**SafeSeqS Software Management Guide**

**Source Code**:

SafeSeqS source code is stored in the github repository: <https://github.com/InSilicoSolutions/SafeSeqS>.

**Pip Application Distribution**:

The SafeSeqS project is distributed to python users/developers via pip. The SafeSeqS pip project is here: <https://pypi.python.org/pypi/safeseqs> . Users install SafeSeqS with the ‘pip install safeseqs’ command.

To create / update the pip package, clone the git repository and go to the project root directory in the command prompt.

To build the pip package:

**python setup.py sdist --formats=gztar**

This will create a pip package (tar.gz) file in the /dist folder with the version number from setup.py.

To test it, copy it to a different computer, unpack it with 7-Zip and from the root directory type ‘pip install safeseqs’. Verify the directory structure and files were installed.

To publish the pip package you will need the twine package (pip install twine):

**twine upload dist\\***

Notes: You cannot republish with the same version number. Edit setup.py to increment the version number before publishing the update. You will need to move or delete old versions from the \dist directory.

**Setup Instructions**

The file in the root github directory “setup.py” controls the pip packaging and has all of the parameters that control metadata shown on the pip project page (e.g. author, contact, etc). The file README.rst is restructured text file that is used by both pip and github as the main project page. There is an editor here that can be used to help edit the restructured test file: <http://rst.ninjs.org/>

Setup.py should be updated if safeseqs becomes dependent on additional external packages so that pip can install everything when safeseqs is installed. Only pure python packages should be used by safeseqs.

**Project Documentation**

The SafeSeqS package is documented via the gitlab wiki page: <https://github.com/InSilicoSolutions/SafeSeqS/wiki>

This wiki provides installation instructions, quick start guide, and details about interface, input and output. The documentation can be edited by any member of the SafeSeqS gitlab project with write authority on the repository.

Editing the wiki follows a simplified wiki markup and gitlab has a built in editor to assist with creating and updating wiki pages. There is basic built-in help in their wiki editor and details of their markdown syntax are available here: <https://docs.gitlab.com/ee/user/markdown.html>