Introducing JobServ
A new CI system built without all of the Jenkins baggage

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About Me

- Wrote a bunch of the LAVA code in the early days
- Worked on the test automation of Ubuntu Phones
- Working on automation for Zephyr and MCUboot

I’ve basically spent the better part of 7 years fighting automation.
Why Would You Do This?

- We had a few “simple” requirements:
  - http://tinyurl.com/jobserv-readme
Why Not ${X}$?

- **CI has changed dramatically**
  - It’s now a mission-critical piece of infrastructure
- **Jenkins Can’t**
  - Scale
  - Run in HA
  - Upgrades require stopping everything
  - Debugging is a nightmare
  - Plugin-Hell
- **GitLab CI - tied to gitlab**
  - Their runner is 750,000 lines. JobServ is 1,400 (the entire source is <8,000).
- **BuildBot - very interesting project, not quite there though**
- **Almost everything has a server initiating an SSH connection to a worker**
- **Nobody has a “simulator”**
Benefits For Users

- The Simulator is a killer feature
- At 8,000 lines of code it’s not complicated to poke around
  - Python makes this really easy compared to the Go alternatives
Benefits for Admins

● Scales out horizontally
● Almost no single point of failure
  ○ NFS used for streaming console logs during a run
    ■ There’s no reason you couldn’t use Ceph/Gluster instead
  ○ MySql can be if not using something like Percona/Galera
● Multiple daemons
  ○ Logs easier to look at (look at the git-poller to see why git polling isn’t working)
  ○ “Top” gives a better picture
● Live updates: you can kill any component and in-progress Runs won’t fail
● “Surge Workers”
Example Projects

- https://github.com/linaro-technologies/jobserv/tree/master/examples/projects
Live Demo

```
apt-get install -y git

# Clone the repository
git clone https://github.com/linaro-technologies/jobserve.git

# Create a new directory
mkdir /path/to/new/directory

# Change to the new directory
cd /path/to/new/directory

# Pull the latest changes from the repository
git pull

# View the files in the directory
ls
```
Thank You

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