Galaxy Flavours – your highly portable, configurable local Galaxy distributions with preinstalled workflows – for Linux, MacOSX and Windows

Powered by **docker**

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Why a local Galaxy installation?

- If you have confidential / proprietary / patient data
- Too BIG DATA files to transfer
- You want to install tools / new data sources unavailable on public Galaxies

Why Docker containers are great to install Galaxy locally?

- Galaxy installations become completely portable, easy and quickly installable
- Containers are self-contained, don't depend on certain versions of programs or libraries on the host
- Docker is a widely used standard for 'shipping' software
- Inheritance hierarchy can be used to extend an existing version

Why installers for Windows, MacOSX and Linux?

- Many Galaxy *users* are working on Windows, less work on MacOS and even less on Linux.
- Suitable workstations to run local jobs on Galaxy are often available in research institutions but come with Windows pre-installed.
- An installer helps you to get Galaxy installed easily

Results:
We have developed a working prototype installer for Galaxy-in-Docker for Windows, and working towards MacOS and Linux installers. We are also evaluating Kitematic if it would be easier to build an installer on top of it.

Why use one of our "Galaxy Flavours" with preinstalled workflows?

> 3100 tools in the public Galaxy toolshed
→ finding the right tool is difficult
→ Installing many tools for a dedicated task takes long

Results:
We provide Galaxy installations with a selection of useful tools and workflows pre-installed, for popular applications of Galaxy:

galaxy-stable (the base installation)	galaxyp
galaxy-imaging	galaxy-deseq2
galaxy-chemicaltoolbox	galaxy-mummer
galaxy-exom-seq	galaxy-metagenomics
galaxy-blast	galaxy-ipython-notebook-plus
galaxy-deeptools	galaxy-rna-workbench-extra
galaxy-rna-workbench	galaxy-genome-annotation

https://registry.hub.docker.com/repos/bgruening/
→ filter by name: galaxy

Ideas for the Future?

- Selection option for Galaxy Flavours in the installer
- Configurator for your custom Galaxy: assemble your Flavour!
- You have more ideas? Please stick your postit here →

- If you want to try the current installer, please contact:
  c.rausch@vumc.nl or bjoern.gruening@gmail.com
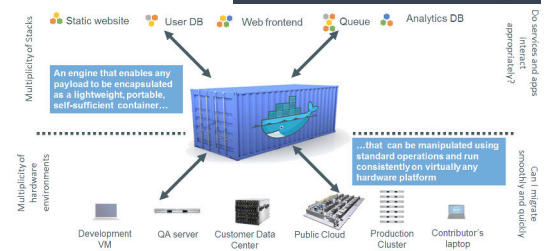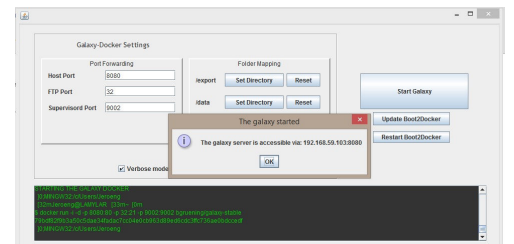
Your local Galaxy

Image source: programering.com

Prototype of Galaxy-in-Docker Windows installer