Longterm Embedded Linux: Testing & Field Update

**labgrid:**
Test Automation Framework

- Board Control: Python Library
- Tests: pytest
- “Strategies”
  Abstract States of Test Systems:

```python
def test_linux_i2c_bus(target, in_shell):
    # Test if the /sys/bus/i2c exists and has the two subdevices i2c-0 and i2c-1
    fs = target.get_driver('HierarchyDriver')
    if fs.have_bus('i2c')
        fs.bus.has_subdevice('i2c', 'i2c-0')
```

labgrid.readthedocs.io

**RAUC:**
Robust Auto Upgrade Controller

- Safe & Secure Updating
- Client Runs on Embedded Linux Device
- Atomic Update
- RAUC Bundles Signed (X.509)

rauc.io
rauc.readthedocs.io
github.com/rauc
labgrid.readthedocs.io