LAVA users forum

LAVA team
Major changes since BKK19

- 5 releases
- 33 new device-types (not only u-boot devices)
- Device-type aliases
  - Now working properly
- Compressing job logs
  - `lava-server manage jobs compress --older-than 30d`
  - Uncompressed on-the-fly when accessed
- Default table size
  - At instance and user level
  - Default to 50 (every tables)
- Sentry error reporting
- Authentication refactoring
New LAVA methods

deploy:
  • nbd for grub

boot:
  • barebox
  • dfu
  • kexec
  • minimal
    ○ reset can be skipped
  • OpenOCD (cc3220SF)

test:
  • environment (see next slide)
Test environment (2019.06)

Export environment, static_info and storage_info in the test shell

```bash
{% set environment = {"RELAY_ADDRESS": "10.66.16.103", "REMOTE_SERIAL_PORT": "/dev/ttyUSB2"} %}
{% set static_info = [{"board_id": "S_N081730000"}, {"board_id": "S_N081730001"}] %}
{% set storage_info = [{"SATA": "/dev/disk/by-id/ata-ST500DM002-1BD142_W3T79GCW"}] %}

export RELAY_ADDRESS='10.66.16.103'
export REMOTE_SERIAL_PORT='/dev/ttyUSB2'
export LAVA_STATIC_INFO_0_board_id='S_N081730000'
export LAVA_STATIC_INFO_1_board_id='S_N081730001'
export LAVA_STORAGE_INFO_0_SATA='/dev/disk/by-id/ata-ST500DM002-1BD142_W3T79GCW'
```
Authentication refactoring (2019.09)

Per object authorization:
- Applies to following entities: Device type, Device, Test job
- Permissions: view, submit, admin
- Non-restricted vs Restricted objects
- Permission inheritance
- Anonymous and authenticated users
- Test job specifics: viewing_groups and is_public
- Data migration:
  - Safe downgrades are not possible (not keeping auth data)
  - Is_public field changed behavior
Authentication refactoring (2019.09)

Decision trees:

1. DeviceType.VIEW
   - user.has_perm(VIEW)
     - yes → True
     - no
       - device_type is permission restricted
         - yes → False
         - no → True

2. Device.VIEW
   - user.has_perm(VIEW)
     - yes → True
     - no
       - device is permission restricted
         - yes → False
         - no
           - user can view device_type
             - yes → True
             - no → False
Authentication refactoring (2019.09)

Decision trees (cont.):
Schema and context (2019.04)

The job definition context is now restricted

```python
context:
    arch: aarch64
```

The list of variables:

https://git.lavasoftware.org/lava/lava/blob/master/lava_common/schemas/__init__.py#L43

Can be extended by the admins:

"EXTRACONTEXTARIABLES": ["custom_variable1", "variable_2"]
Docker images

lava-server and lava-dispatcher images

- Based on `debian:stretch-slim`
- `lavaserver` `uid` and `gid` fixed to 200
  - Will not change from one version to another
- Check permissions at start
  - Should belong to `lavaserver`
    - `/etc/lava-server/dispatcher-config/`
    - `/var/lib/lava-server/default/media/`
lavafed

LAVA federated testing

- Testing on 12 device-types
- Contributor: STMicroelectronics
  - Waiting for more!
- Already found some critical bugs
  - Crashes in lava-server
  - Issue with lava-slave network access
  - ...

...
Questions ?
Ask us anything
Thank you

Join Linaro to accelerate deployment of your Arm-based solutions through collaboration

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