Requesting the installation of a software

SCITAS can install and configure applications on the clusters but in order to do so we need the information detailed below.

We will also install updates using the procedure described but to keep things tidy we will only install one version. An extra versions could be installed in the "future" version of the packages

1. **What's the code and where do we get it?**
   Please provide the location of the source code and the version required. We prefer links to the official project web-sites and/or GIT repositories. If the software is subject to a license please contact us before hand to discuss this.

2. **How do we compile and tune it?**
   This is where things get a little bit trickier. We support two compiler/MPI combination:
   - GCC and MVAPICH2
   - Intel Compiler and IntelMPI
   
   The latter is generally recommended for performance reasons but the GCC and MVAPICH2 combination allows for a completely open source solution if required.
   We will install using the package manager [http://software.llnl.gov/spack/](http://software.llnl.gov/spack/)
   - If the software is in the list of available recipes we can install it
   - If it is missing we will write the recipe that can take a bit of time.
   - In both cases we need to know if some particular options need to be activated

3. **How do we run and test it?**
   We need:
   - The command used to run the code
   - Any environmental variables that need to be set for the code to function correctly
   - An input file and the associated parameters (number of nodes and processes)
   - The expected output
   We use this information to validate the build and installation.

4. **Who's the expert at the EPFL?**
   In case of questions from other users of the code we need somebody who understands it sufficiently to be able to help them.

**Related articles**
- Compiling codes on different systems
- Using the clusters the reproducible way
- Using software on the SCITAS clusters
- Requesting the installation of a software