



# BioDepot Workflow Builder

Bioinformatics Group  
University of Washington Tacoma

## Resources

**Repository:** <https://github.com/BioDepot/BioDepot-workflow-builder>

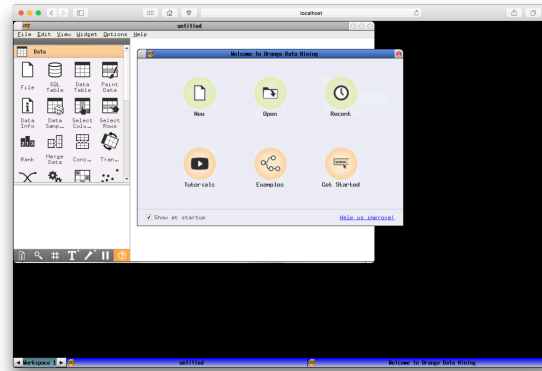
**User Manual:** <https://github.com/BioDepot/BioDepot-workflow-builder/blob/master/BioDepotUserManual.docx>

**Paper (draft):** <https://doi.org/10.1101/099010>

**Video:** [https://drive.google.com/file/d/0B6xuS\\_tbRDJ0RzN6NIJ0T1U4VUU/view?usp=sharing](https://drive.google.com/file/d/0B6xuS_tbRDJ0RzN6NIJ0T1U4VUU/view?usp=sharing)

**Orange Lab:** <https://github.com/biolab/orange3>

BioDepot is a self-contained tool with graphical user interface for bioinformatic workflows. The package is based on Orange 3 by Biolab, NoVNC and widgets are mainly written in Python (Qt5, Docker-Py, PyQt5).



## Requirements

1. Docker 1.13.0
2. Internet Browser

## Running BwB

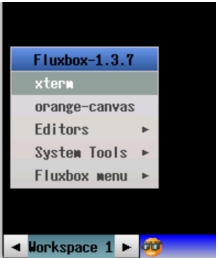
Currently BwB uses docker sock binding, to run BwB:

1. Install Docker
2. On Docker-enabled machines run:  
**docker run --rm**  
**-p 6080:6080**  
**-v ~/Desktop/:/data**  
**-v /var/run/docker.sock:/var/run/docker.sock**  
**biodepot/bwb**

3. BwB can be accessed from browser:  
**<http://localhost:6080>**

## Developing Widget

To add a widget to BioDepot:

1. Download BioDepot source codes:  
<https://github.com/BioDepot/BioDepot-workflow-builder/tree/master/biodepot>
2. Locate to folder orangebiodepot (eg: **~/Desktop/biodepot/orangebiodepot**)
3. Write the widget (or copy any of existing widget and modify as necessary)
4. On BwB, run xterm and locate to the shared widget location (e.g: **/data/biodepot**)  

5. Remove and put back BioDepot:  
**pip3 uninstall BioDepot**  
**pip3 install -e .**
6. Rerun orange canvas:  
**orange-canvas**
7. Run your widgets

