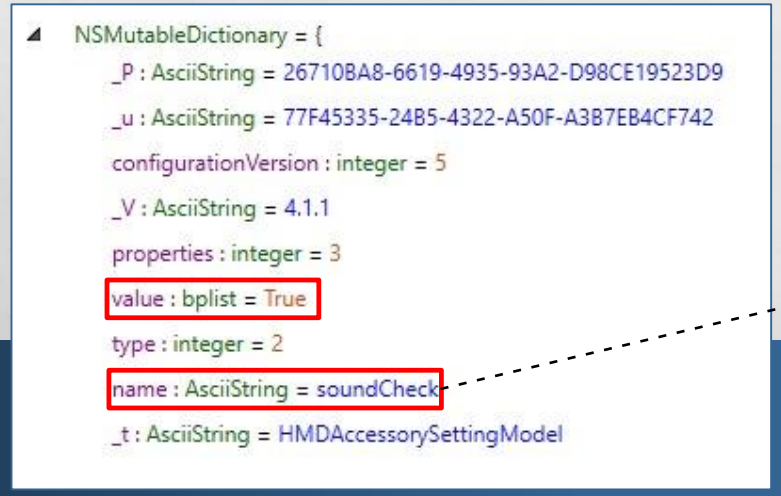
Table: record

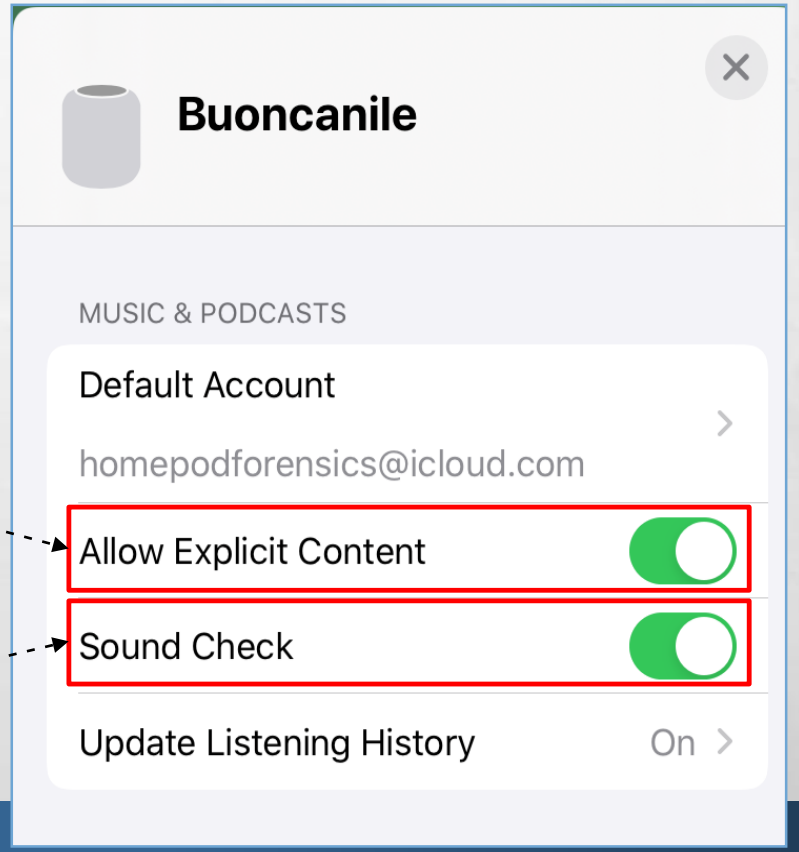
Filter in any column

| | tore_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|
| | ter | Filter | Filter | Filter | | Filter | Filter | Filter |
| 20 | 1 | FB8CBBB7-864D-4E91-88FB-876EC32CC44A | HMDAccessorySettingModel | 67C2F3C3-B3F6-4427-A81C-C1D50B8706E8 | 26710BA8-6619-4935-93A2-D98CE19523D9 | 1 | BLOB | |
| 21 | 1 | 85AC45FE-F8DF-48A7-8411-667057E7EFC9 | HMDAccessorySettingModel | 474E6002-385F-4966-B1AA-EBAFE8E277E4 | 26710BA8-6619-4935-93A2-D98CE19523D9 | 1 | BLOB | BLOB |
| 22 | 1 | C8193D50-D16E-4B04-A402-8A1D3C4C6C78 | HMDAccessorySettingModel | 77F45335-24B5-4322-A50F-A3B7EB4CF742 | 26710BA8-6619-4935-93A2-D98CE19523D9 | 1 | BLOB | BLOB |

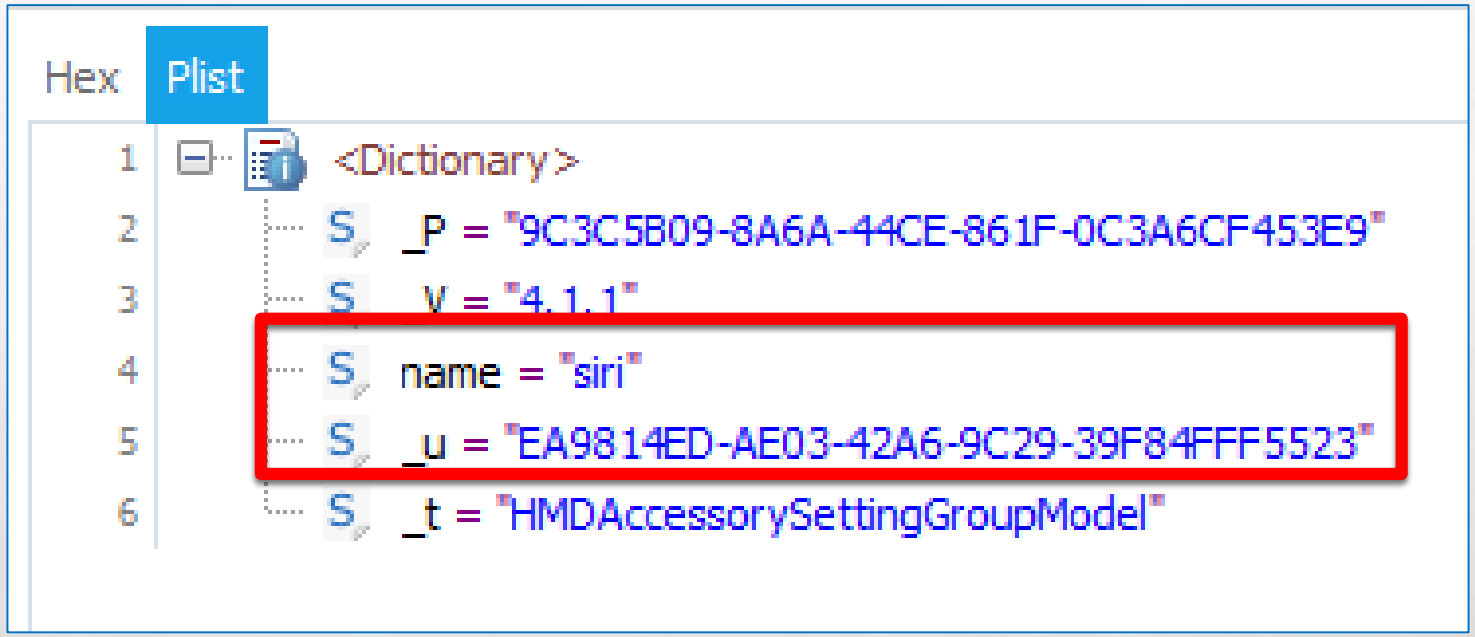
# HOMEPOD MUSIC SETTINGS



# HOMEPOD SIRI SETTINGS



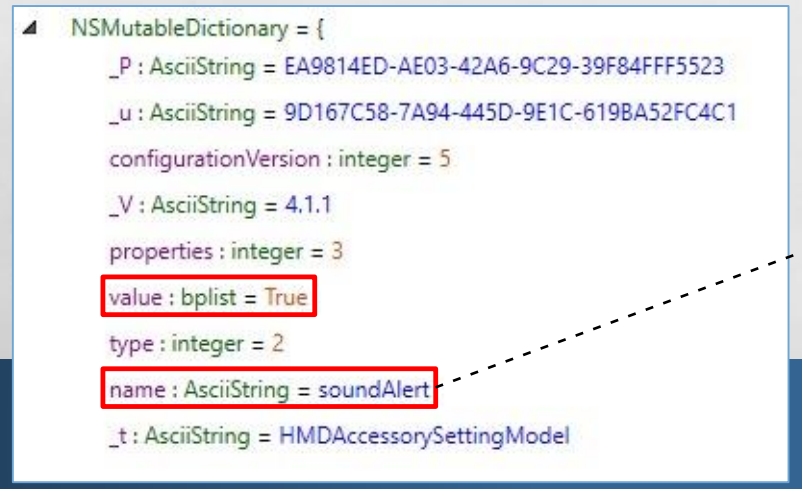

record

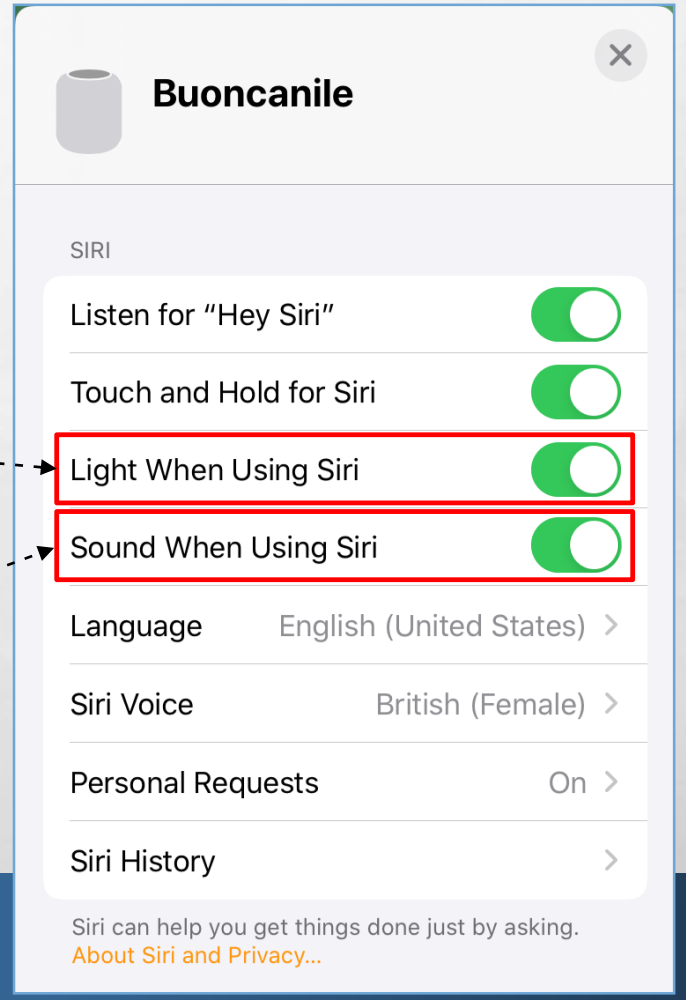
Filter in any column

| tore_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|
| ter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 1 | 00F4D278-DCF9-471D-97D9-A0A3DE862A55 | HMDAccessorySettingModel | D17AFDA6-DB46-4D4A-B7A0-3483C8E2552B | EA9814ED-AE03-42A6-9C29-39F84FFF5523 | 1 | BLOB | BLOB |
| 1 | 7EF65293-C215-4E10-B82E-84D35D77F0F0 | HMDAccessorySettingModel | C2BEED0B-FF3E-413A-9B1F-3959FA265888 | EA9814ED-AE03-42A6-9C29-39F84FFF5523 | 1 | BLOB | BLOB |
| 1 | 1BF08CFC-343E-431B-AFB0-44272154668F | HMDAccessorySettingModel | CAE0CEFE-EAC9-4D7A-98D9-BC9DCCA325B1 | EA9814ED-AE03-42A6-9C29-39F84FFF5523 | 1 | BLOB | BLOB |
| 1 | 8C9C8BAB-FCF9-4A4D-B077-1742DE34827F | HMDAccessorySettingModel | 64610117-E34B-4C32-9917-E92F562A5F8F | EA9814ED-AE03-42A6-9C29-39F84FFF5523 | 1 | BLOB | BLOB |
| 1 | E02B6D1B-76B2-4D3D-B4A2-997629C11FB9 | HMDAccessorySettingModel | 9D167C58-7A94-445D-9E1C-619BA52FC4C1 | EA9814ED-AE03-42A6-9C29-39F84FFF5523 | 1 | BLOB | BLOB |

# HOMEPOD SIRI SETTINGS

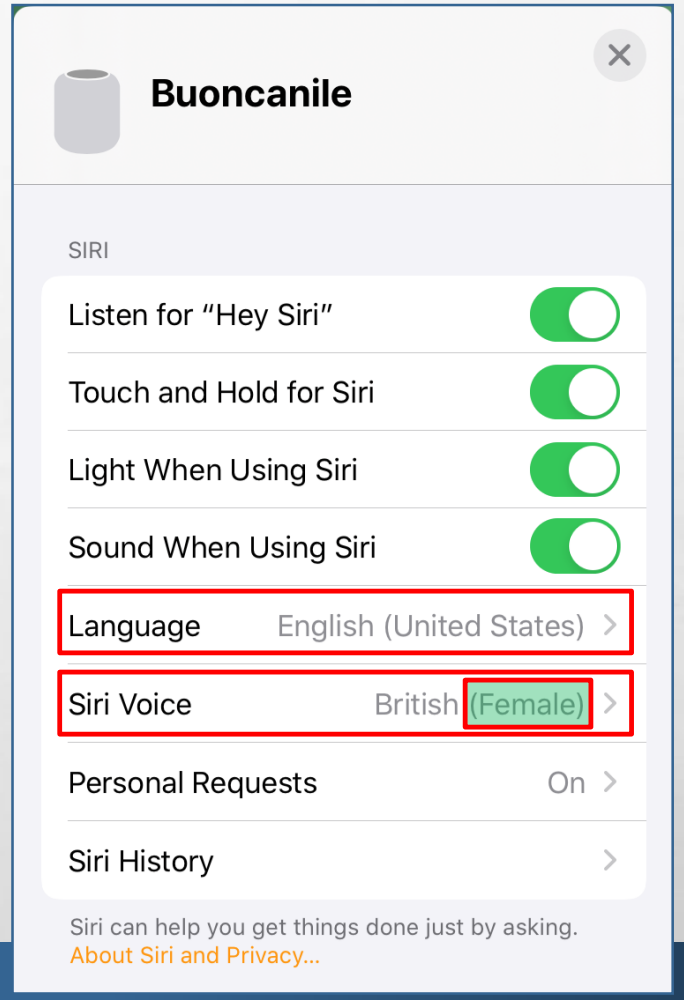
# HOMEPOD SIRI SETTINGS

# HOMEPOD SIRI SETTINGS

```
NSMutableDictionary = {
    _P : AsciiString = EA9814ED-AE03-42A6-9C29-39F84FFF5523
    _u : AsciiString = D17AFDA6-DB46-4D4A-B7A0-3483C8E2552B
    configurationVersion : integer = 4
    _V : AsciiString = 4.1.1
    properties : integer = 3
    value : bplist = {
        HM.identifier : NSUUID = 67b2c439-f03a-804e-b5a5-6d4bab7edabc
        HM.title : AsciiString = en-US en-GB f n
    type : integer = 4
    name : AsciiString = language
    _t : AsciiString = HMDAccessorySettingModel
```



# HOMEPOD INFORMATION

## /private/var/mobile/Library/Caches/com.Apple.Homekit.Configurations/homeData.*.Config

| Key | Type | Value |
|---|---|---|
| | dict | |
| | dict | |
| | string | 4952117C-F0B4-57A1-ABF3-C8B0BDB1E256 |
| | string | Buoncanile |
| | string | CC4VR0QEHQK8 |
| | string | Apple Inc. |
| | dict | |
| $class | dict | |
| NS.string | string | MQHW2LL/A |
| | dict | |
| | string | 13.3.1 |
| | dict | |
| | dict | |
| | dict | |
| | dict | |
| | dict | |
| | string | 1D8FD40E-7CAE-4AD5-9973-977D18890DE2 |
| | string | HomePod |
| | dict | |
| | string | com.apple.SharingViewService |
| | dict | |
| | string | Bedroom |
| | string | 3886FDCB-7840-47FA-B0B8-A8DC389F31B5 |
| | dict | |
| | string | B40BD6EA-126C-4C38-AE0F-698CE3048132 |

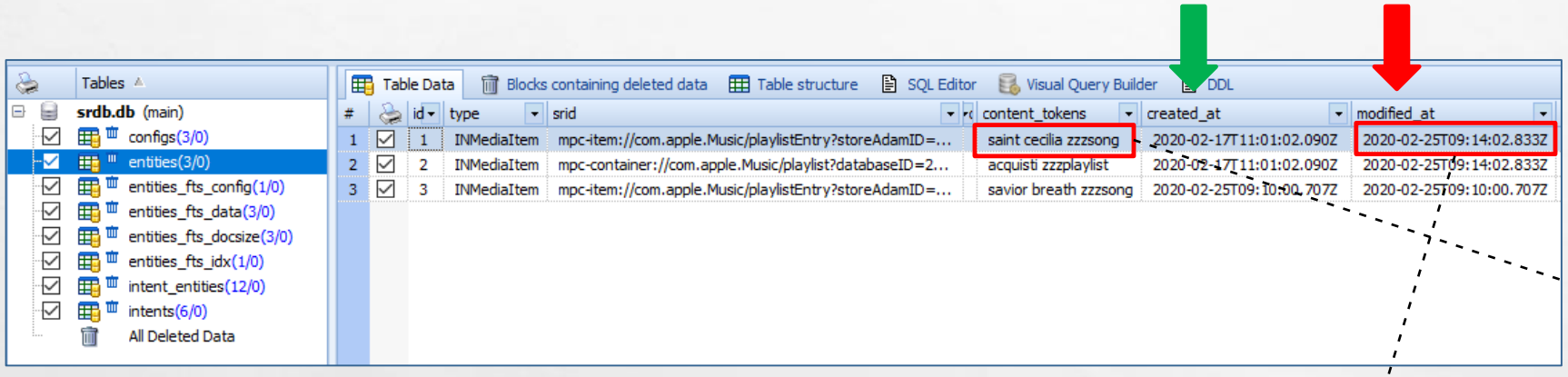
| | |
|---|---|
| string | Buoncanile |
| dict | |
| string | IRK |
| data | ... |
| dict | |
| dict | |
| dict | |
| string | 17D50 |
| dict | |
| dict | |
| dict | |
| data | ... |
| dict | |
| string | |
| dict | |
| dict | |
| dict | |
| dict | |
| dict | |

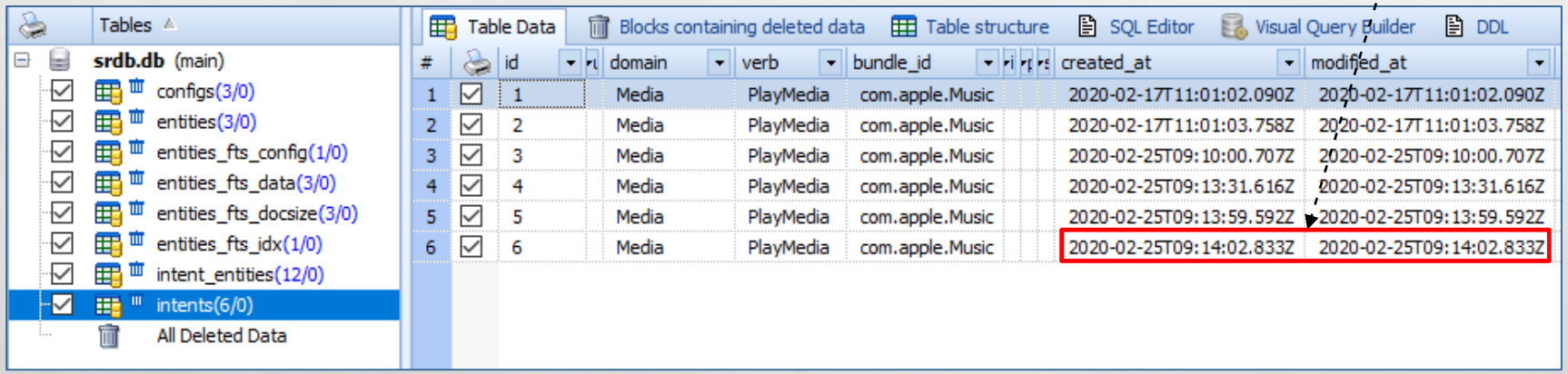
Position: 0 / 5 ( 0% )

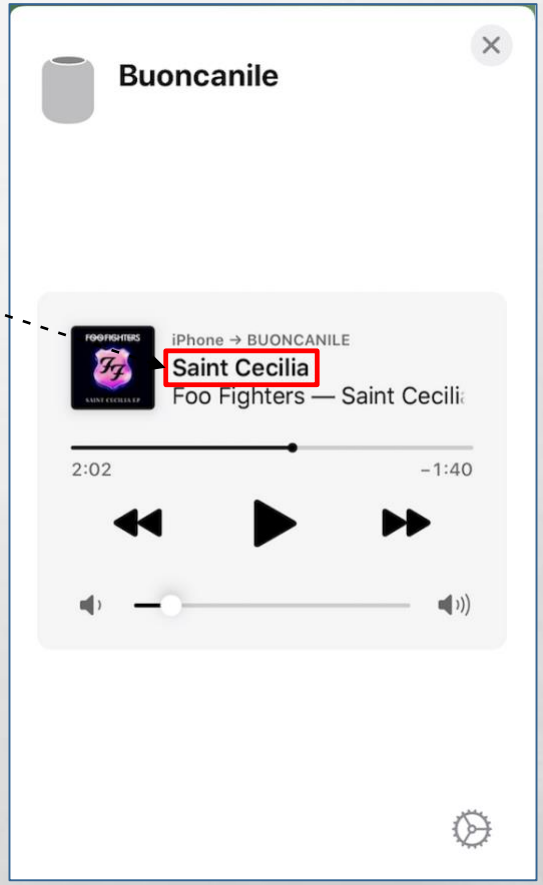
00000000: D4 90 9C D6 D7 68

# HOMEPOD MUSIC PLAYBACK

## /private/var/mobile/Library/com.apple.siri.inference/srdb.db



# HOMEPOD MUSIC PLAYBACK

## /private/var/mobile/CoreDuet/Knowledge/knowledgeC.db

```
SELECT DATETIME(ZOBJECT.ZSTARTDATE+978307200,'UNIXEPOCH') AS "START",
               DATETIME(ZOBJECT.ZENDDATE+978307200,'UNIXEPOCH') AS "END",
               ZSTREAMNAME AS "STREAM NAME", ZVALUESTRING AS "VALUE STRING",
               Z_DKNOWPLAYINGMETADATAKEY__TITLE AS "TITLE",
               Z_DKNOWPLAYINGMETADATAKEY__ARTIST AS "ARTIST",
               Z_DKNOWPLAYINGMETADATAKEY__ALBUM AS "ALBUM",
               Z_DKNOWPLAYINGMETADATAKEY__DURATION AS "DURATION",
               Z_DKNOWPLAYINGMETADATAKEY__GENRE AS "GENRE",
               Z_DKNOWPLAYINGMETADATAKEY__MEDIATYPE AS "MEDIA TYPE",
               Z_DKNOWPLAYINGMETADATAKEY__OUTPUTDEVICEIDS AS "OUTPUT DEVICE ID"
FROM ZSTRUCTUREDMETADATA JOIN ZOBJECT
ON ZOBJECT.ZSTRUCTUREDMETADATA = ZSTRUCTUREDMETADATA.Z_PK
ORDER BY ZOBJECT.ZSTARTDATE
```

# HOMEPOD MUSIC PLAYBACK

## /private/var/mobile/CoreDuet/Knowledge/knowledgeC.db

| # | | START | END | STREAM NAME | VALUE STRING | TITLE | ARTIST | ALBUM | DURATION | GENRE | MEDIA TYPE | OUTPUT DEVICE ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ☑ | 2020-02-17 09:55:18 | 2020-02-17 11:01:01 | /media/nowPlaying | com.apple.Music | The Neverending Sigh | Foo Fighters | Saint Cecilia - EP | 285,257142857143 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 2 | ☑ | 2020-02-17 09:55:12 | 2020-02-17 09:55:12 | /media/nowPlaying | com.apple.Music | The Neverending Sigh | Foo Fighters | Saint Cecilia - EP | 285,257142857143 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 3 | ☑ | 2020-02-17 09:55:12 | 2020-02-17 09:55:12 | /media/nowPlaying | com.apple.Music | The Neverending Sigh | Foo Fighters | Saint Cecilia - EP | 285,257142857143 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 4 | ☑ | 2020-02-17 09:55:12 | 2020-02-17 09:55:18 | /media/nowPlaying | com.apple.Music | The Neverending Sigh | Foo Fighters | Saint Cecilia - EP | 285,257142857143 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 5 | ☑ | 2020-01-28 09:26:34 | 2020-01-28 09:26:34 | /media/nowPlaying | com.apple.Music | Sean | Foo Fighters | Saint Cecilia - EP | 131,401723356009 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 6 | ☑ | 2020-01-28 09:26:34 | 2020-01-28 09:26:34 | /media/nowPlaying | com.apple.Music | Sean | Foo Fighters | Saint Cecilia - EP | 131,401723356009 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 7 | ☑ | 2020-01-28 09:26:34 | 2020-01-28 09:26:34 | /media/nowPlaying | com.apple.Music | Sean | Foo Fighters | Saint Cecilia - EP | 131,401723356009 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 8 | ☑ | 2020-01-28 09:26:34 | 2020-01-28 09:26:44 | /media/nowPlaying | com.apple.Music | Sean | Foo Fighters | Saint Cecilia - EP | 131,401723356009 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 9 | ☑ | 2020-01-28 09:26:26 | 2020-01-28 09:26:26 | /media/nowPlaying | com.apple.Music | Sean | Foo Fighters | Saint Cecilia - EP | 131,333 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 10 | ☑ | 2020-01-28 09:26:26 | 2020-01-28 09:26:34 | /media/nowPlaying | com.apple.Music | Sean | Foo Fighters | Saint Cecilia - EP | 131,401723356009 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 11 | ☑ | 2020-02-25 09:14:02 | 2020-02-25 09:14:02 | /media/nowPlaying | com.apple.Music | Savior Breath | Foo Fighters | Saint Cecilia - EP | 191,285986394558 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 12 | ☑ | 2020-02-25 09:11:41 | 2020-02-25 09:14:02 | /media/nowPlaying | com.apple.Music | Savior Breath | Foo Fighters | Saint Cecilia - EP | 191,285986394558 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 13 | ☑ | 2020-02-25 09:10:00 | 2020-02-25 09:10:00 | /media/nowPlaying | com.apple.Music | Savior Breath | Foo Fighters | Saint Cecilia - EP | 191,285 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 14 | ☑ | 2020-02-25 09:10:00 | 2020-02-25 09:11:41 | /media/nowPlaying | com.apple.Music | Savior Breath | Foo Fighters | Saint Cecilia - EP | 191,285986394558 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 15 | ☑ | 2020-02-25 09:16:05 | 2020-02-25 09:22:40 | /media/nowPlaying | com.apple.Music | Saint Cecilia | Foo Fighters | Saint Cecilia - EP | 221,727346938775 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 16 | ☑ | 2020-02-25 09:14:02 | 2020-02-25 09:14:02 | /media/nowPlaying | com.apple.Music | Saint Cecilia | Foo Fighters | Saint Cecilia - EP | 221,727 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 17 | ☑ | 2020-02-25 09:14:02 | 2020-02-25 09:16:05 | /media/nowPlaying | com.apple.Music | Saint Cecilia | Foo Fighters | Saint Cecilia - EP | 221,727346938775 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 18 | ☑ | 2020-02-17 11:01:03 | 2020-02-17 11:01:03 | /media/nowPlaying | com.apple.Music | Saint Cecilia | Foo Fighters | Saint Cecilia - EP | 221,727 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |
| 19 | ☑ | 2020-02-17 11:01:03 | 2020-02-17 11:01:13 | /media/nowPlaying | com.apple.Music | Saint Cecilia | Foo Fighters | Saint Cecilia - EP | 221,727346938775 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT |

# HOMEPOD MUSIC PLAYBACK

## /private/var/mobile/CoreDuet/Knowledge/knowledgeC.db

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | ☑ | 2020-02-25 09:14:02 | 2020-02-25 09:16:05 | /media/nowPlaying | com.apple.Music | Saint Cecilia | Foo Fighters | Saint Cecilia - EP | 221,727346938775 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT$to |
| 18 | ☑ | 2020-02-17 11:01:03 | 2020-02-17 11:01:03 | /media/nowPlaying | com.apple.Music | Saint Cecilia | Foo Fighters | Saint Cecilia - EP | 221.727 | Rock | MRMediaRemoteMediaTypeMusic | bplist00? □□□□□X$versionY$archiverT$to |

| Key | Type | Value |
|---|---|---|
| accessoryCategory | Integer | 25 |
| appleMediaAccessoryChan... | String | A06CAAF2-0049-4037-85BA-827E66C3AF62 |
| configurationAppIdentifier | String | com.apple.SharingViewService |
| configuredName | String | Buoncanile |
| **device** | Array | 2 objects |
| deviceUUID | String | DAD423DA-F06A-58A9-9205-BA4F6F838DD8 |
| identifier | String | B40BD6EA-126C-4C38-AE0F-698CE3048132 |
| manufacturer | String | Apple Inc. |
| model | String | MQHW2LL/A |
| name | String | Buoncanile |
| **pairingIdentity** | Array | 2 objects |
| providedName | String | HomePod |
| roomUUID | String | 3886FDCB-7840-47FA-B0B8-A8DC389F31B5 |
| serialNumber | String | CC4VR0QEHQK8 |
| **softwareVersion** | Array | 2 objects |
| **symptoms** | Array | 2 objects |
| **wifiNetworkInfo** | Array | 2 objects |
| _P | String | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 |
| _t | String | HMDAppleMediaAccessoryModel |
| _u | String | 4952117C-F0B4-57A1-ABF3-C8B0BDB1E256 |
| _v | String | 6.2 |

| Key | Type | Value |
|---|---|---|
| Root | dict | |
| $version | integer | 100000 |
| $archiver | string | NSKeyedArchiver |
| $top | dict | |
| | array | |
| | string | $null |
| | dict | |
| | integer | 0 |
| | dict | |
| | integer | 12 |
| | dict | |
| | string | B40BD6EA-126C-4C38-AE0F-698CE3048132 |
| | dict | |
| | dict | |
| | dict | |

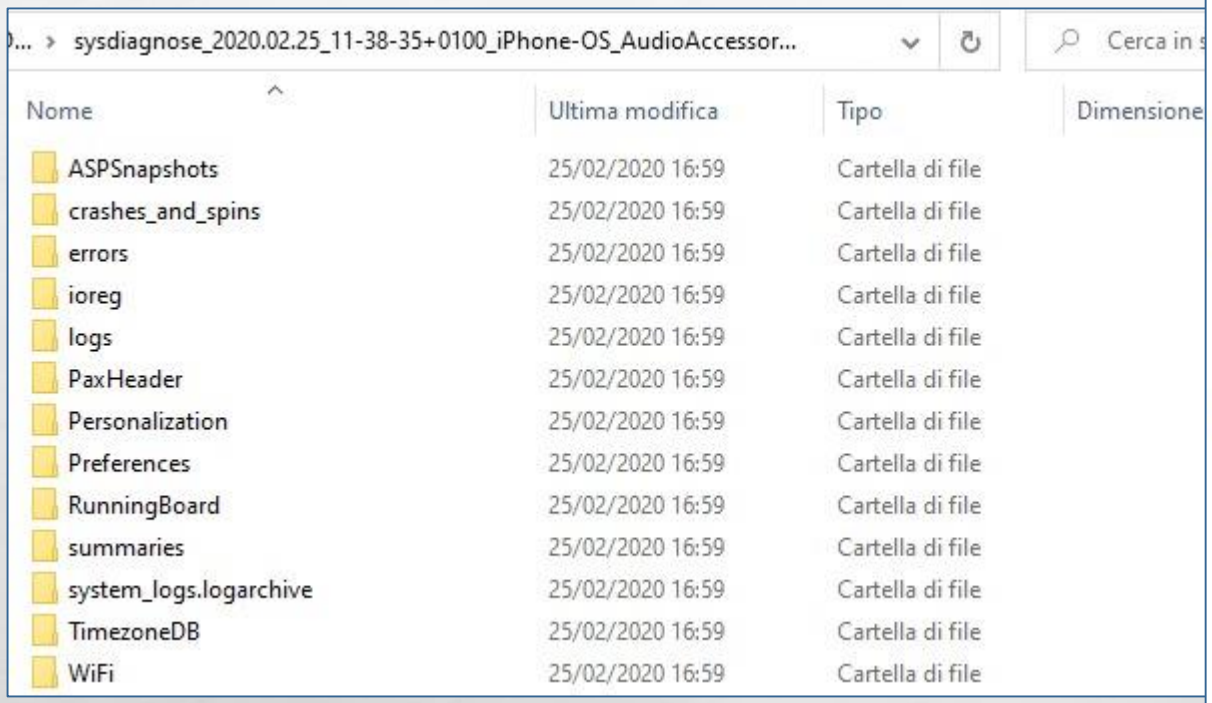
# DATA ANALYSIS - SYSDIAGNOSE

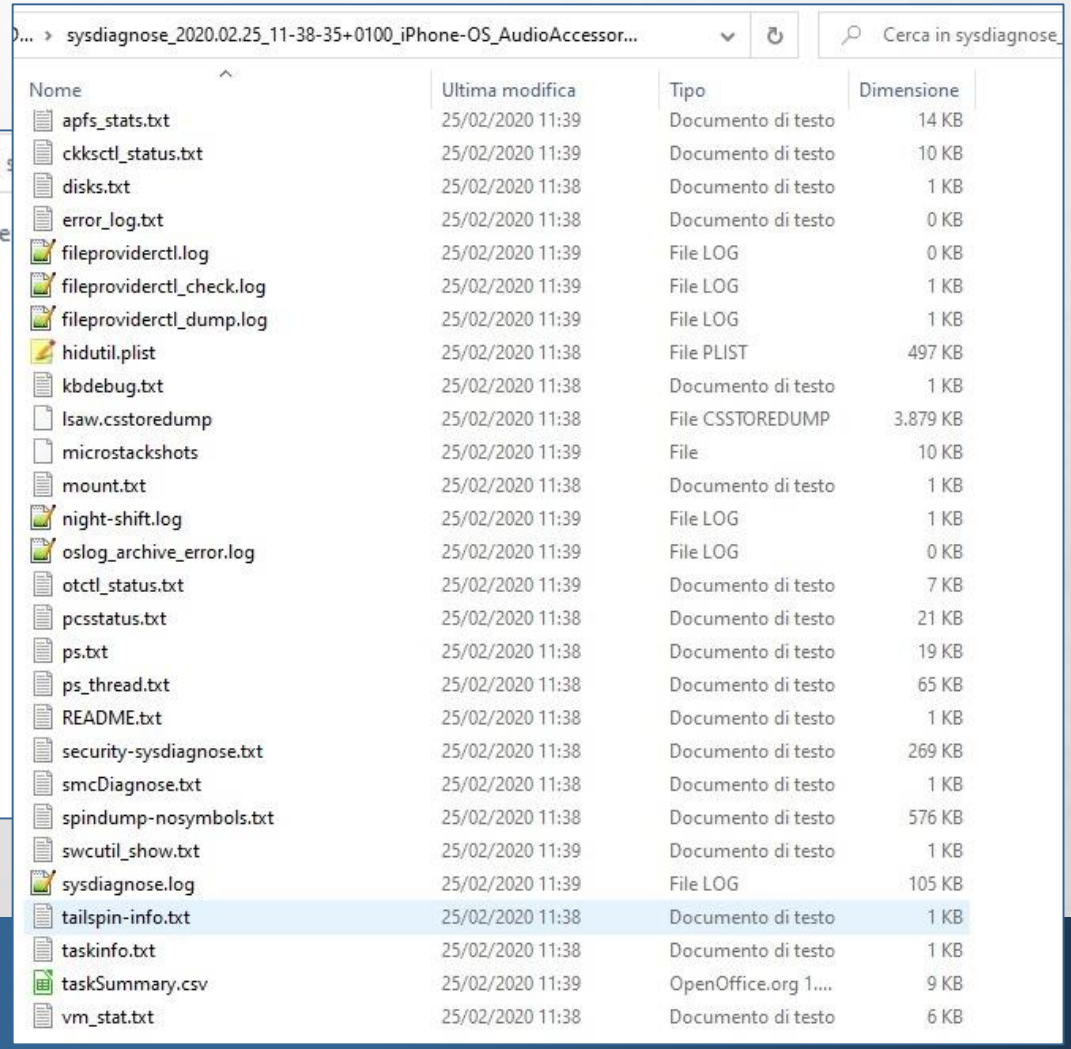
MATTIA EPIFANI

SANS DFIR SUMMIT

17TH JULY 2020

# HOMEPOD SYSDIAGNOSE



# HOMEPOD INFORMATION

## /logs/Networking/preferences.plist

| Key | Type | Value |
|---|---|---|
| Root | dict | |
| Sets | dict | |
| CurrentSet | string | /Sets/DDD76F4C-D8 |
| NetworkServices | dict | |
| Model | string | B238aAP |
| System | dict | |
| Network | dict | |
| HostNames | dict | |
| LocalHostName | string | Buoncanile |
| System | dict | |
| ComputerNameEncoding | integer | 134217984 |
| ComputerName | string | Buoncanile |
| HostName | string | Buoncanile |

# HOMEPOD BLUETOOTH ADDRESS

## /WiFi/bluetooth_status.txt

```
# --- Bluetooth Status

    Power                  : On
    MAC Address            : D4:90:9C:D6:D7:69
    Discoverable           : No
    Connectable            : No
    Scanning               : No
    Devices                : 2 (paired=2 cloud=2 connected=0)

    iPhone di Homepod
    Address            : 317A801D-77E0-77BF-1972-96BC60D22E46
    Paired             : Yes
    CloudPaired        : Yes
    Connected          : No

    19
    Address            : 6A65FCA5-AA6C-165F-3833-72A998191C3F
    Paired             : Yes
    CloudPaired        : Yes
    Connected          : No
```

# HOMEPOD WI-FI ADDRESS

## /WiFi/wifi_status.txt

```
# --- Wi-Fi Status

    MAC Address             : d4:90:9c:d6:d7:68
    Interface Name          : en0
    Power                   : On [On]
    Op Mode                 : STA
    SSID                    : dfrws_rodeo_2020
    BSSID                   : c0:a0:bb:f1:ea:f8
    RSSI                    : -34 dBm
    Noise                   : -91 dBm
    Tx Rate                 : 24.0 Mbps
    Security                : WPA/WPA2 Personal
    PHY Mode                : 11n
    MCS Index               : 15
    Guard Interval          : 800
    NSS                     : 2
    Channel                 : 1 (20 MHz, Active)
    Country Code            : IT
    NetworkServiceID        : 5395C805-DB65-44B1-B8AC-C2C2BD3CCF05
    IPv4 Config Method      : DHCP
    IPv4 Address            : 10.7.7.13
```

# HOMEPOD WI-FI ADDRESS

## /WiFi/com.apple.wifi.plist

| | | |
|---|---|---|
| RATES | array | |
| CARPLAY_NETWORK | boolean | false |
| BEACON_PROBE_INFO_PER_BSSID_LIST | array | |
| networkKnownBSSListKey | array | |
| RSN_IE | dict | |
| SCAN_RESULT_FROM_PROBE_RSP | boolean | false |
| SSID | data | ... |
| SSID_STR | string | dfrws_rodeo_2020 |
| Strength | real | 0.949410 |
| 80211W_ENABLED | boolean | true |
| INSTANT_HOTSPOT_ASSOC | boolean | false |
| CAPABILITIES | integer | 1041 |
| BEACON_INT | integer | 100 |
| AGE | | |
| WiFiNetworkAttributeIsMoving | | |
| SNR | | |
| WiFiAutoInstantHotspotJoining | | |
| ScaledRSSI | | |
| addedAt | | |
| lastUpdated | | |
| WPS_PROB_RESP_IE | | |
| FT_ENABLED | | |
| NOISE | | |
| ORIG_AGE | | |
| WPA_IE | dict | |
| RSSI | integer | -34 |
| PHY_MODE | integer | 16 |

| | | |
|---|---|---|
| WPS_PROB_RESP_IE | dict | |
| IE_KEY_WPS_UUID_E | data | ... |
| IE_KEY_WPS_MANUFACTURER | string | D-Link Corporation |
| IE_KEY_WPS_RESP_TYPE | integer | 3 |
| IE_KEY_WPS_SERIAL_NUM | string | 123456789012347 |
| IE_KEY_WPS_PRIMARY_DEV_TYPE | dict | |
| IE_KEY_WPS_MODEL_NAME | string | DAP-1360 |
| IE_KEY_WPS_MODEL_NUM | string | C1 |
| IE_KEY_WPS_DEV_NAME | string | DAP-1360 |
| IE_KEY_WPS_CFG_METHODS | integer | 130 |
| IE_KEY_WPS_SC_STATE | integer | 2 |

# HOMEPOD WI-FI ADDRESS

## /WiFi/com.apple.wifi.plist

```
sysdiagnose-wifi-plist.py -i com.apple.wifi.plist
```

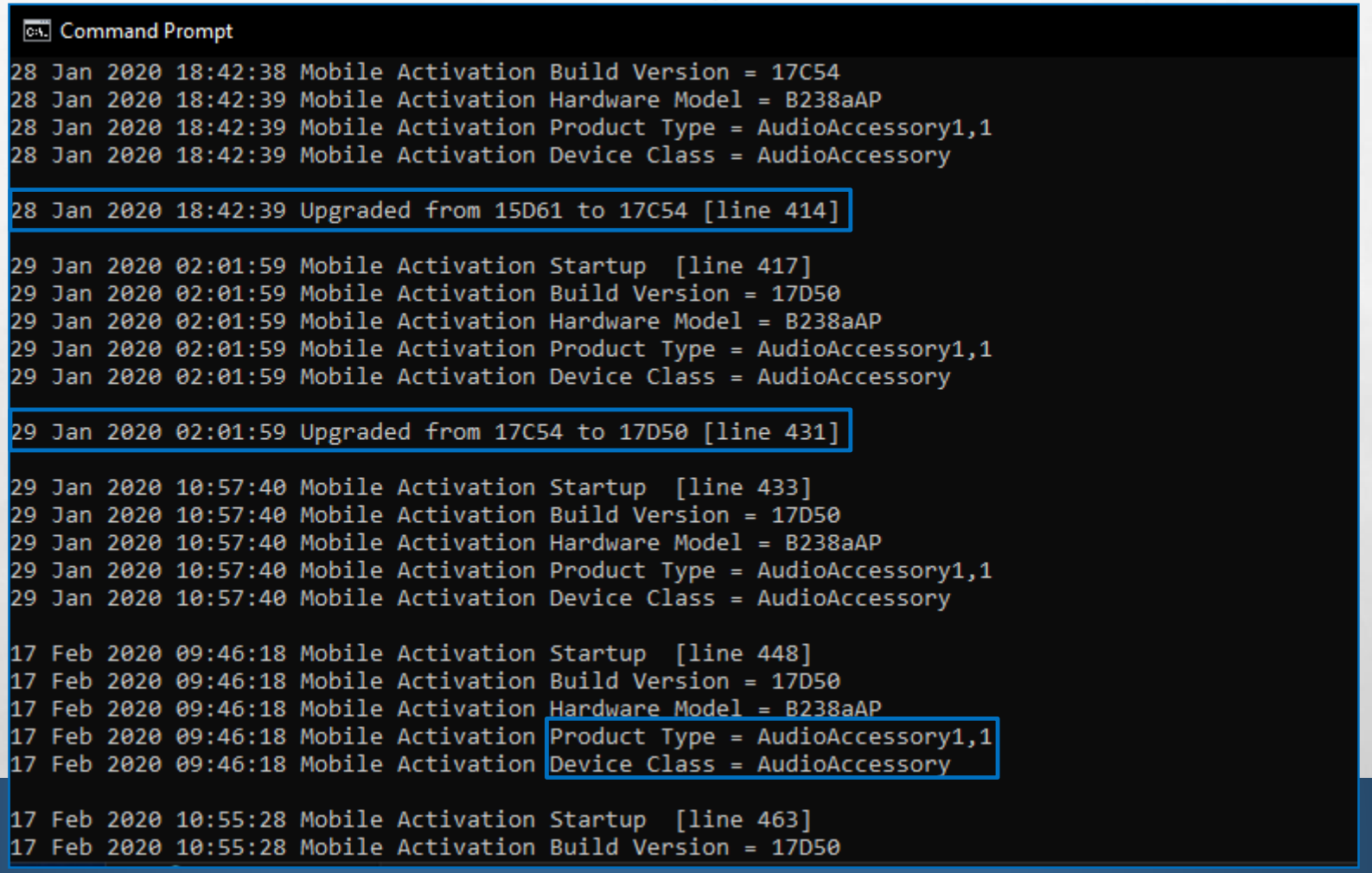
```
Running sysdiagnose-wifi-plist.py v2019-10-24 Version 1.0


==============================
SSID_STR = dfrws_rodeo_2020
BSSID = c0:a0:bb:f1:ea:f8
IE_KEY_WPS_MANUFACTURER = D-Link Corporation
IE_KEY_WPS_SERIAL_NUM = 123456789012347
IE_KEY_WPS_MODEL_NAME = DAP-1360
IE_KEY_WPS_DEV_NAME = DAP-1360
enabled = True
==============================
```

https://github.com/cheeky4n6monkey/iOS_sysdiagnose_forensic_scripts/sysdiagnose-wifi-plist.py

# HOMEPOD MOBILE ACTIVATION LOGS

## /logs/MobileActivation/mobileactivationd.log.*




https://github.com/cheeky4n6monkey/iOS_sysdiagnose_forensic_scripts/sysdiagnose-mobileactivation.py

# HOMEPOD POWERLOGS

## /logs/PowerLogs

| Key | Activity | Output |
|---|---|---|
| Filtro | Filtro | Filtro |
| 2020-02-25 09:23:20 | Application Info | [TIMESTAMP: 2020-02-25 09:23:20] [APP NAME: AirMusic] [APP EXECUTABLE NAME: AirMusic] [BUNDLE ID: com.apple.Music] [APP |
| 2020-02-25 09:23:20 | Application Info | [TIMESTAMP: 2020-02-25 09:23:20] [APP NAME: AirPodcasts] [APP EXECUTABLE NAME: AirPodcasts] [BUNDLE ID: com.apple.podca |
| 2020-02-25 09:23:20 | Device Status | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:20] [DEVICE CONNECTABLE: NO] [DEVICE CONNECTED: NO] [DEVICE DISCOVERABLE: |
| 2020-02-25 09:23:21 | Application Info | [TIMESTAMP: 2020-02-25 09:23:21] [APP NAME: DiagnosticsService] [APP EXECUTABLE NAME: DiagnosticsService] [BUNDLE ID: co |
| 2020-02-25 09:23:21 | Application Info | [TIMESTAMP: 2020-02-25 09:23:21] [APP NAME: Ambient Sounds] [APP EXECUTABLE NAME: SoundScapes] [BUNDLE ID: com.apple |
| 2020-02-25 09:23:21 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [ACTIVEROUTE: Speaker] [ACTIVE: NO] [ACTIVE PID: 0] [OUTPUT CATEGORY: Au |
| 2020-02-25 09:23:21 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [VOLUME PERCENTAGE: 12.580643594264984] [MUTED: NO] [ORIGINAL_VOLUME_ |
| 2020-02-25 09:23:21 | Network Usage | [TIMESTAMP: 2020-02-25 09:23:21] [INTERFACE: en0] [DOWN BYTES: 389068] [UP BYTES: 562936] [PLNETWORKAGENT_EVENTB |
| 2020-02-25 09:35:49 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:35:49] [ACTIVEROUTE: Speaker] [ACTIVE: NO] [ACTIVE PID: 0] [OUTPUT CATEGORY: Audio/Video] [HEADSET HAS INPUT: 0] [HEADPHONES CONNECTED: 0] [ORIGIN |
| 2020-02-25 09:35:49 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:35:49] [VOLUME PERCENTAGE: 12.580643594264984] [MUTED: NO] [ORIGINAL_VOLUME_TIMESTAMP: 2020-02-25 09:35:49] [OFFSET_TIMESTAMP: 2020-02-25 09:3 |
| 2020-02-25 09:35:49 | Network Usage | [TIMESTAMP: 2020-02-25 09:35:49] [INTERFACE: en0] [DOWN BYTES: 332329] [UP BYTES: 461652] [PLNETWORKAGENT_EVENTBACKWARD_CUMULATIVENETWORKUSAGE TABLE ID: 3] |
| 2020-02-25 09:35:49 | Network Usage | [TIMESTAMP: 2020-02-25 09:35:49] [INTERFACE: awdl0] [DOWN BYTES: 0] [UP BYTES: 260] [PLNETWORKAGENT_EVENTBACKWARD_CUMULATIVENETWORKUSAGE TABLE ID: 4] |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: amsaccountsd] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN: 4156] [WIFI OUT: 983] [PL |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: timed] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN: 625] [WIFI OUT: 524] [PLPROCESSN |

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# HOMEPOD POWERLOGS

## /logs/PowerLogs

| Key | Activity | Output |
|---|---|---|
| Filtro | Filtro | Filtro |
| 2020-02-25 09:23:20 | Application Info | [TIMESTAMP: 2020-02-25 09:23:20] [APP NAME: AirMusic] [APP EXECUTABLE NAME: AirMusic] [BUNDLE ID: com.apple.Music] [APP BUILD VERSION: 1.0] [APP BUNDLE VERSION: 3.1] [APP TYPE: 3] [APP DELE |
| 2020-02-25 09:23:20 | Application Info | [TIMESTAMP: 2020-02-25 09:23:20] [APP NAME: AirPodcasts] [APP EXECUTABLE NAME: AirPodcasts] [BUNDLE ID: com.apple.podcasts] [APP BUILD VERSION: 1425.5] [APP BUNDLE VERSION: 3.9] [APP TYPE: |
| 2020-02-25 09:23:20 | Device Status | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:20] [DEVICE CONNECTABLE: NO] [DEVICE CONNECTED: NO] [DEVICE DISCOVERABLE: NO] [DEVICE POWERED: YES] [ORIGINAL_BLUETOOTHSTATE_TIMESTAMP: 2 |
| 2020-02-25 09:23:21 | Application Info | [TIMESTAMP: 2020-02-25 09:23:21] [APP NAME: DiagnosticsService] [APP EXECUTABLE NAME: DiagnosticsService] [BUNDLE ID: com.apple.DiagnosticsService] [APP BUILD VERSION: 1] [APP BUNDLE VERSION |
| 2020-02-25 09:23:21 | Device Status | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [TIME ZONE NAME: Europe/Rome] [COUNTRY CODE: IT] [LOCALE ID: en_IT] [SECONDS FROM G |
| 2020-02-25 09:23:21 | Device State | [TIMESTAMP: 2020-02-25 09:23:21] [Volume: 12.580643594264984] [MUTED: NO] [PLAUDIOAGENT_EVENTFORWARD_OUTPUT TABLE ID: 1] |
| 2020-02-25 09:23:21 | Network Usage | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [CURRENTSSID: BF25650C1124E918BB43E5E5273DE398] [CURRENTCHANNEL: 9] [OFFSET_TIME |
| 2020-02-25 09:23:21 | Network Usage | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [CURRENTSSID: BF25650C1124E918BB43E5E5273DE398] [CURRENTCHANNEL: 9] [OFFSET_TIME |
| 2020-02-25 09:35:49 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:35:49] [ACTIVEROUTE: Speaker] [ACTIVE: NO] [ACTIVE PID: 0] [OUTPUT CATEGORY: Audio/Video] [HE |
| 2020-02-25 09:35:49 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:35:49] [VOLUME PERCENTAGE: 12.580643594264984] [MUTED: NO] [ORIGINAL_VOLUME_TIMESTAMP: |
| 2020-02-25 09:35:49 | Network Usage | [TIMESTAMP: 2020-02-25 09:35:49] [INTERFACE: en0] [DOWN BYTES: 332329] [UP BYTES: 461652] [PLNETWORKAGENT_EVENTBACKWARD_CU |
| 2020-02-25 09:35:49 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:35:49] [VOLUME PERCENTAGE: 12.580643594264984] [MUTED: NO] [ORIGINAL_VOLUME_TIMESTAMP: 2020-02-25 09:35:49] [OFFSET_TIMESTAMP: 2020-02-25 09:3 |
| 2020-02-25 09:35:49 | Network Usage | [TIMESTAMP: 2020-02-25 09:35:49] [INTERFACE: en0] [DOWN BYTES: 332329] [UP BYTES: 461652] [PLNETWORKAGENT_EVENTBACKWARD_CUMULATIVENETWORKUSAGE TABLE ID: 3] |
| 2020-02-25 09:35:49 | Network Usage | [TIMESTAMP: 2020-02-25 09:35:49] [INTERFACE: awdl0] [DOWN BYTES: 0] [UP BYTES: 260] [PLNETWORKAGENT_EVENTBACKWARD_CUMULATIVENETWORKUSAGE TABLE ID: 4] |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: amsaccountsd] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN: 4156] [WIFI OUT: 983] [PL |

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# HOMEPOD POWERLOGS

## /logs/PowerLogs

| Key | Activity | Output |
|---|---|---|
| Filtro | Filtro | Filtro |
| 2020-02-25 09:23:20 | Application Info | [TIMESTAMP: 2020-02-25 09:23:20] [APP NAME: AirMusic] [APP EXECUTABLE NAME: AirMusic] [BUNDLE ID: com.apple.Music] [APP BUILD VERSION: 1.0] [APP BUNDLE VERSION: 3.1] [APP TYPE: 3] [APP DELE |
| 2020-02-25 09:23:20 | Application Info | [TIMESTAMP: 2020-02-25 09:23:20] [APP NAME: AirPodcasts] [APP EXECUTABLE NAME: AirPodcasts] [BUNDLE ID: com.apple.podcasts] [APP BUILD VERSION: 1425.5] [APP BUNDLE VERSION: 3.9] [APP TYPE: |
| 2020-02-25 09:23:20 | Device Status | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:20] [DEVICE CONNECTABLE: NO] [DEVICE CONNECTED: NO] [DEVICE DISCOVERABLE: NO] [DEVICE POWERED: YES] [ORIGINAL_BLUETOOTHSTATE_TIMESTAMP: 2 |
| 2020-02-25 09:23:21 | Application Info | [TIMESTAMP: 2020-02-25 09:23:21] [APP NAME: DiagnosticsService] [APP EXECUTABLE NAME: DiagnosticsService] [BUNDLE ID: com.apple.DiagnosticsService] [APP BUILD VERSION: 1] [APP BUNDLE VERSION |
| 2020-02-25 09:23:21 | Application Info | [TIMESTAMP: 2020-02-25 09:23:21] [APP NAME: Ambient Sounds] [APP EXECUTABLE NAME: SoundScapes] [BUNDLE ID: com.apple.SoundScapes] [APP BUILD VERSION: 1] [APP BUNDLE VERSION: 1.0] [APP T |
| 2020-02-25 09:23:21 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [ACTIVEROUTE: Speaker] [ACTIVE: NO] [ACTIVE PID: 0] [OUTPUT CATEGORY: Audio/Video] [HEADSET HAS INPUT: 0] [HEADPHONES CONNECTED: 0] [ORIGIN |
| 2020-02-25 09:23:21 | Device State | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [VOLUME PERCENTAGE: 12.580643594264984] [MUTED: NO] [ORIGINAL_VOLUME_TIMESTAMP: 2020-02-25 09:23:21] [OFFSET_TIMESTAMP: 2020-02-25 09:3 |
| 2020-02-25 09:23:21 | Network Usage | [TIMESTAMP: 2020-02-25 09:23:21] [INTERFACE: en0] [DOWN BYTES: 389068] [UP BYTES: 562936] [PLNETWORKAGENT_EVENTBACKWARD_CUMULATIVENETWORKUSAGE TABLE ID: 1] |
| 2020-02-25 09:23:21 | Network Usage | [TIMESTAMP: 2020-02-25 09:23:21] [INTERFACE: awdl0] [DOWN BYTES: 0] [UP BYTES: 260] [PLNETWORKAGENT_EVENTBACKWARD_CUMULATIVENETWORKUSAGE TABLE ID: 2] |
| 2020-02-25 09:23:21 | Device Status | [ADJUSTED_TIMESTAMP: 2020-02-25 09:23:21] [TIME ZONE NAME: Europe/Rome] [COUNTRY CODE: IT] [LOCALE ID: en_IT] [SECONDS FROM GMT: 1] [TIME ZONE IN DST: 0] [TRIGGER: powerlog] [OFFSET |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: amsaccountsd] [CELLULAR IN: 0] [CELLULAR OUT: 0] [W |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: timed] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN: 6 |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: rtcreportingd] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WI |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: fmfd] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN: 16 |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: ind] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN: 276 |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: IMRemoteURLConne] [CELLULAR IN: 0] [CELLULAR OUT: |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: locationd] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN |
| 2020-02-25 09:35:49 | Device State | [TIMESTAMP: 2020-02-25 09:35:49] [TIMESTAMP END: 2020-02-25 10:05:47] [BUNDLE ID: None] [PROCESS NAME: rapportd] [CELLULAR IN: 0] [CELLULAR OUT: 0] [WIFI IN |

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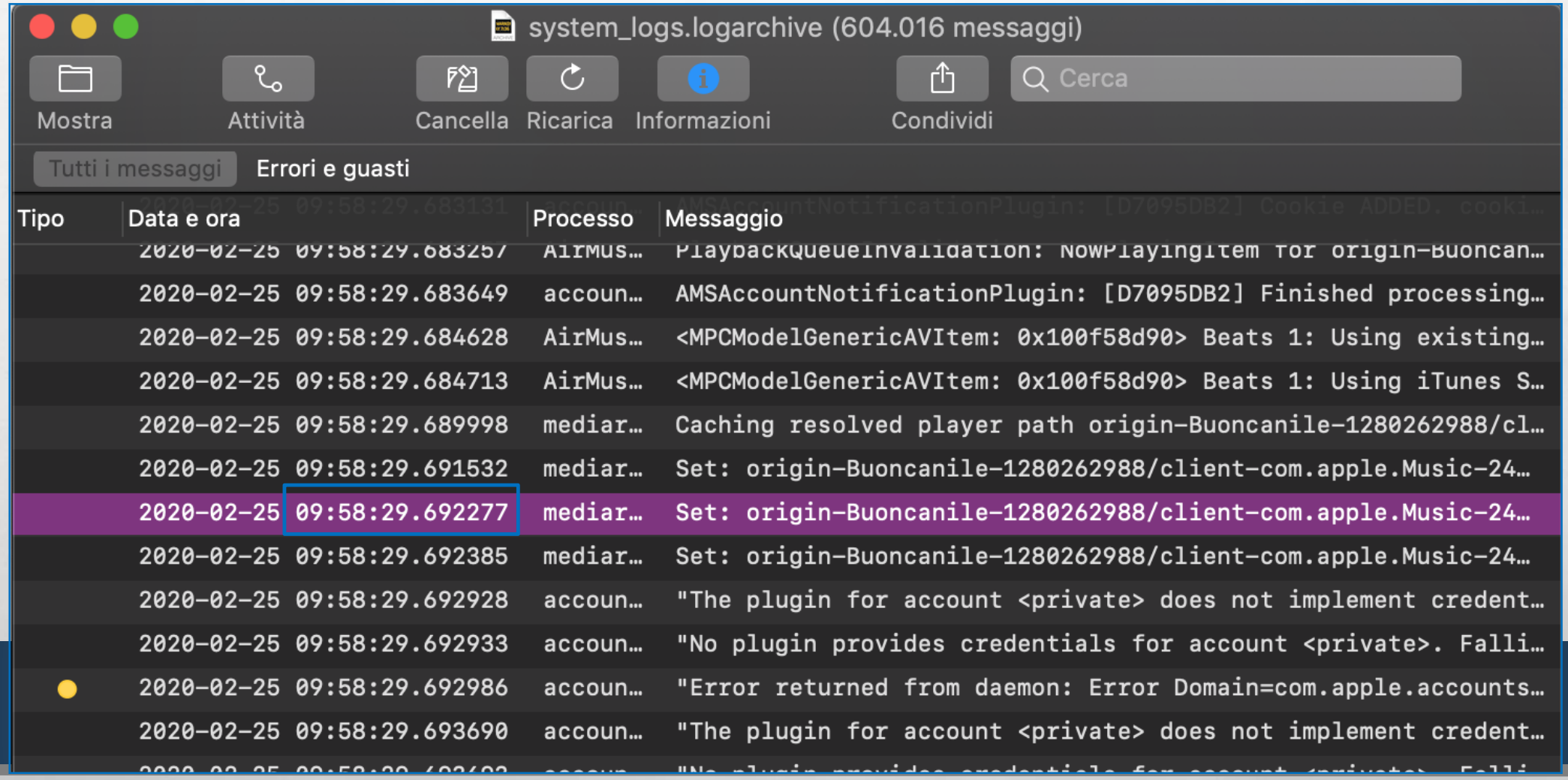
# HOMEPOD SYSLOG ARCHIVE – BEATS 1 RADIO

## /system_logs.logarchive/

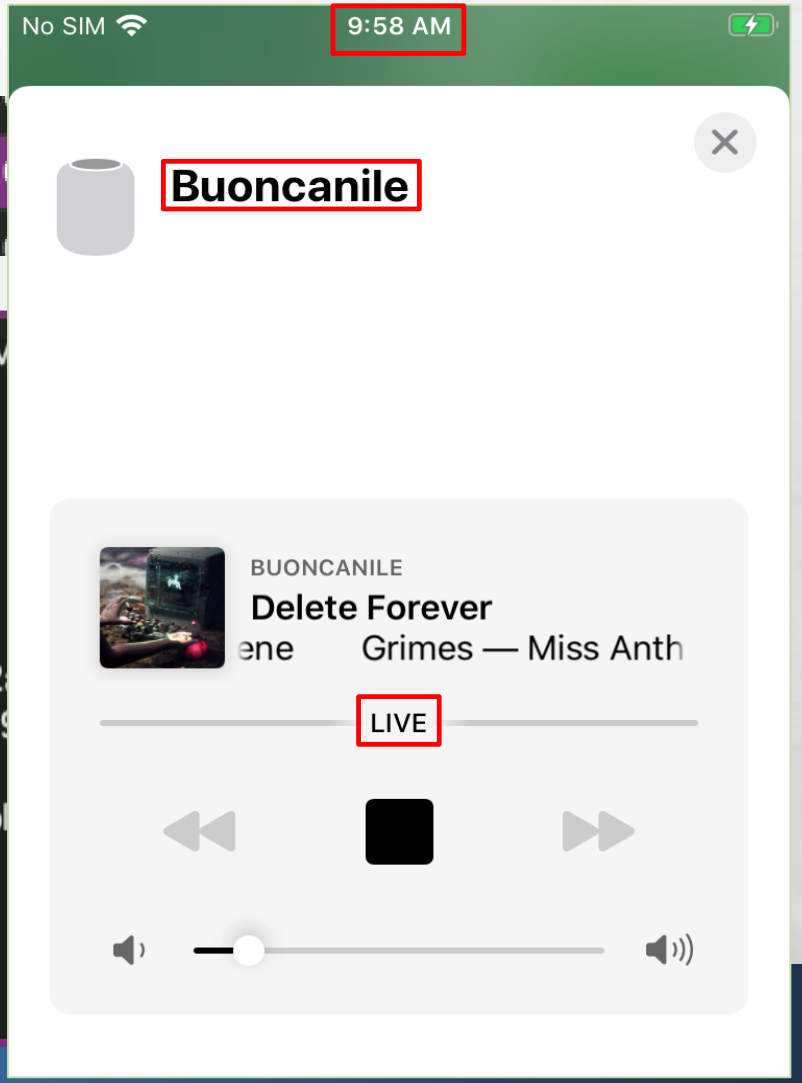


# HOMEPOD SYSLOG ARCHIVE – BEATS 1 RADIO

## /system_logs.logarchive/

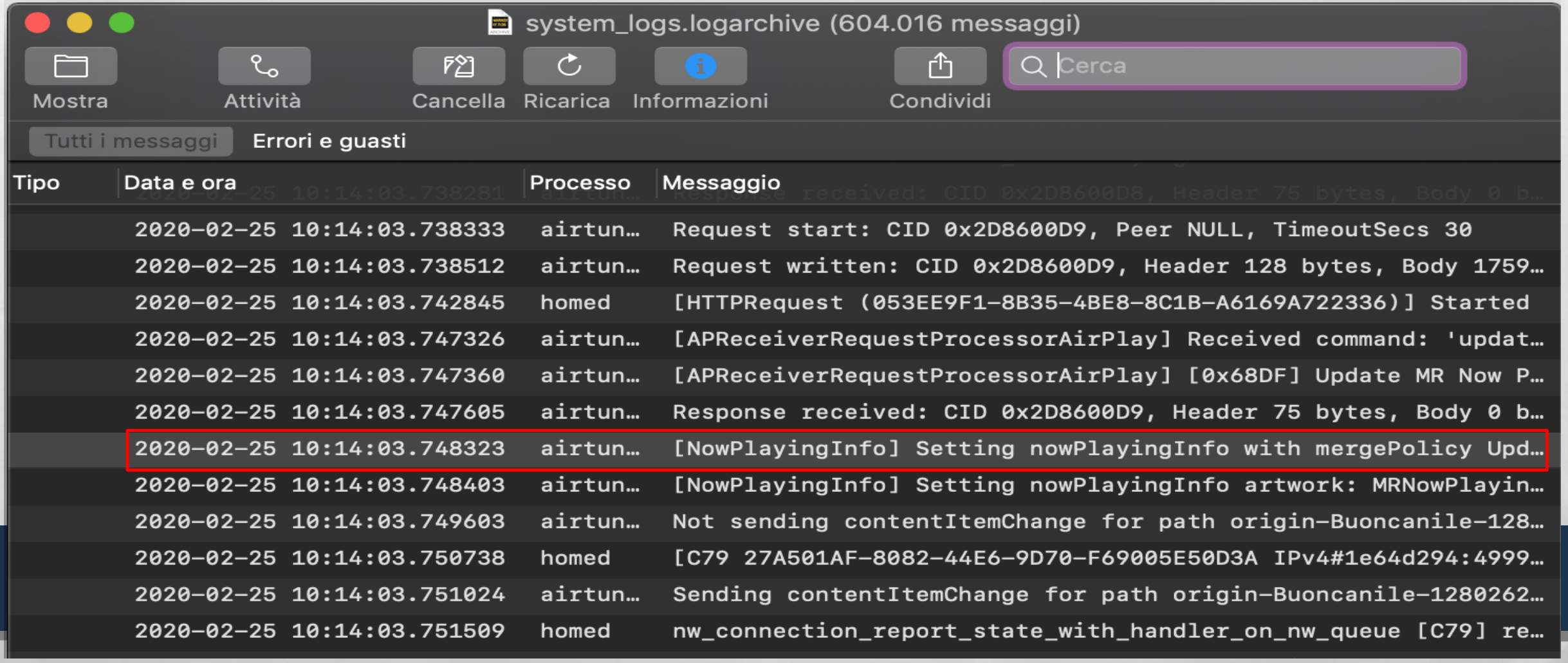
```
2020-02-25 09:58:29.692277  mediar…  Set: origin-Buoncanil
2020-02-25 09:58:29.692385  mediar…  Set: origin-Buoncanil
```

```
Set: origin-Buoncanile-1280262988/client-com.apple.Music-24 (AirMusic)/player-Music setting nowPlayingItem to <<M
    identifier = "Bxjf9fsBR0eouHZZXXDTcA\U22060t9lwLDRTFObwijEelaQAQ";
    metadata =     {
        "__playbackRate" = 0;
        "__title" = "Beats 1";
        albumYear = 0;
        artworkAvailable = 1;
        artworkIdentifier = "https://is1-ssl.mzstatic.com/image/thumb/Features113/v4/10/e7/de/10e7deff-d674-e2
        artworkURL = "https://is1-ssl.mzstatic.com/image/thumb/Features113/v4/10/e7/de/10e7deff-d674-e2a5-9
        collectionInfo =         {
            kMRMediaRemoteNowPlayingCollectionInfoKeyCollectionType = kMRMediaRemoteNowPlayingCollectionInfoCo
            kMRMediaRemoteNowPlayingCollectionInfoKeyIdentifiers =             {
                kMRMediaRemoteNowPlayingInfoRadioStationHash = CgklBRoFlaS40gMQBA;
                kMRMediaRemoteNowPlayin>
```



# HOMEPOD SYSLOG ARCHIVE – MUSIC PLAYBACK

## /system_logs.logarchive/

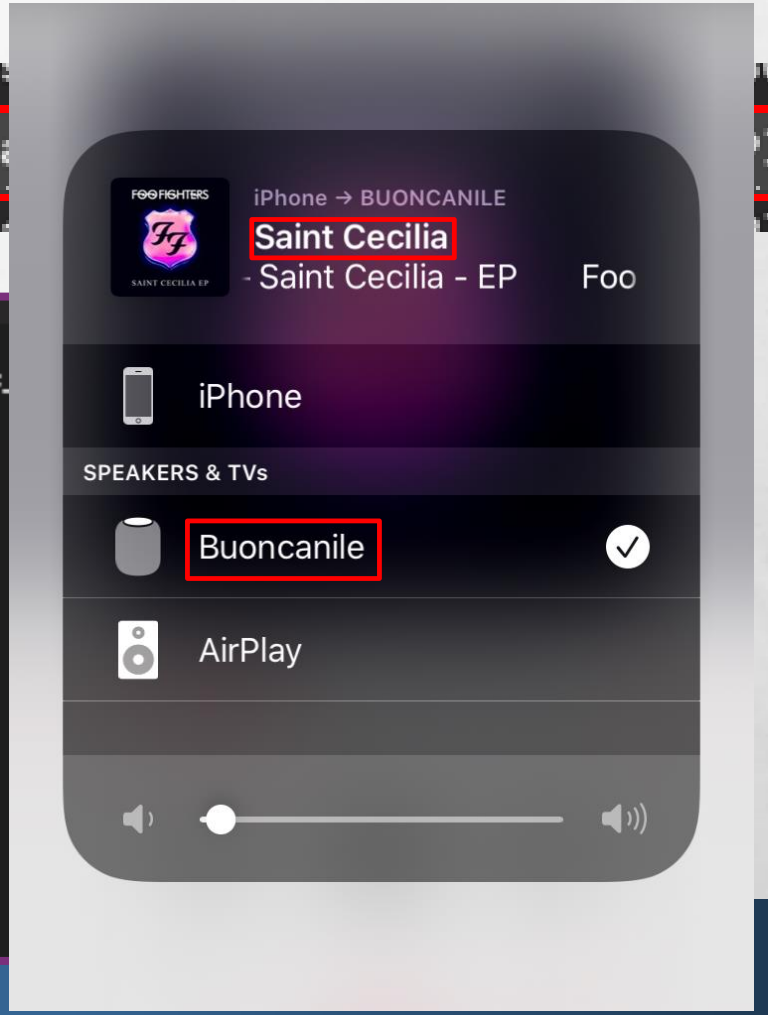


# HOMEPOD SYSLOG ARCHIVE – MUSIC PLAYBACK

## /system_logs.logarchive/

```
2020-02-25 10:14:03.748323   airtun…   [NowPl
```

```
[NowPlayingInfo] Setting nowPlayingInfo with mergePolicy Update: <NSCFDictionary 0x10130e9c0 {
        kMRMediaRemoteNowPlayingInfoArtworkIdentifier = Music69/v4/d8/58/f8/d858f83f-ac7c-aa4f-
        kMRMediaRemoteNowPlayingInfoTrackNumber = 1
        kMRMediaRemoteNowPlayingInfoDuration = 221.7273469387755
        kMRMediaRemoteNowPlayingInfoTitle = Saint Cecilia
        kMRMediaRemoteNowPlayingInfoPlaybackRate = 1
        kMRMediaRemoteNowPlayingInfoAlbum = Saint Cecilia - EP
        kMRMediaRemoteNowPlayingInfoUserInfo = {
    libEligible = 1;
    rdwn = 1;
    sfid = "143441-1,29";
}
        kMRMediaRemoteNowPlayingInfoTotalQueueCount = 5
```



# DATA ANALYSIS – EVE DOOR SENSOR

MATTIA EPIFANI

SANS DFIR SUMMIT

17TH JULY 2020

# DATASTORE.SQLITE

## HMDAccessoryTransaction

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

Filter in any column

| | e_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 73 | 1 | 9BF59942-0654-4350-8125-4133A1850961 | HMDActionSetModel | 976D30EC-E24A-52DA-921B-83B9B6685934 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 74 | 1 | B5094766-7F20-4C73-8188-EA51CD5786CC | HMDUserModel | A4A32D3D-59AF-4F47-981B-2D2BD1E34065 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 75 | 1 | 93B78C42-E385-493D-B4A9-264CE1589117 | HMDActionSetModel | E1AAAE36-31B5-5433-B73C-1A82AD218D1A | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 76 | 1 | 41396CF7-DECC-414E-BC5E-8098A6ECF15D | HMDHomeNetworkRouterSettingsModel | 4C439A6B-F1E4-52DB-A541-8B2FC9D745EC | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 77 | 1 | EA9CE1F7-66E3-4BDC-B4C2-F1E16E86FBCA | HMDHomeNetworkRouterManagingDeviceSetting... | EC205060-73E2-5550-AACA-D4B09573B160 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 78 | 1 | 3A56BCA1-E636-48D7-B9A3-3F803D56013D | HMDActionSetModel | 113E9DA9-9B4D-58B0-B8D5-0C5EFBE3580F | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 79 | 1 | 66F2DE08-8ED5-4BA5-AFBD-EA07F4AB34ED | HMDHomeMediaSettingsModel | C612DD2C-E416-55BD-AD8A-2EA4C23C776C | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 80 | 1 | 5DECAF1E-C6FB-41EB-9833-2CEC4383ACA9 | HMDActionSetModel | 04C5D232-88F9-5733-ABFF-A6AFC9919B9C | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 81 | 1 | 6CA11486-01E1-46D5-968A-8F3F3ABFB633 | HMDRoomModel | 6B76D45C-3257-4DE9-A00F-8F724CB0D4E8 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 82 | 1 | D50296B2-138D-4245-B28F-15A538EDE728 | HMDHomeSettingsModel | 8E714D75-8B62-50B7-9D94-3A9839F2BCE9 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 83 | 1 | 83026FA1-202C-4DD5-ABEF-A19E346620BC | HMDApplicationDataModel | 3C8210A3-D3E4-5662-A9A0-ECA8464DC528 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 84 | 1 | D563AB7A-21CC-49C3-809C-7D3B82660EE7 | HMDResidentDeviceModel | DBACBD84-0916-5FA2-9943-15C93517B9EB | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 85 | 1 | BDDA5512-7F96-4655-9D6D-776ECA3BE456 | HMDRoomModel | 32180983-7A6E-4C41-8EC8-0E1D348BBD60 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 86 | 1 | D13BB7B2-9501-475B-AA9B-9CEA534D0D08 | HMDRoomModel | 3886FDCB-7840-47FA-B0B8-A8DC389F31B5 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 87 | 1 | A40327ED-116E-487F-8068-C0B8463E2239 | HMDEventTriggerModel | 3348B48B-D825-4306-B210-50C268CC6645 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 88 | 1 | F0200FCB-61F8-41C6-9766-4F196485CAF7 | HMDActionSetModel | 80A4CB44-046F-40F2-831C-C11FA06536A3 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 89 | 1 | 525B1827-0333-4B40-8E8D-DBF47399FF60 | HMDAppleMediaAccessoryModel | 4952117C-F0B4-57A1-ABF3-C8B0BDB1E256 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 90 | 1 | 38E268B0-9334-45FF-8719-40F8EFD52178 | HMDAccessoryTransaction | 84E4B706-55F7-429F-BEAE-07A03DFA0D76 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |
| 91 | 1 | 1204E7FF-407D-4699-A563-2FAB0AD578A9 | HMDHomeConfigurationModel | 5D160B75-D05B-58A7-A4A3-569D81B296A4 | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 | 1 | BLOB | BLOB |

# EVE DOOR SENSOR INFORMATION

## HMDAccessoryTransaction

Hex | Plist

```
<Dictionary>
  _V = "6.2"
  transportInformation
    <Dictionary>
      HM.serverIdentifier = "39:46:7A:6E:03:FD"
      HM.instanceID = 1
      linkType = 2
  pairingUsername = "39:46:7A:6E:03:FD"
  networkClientLAN = 1
  _t = "HMDAccessoryTransaction"
  _u = "84E4B706-55F7-429F-BEAE-07A03DFA0D76"
  wiFiCredentialType = 0
  initialModel = "Eve Door 20EAL9901"
  certificationStatus = 2
  serialNumber = "DV51I1A03588"
  roomUUID = "6B76D45C-3257-4DE9-A00F-8F724CB0D4E8"
  firmwareVersion = "1.2.8"
  initialCategoryIdentifier = 10
  uniqueIdentifier = "39:46:7A:6E:03:FD+1"
  configurationAppIdentifier = "com.apple.Home.HomeUIService"
  configuredName = "Eve Door 93F5"
  name = "Eve Door 93F5"
  model = "Eve Door 20EAL9901"
  manufacturer = "Elgato"
  providedName = "Eve Door 93F5"
  initialManufacturer = "Elgato"
  identifier = "39:46:7A:6E:03:FD"
```

Status and Notifications

MANUFACTURER

Eve
Eve Systems GmbH
INSTALLED
Open

Manufacturer Elgato

Serial Number DV51I1A03588

Model Eve Door 20EAL9901

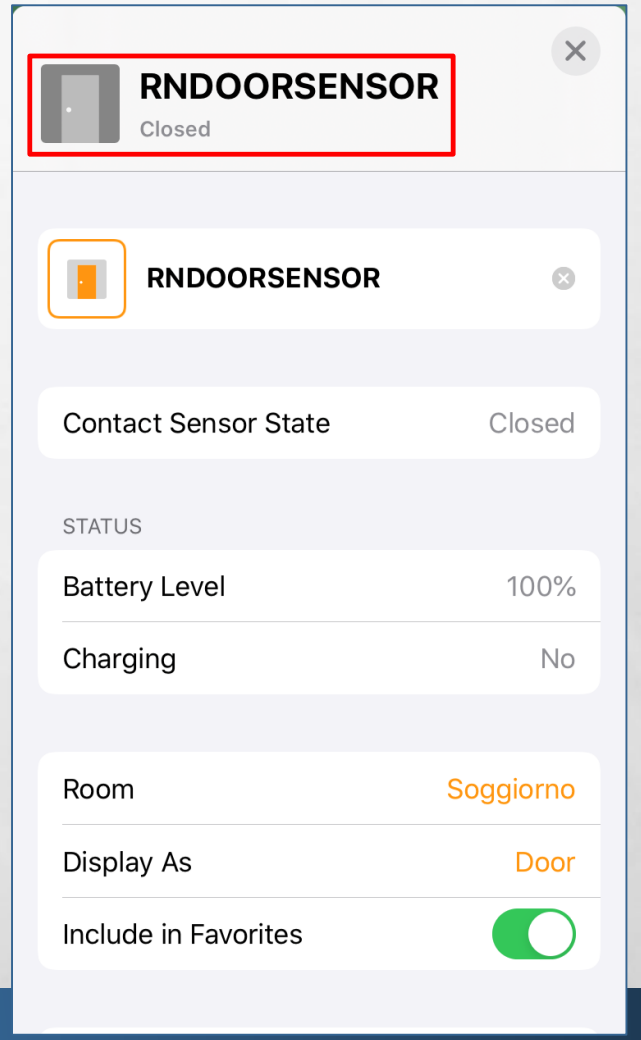
Firmware 1.2.8

Remove Accessory

# EVE DOOR SENSOR NAME

## HMDServiceTransaction

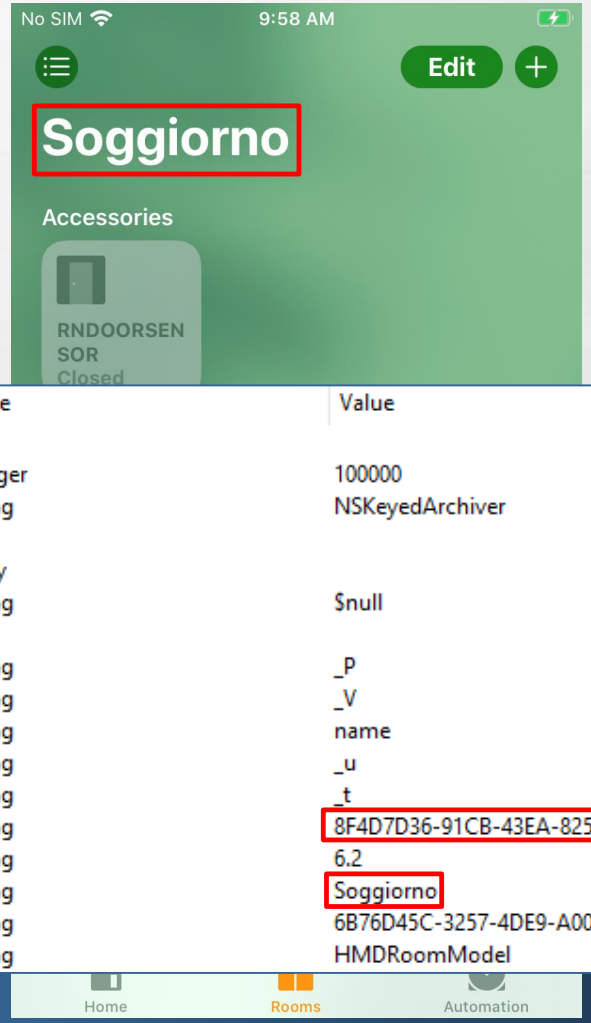
| Key | Type | Value |
|---|---|---|
| | integer | 22 |
| | string | E863F119-079E-48FF-8F27- |
| ⊞ | dict | |
| ⊞ | dict | |
| | integer | 23 |
| | string | E863F11A-079E-48FF-8F27 |
| ⊞ | dict | |
| ⊞ | dict | |
| | string | 6.2 |
| | string | Eve Door |
| | string | 00000081-0000-1000-8000- |
| | integer | 17 |
| | string | 00000080-0000-1000-8000- |
| | boolean | true |
| | string | HMDServiceTransaction |
| | string | RNDOORSENSOR |
| | string | 84E4B706-55F7-429F-BEAE |



# EVE DOOR SENSOR ROOM

## HMDAccessoryTransaction / HMDRoom

| Key | Type | Value |
|---|---|---|
| | string | HM.instanceID |
| | string | linkType |
| | string | 39:46:7A:6E:03:FD |
| | integer | 1 |
| | integer | 2 |
| ⊞ | dict | |
| ⊞ | dict | |
| | string | 39:46:7A:6E:03:FD |
| | string | HMDAccessoryTransaction |
| | string | 84E4B706-55F7-429F-BEAE-07A03DFA0D76 |
| | integer | 0 |
| | string | Eve Door 20EAL9901 |
| | string | DV51I1A03588 |
| | string | 6B76D45C-3257-4DE9-A00F-8F724CB0D4E8 |
| | string | 1.2.8 |
| | integer | 10 |
| | string | 39:46:7A:6E:03:FD+1 |
| | string | com.apple.Home.HomeUIService |
| | string | Eve Door 93F5 |
| | string | Eve Door 20EAL9901 |
| | string | Elgato |
| | string | Eve Door 93F5 |
| ⊞ | dict | |
| ⊞ | dict | |
| | string | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 |
| | integer | 209 |
| | data | ... |
| | data | ... |
| ⊞ | dict | |




| Key | Type | Value |
|---|---|---|
| ⊟ Root | dict | |
| $version | integer | 100000 |
| $archiver | string | NSKeyedArchiver |
| ⊞ $top | dict | |
| ⊟ $objects | array | |
| | string | $null |
| ⊞ | dict | |
| | string | _P |
| | string | _V |
| | string | name |
| | string | _u |
| | string | _t |
| | string | 8F4D7D36-91CB-43EA-8250-31FEC09DE463 |
| | string | 6.2 |
| | string | Soggiorno |
| | string | 6B76D45C-3257-4DE9-A00F-8F724CB0D4E8 |
| | string | HMDRoomModel |

# EVE DOOR SENSOR INFORMATION

## /private/var/mobile/Library/Caches/com.apple.HomeKit.configurations/homeData.*.config

| Key | Type | Value |
|---|---|---|
| ⊞ | dict | |
| ⊞ | dict | |
| ⊞ | dict | |
| | string | 84E4B706-55F7-429F-BEAE-07A03DFA0D76 |
| | string | Eve Door 93F5 |
| | string | DV51I1A03588 |
| | string | Elgato |
| | string | Eve Door 20EAL9901 |
| | string | 1.2.8 |
| ⊞ | dict | |
| ⊞ | dict | |
| | string | 772AFB8E-8D2F-455E-90E5-9852E6C4DD31 |
| | string | Sensor |
| | string | com.apple.Home.HomeUIService |
| | string | 39FA322E-5145-548C-BB94-E621393D6CA7 |
| ⊞ | dict | |
| | string | Soggiorno |
| | string | 6B76D45C-3257-4DE9-A00F-8F724CB0D4E8 |
| | string | com.elgato.eve |
| | string | 917695792 |
| | string | 39:46:7A:6E:03:FD |

# EVE DOOR SENSOR INFORMATION – EVE APP

## com.elgato.plist

| Key | Type | Value |
|---|---|---|
| CloudClientFeatureSwitch.eve | boolean | false |
| ELGFluidVolumeUnit | string | ELGFluidVolumeUnit_GallonUS |
| ELGPrimaryHomeUseSameAsC | boolean | true |
| RRMSessionsCountSinceUpdat | integer | 2 |
| SessionIdHistory | data | ... |
| identifierKey:1FAD21D8-DD28- | string | Elgato##Eve Door 20EAL9901##DV51I1A03588 |
| RRMLastDidEnterBackgorund | string | 2/25/20, 10:08:17 AM |
| UserIdHistory | data | ... |
| ELGThermoSchedulesToken | data | ... |
| serialNumberKey:1FAD21D8-D | string | DV51I1A03588 |
| ELGPressureUnit | string | ELGPressureUnit_Hg |
| ELGEveLastPositionPrior2_9_5V | boolean | true |
| ELGEve2_5VersionWasInstalled | boolean | true |
| ELGSystemInfoLastTime | real | 604314152.175106 |
| ELGAltitudeUnit | string | ELGAltitudeUnit_Feet |
| RRMLastBuildNumber | string | 4793 |

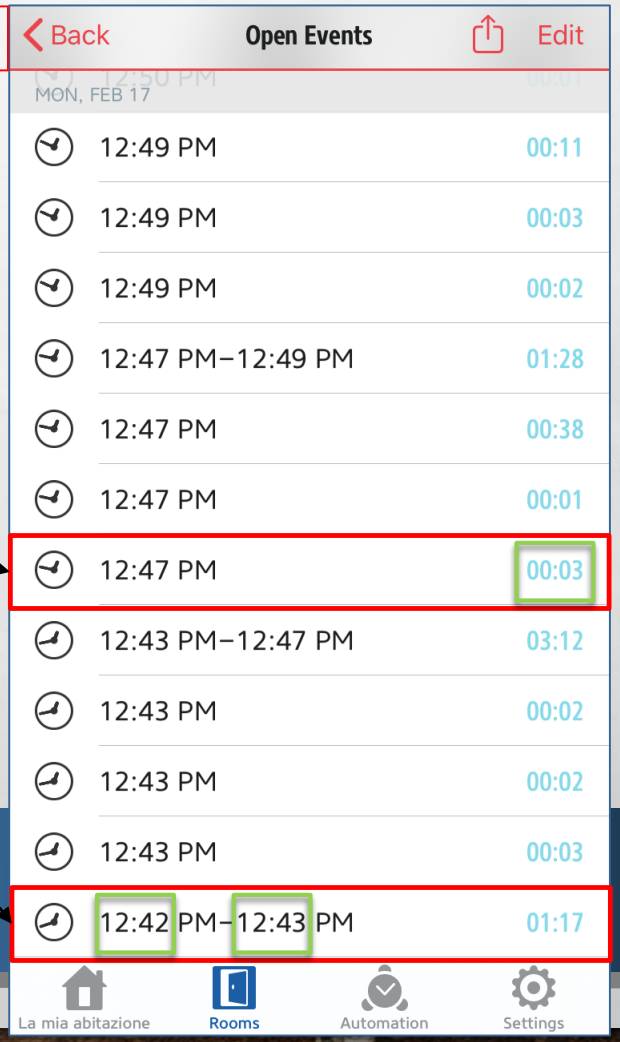
# EVE DOOR SENSOR INFORMATION – EVE APP

## Elgato##Eve Door 20EAL9901##DV51I1A03588.sql

UTC

| | | | | |
|---|---|---|---|---|
| 1 | ☑ | 4107 | 17/02/2020 11:42:23 | 0 |
| 2 | ☑ | 4108 | 17/02/2020 11:43:40 | 1 |
| 3 | ☑ | 4109 | 17/02/2020 11:43:41 | 0 |
| 4 | ☑ | 4110 | 17/02/2020 11:43:44 | 1 |
| 5 | ☑ | 4111 | 17/02/2020 11:43:44 | 0 |
| 6 | ☑ | 4112 | 17/02/2020 11:43:46 | 1 |
| 7 | ☑ | 4113 | 17/02/2020 11:43:48 | 0 |
| 8 | ☑ | 4114 | 17/02/2020 11:43:50 | 1 |
| 9 | ☑ | 4115 | 17/02/2020 11:43:51 | 0 |
| 10 | ☑ | 4116 | 17/02/2020 11:47:03 | 1 |
| 11 | ☑ | 4117 | 17/02/2020 11:47:03 | 0 |
| 12 | ☑ | 4118 | 17/02/2020 11:47:06 | 1 |
| 13 | ☑ | 4119 | 17/02/2020 11:47:09 | 0 |
| 14 | ☑ | 4120 | 17/02/2020 11:47:10 | 1 |
| 15 | ☑ | 4121 | 17/02/2020 11:47:12 | 0 |
| 16 | ☑ | 4122 | 17/02/2020 11:47:50 | 1 |
| 17 | ☑ | 4123 | 17/02/2020 11:47:51 | 0 |
| 18 | ☑ | 4124 | 17/02/2020 11:49:19 | 1 |
| 19 | ☑ | 4125 | 17/02/2020 11:49:29 | 0 |
| 20 | ☑ | 4126 | 17/02/2020 11:49:31 | 1 |
| 21 | ☑ | 4127 | 17/02/2020 11:49:39 | 0 |
| 22 | ☑ | 4128 | 17/02/2020 11:49:42 | 1 |
| 23 | ☑ | 4129 | 17/02/2020 11:49:50 | 0 |
| 24 | ☑ | 4130 | 17/02/2020 11:50:01 | 1 |
| 25 | ☑ | 4131 | 17/02/2020 11:50:01 | 0 |
| 26 | ☑ | 4132 | 17/02/2020 11:50:02 | 1 |
| 27 | ☑ | 4133 | 17/02/2020 11:50:04 | 0 |
| 28 | ☑ | 4134 | 17/02/2020 11:50:06 | 1 |

GMT+1



# FINDINGS AND VALIDATION

MATTIA EPIFANI

SANS DFIR SUMMIT

17TH JULY 2020

# FINDINGS

- **Apple HomeKit is an unexplored field in IoT/Mobile Forensics**
- The **analysis of an iPhone connected to an Apple Home** can reveal
  - **Home location**
  - **Home organization (rooms)**
  - **Installed HomeKit devices**
  - **Interactions (Music, Sensors)**
- The **analysis of an HomePod connected to an Apple Home** can reveal
  - **HomePod Settings**
  - **HomePod network connections**
  - **HomePod usage (Powelogs, Syslog)**

# VALIDATION

- We tested our findings on the Joshua Hickman iOS 13.4.1 image
- https://digitalcorpora.org/archives/1496

# DATASTORE.SQLITE

## HMDHomeManagerModel / HMDHomeModel

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

Filter in any column

| | group_id | share_id | store_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 1 | 4 | 0 | 1 | 55C72C52-0304-4E13-90B1-5D0A5EF53E94 | HMDHomeManagerModel | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | NULL | 1 | BLOB | BLOB |
| 2 | 2 | 0 | 1 | 9C3BF4D1-C7CF-4217-BCD2-0F7E96D5B300 | HMDCloudLegacyModelObject | 457C009B-1DA4-4B71-BD69-93D344A81A8B | NULL | 1 | BLOB | BLOB |

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

Filter in any column

| | group_id | share_id | store_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 12 | 4 | 0 | 1 | 84C5BA82-0D4E-4541-B68B-9F0BBE93A4DC | HMDApplicationDataModel | D162EAEF-8138-5E87-9A01-29F8B9A950A7 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 13 | 4 | 0 | 1 | A4100B50-0A29-41DF-88B4-D30A997ACD91 | HMDAccountModel | 464C253A-E17D-5881-A8BE-C53773BF98DA | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 14 | 4 | 0 | 1 | 9754E933-4AD3-4581-84F9-E4C5FC5F5C08 | HMDCloudZoneInformationModel | C04E1CE7-FE08-5F1D-B82E-5C8F39EE63F3 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 15 | 4 | 0 | 1 | A6BBA3B0-78E6-4BE3-82DB-A3872E643D0D | HMDHAPMetadataModel | 9C7B07AE-AB5E-58F8-99B8-22ED7732C292 | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |
| 16 | 5 | 1 | 1 | 68FDD0E1-E60D-4639-9C9E-C2DA19733A98 | HMDHomeModel | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938 | 1 | BLOB | BLOB |

# HOME NAME, HOME GEOLOCATION AND USER ID

## HMDHomeModel

Hex Plist

```
1  <Dictionary>
2      _u = "A7FA5B35-F540-4226-AA03-0126B5B928EF"
3      homeLocationData
4          ClassName = "NSMutableData"
5          NS.data = bplist00Ô.....X$versionY$archiverT$topX$objects...† _..NSKeyedArchiverÑ..Troot€.£...U$nullÓ.....
6      ownerUserID = "thisisdfir@gmail.com"
7      defaultRoomUUID = "C02D3608-63CF-4B75-BA13-B41668E0BC55"
8      networkProtectionMode = 0
9      _V = "6.2"
10     multiUserEnabled = True
11     ownerPublicKey = "†Lu.Gþ/Ælµî..¨®Ô•YÐ¢þ²mÓ!.ˆç/àš
12     ownerName = "7AB2FF69-E391-4AB2-980B-A8191E8A840A"
13     ownerUUID = "FDFDF0DB-58DD-45FA-BF21-F84CF640A05A"
14     _t = "HMDHomeModel"
15     presenceAuthorizationStatus = 1
16     primaryResidentUUID = "E9903C6B-CC33-578E-A3E0-2876D3C71B43"
17     name = "My Home"
18     _P = "1CAEDC10-E3E5-41A4-BB17-A9EEBA14A938"
```

Hex Plist

```
1  <Dictionary>
2      ClassName = "HMDHomeLocationData"
3      homeLocation
4      homeLocationNextUpdate
```

# DATASTORE.SQLITE

## HMDRoomModel / HMDAppleMediaAccessoryModel

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

Filter in any column

| | group_id | share_id | store_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 54 | 5 | 1 | 1 | F4F9800F-AC09-4A40-8789-B1C7A08C5728 | HMDHomeSettingsModel | 55D6B260-3BB2-5EE6-9BBC-5C87E9960F15 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 55 | 5 | 1 | 1 | A45FF377-BF59-4221-9864-735B391F0883 | HMDActionSetModel | 1CD12ADD-D479-525E-BC76-59EAA394E939 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 56 | 5 | 1 | 1 | 23173970-AFCA-4D37-BEFF-7ABDB0996FB3 | HMDHomeNetworkRouterManagingDeviceSetting... | CE495F7C-7E34-5F10-B823-E93DDA264E5C | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 57 | 5 | 1 | 1 | C802C768-6ACE-4A40-A3C2-24E98FF41654 | HMDActionSetModel | 13F3CC57-35DD-5A26-B4DD-10E1C433F337 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 58 | 5 | 1 | 1 | BB7DDAA1-4262-4F9B-8557-0A805F8E3698 | HMDActionSetModel | 4AC04E92-74E4-5D6B-A4D0-E87419D440DE | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 59 | 5 | 1 | 1 | 4531A7B8-963E-4F0A-A4EC-C138BE2B690C | HMDApplicationDataModel | 556EF00C-89F0-5BC8-8E83-EB4F6B611C54 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 60 | 5 | 1 | 1 | 97733E44-727A-455F-8772-C400251D8B77 | HMDUserModel | FDFDF0DB-58DD-45FA-BF21-F84CF640A05A | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 61 | 5 | 1 | 1 | 14C2EFE1-E6DA-4663-8B98-89C8545AAA3B | HMDActionSetModel | B914A4D2-66FE-5E59-B2D3-1EB269C6ACD6 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 62 | 5 | 1 | 1 | 258A2A5D-EE34-40C1-A950-AD9EB754B40B | HMDHomeNetworkRouterSettingsModel | 94116D5A-D19C-564A-9E61-A278BE32533E | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 63 | 5 | 1 | 1 | BBFCEFD8-F006-4157-A6D1-A124587687E7 | HMDRoomModel | 34147518-5CB4-4A4E-B139-E0E3E37A7001 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 64 | 5 | 1 | 1 | 50DA2986-6452-4CC8-9CA0-7E9A3C16CC94 | HMDResidentDeviceModel | E9903C6B-CC33-578E-A3E0-2876D3C71B43 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 65 | 5 | 1 | 1 | 65ED7919-839B-4DAE-A703-D095DB42AEB9 | HMDHomeMediaSettingsModel | 144BFB15-C934-5335-AE19-FAC2A64237C1 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 66 | 5 | 1 | 1 | 975A902D-E42E-4DAE-9B73-DEBA76D5824D | HMDHomeConfigurationModel | 62FCB50D-8D55-5877-8581-24380CB4A1F7 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |
| 67 | 5 | 1 | 1 | C0FC6DFE-3E9A-4F90-9323-3AB9ADAC6C21 | HMDAppleMediaAccessoryModel | 8EB90DD5-0F47-5027-BA90-5274B123D579 | A7FA5B35-F540-4226-AA03-0126B5B928EF | 1 | BLOB | BLOB |

# HOMEPOD INFORMATION

## HMDAppleMediaAccessoryModel

## HMDRoomModel

Hex | Plist

```
1  <Dictionary>
2      _P = "A7FA5B35-F540-4226-AA03-0126B5B928EF"
3      _V = "6.2"
4      name = "Office"
5      _u = "34147518-5CB4-4A4E-B139-E0E3E37A7001"
6      _t = "HMDRoomModel"
```

Hex | Plist

```
1  <Dictionary>
2      configuredName
3          ClassName = "NSNull"
4      accessoryCategory = 25
5      roomUUID = "34147518-5CB4-4A4E-B139-E0E3E37A7001"
6      pairingIdentity
7          ClassName = "NSMutableData"
8          NS.data = bplist00Ô.....X$versionY$archiverT$topX$objects...† _..NSKeyedArchiverÑ..Troot€.§.....U$nullÔ.....
9      _t = "HMDAppleMediaAccessoryModel"
10     _u = "8EB90DD5-0F47-5027-BA90-5274B123D579"
11     deviceUUID = "0B40F101-4268-5AA0-9A35-2CBC35398429"
12     wifiNetworkInfo
13         ClassName = "NSMutableData"
14         NS.data = bplist00Ô.....X$versionY$archiverT$topX$objects...† _..NSKeyedArchiverÑ..Troot€.§.....!"U$nullÓ.....
15     _V = "6.2"
16     firmwareVersion = "13.4 (17L256)"
17     name
18         ClassName = "NSNull"
19     manufacturer = "Apple Inc."
20     providedName = "HomePod"
21     identifier = "A85EA0EB-E871-4875-8A3A-889A11288A35"
22     configurationAppIdentifier = "com.apple.SharingViewService"
23     serialNumber = "DLXW2G7KHQK8"
24     _P = "A7FA5B35-F540-4226-AA03-0126B5B928EF"
25     model = "NQHW2LL/A"
26     softwareVersion
27         ClassName = "NSMutableData"
28         NS.data = bplist00Ô.....X$versionY$archiverT$topX$objects...† _..NSKeyedArchiverÑ..Troot€.¤....U$nullÕ.....
29     device
30         ClassName = "NSMutableData"
31         NS.data = bplist00Ô.....X$versionY$archiverT$topX$objects...† _..NSKeyedArchiverÑ..Troot€.¯.*..-17=AHIOSTW\...
32     loggedInAccount
33         ClassName = "NSMutableData"
34         NS.data = bplist00Ô.....X$versionY$archiverT$topX$objects...† _..NSKeyedArchiverÑ....Troot€.¯.¼.....
```

# DATASTORE.SQLITE

## HMDAccessorySettingGroupModel

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

Filter in any column

| | group_id | share_id | store_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 76 | 5 | 1 | 1 | 7DB7AF54-F1DD-474D-B5D1-20D4731D8BBF | HMDAccessorySettingGroupModel | CDA42BD0-73DF-488F-9142-0BA954C6C5DE | 8EB90DD5-0F47-5027-BA90-5274B123D579 | 1 | BLOB | BLOB |
| 77 | 5 | 1 | 1 | D2D2E130-0AAA-43F2-AE27-A24E72C5EC69 | HMDApplicationDataModel | BAA48C94-F995-5CB4-A21C-A929B1FD0853 | 8EB90DD5-0F47-5027-BA90-5274B123D579 | 1 | BLOB | BLOB |

Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record

Filter in any column

| | group_id | share_id | store_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 21 | 5 | 1 | 1 | F9C9E7E4-E490-4CCC-9077-E14F3C521E01 | HMDAccessorySettingGroupModel | 20A07D20-00C6-4ED5-9C83-31924CA08538 | CDA42BD0-73DF-488F-9142-0BA954C6C5DE | 1 | BLOB | BLOB |
| 22 | 5 | 1 | 1 | 66893FAA-C503-4CFA-B3DA-25FA0FDDF26E | HMDAccessorySettingGroupModel | 7688AE36-3441-44D0-9740-9BF30B6435D2 | CDA42BD0-73DF-488F-9142-0BA954C6C5DE | 1 | BLOB | BLOB |
| 23 | 5 | 1 | 1 | 1D755A59-2834-46D9-9A78-50BA804B6C74 | HMDAccessorySettingGroupModel | 3AA98B51-2739-4225-80E2-60453A314A97 | CDA42BD0-73DF-488F-9142-0BA954C6C5DE | 1 | BLOB | BLOB |
| 24 | 5 | 1 | 1 | A4E95495-BA8C-4342-B351-5D5E26C378A2 | HMDAccessorySettingGroupModel | 459A650B-D8AE-48B5-8781-80FE5F47C022 | CDA42BD0-73DF-488F-9142-0BA954C6C5DE | 1 | BLOB | BLOB |
| 25 | 5 | 1 | 1 | E8BCC7A4-72D2-4E4E-B535-B033308524A2 | HMDAccessorySettingGroupModel | B75CCD62-221B-4D4D-A5A2-37947D890E01 | CDA42BD0-73DF-488F-9142-0BA954C6C5DE | 1 | BLOB | BLOB |
| 26 | 5 | 1 | 1 | BC7F20DD-DE83-4CE5-9D26-1DA8ADA17C0E | HMDAccessorySettingGroupModel | 55A6631B-FBDF-46E0-9E60-F8E6865B7CBC | CDA42BD0-73DF-488F-9142-0BA954C6C5DE | 1 | BLOB | BLOB |

# HOMEPOD SIRI SETTINGS

Hex | Plist

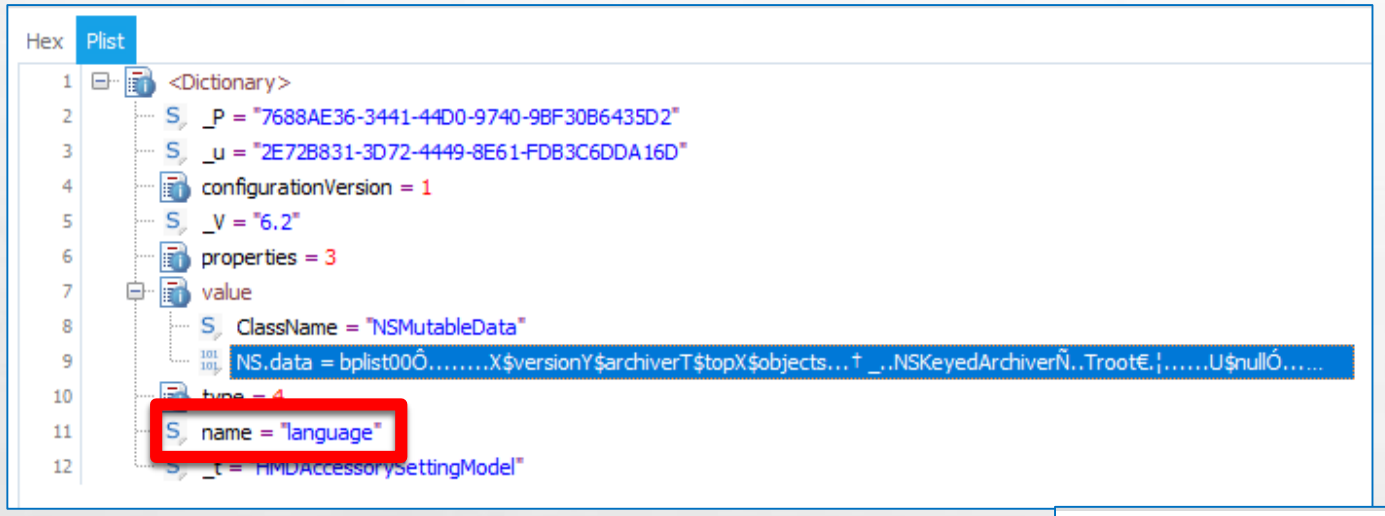
```
1  <Dictionary>
2      _P = "CDA42BD0-73DF-488F-9142-0BA954C6C5DE"
3      _V = "6.2"
4      name = "siri"
5      _u = "7688AE36-3441-44D0-9740-9BF30B6435D2"
6      _t = "HMDAccessorySettingGroupModel"
```

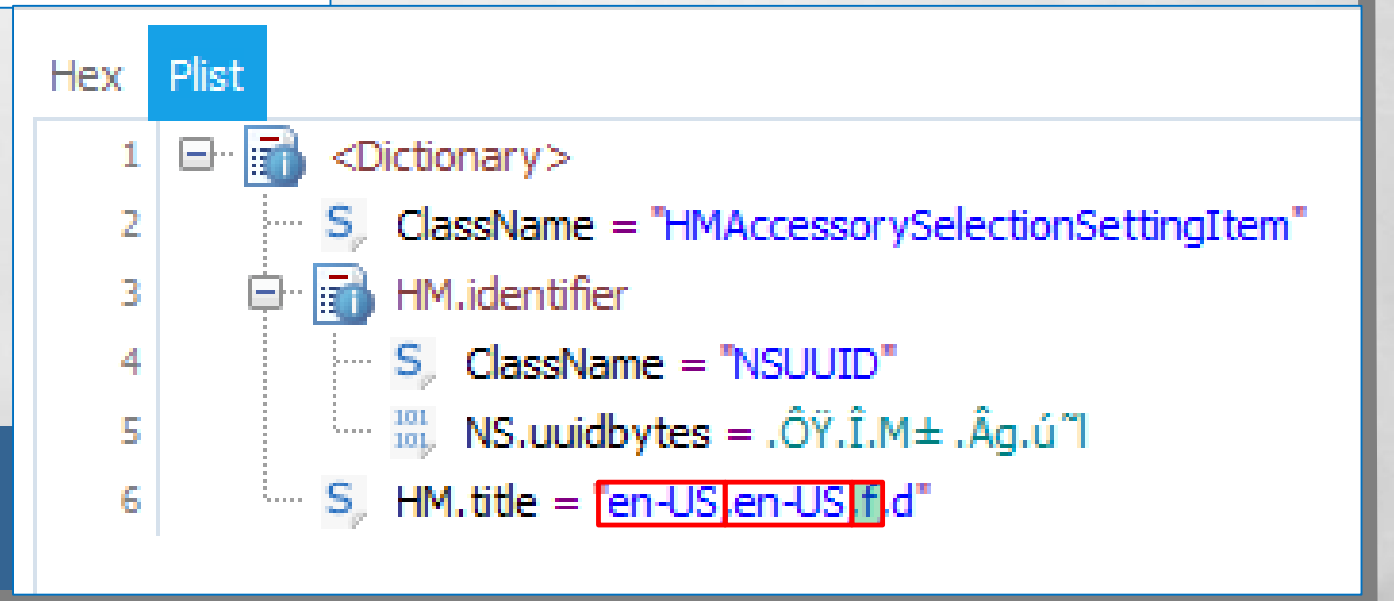
Database Structure | Browse Data | Edit Pragmas | Execute SQL

Table: record — Filter in any column

| | group_id | share_id | store_id | name | type | uuid | parent_uuid | encoding | record | data |
|---|---|---|---|---|---|---|---|---|---|---|
| | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter | Filter |
| 152 | 5 | 1 | 1 | 24F0FDEC-73C5-4E6E-9AF9-1A979DC05BCF | HMDAccessorySettingModel | DE0B6401-11CD-465E-997B-448F1F85845A | 7688AE36-3441-44D0-9740-9BF30B6435D2 | 1 | BLOB | BLOB |
| 153 | 5 | 1 | 1 | 8E7EC072-0081-4ECD-808D-F4CC57AED240 | HMDAccessorySettingModel | 2E72B831-3D72-4449-8E61-FDB3C6DDA16D | 7688AE36-3441-44D0-9740-9BF30B6435D2 | 1 | BLOB | BLOB |
| 154 | 5 | 1 | 1 | 82DF6B4E-43B2-414A-8641-2A71235D2FF5 | HMDAccessorySettingModel | 10B5CF35-B041-4171-8D15-4CE1CBA9983E | 7688AE36-3441-44D0-9740-9BF30B6435D2 | 1 | BLOB | BLOB |
| 155 | 5 | 1 | 1 | F888B19F-614E-490C-BEC4-079E01C73CE1 | HMDAccessorySettingModel | 657632FB-44BC-462F-A069-9C33C4F1047C | 7688AE36-3441-44D0-9740-9BF30B6435D2 | 1 | BLOB | BLOB |
| 156 | 5 | 1 | 1 | 21158DD2-AF06-4C2B-8787-EE7A7A6676C9 | HMDAccessorySettingModel | 1E049B6F-4DE1-437E-BABF-87E61968EABB | 7688AE36-3441-44D0-9740-9BF30B6435D2 | 1 | BLOB | BLOB |

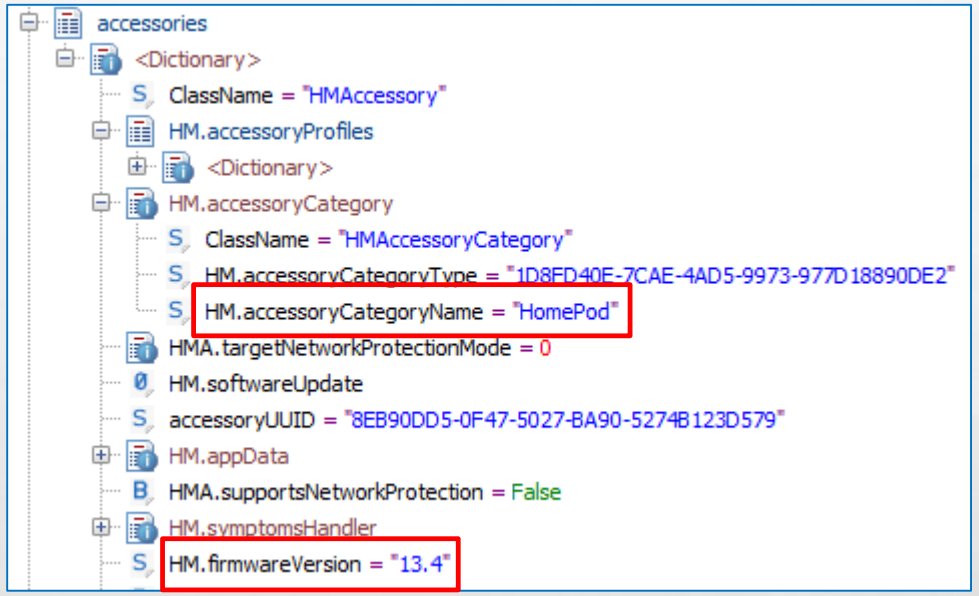
# HOMEPOD SIRI LANGUAGE SETTINGS

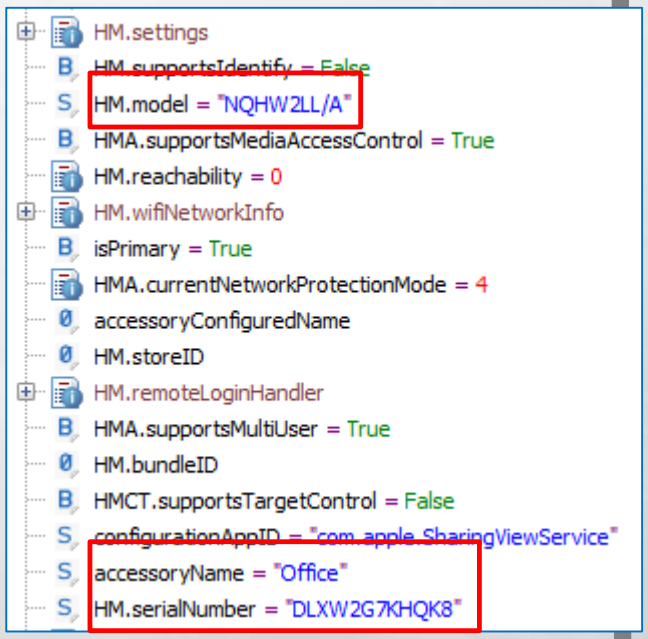


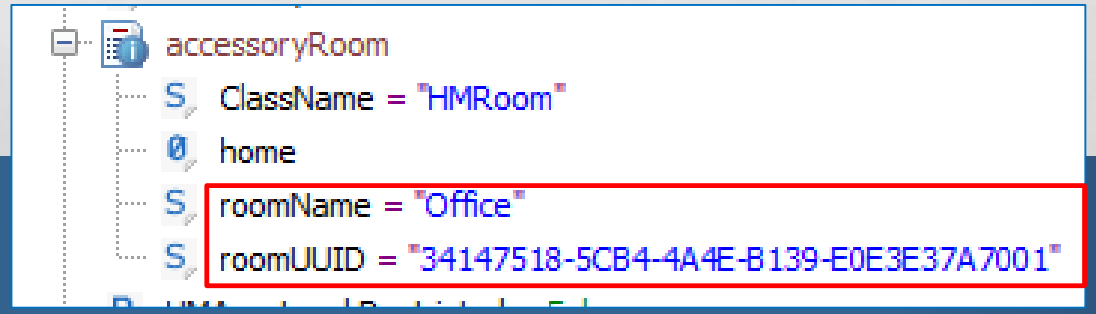



# HOMEPOD INFORMATION

## /private/var/mobile/Library/Caches/com.Apple.Homekit.Configurations/homeData.*.Config

# HOMEPOD MUSIC PLAYBACK

## /private/var/mobile/CoreDuet/Knowledge/knowledgeC.db

```
SELECT DATETIME(ZOBJECT.ZSTARTDATE+978307200,'UNIXEPOCH') AS "START",
               DATETIME(ZOBJECT.ZENDDATE+978307200,'UNIXEPOCH') AS "END",
               ZSTREAMNAME AS "STREAM NAME", ZVALUESTRING AS "VALUE STRING",
               Z_DKNOWPLAYINGMETADATAKEY__TITLE AS "TITLE",
               Z_DKNOWPLAYINGMETADATAKEY__ARTIST AS "ARTIST",
               Z_DKNOWPLAYINGMETADATAKEY__ALBUM AS "ALBUM",
               Z_DKNOWPLAYINGMETADATAKEY__DURATION AS "DURATION",
               Z_DKNOWPLAYINGMETADATAKEY__GENRE AS "GENRE",
               Z_DKNOWPLAYINGMETADATAKEY__MEDIATYPE AS "MEDIA TYPE",
               Z_DKNOWPLAYINGMETADATAKEY__OUTPUTDEVICEIDS AS "OUTPUT DEVICE ID"
FROM ZSTRUCTUREDMETADATA JOIN ZOBJECT
ON ZOBJECT.ZSTRUCTUREDMETADATA = ZSTRUCTUREDMETADATA.Z_PK
ORDER BY ZOBJECT.ZSTARTDATE
```

DB Browser for SQLite - D:\knowledgeC.db

File Edit View Tools Help

New Database | Open Database | Write Changes | Revert Changes | Open Project | Save Project | Attach Database | Close Database

Database Structure | Browse Data | Edit Pragmas | Execute SQL

SQL 1

```
1  SELECT DATETIME(ZOBJECT.ZSTARTDATE+978307200,'UNIXEPOCH') AS "START",
2         DATETIME(ZOBJECT.ZENDDATE+978307200,'UNIXEPOCH') AS "END",
3         ZSTREAMNAME AS "STREAM NAME", ZVALUESTRING AS "VALUE STRING",
4         Z_DKNOWPLAYINGMETADATAKEY__TITLE AS "TITLE",
```

| | START | END | STREAM NAME | VALUE STRING | TITLE | ARTIST | ALBUM | DURATION | GENRE | MEDIA TYPE | OUTPUT DEVI |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7537 | 2020-04-06 14:18:07 | 2020-04-06 14:18:11 | /media/nowPlaying | com.apple.podcasts | Month In 4n6 – ... | This Week In 4n6 » Podcasts | Marc... | 1074.7588208... | NULL | MRMediaRemoteMediaTypePodcast | BLOB |
| 7538 | 2020-04-06 14:18:11 | 2020-04-06 14:19:10 | /media/nowPlaying | com.apple.podcasts | Month In 4n6 – ... | This Week In 4n6 » Podcasts | Marc... | 1074.7588208... | NULL | MRMediaRemoteMediaTypePodcast | BLOB |
| 7539 | 2020-04-06 14:19:10 | 2020-04-06 14:26:41 | /media/nowPlaying | com.apple.podcasts | Month In 4n6 – ... | This Week In 4n6 » Podcasts | Marc... | 1074.7588208... | NULL | MRMediaRemoteMediaTypePodcast | BLOB |
| 7540 | 2020-04-06 14:26:41 | 2020-04-06 14:26:43 | /media/nowPlaying | com.apple.podcasts | Month In 4n6 – ... | This Week In 4n6 » Podcasts | Marc... | 1074.7588208... | NULL | MRMediaRemoteMediaTypePodcast | BLOB |
| 7541 | 2020-04-06 14:26:43 | 2020-04-06 14:38:08 | /media/nowPlaying | com.apple.podcasts | Month In 4n6 – ... | This Week In 4n6 » Podcasts | Marc... | 1074.7588208... | NULL | MRMediaRemoteMediaTypePodcast | BLOB |
| 7542 | 2020-04-06 14:38:08 | 2020-04-06 14:38:08 | /media/nowPlaying | com.apple.podcasts | Month In 4n6 – ... | This Week In 4n6 » Podcasts | Marc... | 1074.7588208... | NULL | MRMediaRemoteMediaTypePodcast | BLOB |
| 7543 | 2020-04-04 22:17:42 | 2020-04-04 22:20:32 | /media/nowPlaying | com.apple.Music | Move Your Feet | Junior Senior | D-D-... | 180.97632653... | Pop | MRMediaRemoteMediaTypeMusic | BLOB |
| 7544 | 2020-04-04 22:20:32 | 2020-04-04 22:20:35 | /media/nowPlaying | com.apple.Music | Move Your Feet | Junior Senior | D-D-... | 180.97632653... | Pop | MRMediaRemoteMediaTypeMusic | BLOB |
| 7545 | 2020-04-04 22:20:35 | 2020-04-05 06:03:15 | /media/nowPlaying | com.apple.Music | Move Your Feet | Junior Senior | D-D-... | 180.97632653... | Pop | MRMediaRemoteMediaTypeMusic | BLOB |
| 7546 | 2020-04-01 18:09:39 | 2020-04-01 18:12:33 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7547 | 2020-04-01 18:12:33 | 2020-04-01 18:12:45 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7548 | 2020-04-01 18:12:45 | 2020-04-02 17:26:35 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7549 | 2020-04-02 17:26:35 | 2020-04-02 17:27:55 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7550 | 2020-04-02 17:27:55 | 2020-04-02 17:28:20 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7551 | 2020-04-02 17:28:20 | 2020-04-02 17:28:30 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7552 | 2020-04-02 17:28:30 | 2020-04-02 17:32:06 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7553 | 2020-04-02 17:32:06 | 2020-04-02 17:33:01 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7554 | 2020-04-02 17:33:01 | 2020-04-02 18:06:12 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7555 | 2020-04-02 18:06:12 | 2020-04-02 18:09:16 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7556 | 2020-04-02 18:09:16 | 2020-04-03 16:32:01 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7557 | 2020-04-03 16:32:01 | 2020-04-03 16:32:17 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |
| 7558 | 2020-04-03 16:32:17 | 2020-04-03 18:54:42 | /media/nowPlaying | com.apple.Music | Name of the Game | The Crystal Method | Twee... | 255.16408163... | Elect... | MRMediaRemoteMediaTypeMusic | BLOB |

```
Execution finished without errors.
Result: 7600 rows returned in 135ms
At line 1:
SELECT DATETIME(ZOBJECT.ZSTARTDATE+978307200,'UNIXEPOCH') AS "START",
                    DATETIME(ZOBJECT.ZENDDATE+978307200,'UNIXEPOCH') AS "END",
                    ZSTREAMNAME AS "STREAM NAME", ZVALUESTRING AS "VALUE STRING",
                    Z_DKNOWPLAYINGMETADATAKEY__TITLE AS "TITLE",
                    Z_DKNOWPLAYINGMETADATAKEY__ARTIST AS "ARTIST",
```

Edit Database Cell

Mode: Binary

```
c 69 73 74 30 30 d4 01 02 03 04 05 06 07   bplist00........
4 76 65 72 73 69 6f 6e 59 24 61 72 63 68   .X$versionY$arch
5 72 54 24 74 6f 70 58 24 6f 62 6a 65 63   iverT$topX$objec
2 00 01 86 a0 5f 10 0f 4e 53 4b 65 79 65   ts..... ..NSKeye
2 63 68 69 76 65 72 d1 08 09 54 72 6f 6f   dArchiver...Troo
1 aa 0b 0c 15 16 1c 1d 21 22 29 2d 55 24   t.........!")-U$
c 6c d3 0d 0e 0f 10 12 14 57 4e 53 2e 6b   null.......WNS.k
3 5a 4e 53 2e 6f 62 6a 65 63 74 73 56 24   eysZNS.objectsV$
1 73 73 a1 11 80 02 a1 13 80 03 80 09 10   class...........
d 0e 0f 17 19 1b a1 18 80 04 a1 1a 80 05   ................
0 0c d2 0e 0f 1e 20 a1 1f 80 06 80 07 5f   ........ ......
1 38 35 45 41 30 45 42 2d 45 38 37 31 2d   .$A85EA0EB-E871-
7 35 2d 38 41 33 41 2d 38 38 39 41 31 31   4875-8A3A-889A11
8 41 33 35 d2 23 24 25 26 5a 24 63 6c 61   288A35.#$%&Z$cla
e 61 6d 65 58 24 63 6c 61 73 73 65 73 5e   ssnameX$classes^
d 75 74 61 62 6c 65 41 72 72 61 79 a3 25   NSMutableArray.%
7 4e 53 41 72 72 61 79 58 4e 53 4f 62 6a   '(WNSArrayXNSObj
```

Type of data currently in cell: Binary
453 byte(s)

Apply

Remote

Identity: Public

| Name | Commit | Last modified | Size |
|---|---|---|---|

SQL Log | Plot | DB Schema | Remote

Create a new database file

UTF-8

# REFERENCES AND PUBLIC DATASET

MATTIA EPIFANI

SANS DFIR SUMMIT

17TH JULY 2020

# REFERENCES


- **HomePod Teardown Reveals Hidden 14-Pin Connector, 16GB Storage, and Very Low Repairability**
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- **HomePod - iFixit**
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- **Pogo pin – Wikipedia**
  https://en.wikipedia.org/wiki/Pogo_pin
- **Profiles and Logs - Bug Reporting - Apple Developer**
  https://developer.apple.com/bug-reporting/profiles-and-logs/
- **HomePod Logging Instructions - Apple Developer**
  https://developer.apple.com/services-account/download?path=/iOS/iOS_Logs/HomePod_Logging_Instructions.pdf
- **Epifani Mattia, Leong Adrian and Mahalik Heather. Using Apple "Bug Reporting" for forensic purposes. OSDFCON, 2019.**
- **GitHub - RealityNet/ios_bfu_triage**
  https://github.com/RealityNet/ios_bfu_triage
- **GitHub - cheeky4n6monkey/iOS_sysdiagnose_forensic_scripts**
  https://github.com/cheeky4n6monkey/iOS_sysdiagnose_forensic_scripts
- **GitHub - mac4n6/APOLLO: Apple Pattern Of Lazy Output'er**
  https://github.com/mac4n6/APOLLO

# PUBLIC DATASET
# DFRWS 2020 EU RODEO – DATASET AND QUESTIONS

## http://bit.do/dfrws_rodeo_2020

File > DFRWS_2020

| Nome | Data/ora modifica | Modificato da | Dimensioni file | Condivisione |
|---|---|---|---|---|
| Apple_Homepod_Forensics_DFRWS_2020.pdf | 4 giugno | Mattia Epifani | 4,69 MB | Condiviso |
| DEVICE.zip | 27 maggio | Mattia Epifani | 409 MB | Condiviso |
| DFRWS_2020_Rodeo_Presentation.pdf | 3 giugno | Mattia Epifani | 1,78 MB | Condiviso |
| hashes.txt | 29 maggio | Mattia Epifani | 214 byte | Condiviso |
| password.txt | 3 giugno | Mattia Epifani | 24 byte | Condiviso |
| questions.txt | 3 giugno | Mattia Epifani | 865 byte | Condiviso |
| useful_tools.txt | 2 giugno | Mattia Epifani | 116 byte | Condiviso |

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# Q&A

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