

# Cloud Authorization Operation Guide

Foreword: Please read the following authorization instructions carefully, especially the yellow font, which will greatly help you with the authorization problems you often encounter.

## 1、Obtain communication authentication file and activation code

Login to the software customer service center <https://srp.megvii.com> . Obtain the communication authentication file, double authentication file, activation code, as shown below:

The screenshot shows the MEGVII Software Customer Service Center interface. On the left is a dark blue sidebar with navigation links: Message Center, Account Info, Download Center, and Auth Statistics (highlighted). The main content area has a dark blue header with the MEGVII logo, 'Software Customer Service Center', language toggles (中, En), and a Logout button. Below the header is a 'License File' section containing a table with the following data:

| Name                              | User Name       | Contract Type | Expire Time (days) | Activated License | Remaining License |
|-----------------------------------|-----------------|---------------|--------------------|-------------------|-------------------|
| CBG_H3516DV300_Panel_Face_IR_Reco | zhangwenbo_test | Test          | 90                 | 0                 | 10                |

Below the table are two panels for authentication:

- One-stage Auth:** Created At: 2019-10-09 04:09:10, MD5: 3f31b593342182c54bad98b25d692. It has 'Download' and 'Revoke Auth File' buttons. A note states: 'One-stage auth is to fully trust the communication auth file. To acquire the license, the auth file is required.'
- Two-stage Auth:** Created At: 2019-10-09 04:09:10, MD5: f0ef0804e044067ec5eb37059cde843a. It has 'Download' and 'Revoke Auth File' buttons. Below these is a '1' and a 'Get activation code' button. A note states: 'Two-stage Auth: Partial trust files require file + one-time activation code to apply for authorization.'

One-stage Auth: All customer authorization counts are in it.

Two-stage Auth: The customer's user wants to authorize, the customer gives an activation code file + Two-stage Auth key to his user, so that he can activate it once (avoid giving all authorization counts to the user)

Name: SDK Type

Contract Type: Formal/Test

Expire Time(days): Formal (36500) / Test (default 30)

Activated License: Number of authorizations that have been consumed

Remaining Licence: Remaining authorizations

## 2、Get fingerprint file information

Note:

(1) If it is the HISI platform SDK, please execute it on the board side, or mount the board mount to the VM/X86 server. If it is the X86 server platform SDK, please execute it directly on the X86 server.

(2) The board cannot use the file system mounted by nfs, otherwise the hash length will be too short or incorrect.

一、Specify the fingerprint file directory path.

Please execute: export HASPUSER\_PREFIX=/home/...

Note:

The fingerprint file directory path must have read and write permissions, and there can be no other files in the path.

二、Generate “c2v” flie

Please execute: ./hasp\_update\_xxx f fingerprint.c2v

Open “fingerprint.c2v”. Check the length of “hash”. If “hash” is too short, there is a problem with the fingerprint file directory path. Please re-specify the fingerprint file directory path and give read and write permissions.

### 3、Generate device authorization file

Note:

If it is the HISI platform SDK, please execute it on the board side, or mount the board mount to the VM/X86 server.

一、One-stage Auth operating

Please execute: `python get_auth_file.py --key 3516CV500FaceCapture-one-stage.cert(*.cert) --fp fingerprint.c2v`

Explanation:

`--key parameter` : One-stage Auth Communication file

`--pf parameter` : Device fingerprint file name

Operation result:

(1)Successfully print result :

get auth file ok.

Get device authorization file: authFile.v2c

(2)Failed print result :

| Error message            | Reason                                    | Approach   |
|--------------------------|---|--|
| detail: auth key invalid | Illegal communication authentication file | Re-acquire the communication certification file on the website |

|                                 |   |   |
|---------------------------------|---|---|
| --key<br>input<br>invalid       | Illegal<br>communication<br>authentication file | Re-acquire the<br>communication<br>certification file<br>on the website |
| false<br>to get<br>auth<br>file | Authorization<br>failure                        | Maybe the<br>fingerprint file<br>is illegal                             |

## 二、Two-stage Auth operating

Please execute: `python get_auth_file.py --key 3516CV500FaceCapture-two-stage.cert(*.cert) --fp fingerprint.c2v --active 3516CV500FaceCapture-active.code(*.code)`

Explanation:

**--key parameter** : Two-stage Auth Communication file

**--pf parameter** : Device fingerprint file name

**--active parameter**: Activation code file name

Operation result:

(1)Successfully print result :

get auth file ok.

Get device authorization file: `authFile.v2c`

(2)Failed print result :

| Error message             | Reason                     | Approach  |
|---------------------------|----------------------------|---|
| active<br>code<br>invalid | Illegal activation<br>code | Re-acquire the<br>activation code<br>file on the<br>website |

|                              |  |   |
|------------------------------|--|---|
| --key<br>input<br>invalid    | Illegal<br>communication<br>authentication<br>file | Re-acquire the<br>communication<br>authentication<br>file on the<br>website |
| false to<br>get auth<br>file | Authorization<br>failure                           | Maybe the<br>fingerprint file<br>is illegal                                 |

## 4、Authorization

Note:

If it is the HISI platform SDK, please execute it **on the board side**, or mount the board mount to the VM/X86 server. If it is the **X86 server platform SDK**, please execute it directly **on the X86 server**.

- (1) Compressed authorization directory size. Please execute: **export HASPUSER\_CLUSTERS=1000** // Compress the size of the authorized directory space
- (2) If it is the HISI platform SDK. Please execute: **mkdir /dev/shm;mount -t tmpfs shmfs -o size=1g /dev/shm** (Note: If it is the **X86 server platform SDK**, it does not need to be executed.)

(3) Authorize the device. Please execute: **./hasp\_update\_xxx u authFile.v2c**  
(If the output "unknow info error" or "no output", the authorization is successful. If the authorization is successful, execute this command again, it will report "hasp\_update failed with status 65")

## 5、Authorize after rebooting the device

Note:

If it is the HISI platform SDK, please execute it on the board side, or mount the board mount to the VM/X86 server. If it is the X86 server platform SDK, please execute it directly on the X86 server.

The environment variable may be cleared after restarting the device. Please execute the following command:

```
export HASPUSER_PREFIX=xxx; export HASPUSER_CLUSTERS=1000; mkdir /dev/shm;mount -t tmpfs shmfs -o size=1g /dev/shm
```

## 6、Verify authorization is successful

### 1、Run Demo to print information normally

```
/tmp/L1_1222_CR99_181224V2.8/examples # ./FSL1_demo -i /mnt/nfsroot/720p.yuv -f 25 -r 1 -m 1 -o a
fsl1_demo.c:main(1616): inpufile is /mnt/nfsroot/720p.yuv !!!
bl module compile time-build time:2018-11-23 16:04:10 !!!!
fsl1_demo.c:main(1668): SDK_VERSION:L1_1222_CR99_181224V2.8 !!!
fsl1_demo.c:main(1711): feature version:181222V1.3.0 !!!
fsl1_demo.c:stream_feed_extra_compare_thr(750): g_group.face_count = 1
fsl1_demo.c:stream_feed_extra_compare_thr(803): send one frame: pts = 2380090, prev_send_pts=0, frame_rate=0 !!!
fsl1_demo.c:stream_feed_extra_compare_thr(848): ----- read_frame: time_cost=26 ----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(860): ----- mgvll_feed_frame: time_cost=238 face:0----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(803): send one frame: pts = 2381155, prev_send_pts=2380090, frame_rate=0 !!!
fsl1_demo.c:stream_feed_extra_compare_thr(848): ----- read_frame: time_cost=38 ----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(860): ----- mgvll_feed_frame: time_cost=126 face:0----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(803): send one frame: pts = 2381320, prev_send_pts=2381155, frame_rate=1 !!!
fsl1_demo.c:stream_feed_extra_compare_thr(848): ----- read_frame: time_cost=1 ----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(860): ----- mgvll_feed_frame: time_cost=56 face:0----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(803): send one frame: pts = 2381378, prev_send_pts=2381320, frame_rate=2 !!!
fsl1_demo.c:stream_feed_extra_compare_thr(848): ----- read_frame: time_cost=2 ----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(860): ----- mgvll_feed_frame: time_cost=57 face:0----- !!!
fsl1_demo.c:stream_feed_extra_compare_thr(803): send one frame: pts = 2381438, prev_send_pts=2381378, frame_rate=3 !!!
fsl1_demo.c:stream_feed_extra_compare_thr(848): ----- read_frame: time_cost=2 ----- !!!
```

2、The license folder in some SDK packages will provide a soft authorization verification tool, such as himix100\_auth\_check.tar or himix200\_auth\_check.tar. If not, it proves that there is no soft authorization verification tool.

3. If you run the soft license verification tool there is a warning like the following, Please execute: `mkdir /dev/shm;mount -t tmpfs shmfs -o size=1g /dev/shm`

HASPUSER\_PREFIX defined

himix200 system

check auth false

Warning!! please input as: mkdir /dev/shm;mount -t tmpfs shmfs -o size=1g /dev/shm

## 7、Soft Authorization Error Troubleshooting FAQ

Q: Soft license This version of the SDK can not be debugged with gdb, and if there is a segmentation error when using SDK integration, the system can not generate core files?

A: The soft license version encrypts the algorithm library. The algorithm library cannot be debugged by gdb, nor can it generate a core file after a segmentation error occurs.

Q: If the system time of the HISI board is not the current time, the SDK will not be available.

A: This problem is a common problem of trial soft license (the trial version has a time limit), and the official soft license does not have this problem.

Q: Execution SDK error: Sentinel LDK Protection System: Sentinel key not found (H0007)

A: Please execute : `export HASPUSER_PREFIX=xxx; export  
HASPUSER_CLUSTERS=1000; mkdir /dev/shm; mount -t tmpfs shmfs -o size=1g  
/dev/shm`