

NOTE: This guide is for accessing the raspberry pi using a MAC. The IP addresses, hostnames, and passwords can be used as a starting block to access the pi using a Windows computer.

SSH into pis

1. Open Terminal
2. Two ways to access (Use Table 1)
 - a. Ethernet Adapter
 - i. Type “ssh pi@IP Address of the pi”
 - b. Micro USB
 - i. Type “ssh pi@Hostname.local”
3. Enter password from table 1

	IP Address	Hostname	Password
B0	192.168.1.100	HABIP-B0	raspberrypi
B1	192.168.1.110	HABIP-B1	raspberrypi
B2	192.168.1.120	HABIP-B2	raspberrypi
B3	192.168.1.130	HABIP-B3	raspberrypi
DTV	192.168.1.15	HABIP-DTV	splintercell
Comms	Non-Static	raspberrypi	raspberrypi

Table 1 – Raspberry Pi Information

Working on DACQs pis (B0-B3)

1. End the data acquisition python scripts
 - a. Once in the pi type “cd habip”
 - i. This will get you into the habip folder
 - b. Type “ps -aux | grep python”
 - i. This will show all python scripts that are running
 - c. Type “sudo -9 kill <PIDs>”
 - i. The previous command will show the PID (Process ID #) of the python scripts.
 - ii. You can kill multiple scripts by adding a space between their PID#
 - d. Rather quickly type “python wdt_pet.py”
 - i. This will activate the script that “pets” the watchdog to keep the pi from resetting.
 1. The pi resets whenever the i2c data logging script is not running.
 - e. You must open another instance/shell for this pi to work on it since the wdt_pet.py script needs to stay running in order to keep from resetting the pi.

Deleting Data from the DACQs pi

1. Once in the pi go to habip folder by typing "cd habip"
2. Type "bash remove_all_data.sh"
 - a. This will remove all the logs, photos, videos, and data from the pi
3. The pi is now ready for flight/testing

Retrieving data from the pis

I used SCP but with some searching you can probably find other methods. Just use whatever works best for you.

Script Location on the pis

NOTE: Use /home/pi before any of these paths using SCP or any path designation in scripts

DACQs pis

Photo and Video Logging - /habip/photo_video_sw/

The script (log_photo_video.py) and the photos, videos, and logs folders for photo and video logging can be found in this folder.

UART Monitor - /habip/uart_monitor/

Data Logging - /habip/sensors_sw/

Both the i2c sensors and the wire1 data folders can be found here. The i2c and wire both have their own script.

DTV pi

All the scripts are in the location /ts_tools/

The script that controls the BladeRF is "BladeRF.py", the script for switching between the camera feeds is "Switching.py", and the script for testing one individual Pi for DTV is "PiServer.py".

Comms pi

Trying to figure this pi out was a nightmare. There was no clear organization of this pi, its folders, and its scripts. I would recommend rewriting and reorganizing this pi if this same system will be kept in the future.