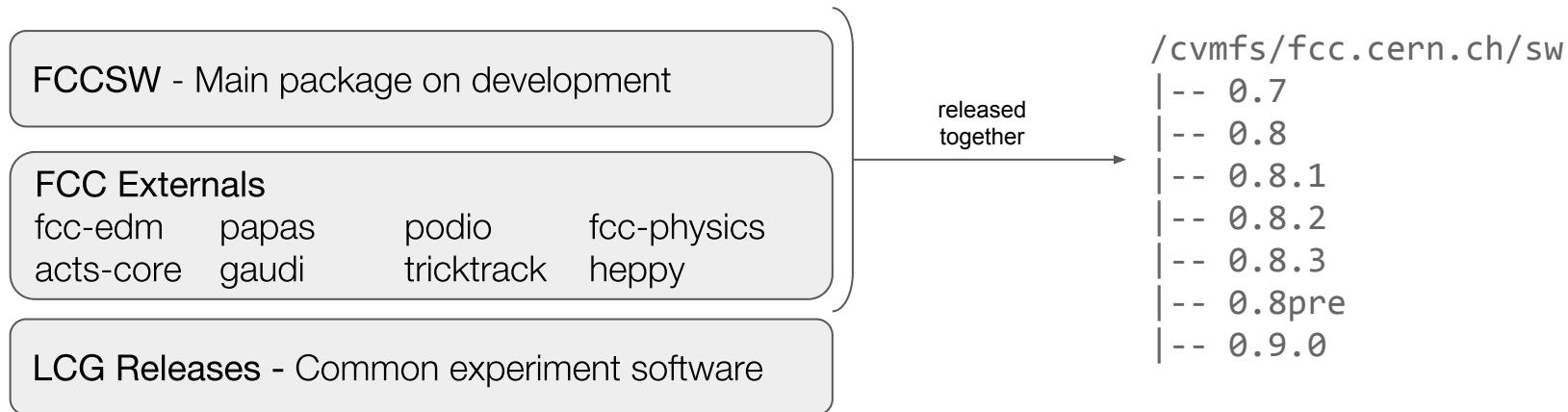


FCC build system reorganisation Proposal

Javier Cervantes Villanueva
EP-SFT

Key concepts (**current** approach)

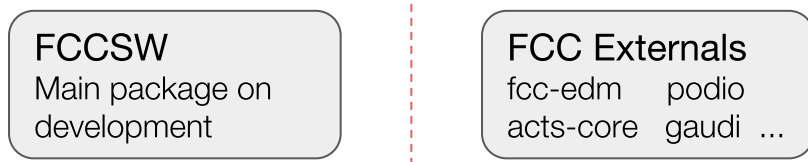


- One [single installation](#) in CVMFS to identify:
 - Stack of externals + FCCSW tags
- Disadvantages
 - Changes on the externals cannot be released to cvmfs without including (a new tagged) FCCSW
 - Lack of agile development
 - Our workflow does not fit with this software structure

Current problem with #303

Proposal

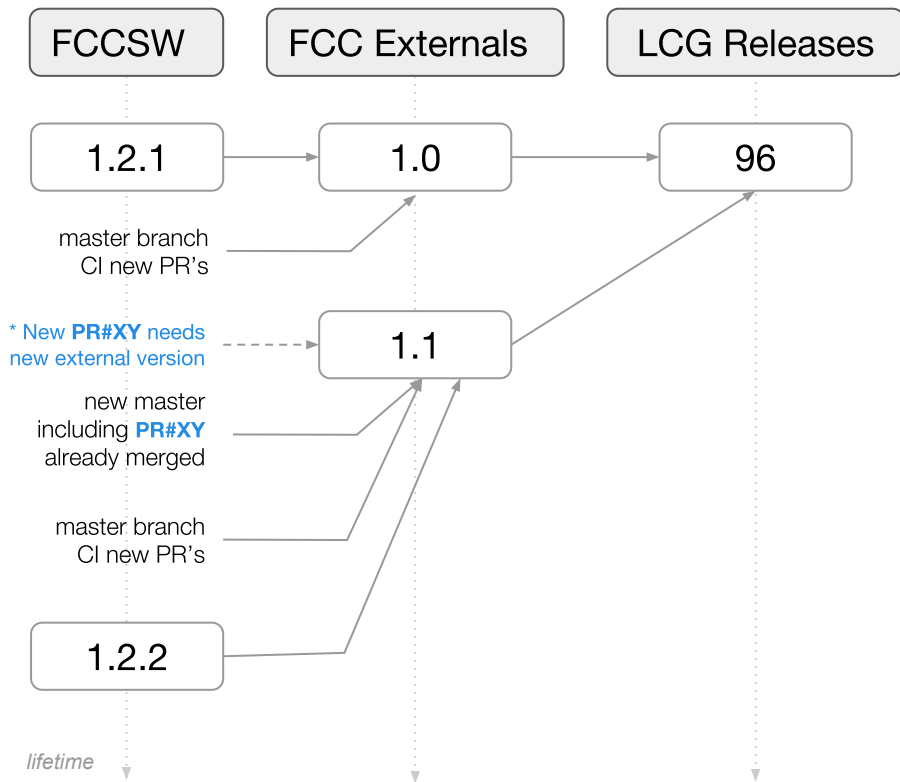
Independent releases of both artifacts



Goals

- **Easy and quick releases** as soon as FCCSW is tagged
- **Foresee problems** (due to new versions, new packages, incompatibilities...)
- **Flexibility** for developers
- Facility to test and release **different combinations of:**
 - FCCSW + FCC External software versions + LCG Releases

Workflow

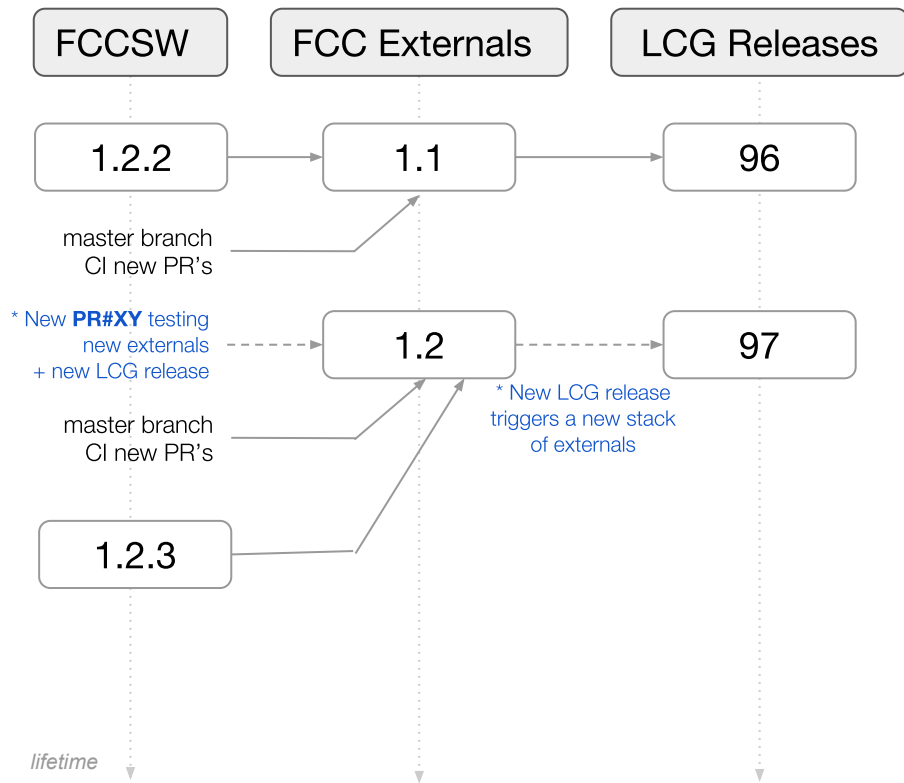


External updates

Guidelines

- FCCSW is always built against latest FCC Externals
- Make sure that we avoid hacky things in the configuration
 - **Priority:** Fully reliance on what the LCG Releases provide - otherwise issues, PR's

Workflow



New LCG Releases

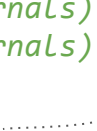
Guidelines

- Same as for External updates

Reorganisation of cvmfs

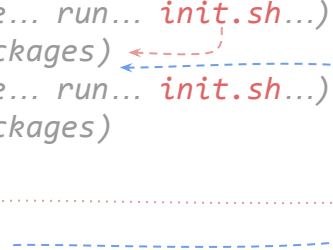
Current

```
/cvmfs/fcc.cern.ch/sw/  
|-- nightlies/$weekday/$platform/(fccsw + externals)  
|-- releases /$version/$platform/(fccsw + externals)  
`-- views  
    |-- nightlies/$weekday/$platform/setup.sh  
    `-- releases /$version/$platform/setup.sh
```



New structure

```
/cvmfs/fcc.cern.ch/sw/  
|-- nightlies/fccsw /$weekday/$platform/(bin... include... run... init.sh...)  
    /externals/$weekday/$platform/(externals packages)  
|-- releases /fccsw /$version/$platform/(bin... include... run... init.sh...)  
    /externals/$version/$platform/(externals packages)  
`-- views  
    |-- nightlies/fccsw /$weekday/$platform/init.sh  
        /externals/$weekday/$platform/init.sh  
    `-- releases /fccsw /$version/$platform/init.sh  
        /externals/$version/$platform/init.sh
```



Each version of FCCSW is bound to a specific version of externals: *init.sh* sources it

Versioning convention

FCCSW

- What is the current convention?

FCC Externals

- Which convention should we follow?
- Proposal: Based on [Semantic Versioning](#)

X . Y . Z

MAJOR
LCG Release in use

MINOR
New packages or versions

PATCH
Patches and bugs

X is Major version
Y is Minor version
Z is Patch version