



EESSI pilot 2020.10

Oct 27th 2020

Outline

- Issues to be fixed
- New features
- Software build and installation procedure
- Steps



Issues to be fixed



- Infiniband support for MPI
 - Additional package in set 2020.10 should fix this (rdma-core)
 - Create test script
- OpenFOAM MPI issues
 - Should be fixed by using modified easyblock (PR #2196)
- GCC issue
 - Should pick up the right binutils/ld when compiling stuff manually
<https://github.com/EESSI/software-layer/issues/26>
 - Check CC's EB hooks file
 - Create test script
- Fonts issue
 - <https://github.com/EESSI/software-layer/issues/29>

(Proposals for) new features



- More packages (see 2020.10 set of gentoo-overlay repo)
- Extra Stratum 1 (Norway)
- Docker image as base for Prefix container
<https://github.com/EESSI/compatibility-layer/pull/50>
- Use a newer snapshot? (currently: 20200909) -> make issue
- New version of bootstrap script? -> make issue
- Install more software? TensorFlow -> low prio, but would be nice
- We really need more test scripts... -> add ReFrame to software layer, Caspar will try to set up an example of a (basic) test
- Verify correctness of compatibility layer:
<https://github.com/EESSI/compatibility-layer/issues/42>
- Lmod cache

Software build and installation procedure

- Software layer build procedure
 - Script modified for 2020.10:
<https://github.com/EESSI/software-layer/pull/28>
 - Add ReFrame (+TensorFlow?)
 - Update EasyBuild to 4.3.1
- Installation procedure: manual, using tarballs



Steps

- Copy latest snapshot to Stratum 0, update README, and test it: Bob/Peter
- Fix fonts: Bob
- Build compatibility layers on Arm + x86_64
 - Arm: Terje on AWS
 - x86_64: Bob
- ~~[Verify correctness]~~ -> open issue, make list of checks
- Ingest tarballs: Bob (+ write down how to do this on a wiki page)
- Build software with build script
 - Which architectures?
 - ARM: generic + Graviton2
 - X86_64: generic, haswell, skylake_avx512, AMD Zen2
 - Who? Terje, Kenneth, Bob, Axel
- Deploy init+test scripts -> Bob

