

DPS STEM Camp

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TOC

Test Cells

Arnold 3D Simulation: [Arnold Virtual Simulator](#)

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Arnold Virtual Simulator

Webpage is here: https://leewhite187.github.io/Arnold_FK_SimDist/

Distribution that's hosted on GH, is here: https://github.com/LeeWhite187/Arnold_FK_SimDist

Codebase is here: https://github.com/LeeWhite187/Arnold_FK_v1

Arnold Live Robot

Software is here: <https://github.com/LeeWhite187/Arnold.Control>

Includes the following components:

- Arduino firmware
- Teacher service (as GO binary)
- Teacher UI (served by GO binary)
- Student UI (served by GO binary through tunnel or local)
- Cloud Relay (set on Lighthouse VM with Caddy and the tunnel service)

Cloud Relay Startup

Locate startup-relay.sh script in the Arnold.Control/APIService/Tools folder.

Copy it to the cloud VM.

Run the following script command to to activate and setup the cloud relay:

```
sudo ROBOT_DOMAIN=arnold-user.ogsofttech.com \  
TUNNEL_DOMAIN=arnold-tunnel.ogsofttech.com \  
CERT_FILE=/home/glwhite/Desktop/arnold/STAR.ogsofttech.com.chained.crt \  
KEY_FILE=/home/glwhite/Desktop/arnold/STAR.ogsofttech.com.key \  
bash ./setup-relay.sh
```

Robotics References

<https://www.youtube.com/watch?v=u1v7TXViRi8>

<https://www.youtube.com/watch?v=Sqr-PdVYhY4>