**Remote login instructions for DSG GEM Raspberry Pi(s):**

hostname: dsg-gem-sbc-1

ip on 36 subnet: 129.57.36.190

hostname: dsg-dev-sbc

ip on 86 subnet: 129.57.86.143

This document covers **remote login** to the prototype Raspberry Pi for the DSG GEM Gas Flow Readback software. For this prototype, only one person can be logged in as user “pi” at a time. If you login while someone else is logged in, you will disconnect anyone currently logged in. To avoid unintentionally disconnecting a user while remote monitoring during the 2020 Jlab holiday shutdown, please notify others through email and give adequate time for other users to log off. After you are done monitoring, please log off by clicking the x of the Remote Desktop window.

Currently the DSG GEM Flow readout software on the 86 subnet, from offsite you will need to remote login to the hall gateway (hallgw) to monitor the flow.

**To remote login to hallgw you will need secure login device (like the mobilepass app) from a windows computer:**

1. If not already installed, install PuTTy, available at the link above, and run it.
2. Under "Category" on the left, expand "SSH" and scroll down and click "Tunnels"
	1. On the right under "Source port" type "3391"
	2. Under "Destination" type "<targetcomputername>.jlab.org:3389" replacing <targetcomputername> with the Target on-site Computer's Name.
	3. a new entry will appear in the "Forwarded Ports" box

 2.3.1. The target computer name is the hostname of the connected Raspberry Pi

 2.3.2. As of 12/18/20 dsg-dev-sbc was connected

1. Under "Category" Click "Session"
	1. On the right under "Host Name (or IP address)" type "hallgw.jlab.org" (without the quotes)
	2. On the right under "Saved Sessions" type "bb\_gem" (without the quotes)
	3. Click "Save" and "bb\_gem" should appear in the list below "Saved Sessions"
2. Now, in PuTTY, under "Saved Sessions" double-click "bb\_gem"
	1. Log in with your CUE username and password
	2. Minimize or otherwise forget about PuTTy for now, it is doing its job
	3. Once you close the RDP session, log out of the putty session

**To remote login from to the Raspberry Pi from hallgw on a windows computer:**

1. Go to start menu on windows computer and open Remote Desktop
2. Type in the hostname of this Raspberry Pi or the IP address
3. An xrdp login screen should open up:
	* 1. username: jlab/your\_username
		2. password:
	1. delete the username and replace it with "pi" (without the quotes)
	2. password is “dsg”, lower case, without the quotes
4. The desktop of the Raspberry Pi should open up
5. The software should already be running and the desktop should have the Prototype GEM Flow Display running
	1. If not go to step 6
6. To start GEM gas flow monitoring open up the file "Startup Instructions for GEM Prototype Gas Flow Program" located on the desktop of Raspberry Pi and complete steps 1 through