How to Flash IAD/DAG

v1.1

1. About Current Document

When the IAD/DAG face some critical issue like upgrade/downgrade using incorrect way or flash have bad block after long time using or lost some key files, resulted in the system start abnormal. We can’t access it through WEB/SSH to resume. So we need Flash to recover the device.

2. Applicable object

This manual is intended for:

- Installation and maintenance engineer
- Technical support engineer
- Related technical and marketing personnel

3. Manual Version and Update list

Version	Revision Record	Editor	Audit
V1.0		Sunny 2022-08-21	Sunny 2022-08-22
V1.1	Add the S805/RK/7620/H8	Sunny 2024-08-22	

4. Applicable Device

DAG1000/2000/2500/3000

IAD1000/2000/2500/3000

5. Flash Logic

When the device IAD/DAG booting, it will try to access are fix TFTP server 192.168.1.3.

If access OK, will download are control file and anlysis it: will cover the uboot or FileSystem or Image etc.

Different platform, the control file different. the RK platform using file "downloadcontrol".

Then, base the file try to download the files and cover target data in the device.

SSSSSSSSSSSSSSSS.

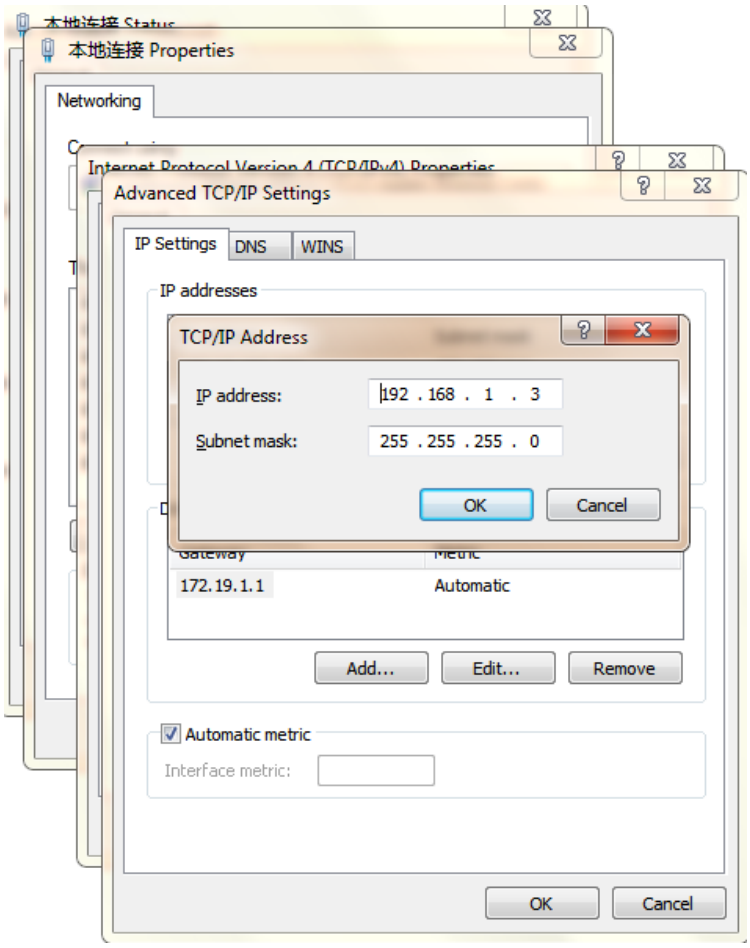
1. In the control file, we can set keep the configuration or not(DAG2500/3000 have).
2. that time the IAD/DAG will have are temp IP 192.168.1.x. so you can ingore the deivce current real IP.

6. Flash Environment

6.1. PC IP setting.

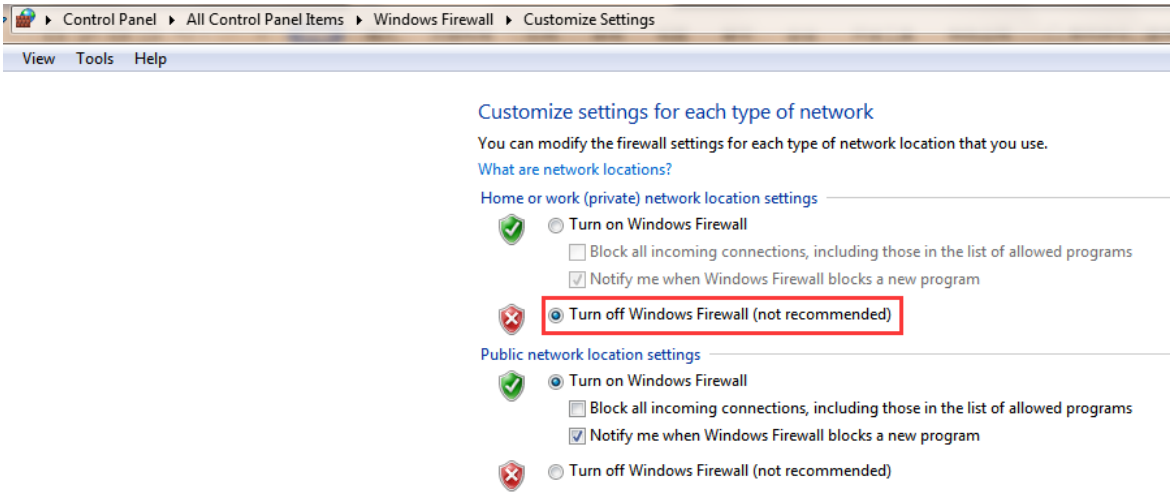
In this guidance, The PC will runing as a TFTP server, so need add a static IP 192.168.1.3 and 192.168.11.3 (this one used for WEB access at later).

If you have TFTP server already, need change the TFTP server IP.



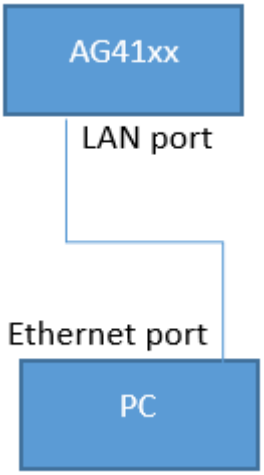
6.2. Turn off the Firewall.

The PC side should trunoff the firmwarell. If not, the IAD/DAG will download the file failed.



6.3. Connect the IAD/DAG to PC.

Connect the IAD/DAG to PC Ethernet port directly though net cable like follow.



DAG1000/2000 uisng port LAN0 to PC.

DAG2500 using port MGMT to PC.

DAG3000 using port GE1 to PC.

7. Files ready and describe.

Different mode use different hardware platform with different file. Before it, must ensure the file correct.

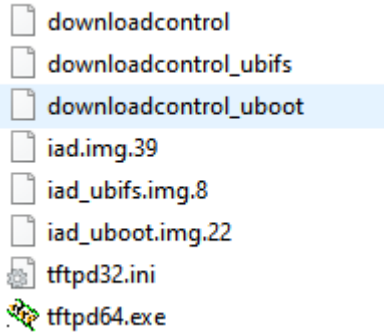
	Version	The control file name
RK Platform	xx.83.xx.xx	downloadcontrol
S805 Platform	xx.81.10.xx	control_file
7620 Platform	xx.19.xx.xx	control_file
H8 Platform	xx.81.11.xx	control_file

Current, we are using RK platform as example. In the folder DMS 22.26.23.21, it have mulitiple files that for different target.

"Downloadcontrol", this one is default, target flash image that use file iad_39. The image include whole DMS and firmware.

"Downloadcontrol_uboot" for flash Boot that use file iad_uboot.img.22. when the device is too old, we need flash the uboot first. If you want using this one, need rename from "Downloadcontrol_uboot" to "Downloadcontrol"

Tftpd64.ext is tftp application.



If you want erase all configuration in the DAG/IAD, please open the file "Downloadcontrol" with txt application, and modify the 'n' to 'y' in option "ERASECONF"

```
PRODUCT=iad
SELPOLICY=LOADIMAGE
PROSTART
POLICY=LOADIMAGE
START
IMAGEPATH=.
IMAGENAME=iad.img
IMAGEVERSION=39
ERASECONF=n
UBIFSNAME=iad_ubifs.img
UBIFSVERSION=8
UPGRADEUBI=n
ERASEFLASH=n
ERASENAND=n
END
```

Note:

Because of different hardware design, the IAD/DAG1000/2000 no this option. the configuration will erase default.

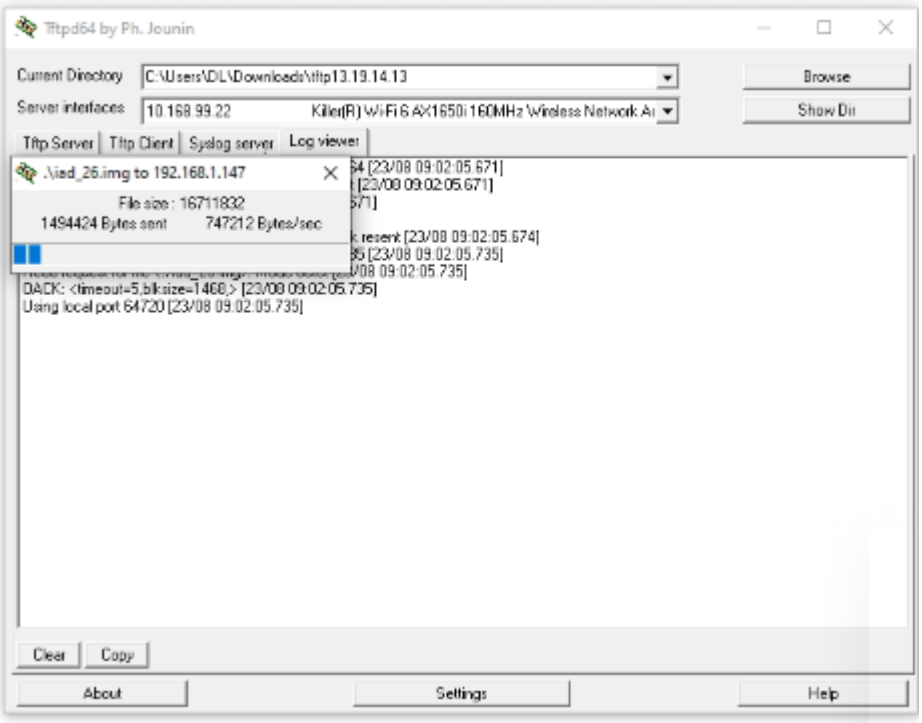
8. Flash the Image

8.1 Ensure the Image control file downloadcontrol(default is it)

8.2 Run the tftp application and choose interface 192.168.1.3

8.3 Power Off and power ON the IAD/DAG

8.4 At tftp application web, it will show IAD download the file “downloadcontrol”, then “iad.img.39”.



8.5 wait 8 mins after download completed.

When do that, the tftp will have following log:

Connection received from 192.168.1.147 on port 2365 [23/08 08:13:26.814]

Read request for file <downloadcontrol>. Mode octet [23/08 08:13:26.814]

OACK: <timeout=5,blksize=1468,> [23/08 08:13:26.814]

Using local port 62905 [23/08 08:13:26.814]

<downloadcontrol>: sent 1 blk, 128 bytes in 0 s. 0 blk resent [23/08 08:13:26.817]

Connection received from 192.168.1.147 on port 1257 [23/08 08:13:26.850]

Read request for file <./iad_26.img>. Mode octet [23/08 08:13:26.850]

OACK: <timeout=5,blksize=1468,> [23/08 08:13:26.850]

Using local port 62906 [23/08 08:13:26.850]

<.\iad_26.img>: sent 11385 blks, 16711832 bytes in 21 s. 1 blk resent [23/08 08:13:47.729]

8.6 Close the tftp application.

8.7 Name the file “downloadcontrol” back to “downloadcontrol_Image”

8.8 Power Off and power ON the IAD/DAG again.

9. login the IAD/DAG

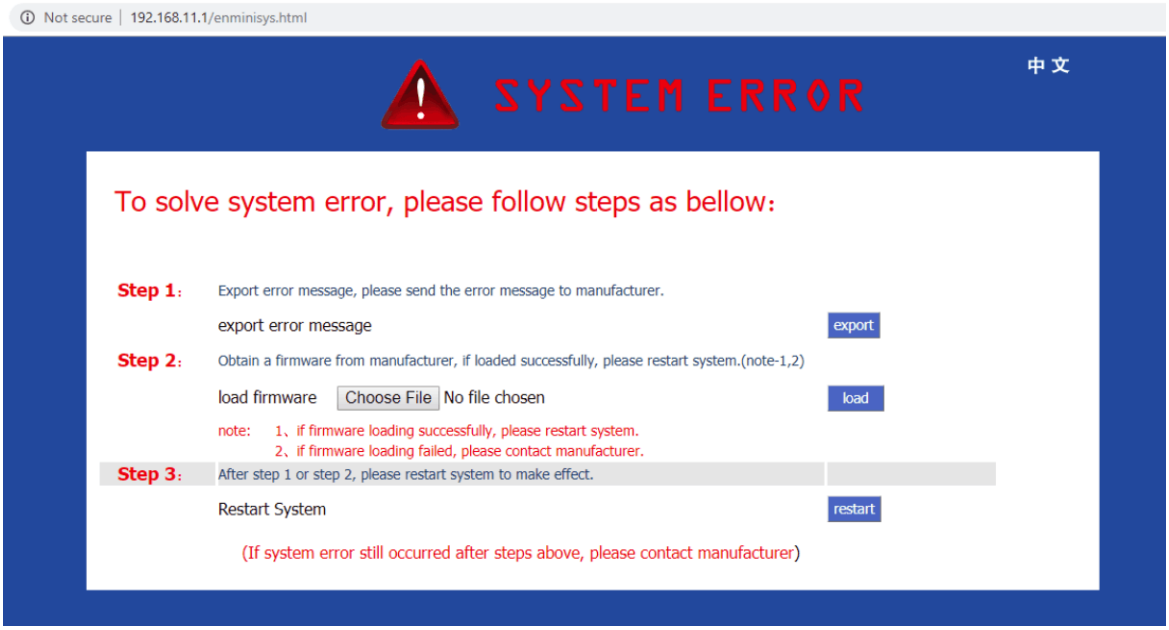
After the IAD/DAG up, you can try to login the device directly through web browser.

If the IAD/DAG had erase the configuration, you need using default IP 192.168.11.1

If the IAD/DAG does not erase the configuration, you need using the original IP.

10. Abnormal

If you Open the web browser and saw following Error.



You need unzip the normal file like 02831210.tar.gz, choose the file Upload the file "dagpkgark.ldf" and reboot.

After device up, you will see the normal WEB though 192.168.11.1