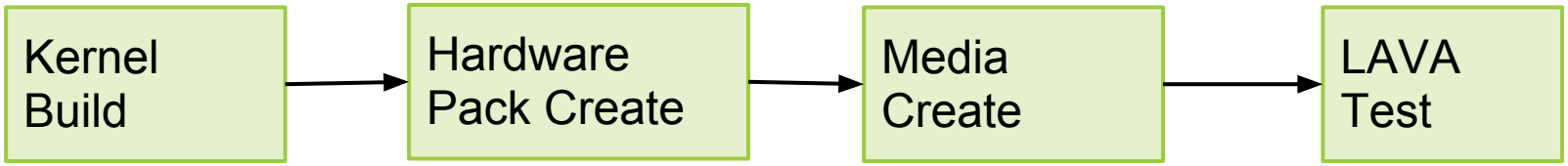
CI Dashboard

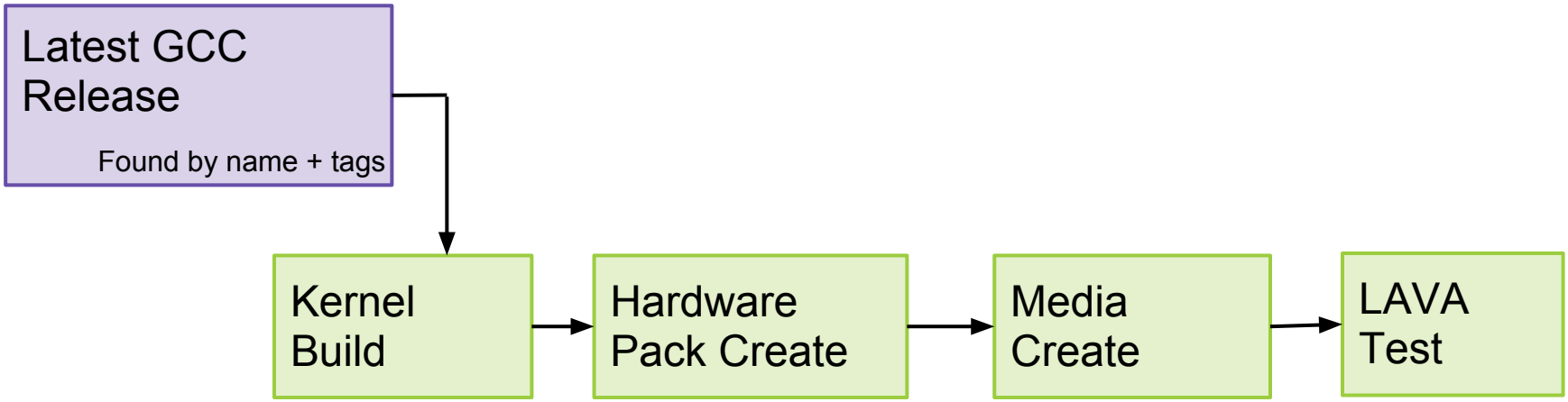
Concepts and UI

A Simple Job



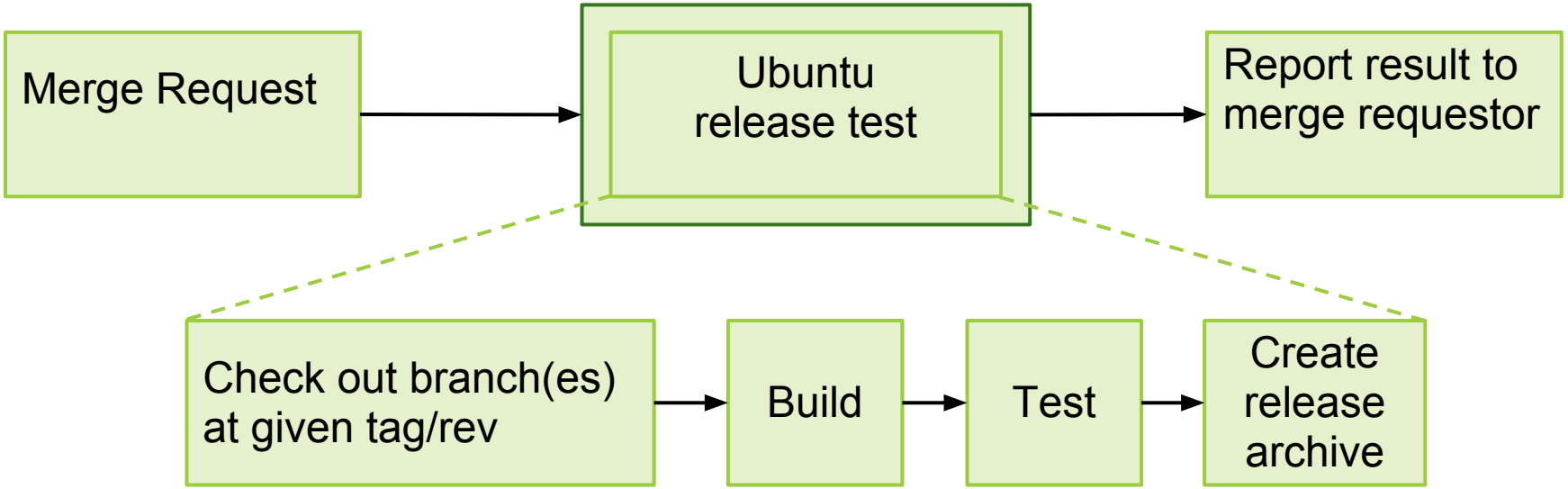
- Job
  - a sequence of steps
- Build
  - Instance of a job
- Step
  - a single scripted action that is triggered on the successful completion of the previous step.

Internal Artifact sharing



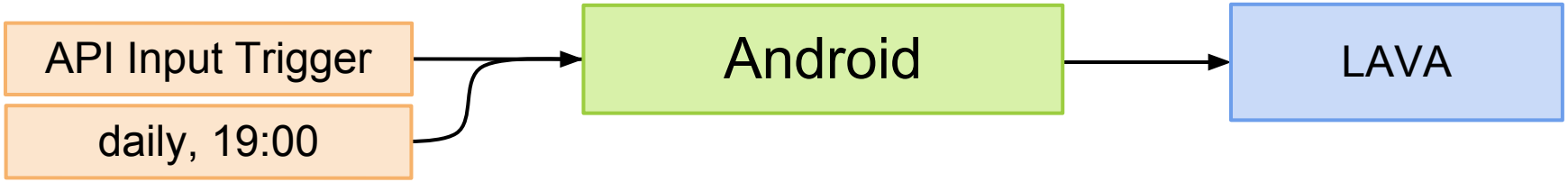
- A step can use the output of a previous step and or job as an input
  - Public and license protected artifacts are findable
    - Licenses are sticky
  - Private artifacts stay private to their owners jobs
- Other jobs can be referenced by a combination of name, build number and tags.

Job & Step Chaining



- You can call other jobs as a step in the current job
  - Allows you to do CI properly
    - Test passed = ready to release
    - Use the same job to create the release
      - If same inputs go into same job, should be able to use cached output.

Job Triggers



- Jobs can be triggered by
  - Time
  - VCS change
  - Another job completing
  - External system using API, e.g. a Gerrit review request.

Derive Job from existing...

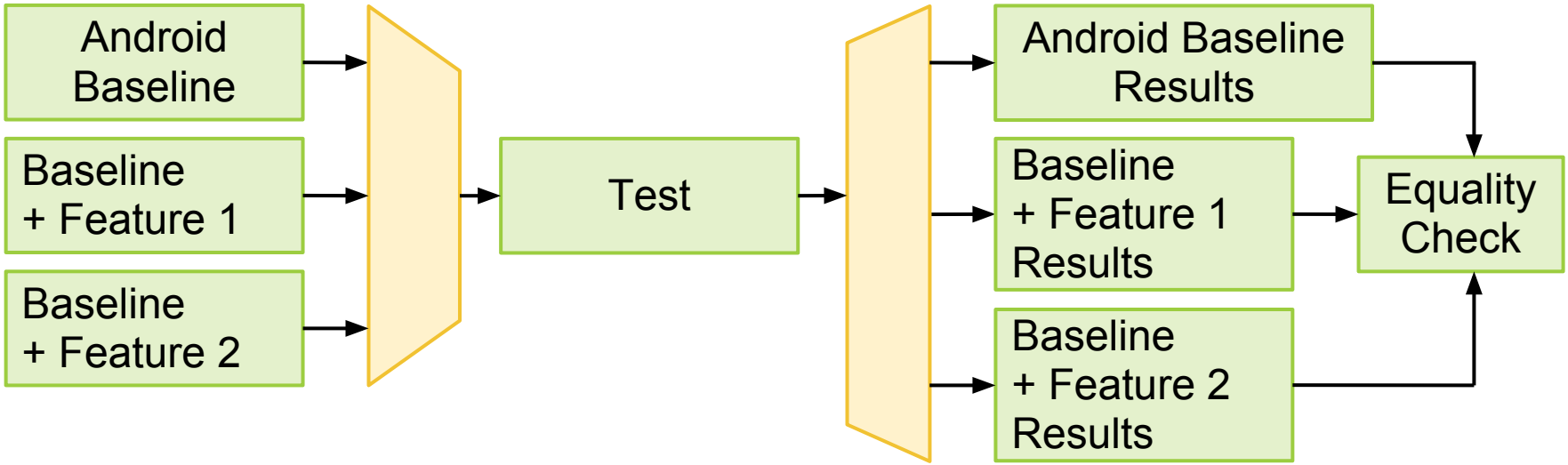
- Copy
- Inherit
  - Copy, but changes made to parent job are reflected in child configuration
  - User informed when change in parent conflicts with change in child config
  - Child picks up fixes and new steps from parent
  - Useful for long running feature branches
- Create Template
  - Just keep the bits of config you want
  - Templates available for all specialised job types

Tags

Ubuntu Linux Linaro | GCC 4.7 | Panda | Snowball

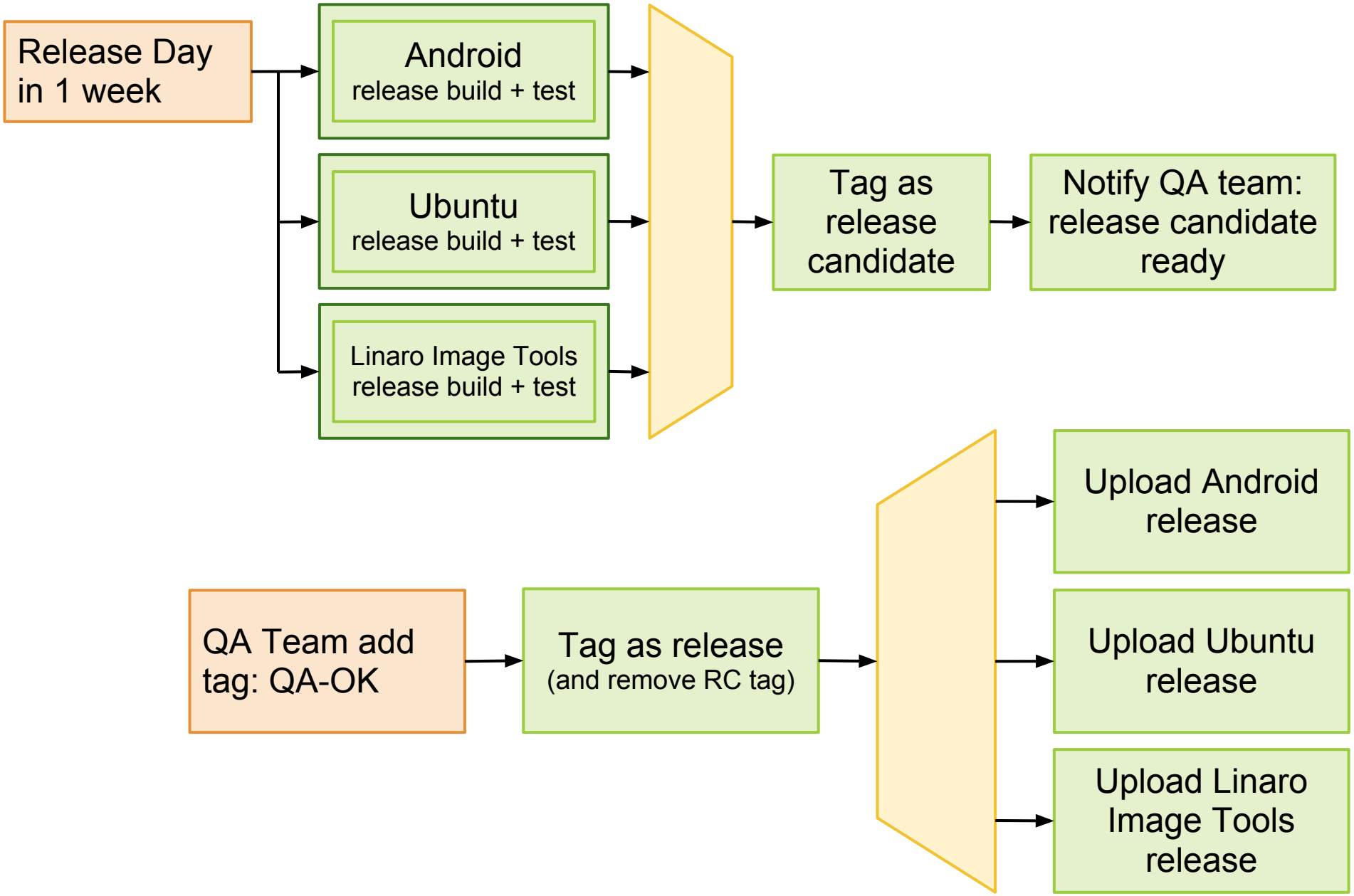
- Keep job name simple and descriptive
- Use tags to provide extra information

Configuration: Mux/DeMux



- Muxes allow you have a common stage in a job with parallel steps.

Release Time...



Putting it together: Front Page

Linaro

Welcome Guest! Login

Release | Toolchain | Power Management | IBM
Ubuntu | Graphics | ARM | ST Ericsson | Freescale
Android | Infrastructure | Samsung | Texas Instruments

New Build

Name	Build	Status
GCC Trunk Native GCC Trunk	1	Toolchain, Toolchain Test, Android Build, Kernel Build, [R] LAVA Test
Ubuntu Linux Linaro, GCC 4.7, Panda, Snowball	2	RootFS, HW Pack (Panda), HW Pack (Snowball), Media Create Panda, [F] Media Create Snowball
Android ICS, IMX.6, GCC Trunk, Freescale	93	[F] Android Build, [R] LAVA Test
Android JB, GCC 4.7, Panda, TI LT	150	Ubuntu Build, LAVA Test
GCC Trunk Cross, GCC Trunk	7	Toolchain, Toolchain Test, Android Build, Kernel Build, Join, [R] LAVA Test

Search:

Panda | Snowball | Pass | Fail | Not Built
Running | ALIP | Developer | gcc-6 | gcc-7
Performance | IKS | big.LITTLE

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New Build

Name					Build	Status	
Android	JB	Snowball	GCC 4.7	Igloo	1	Android Build	LAVA Test
Android	JB	GCC 4.7	Panda	TI LT	2	Android Build	LAVA Test
Android	JB	GCC 4.7	V.Express	ARM LT	93	Android Build	LAVA Test
Android	AOSP	Galaxy Nexus	JB	GCC 4.7	150	Android Build	LAVA Test
Android	Samsung LT	Origen	JB	GCC 4.7	7	Android Build	LAVA Test

Search:

Panda | Snowball | Pass | Fail | Not Built

Running | ALIP | Developer | gcc-6 | gcc-7

Performance | IKS | big.LITTLE

Putting it together: Job Result Page

Linaro®

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Job Name: Android Baseline Test [#92]

Job description...

Input Trigger
daily, 19:00

Android
Baseline OK

LAVA
Running

Build Now

Android | Panda | Jelly Bean | GCC 4.7

Tag this job

Reuse config...

Build #	Date	Result
92	2012-10-24	✓
91	2012-10-23	✓
90	2012-10-22	✗
89	2012-10-21	✓
88	2012-10-20	✓
87	2012-10-19	✓

Search:

Release | 12.10 | QA-OK

Tag this build

Downloads | HowTo | ReadMe

linaro_android_build_cmds.sh
kernel_config
linaro_kernel_build_cmds.sh
pinned-manifest.xml
source-manifest.xml
target/product/pandaboard/pandaboard.img.bz2

Results

Build
Status: SUCCESS
Started: 2012-10-23 07:16:05
Finished: 2012-10-23 09:47:47

Lava Test : Running
<mini LAVA dasboard>

Configure Job

Input Trigger
daily, 19:00

Android
Baseline OK

LAVA
Running

Configuration | Console output | Downloads/ Internal Artifacts

```
Android build configuration...
MANIFEST_REPO=git://android.git.linaro.org/platform/manifest.git
MANIFEST_BRANCH=linaro_android_4.1.2
MANIFEST_FILENAME=tracking-panda.xml

[imported from git://android.git.linaro.org/zack_rocks.git]
BUILD_CONFIGURATION_FILENAME=linaro-build-config/tracking-panda.xml
TARGET_PRODUCT=pandaboard
TARGET_SIMULATOR=false
```

Input Trigger ☒ Time Trigger: daily, 19:00 Master Step ☒