Tool Repository Structure

The directory structure for tool repositories should start from the following:

```
toolname/
    bin/
        .keep
    data/
        .keep
    doc/
        .keep
    examples/
        .keep
    middleware/
        invoke
    rappture/
        .keep
    simtool/
        TOOLNAME.ipynb
    src/
        Makefile
```

The .keep files are present to force git to track initially empty directories. Should the directories become populated the .keep file can be removed. The simtool directory should be present only if the tool was registered with the publication option = Sim2L. The rappture directory is only required for tools actually using Rappture. The src directory should contain any source code that needs to be compiled and a Makefile to direct building of executables. The Makefile must have the install, clean, and distclean targets. The bin directory should contain any executables created by issuing the make install command in the src directory. The bin directory is automatically added to the PATH environment variable used to search for executable files. It is common practice to put Jupyter notebook files in either the top level or bin directories. It is also permissible to create additional directories as deemed necessary.

Invoke script template

All tools require that the executable file middleware/invoke be present. The specifics of the invoke file depend on the tool publication classification.   Templates for the three categories of tools are shown here. For tools where the repository is maintained on the HUB known values such as tool name are substituted in the template to provide an initial invoke file.

Sim2L

```sh
#!/bin/sh

#
# Sim2L
#
/usr/bin/invoke_app "$@" -t @TOOLNAME@ \
                        -C "start_jupyter -T @tool -t @TOOLNAME@Examp
le.ipynb" \
                        -u anaconda-X \
                        -r none \
                        -w headless
```

Jupyter Notebook

```sh
#!/bin/sh

#
# jupyter tool
#
/usr/bin/invoke_app "$@" -t @TOOLNAME@ \
                        -C "start_jupyter -T @tool -t @TOOLNAME@.ipyn
b" \
                        -u anaconda-X \
                        -r none \
                        -w headless
```

Rappture/Linux GUI

```sh
#!/bin/sh

#
# standard tool
#
/usr/bin/invoke_app "$@" -t @TOOLNAME@ \
                        -C rappture
```