

Docker-like interface for IOCs based on procServ and systemd

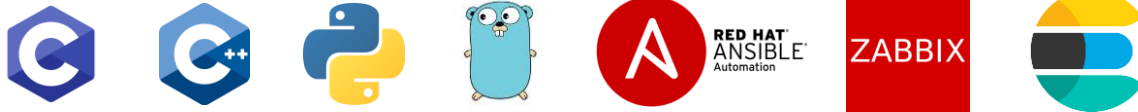
Marcin Lukaszewski, E9

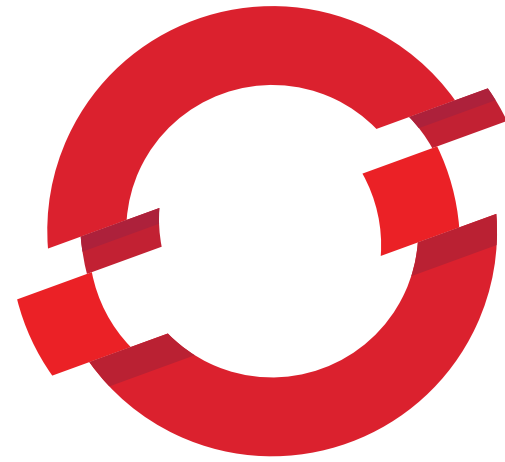
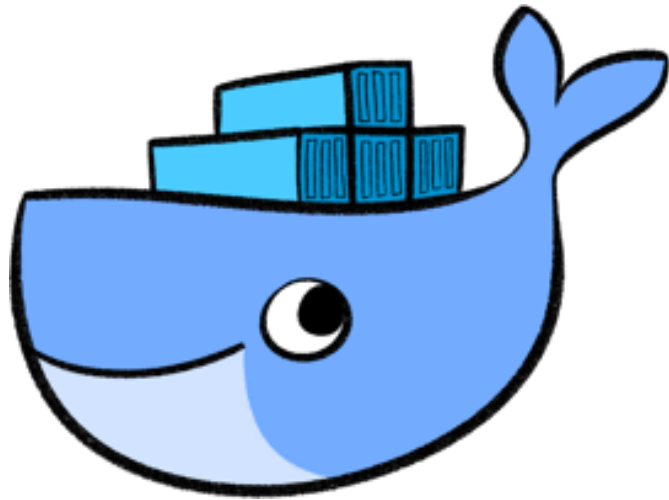
marcin.lukaszewski@e9controls.com



E9 Controls LTD

- Provides software services for the labs
- Focused on transparency & simplicity





OPENSIFT



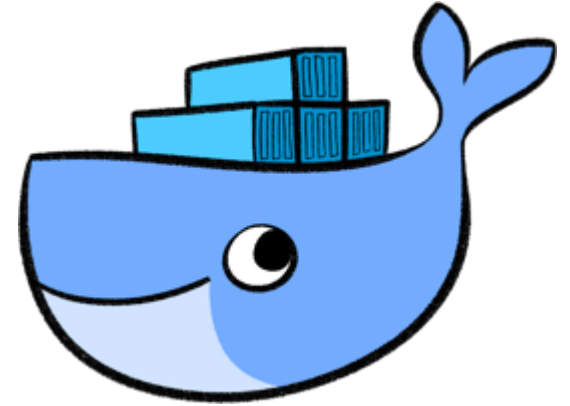
kubernetes



- **Application portability**
- **Faster software delivery cycle**
- **CI efficiency**
- **Maintainability**
- **Standardization and Productivity**

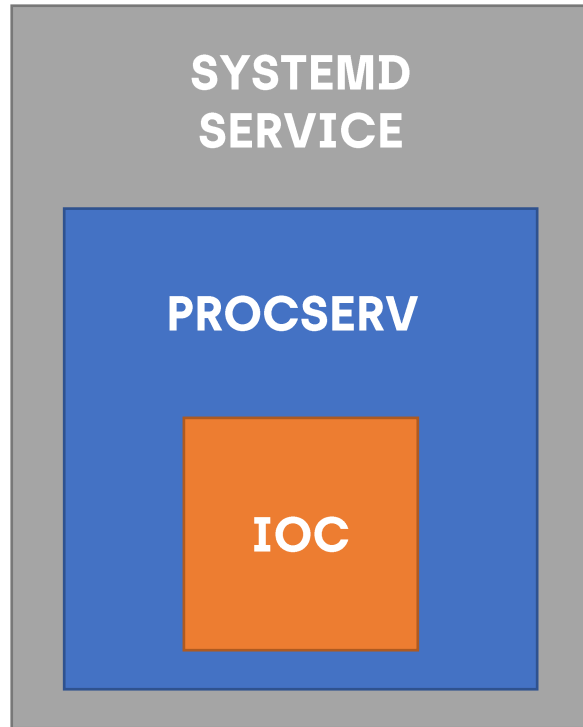


EPICS
RTU



- **Transition to new technology is risky**
- **Lab often lacks resources**
- **Needs to be supported for decades**

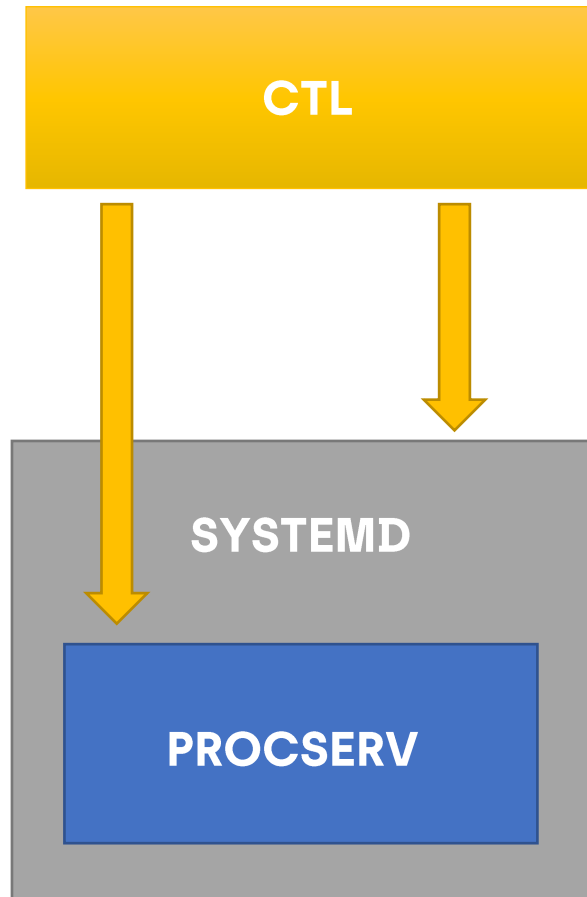




ioc-<pv-prefix>-<device>-<version>.service

unix: <socket-dir>/pv-prefix

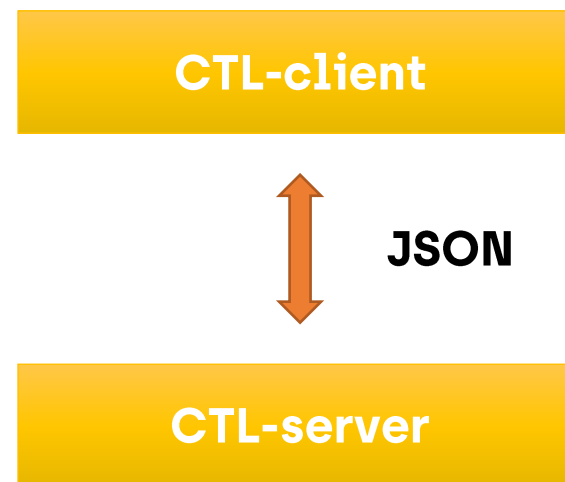
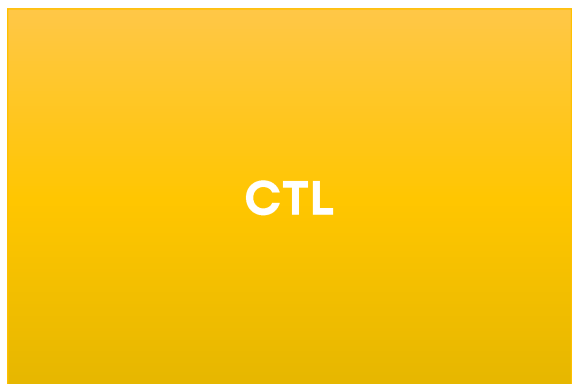
parameters from environment variables



- **list**
- **filter***
- **start/stop**
- **log**
- **attach**
- **edit**

- **output in JSON**






```

marcin@100hz-stag-ctrl-01: ~
marcin@100hz-stag-ctrl-01:~$ ctl get ioc
NAME                DEVICE                VERSION  STATUS  AGE          CREATED
FE-PA1-CHILLER      100hz-chiller        fadb21ae running 817h10m24s 17-Sep-2020 09:08:22
CO-LASER-RACK       laser-rack            e3f37064 dead    0s          17-Sep-2020 09:08:05
FE-PA1-IXBLUE       ixblue                8de1e4a8 dead    0s          13-Oct-2020 09:34:11
CO-LASER-RACK       laser-rack            47bd0faa dead    0s          13-Oct-2020 09:32:30
FE-PA1-MOXA         moxa                  a5403149 running 817h39m41s 17-Sep-2020 09:09:12
FE-PA1-DIODE-DRIVER meerstetter-eng-diode-driver 449308d2 dead    0s          06-Oct-2020 12:58:59
FE-PA1-DELAY-GEN    delay-generator-gft1020 24c3b01c dead    0s          06-Oct-2020 12:19:45
FE-PA1-DIODE-DRIVER meerstetter-eng-diode-driver bb0a4ad1 dead    0s          06-Oct-2020 12:10:40
CO-SCOPE            100hz-keysight       019f6903 running 356h17m27s 06-Oct-2020 12:02:51
CO-SCOPE            100hz-keysight       5ac18e5c dead    0s          17-Sep-2020 09:08:38
FE-PA1-CHILLER      100hz-chiller        ea97193c dead    0s          21-Sep-2020 07:13:40
FE-PA1-DIODE-DRIVER meerstetter-eng-diode-driver 5adc21ad running 817h39m20s 17-Sep-2020 09:08:55
CO-LASER-RACK       laser-rack            9699cd5f dead    0s          15-Oct-2020 16:24:05
FE-PA1-IXBLUE       ixblue                52e49ee5 dead    0s          06-Oct-2020 12:18:54
CO-LASER-RACK       laser-rack            88281109 running 121h32m23s 16-Oct-2020 07:20:51
marcin@100hz-stag-ctrl-01:~$ |

```

Q&A

- **Is it open source? -> No, but we're working on it**
- **Can I adapt it to my environment -> yes, probably**
- **Who is using it? HiLASE, CZ and CLF, UK (soon)**
- **Why Go? We like simple solutions**



THANK YOU