

DJI FlightHub Enterprise

Installation Guide v1.0

2019.03

Before installing FLIGHTHUB, please carefully read the installation instructions;

Only simple notifications of Linux commands are mentioned here to make sure you can finish the installation. If you need more detailed information about commands in Linux system, please check related reference or ask help from someone who are professional on Linux.

Installation Outline



A few steps should be processed to install FLIGHTHUB onto your server:

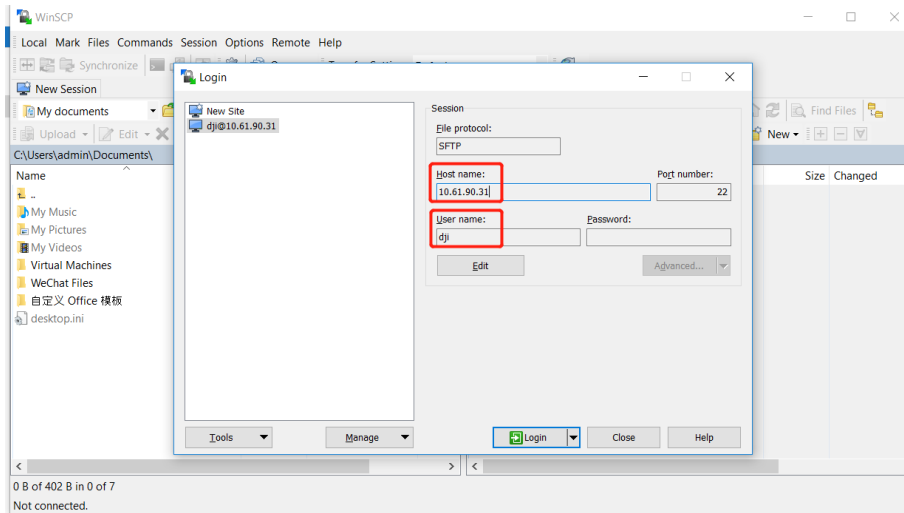
1. Access the server through WinSCP and upload the installation package;
2. Connect the server with your PC using PuTTY to unzip the installation package;
3. Login the FLIGHTHUB Management Center for activation after completing the installation.
4. Two ways of obtaining map files:
 - 1). Contact dealers to get the map file
 - 2). Login DJI official website and follow the link to download map files.

Get ready for the installation

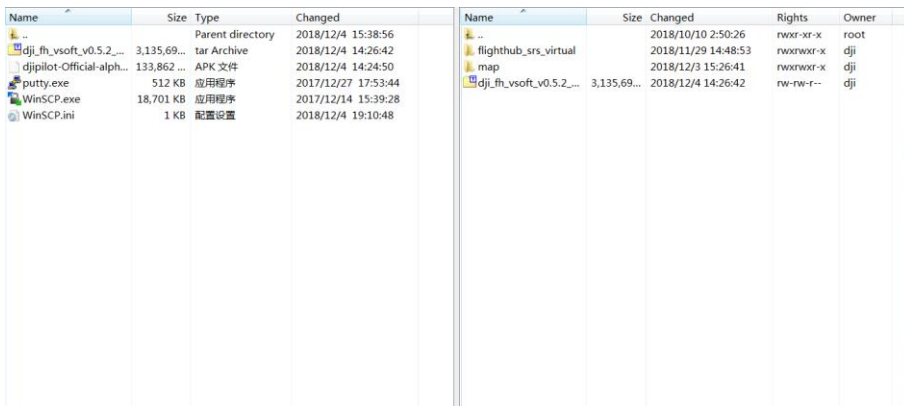
1. DJI FLIGHTHUB PE Installation Package ;
*Example: dji_fh_vsoft_szga_v0.5.2_20181212_194908
2. Ubuntu Server 16.04 LTS ;
3. Make sure you have enabled SSH Service, use `ps -s | grep ssh` to check;
4. Get an admin account and the password ;
5. Enable ROOT authority
6. Software Winscp and puTTY

Import the package using PC to access the server

1. Open WinSCP and input IP address, login using your server account;



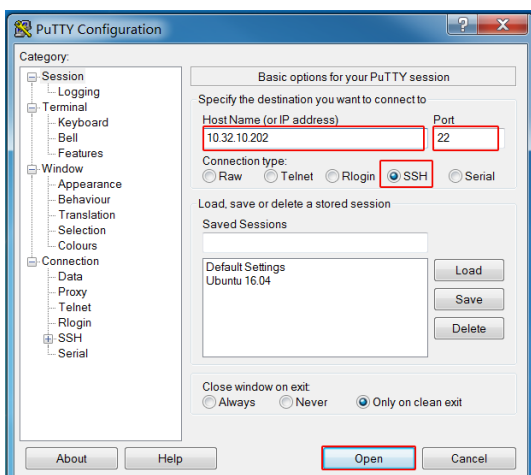
2. Use “WinSCP” for the remote login and copy the installation package under “home” menu.



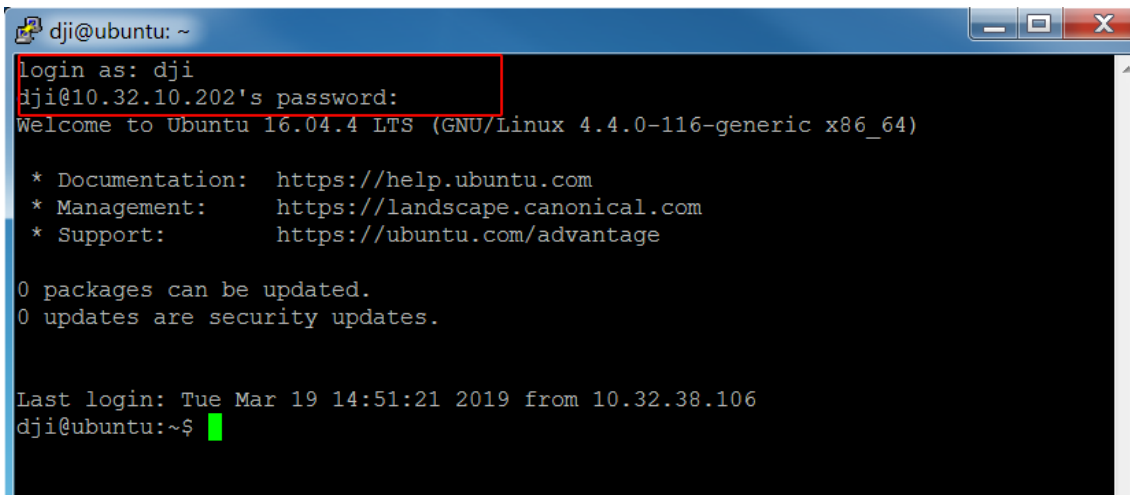
Confirm and unzip the installation package

Note*: Screenshots below are made from Linux interfaces, things in bold text are commands that should be input in Linux system. Use PuTTY for the remote operation if needed.

1. Open PuTTY and input **IP address** , **Port** and choose **SSH**;



2. Use the admin account to enter the sever.



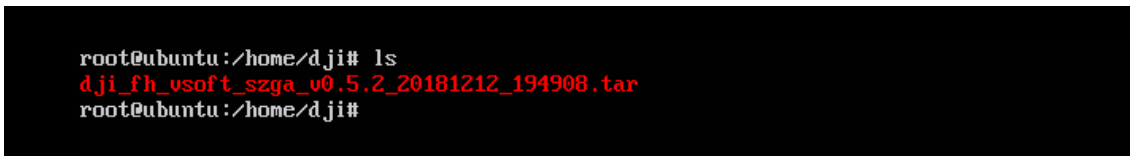
```
dji@ubuntu: ~
login as: dji
dji@10.32.10.202's password:
Welcome to Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-116-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

0 packages can be updated.
0 updates are security updates.

Last login: Tue Mar 19 14:51:21 2019 from 10.32.38.106
dji@ubuntu:~$
```

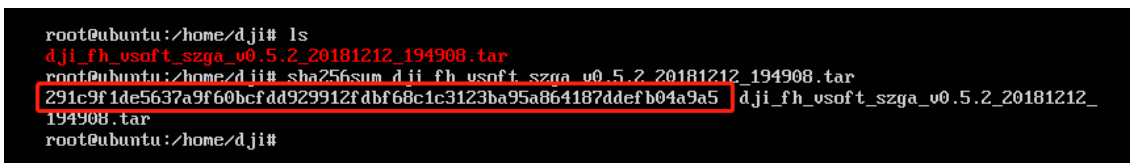
3. Input `ls` and press “Enter” to check if the DJI FLIGHTHUB installation package has been successfully uploaded to the server;



```
root@ubuntu:/home/dji# ls
dji_fh_vsoft_szga_v0.5.2_20181212_194908.tar
root@ubuntu:/home/dji#
```

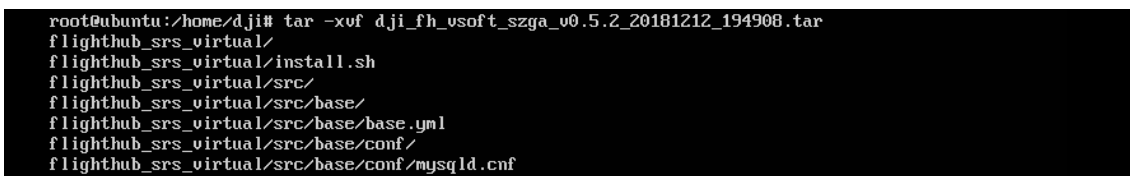
(see the line in red)

4. Input `sha256sum dji_flighthub_vsoft_v1.0.0_20181130_042215.tar` and check if the string of number is the same as the code provided in attachment of the installation package. This is to make sure the package is intact;



```
root@ubuntu:/home/dji# ls
dji_fh_vsoft_szga_v0.5.2_20181212_194908.tar
root@ubuntu:/home/dji# sha256sum dji_fh_vsoft_szga_v0.5.2_20181212_194908.tar
291c9f1de5637a9f60bcfdd929912fdbf68c1c3123ba95a864187ddefb04a9a5 dji_fh_vsoft_szga_v0.5.2_20181212_194908.tar
root@ubuntu:/home/dji#
```

5. Input `tar -xvf dji_flighthub_srs_v1.0.0.....l.tar` and press “Enter” to Unzip the package.



```
root@ubuntu:/home/dji# tar -xvf dji_fh_vsoft_szga_v0.5.2_20181212_194908.tar
flighthub_srs_virtual/
flighthub_srs_virtual/install.sh
flighthub_srs_virtual/src/
flighthub_srs_virtual/src/base/
flighthub_srs_virtual/src/base/base.yml
flighthub_srs_virtual/src/base/conf/
flighthub_srs_virtual/src/base/conf/mysql.cnf
```

Start the installation

1. Input `cd flighthub_srs_virtual/` to enter the package;

```
flighthub_srs_virtual/src/www/static/js/manifest.2ae2e69a05c33dfc65f8.js.map
flighthub_srs_virtual/src/www/static/img/
flighthub_srs_virtual/src/www/static/img/logo.7b4314b.png
flighthub_srs_virtual/src/tool.sh
flighthub_srs_virtual/flighthub.cfg
flighthub_srs_virtual/webinstall
root@ubuntu:/home/dji# ls
dji_fh_vsoft_szga_v0.5.2_20181212_194908.tar flighthub_srs_virtual
root@ubuntu:/home/dji# cd flighthub_srs_virtual/_
```

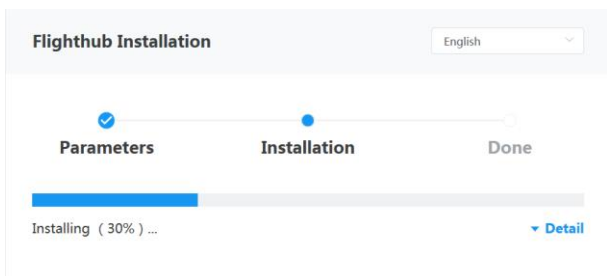
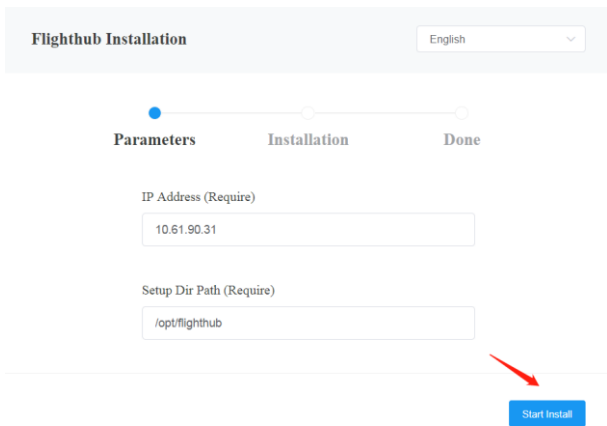
- 2. Use `./webinstall` to execute the installation command;

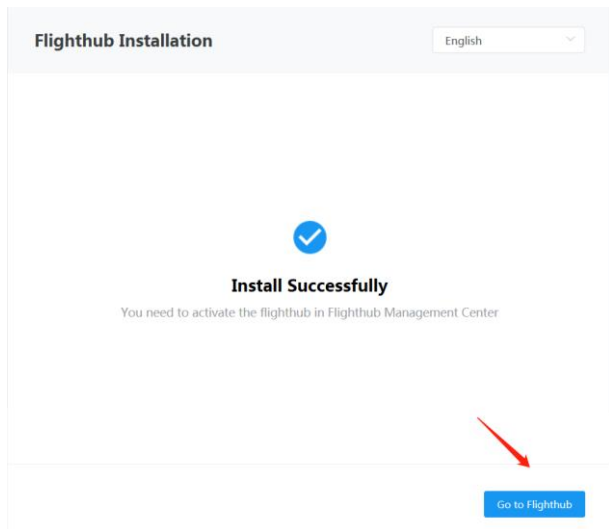
```
root@ubuntu:/home/dji# cd flighthub_srs_virtual/
root@ubuntu:/home/dji/flighthub_srs_virtual# ls
flighthub.cfg install.sh src webinstall
root@ubuntu:/home/dji/flighthub_srs_virtual# ./webinstall
Stop existed dashboard...
```

- 3. Open a browser, input the notified IP address with the port to enter the installation page. Click **start to install**;

```
dji_fh_vsoft_szga_v0.5.2_20181212_194908.tar flighthub_srs_virtual
root@ubuntu:/home/dji# cd flighthub_srs_virtual/
root@ubuntu:/home/dji/flighthub_srs_virtual# ls
flighthub.cfg install.sh src webinstall
root@ubuntu:/home/dji/flighthub_srs_virtual# ./webinstall
Stop existed dashboard
please open http://10.61.90.31:19090/ in your browser and start installation
```

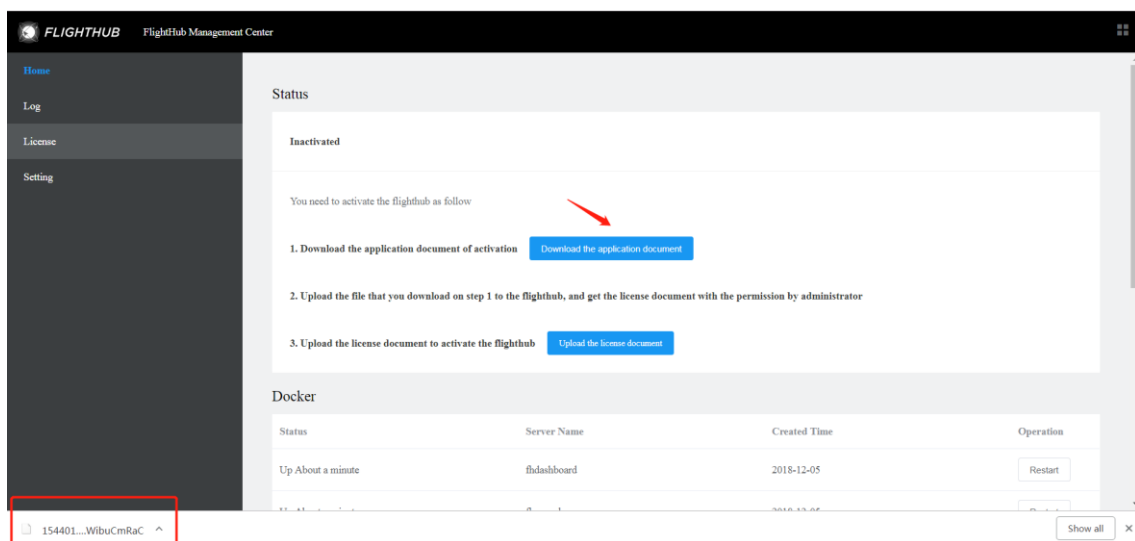
- 4. The installation on the server end COMPLETED ! Go to FLIGHTHUB Center for the activation.



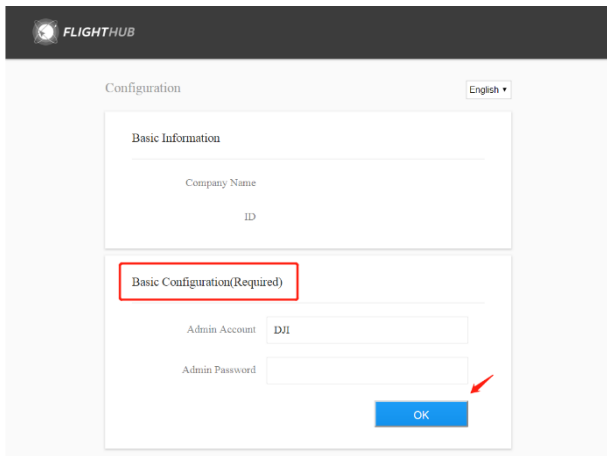


Activation

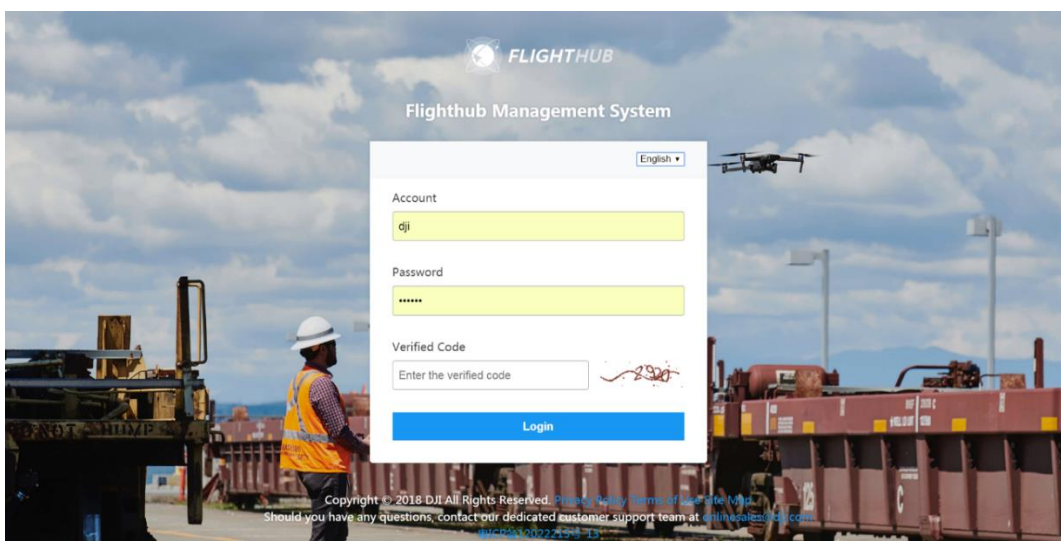
1. For activation, click download the application document ;
2. **Save** the profile and go to <https://www.dji-flighthub.com/peconvert> to obtain the license using the redeem code. The license will be sent to your email address.



3. **Upload** the license after receiving it from DJI;
4. The activation of FLIGHTHUB is **COMPLETED**, remember to check if **Remain Time** and enabled modules are ok;
5. Open a new tap in the browser and input the IP address; start to create a system account;

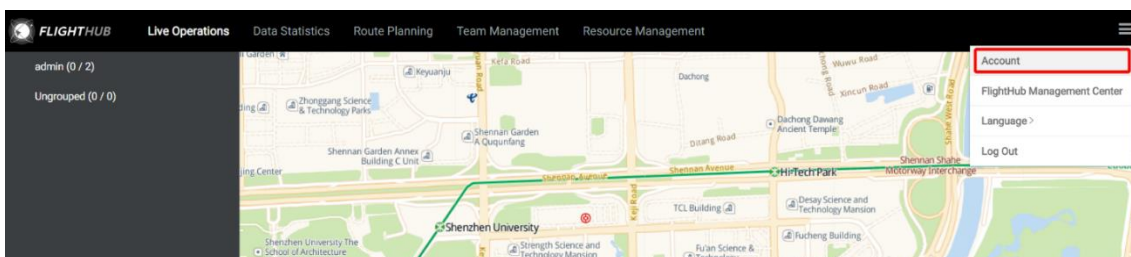


6. The **FLIGHTHUB** installation is **COMPLETED!**

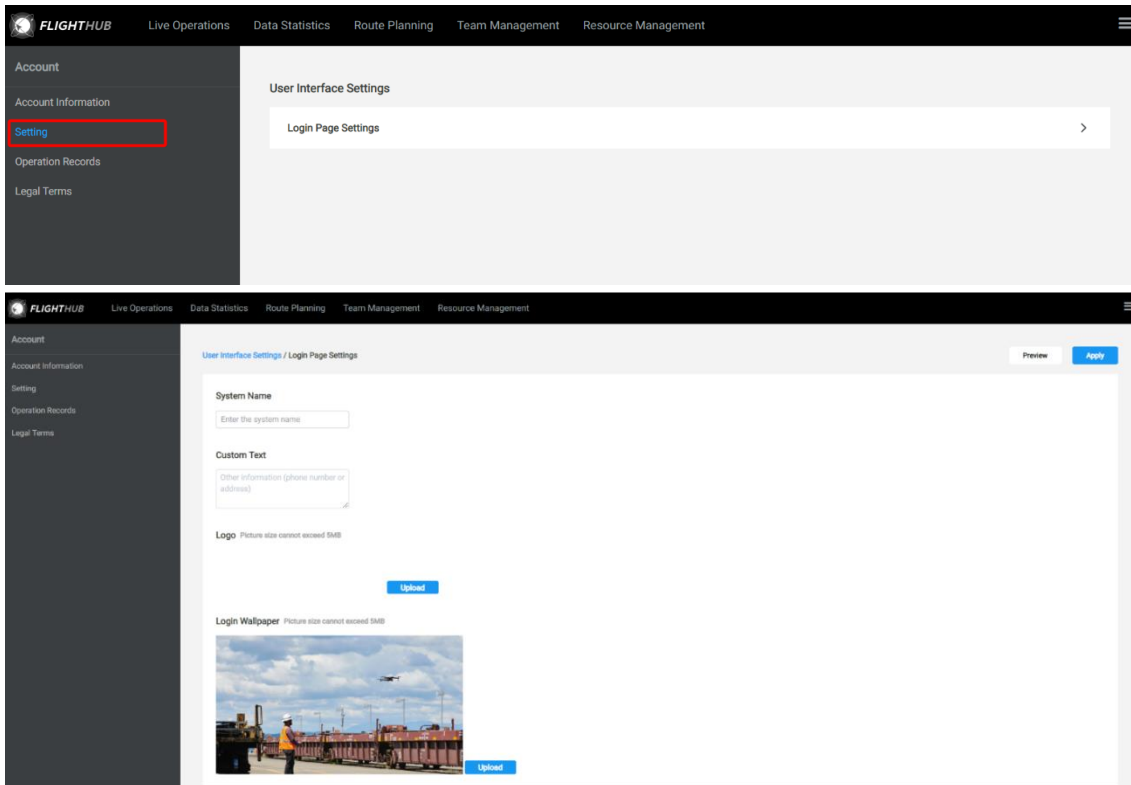


UI settings for the login page

1. Enter **Account** in the Flighthub webpage;



2. Start to design your own login interface by entering **Settings** → **Login Page Settings**.



Map Import

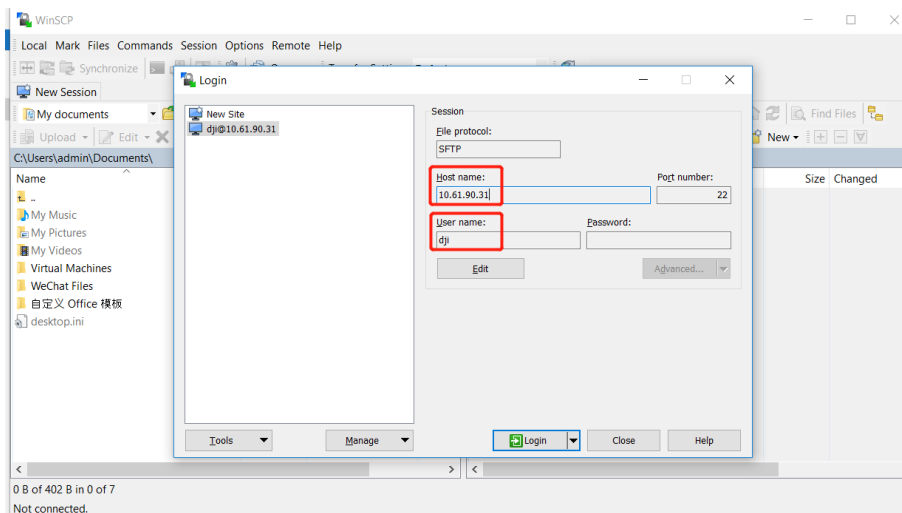
*Please contact DJI engineers to get offline map packages; the Street View Map is supported;

Way of naming maps: Type -Year-Month-Day-Nation_Area.mbtiles

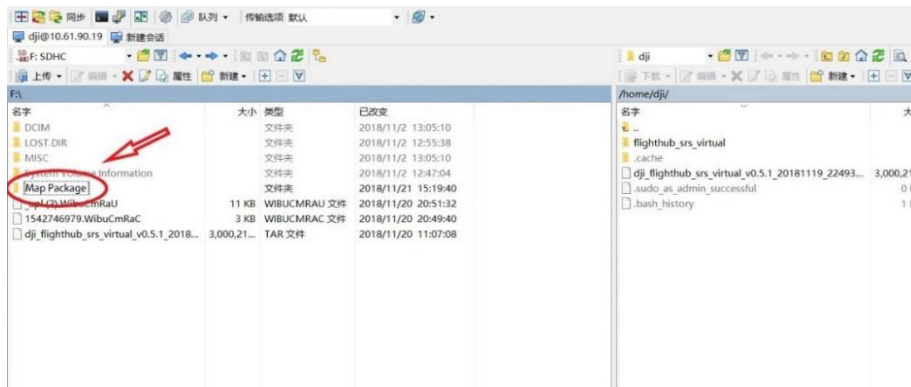
Example :

Street View Map : osm-2018-12-07-china_shenzhen.mbtiles

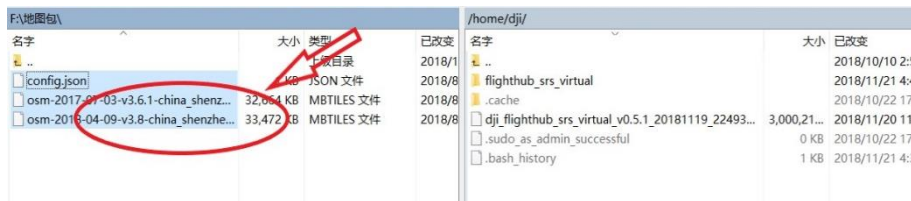
1. Open WinSCP and log in using the server account ;



2. Open the file of map;



3. Upload the package into the server;



4. Input ls and check the map package that has been uploaded into the server ;

```
root@ubuntu:/home/dji# ls
dji_fh_usoft_szga_v0.5.2_20181212_194908.tar  osm-2018-04-09-v3.8-china_shenzhen.mbtiles
flighthub_srs_virtual
root@ubuntu:/home/dji#
```

5. Input mv osm-2017-07-03.....shenzhen.mbtiles /opt/flighthub/advanced/maps-data/ to move the file to a certain path;

```
root@ubuntu:/home/dji/map# ls
config.json  osm-2017-07-03-v3.6.1-china_shenzhen.mbtiles
root@ubuntu:/home/dji/map# mv osm-2017-07-03-v3.6.1-china_shenzhen.mbtiles /opt/flighthub/advanced/maps-data/
root@ubuntu:/home/dji/map# mv config.json /opt/flighthub/advanced/maps-data/
root@ubuntu:/home/dji/map# ls
```

Input `cd /opt/flighthub/advanced/maps-data/` and check the path of saved map file;

```
root@ubuntu:/home/dji/map# mv config.json /opt/flighthub/advanced/maps-data/
root@ubuntu:/home/dji/map# ls
root@ubuntu:/home/dji/map# cd /opt/flighthub/advanced/maps-data/
root@ubuntu:/opt/flighthub/advanced/maps-data# ls
config.json  osm-2018-04-09-v3.8-china_shenzhen.mbtiles
osm-2017-07-03-v3.6.1-china_shenzhen.mbtiles
root@ubuntu:/opt/flighthub/advanced/maps-data# _
```

6. Log in FLIGHTHUB management center and restart **mapserver**, map import is COMPLETED!

Status	Server Name	Created Time	Operation
Up 28 minutes	fhdashboard	2018-11-29	Restart
Up 28 minutes	fhlive	2018-11-29	Restart
Up 28 minutes	fhrecord	2018-11-29	Restart
Up 28 minutes (healthy)	fhstorage	2018-11-29	Restart
Up 28 minutes (healthy)	fhmapserver	2018-11-29	Restart
Up 28 minutes	fhnginx	2018-11-29	Restart
Up 28 minutes (healthy)	fhserver	2018-11-29	Restart
Up 28 minutes (healthy)	fhonline	2018-11-29	Restart
Up 28 minutes	fhmysql	2018-11-29	Restart

Make Settings of the Server Time Zone

1. Input **date -R** to check the current time zone;

```
root@ubuntu:/home/dji# date -R
Thu, 10 Jan 2019 12:16:03 +0800
```

2. Input **tzselect** and choose the continent, country and the area of the time zone you want;

```
Please identify a location so that time zone rules can be set correctly.
Please select a continent, ocean, "coord", or "TZ".
 1) Africa
 2) Americas
 3) Antarctica
 4) Asia
 5) Atlantic Ocean
 6) Australia
 7) Europe
 8) Indian Ocean
 9) Pacific Ocean
10) coord - I want to use geographical coordinates.
11) TZ - I want to specify the time zone using the Posix TZ format.
#? 4
Please select a country whose clocks agree with yours.
 1) Afghanistan      18) Israel           35) Palestine
 2) Armenia           19) Japan            36) Philippines
 3) Azerbaijan        20) Jordan           37) Qatar
 4) Bahrain           21) Kazakhstan       38) Russia
 5) Bangladesh        22) Korea (North)    39) Saudi Arabia
 6) Bhutan            23) Korea (South)    40) Singapore
 7) Brunei            24) Kuwait           41) Sri Lanka
 8) Cambodia          25) Kyrgyzstan       42) Syria
 9) China             26) Laos             43) Taiwan
10) Cyprus            27) Lebanon          44) Tajikistan
11) East Timor        28) Macau            45) Thailand
12) Georgia           29) Malaysia         46) Turkmenistan
13) Hong Kong         30) Mongolia         47) United Arab Emirates
14) India             31) Myanmar (Burma)  48) Uzbekistan
15) Indonesia         32) Nepal            49) Vietnam
16) Iran              33) Oman             50) Yemen
17) Iraq              34) Pakistan
#? 9
```

```

Please select one of the following time zone regions.
1) Beijing Time
2) Xinjiang Time
#? 1

The following information has been given:

    China
    Beijing Time

Therefore TZ='Asia/Shanghai' will be used.
Local time is now:    Thu Jan 10 12:33:00 CST 2019.
Universal Time is now: Thu Jan 10 04:33:00 UTC 2019.
Is the above information OK?
1) Yes
2) No
#? yes
Please enter a number in range.
#? 1

You can make this change permanent for yourself by appending the line
    TZ='Asia/Shanghai'; export TZ
to the file '.profile' in your home directory; then log out and log in again.

Here is that TZ value again, this time on standard output so that you
can use the /usr/bin/tzselect command in shell scripts:
Asia/Shanghai
root@ubuntu:/home/dji# █

```

Time Settings of the Sever

1. Input **date** to check the current time

```

root@ubuntu:/home/dji# date
Thu Jan 10 14:39:44 CST 2019
root@ubuntu:/home/dji# █

```

2. Edit date using the command **date -s month/date/year** , for example **date -s 3/12/2019**

```

root@ubuntu:/home/dji# date -s 3/12/2019
Tue Mar 12 00:00:00 CST 2019
root@ubuntu:/home/dji# █

```

3. Make settings of the time. Please input **date -s hour : minutes : second**, **date -s 14:50:20** as an example

```

root@ubuntu:/home/dji# date -s 14:50:20
Tue Mar 12 14:50:20 CST 2019

```

4. Input **hwclock --systohc** to edit CMOS time (this step will bind the server time to the physical time of the hardware, which helps to improve the accuracy of the server time.

```

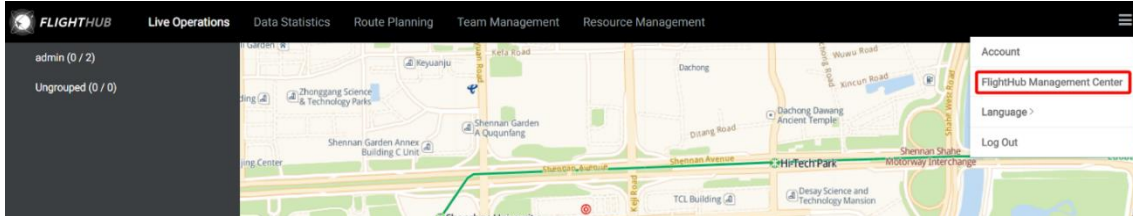
root@ubuntu:/home/dji# hwclock --systohc
root@ubuntu:/home/dji# █

```

Live Operation IP Address

Note :Please login Flighthub Management Center before resetting the IP address of the live operation.

1. Enter Flighthub Management Center



2. Choose **Edit** after clicking **Settings**; Input IP address you want



Authority Verification

The authority password is required when enabling functions in FLIGHTHUB Management Center. The default setting is **074fd28e !** . Please reset that password as soon as possible after the installation of FLIGHTHUB

1. Enter Flighthub Management Center, start to change the authority password by first clicking **Settings**
2. If you forget the password, please enter the location where FLIGHTHUB is installed to reset it. For example, **cd /opt/flighthub**

```
root@ubuntu:/home/dji# cd /opt/flighthub
root@ubuntu:/opt/flighthub# ls
advanced      base          flighthub.cfg  share         stop.sh  version
application  codemeter_tmp percent        start.sh     tool.sh
root@ubuntu:/opt/flighthub#
```

3. See the authority password in the followed screenshot, use editor “vi” to reset it.

```
root@ubuntu:/home/dji# cd /opt/flighthub
root@ubuntu:/opt/flighthub# ls
advanced      base          flighthub.cfg  share         stop.sh       version
application  codemeter    tmp            percent      start.sh     tool.sh
root@ubuntu:/opt/flighthub# vi flighthub.cfg
```

```
# configuration file for Flighthub

# install path, please make sure it is empty
export FLIGHT_HUB_INSTALL_PATH="/opt/flighthub"

# bind address, to provide rtmp address
export FLIGHT_HUB_ADDRESS=10.32.10.202

# video license
export FH_WOWZA_LICENSE=ET1E4-9QkEY-pR8bj-VHQ3W-TVamc-Fdekx-fChBd34JQpG

# NFZ_DSN
export NFZ_DSN="sqlite3:///fhserver_www/db/limitarea.db"

# mysql init password
export MYSQL_ROOT_PASS=4ba77d80

# configuration for s3 , provide storage API
export S3_ENDPOINT=fh_minio:9000
export S3_ACCESSKEY=NJ8I7O7J3GESFYA45HKA
export S3_SECRETKEY=A5LBiZvnDTnTY4AsHhyKHLNbFdPXX7XYspjyg6jp
export S3_BUCKET=fhserver

# srs video path
export FH_SRS_VIDEO_PATH=fhstream

# dashboard auth
export DASHBOARD_AUTH=074fd28e
```

*How to use “vi” editor

1. vi flighthub.cfg (Enter the interface to edit)
2. Press **A** for the edit mode. See —**INSERT**— on the left bottom side.
3. Use arrow keys to edit/change contents
4. Press **Esc** to quit the edit mode, then **Shift+:** and input **wq**, finally press **Enter** to complete the edit.