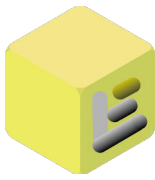


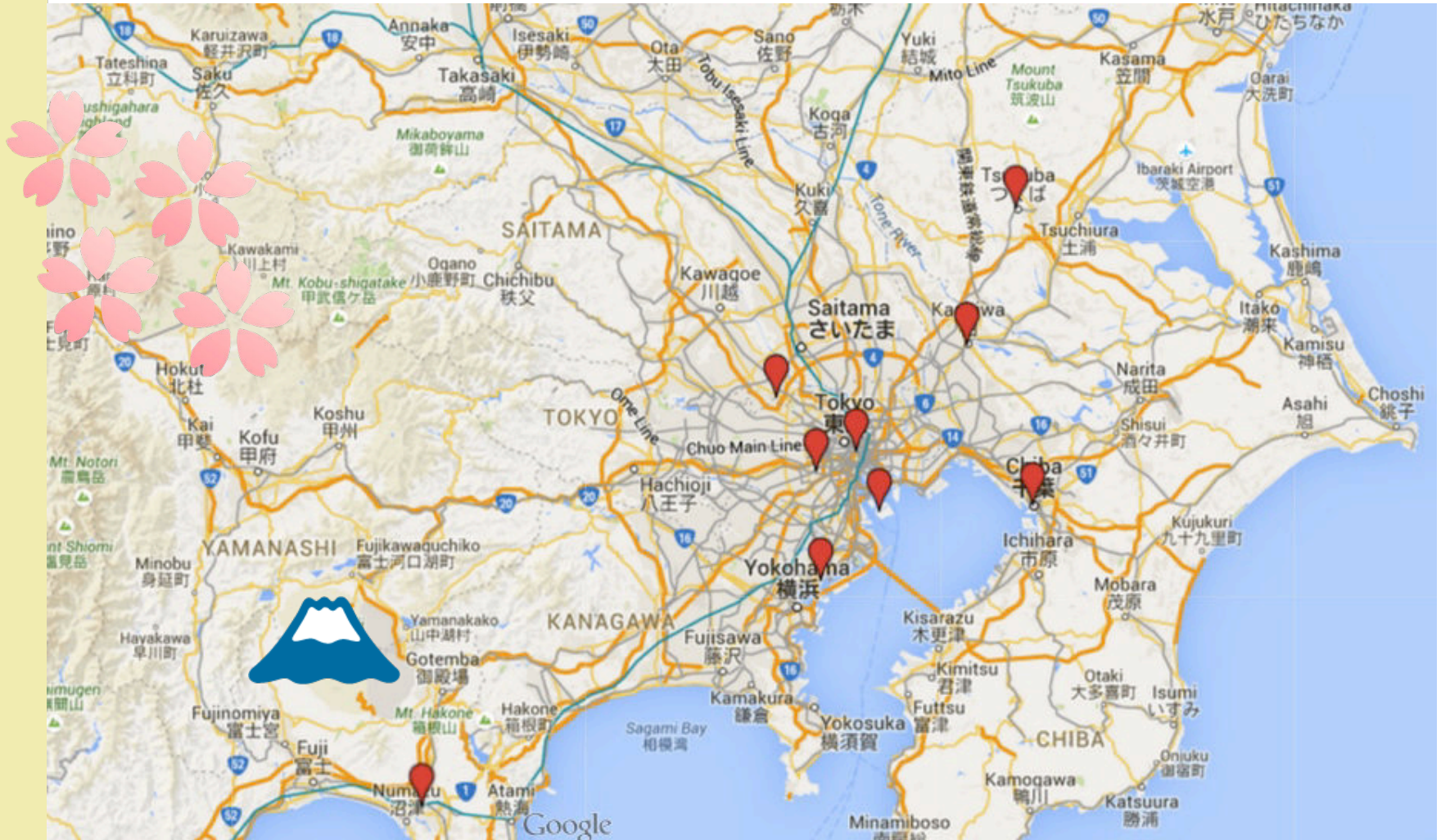
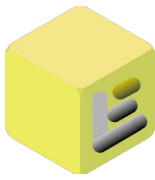
Building Galaxy Community VM

The University of Tokyo
Ryota Yamanaka

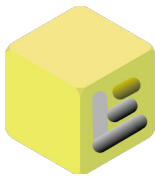


Galaxy is Spreading to Tokyo

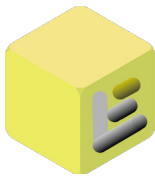
Galaxy Users in Tokyo



Monthly Meetup - Since Nov. 2015

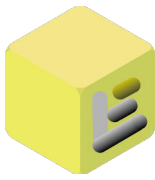


Galaxy Workshop Tokyo 2015



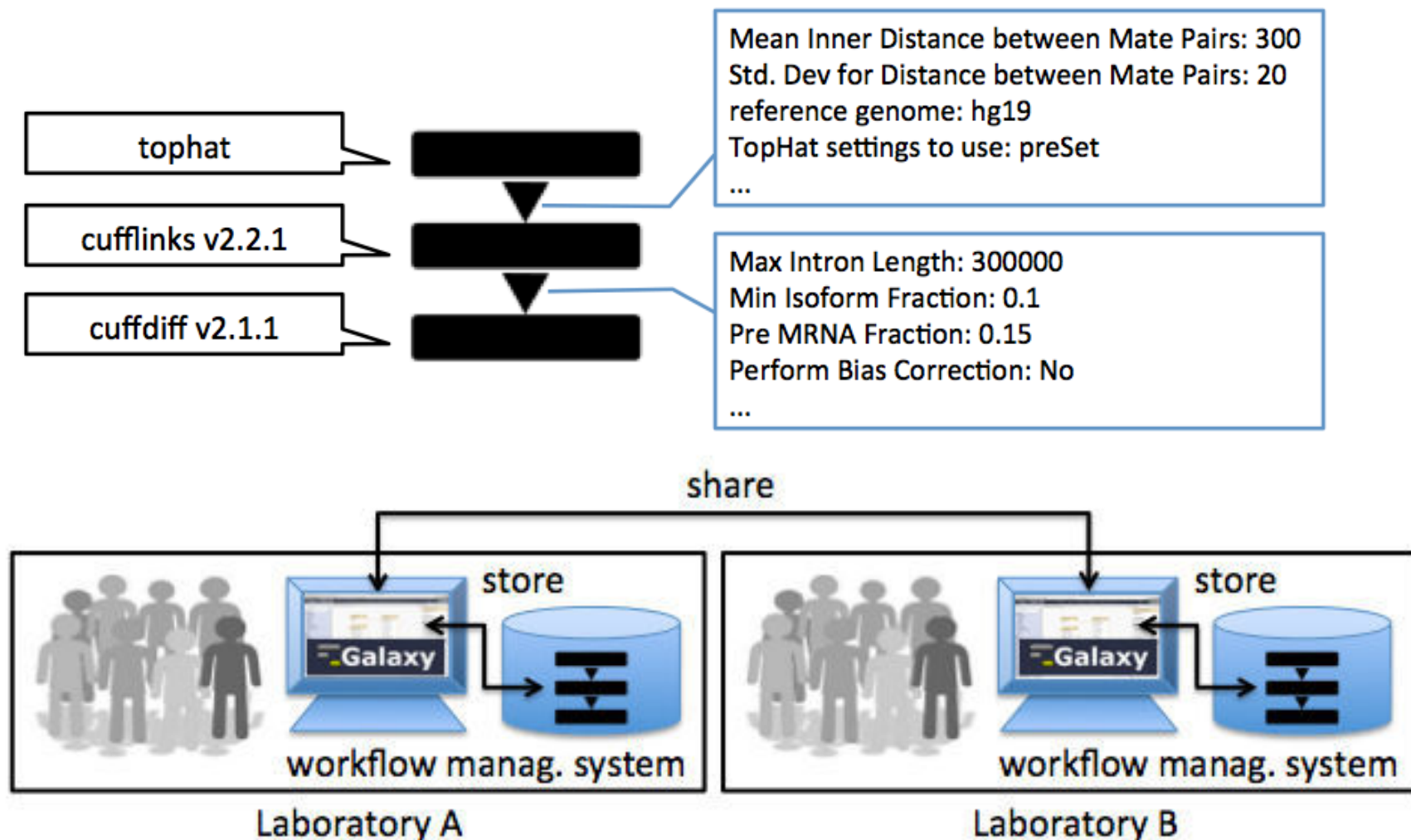
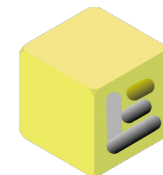
Galaxy
Workshop
Tokyo 2015



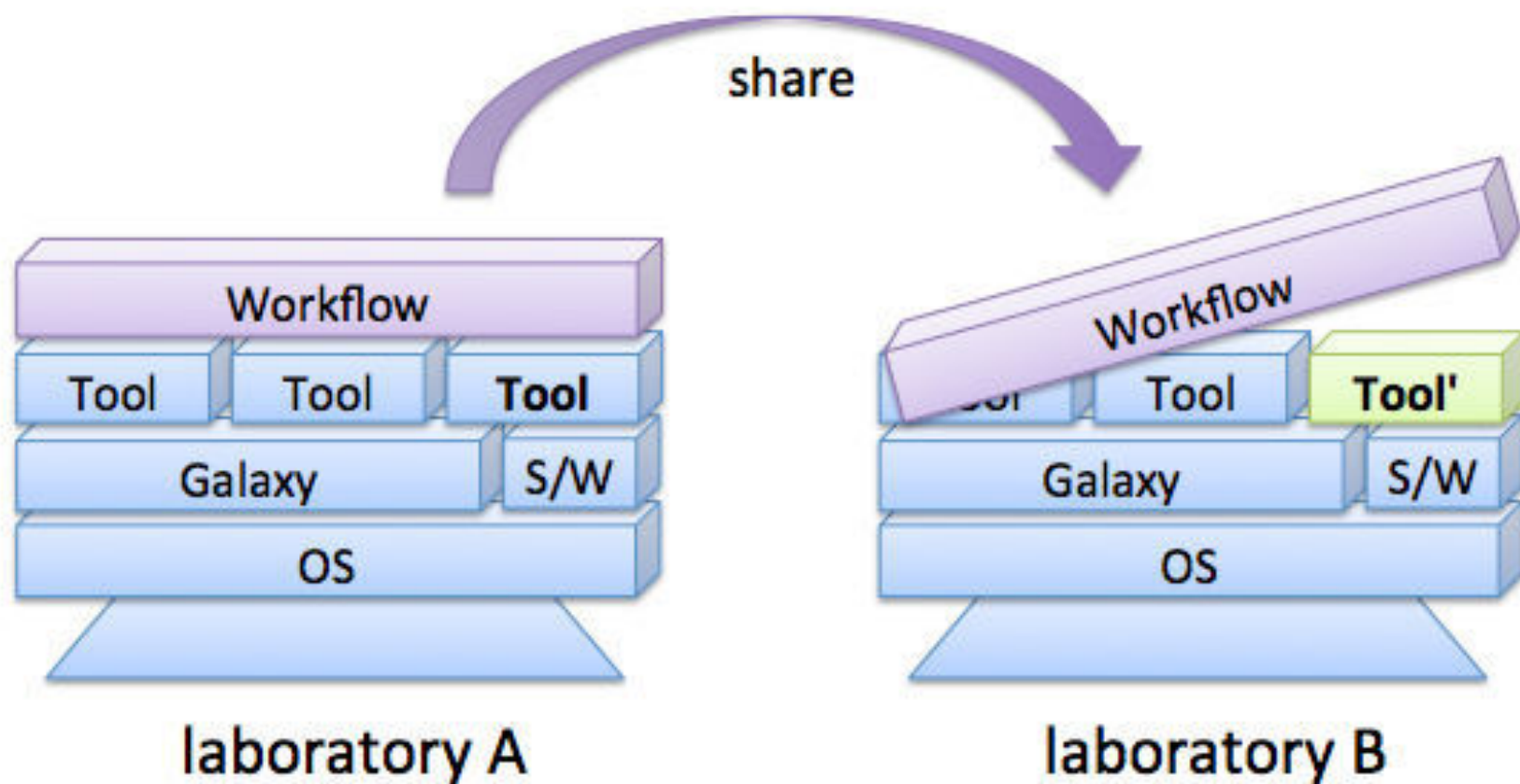
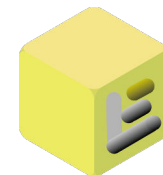


Community VM

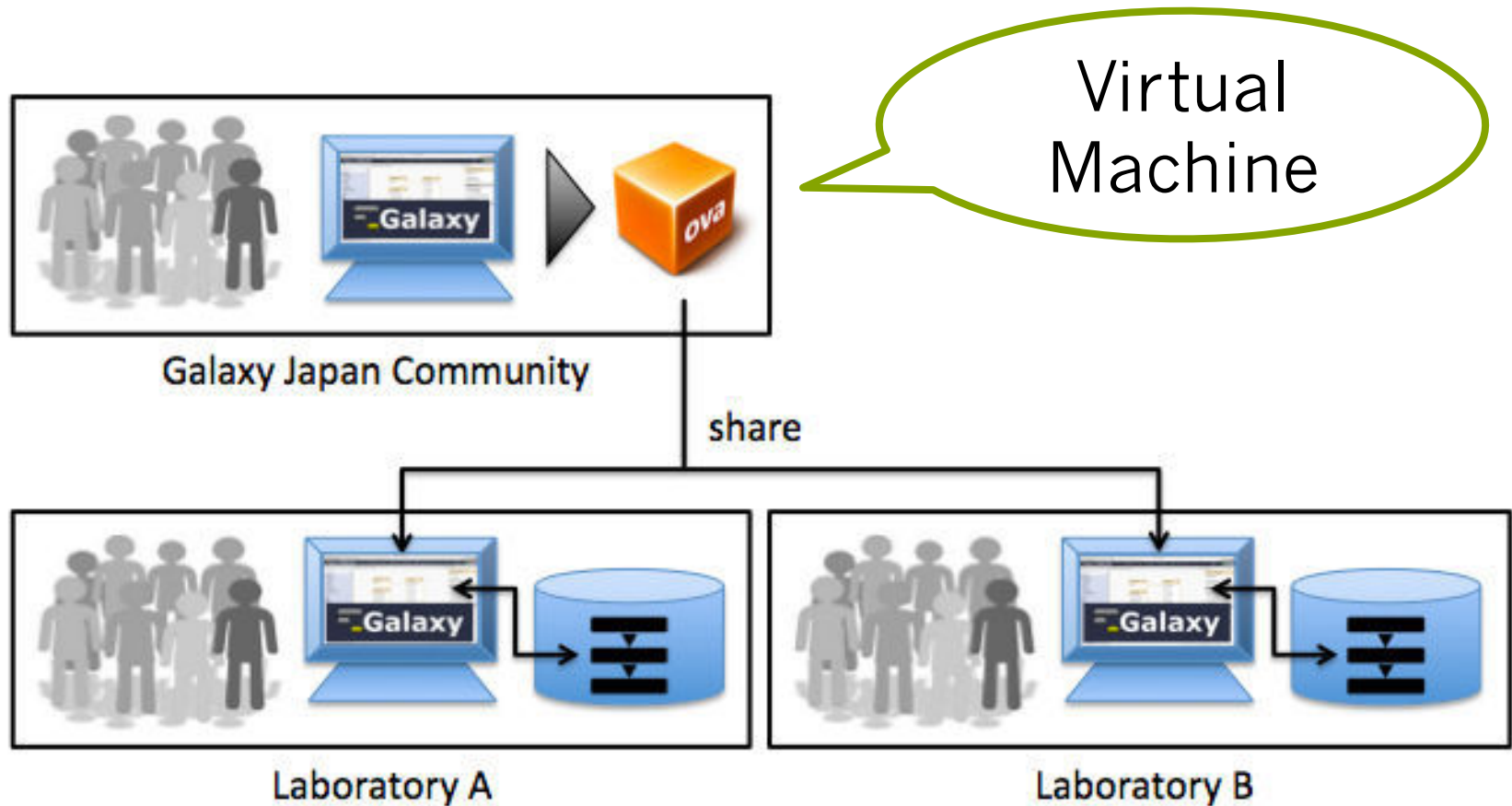
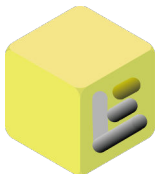
Workflow Management System?



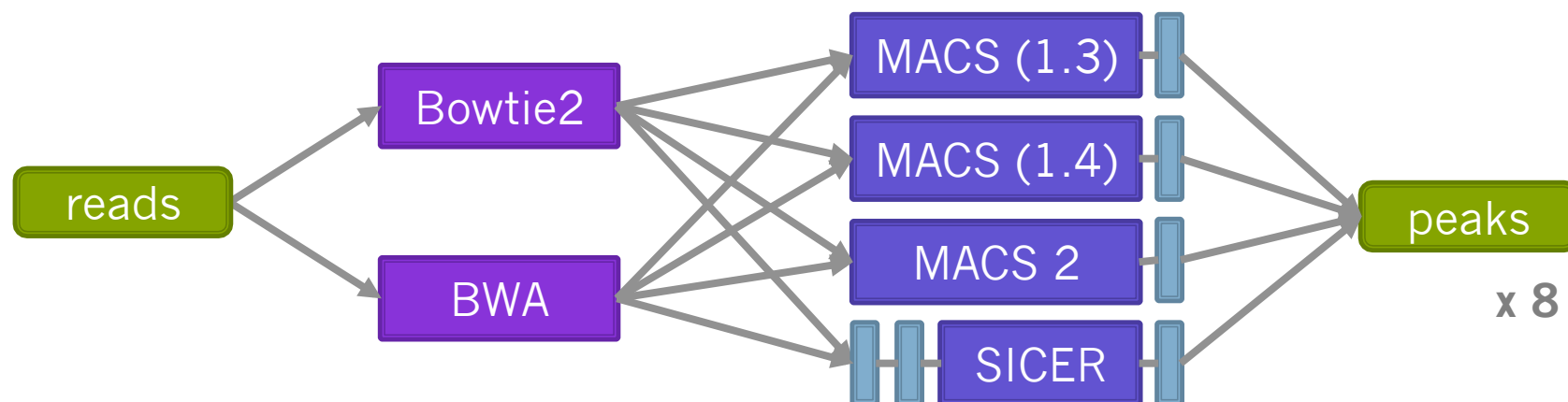
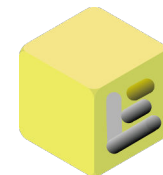
Reproducible? Reusable?



Virtual Machine for Distribution



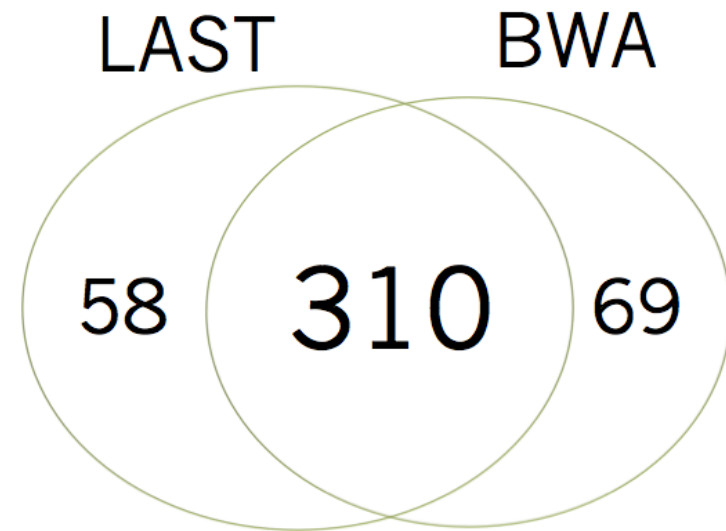
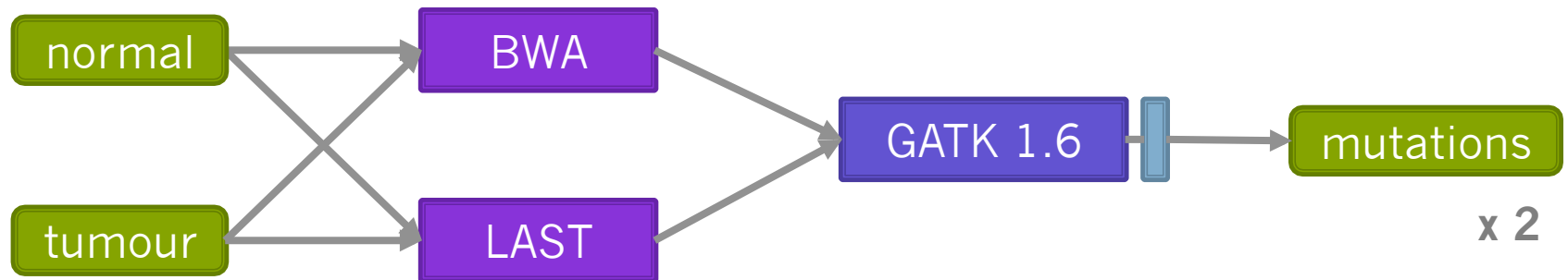
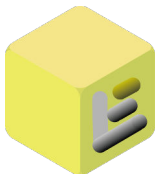
Workflow Example 1



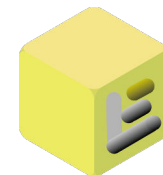
Number of Peaks

| | MACS1.3 | MACS1.4 | MACS2 | SICER |
|---------|---------|---------|--------|--------|
| Bowtie2 | 9,888 | 14,685 | 8,427 | 5,536 |
| BWA | 15,626 | 17,856 | 21,811 | 11,052 |

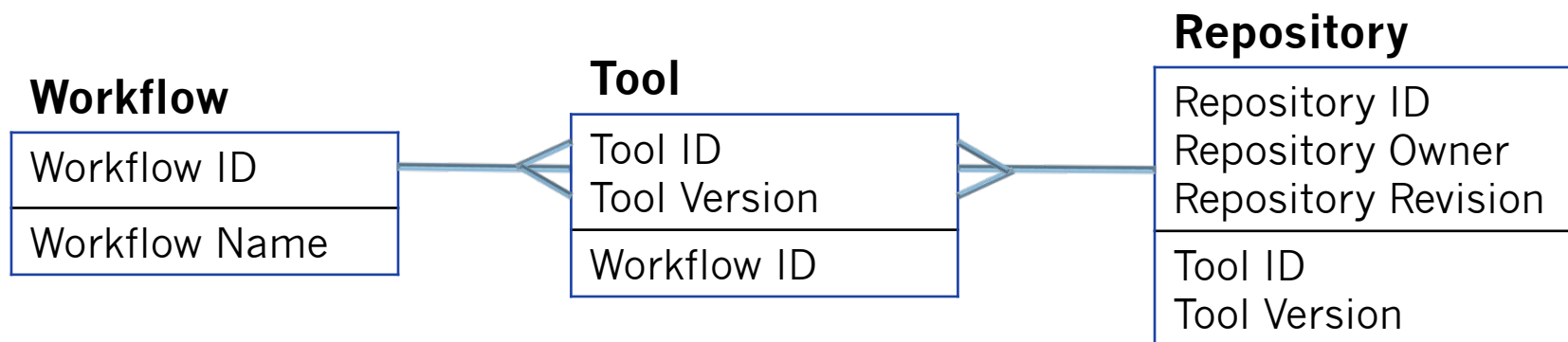
Workflow Example 2



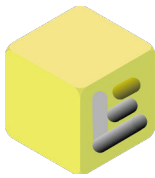
Tips: Managing Workflows



API: `install_toolshed_repositories.py`



Tips: Managing Workflows



Tools_Pitgora-Galaxy-0.2.4 ☆

ファイル 編集 表示 挿入 表示形式 データ ツール アドオン ヘルプ 変更内容をすべてドライブに保存しました

コメント 共有

| | A | B | C | D | E | F | G | H | I | J |
|----|-------------------------------------|-------------------|--------------|--------------|---------------|----------|----------|---------------------|--------------|---------|
| 1 | Tool Shed URL | Repository | Owner | Revision | Panel Section | Repo Dep | Tool Dep | Tool Name | Tool ID | Version |
| 2 | https://testtoolshed.g2.bx.psu.edu/ | download_ref | pitgora | 8e177a318c8c | Pitgora Tools | No | No | Download References | download_ref | 0.0.1 |
| 3 | https://testtoolshed.g2.bx.psu.edu/ | filebrowser | pitgora | d2eb5a5a26a3 | Pitgora Tools | No | No | Local File | filebrowser | 1.0.0 |
| 4 | https://testtoolshed.g2.bx.psu.edu/ | imp_exp | pitgora | 4c225e57d44b | Pitgora Tools | No | No | | | |
| 5 | https://testtoolshed.g2.bx.psu.edu/ | imp_exp | pitgora | 4c225e57d44b | Pitgora Tools | No | No | | | |
| 6 | https://testtoolshed.g2.bx.psu.edu/ | sailfish_linux | pitgora | 655e814b3dc3 | RNA-seq | Yes | Yes | | | |
| 7 | https://testtoolshed.g2.bx.psu.edu/ | sratoolkit_centos | pitgora | b88e52ddb532 | NGS Tools | Yes | Yes | | | |
| 8 | https://testtoolshed.g2.bx.psu.edu/ | unix_tools | pitgora | 8fd5091a4091 | Pitgora Tools | No | No | | | |
| 9 | https://testtoolshed.g2.bx.psu.edu/ | unix_tools | pitgora | 8fd5091a4091 | Pitgora Tools | No | No | | | |
| 10 | https://toolshed.g2.bx.psu.edu/ | bam_to_sam | devteam | 250151b4d934 | NGS Tools | Yes | Yes | | | |
| 11 | https://toolshed.g2.bx.psu.edu/ | bedtools | iuc | 82aac94b06c3 | BED Tools | Yes | Yes | | | |
| 12 | https://toolshed.g2.bx.psu.edu/ | bowtie2 | devteam | ceb6467e276c | NGS Tools | Yes | Yes | | | |
| 13 | https://toolshed.g2.bx.psu.edu/ | bsfcall | yutaka-saito | f274c166e738 | BS-seq | No | Yes | | | |
| 14 | https://toolshed.g2.bx.psu.edu/ | bwa_wrappers | devteam | b4427dbb6ced | NGS Tools | Yes | Yes | | | |
| 15 | https://toolshed.g2.bx.psu.edu/ | commet | yutaka-saito | dfdbd947b32 | BS-seq | No | Yes | | | |
| 16 | https://toolshed.g2.bx.psu.edu/ | cuffdiff | devteam | 604fa75232a2 | RNA-seq | Yes | Yes | | | |
| 17 | https://toolshed.g2.bx.psu.edu/ | cufflinks | devteam | 5346d5eea8b1 | RNA-seq | Yes | Yes | | | |
| 18 | https://toolshed.g2.bx.psu.edu/ | cuffmerge | devteam | b6e3849293b1 | RNA-seq | Yes | Yes | | | |
| 19 | https://toolshed.g2.bx.psu.edu/ | elapsed_time | pitgora | 6ea5fd3c6f6a | Pitgora Tools | Yes | Yes | | | |
| 20 | https://toolshed.g2.bx.psu.edu/ | fastqc | devteam | 0b201de108b9 | NGS Tools | Yes | Yes | | | |
| 21 | https://toolshed.g2.bx.psu.edu/ | fastq_mcf | johnson | b61f1466ce8f | NGS Tools | Yes | Yes | | | |
| 22 | https://toolshed.g2.bx.psu.edu/ | join | devteam | de21bdbb8d28 | General | Yes | Yes | | | |
| 23 | https://toolshed.g2.bx.psu.edu/ | macs | devteam | ae2ec275332a | CHIP-seq | Yes | Yes | | | |
| 24 | https://toolshed.g2.bx.psu.edu/ | macs14 | ryo-tas | c23082638ba0 | CHIP-seq | Yes | Yes | | | |
| 25 | https://toolshed.g2.bx.psu.edu/ | macs2 | iuc | 859c982b1f7f | CHIP-seq | Yes | Yes | | | |

Tools_Pitgora-Galaxy-0.2.4 ☆

ファイル 編集 表示 挿入 表示形式 データ ツール アドオン ヘルプ 変更内容をすべてドライブに保存しました

コメント 共有

| | A | B | C | D | E |
|----|-------------|-------------------|---------|-------------------------|-----------|
| 1 | Workflow | Tool ID | Version | Tool ID + Version | Installed |
| 2 | RNA-seq 01 | fastqc | 0.63 | fastqc 0.63 | installed |
| 3 | RNA-seq 01 | tophat2 | 0.7 | tophat2 0.7 | installed |
| 4 | RNA-seq 01 | cufflinks | 2.2.1.0 | cufflinks 2.2.1.0 | installed |
| 5 | RNA-seq 01 | cuffmerge | 2.2.1.0 | cuffmerge 2.2.1.0 | installed |
| 6 | RNA-seq 01 | cuffdiff | 0.0.7 | cuffdiff 0.0.7 | installed |
| 7 | CHIP-seq 02 | bowtie2 | 0.4 | bowtie2 0.4 | installed |
| 8 | CHIP-seq 02 | macs | 1.0.1 | macs 1.0.1 | installed |
| 9 | CHIP-seq 02 | awk | 0.0.1 | awk 0.0.1 | installed |
| 10 | CHIP-seq 02 | join | 1.0.0 | join 1.0.0 | installed |
| 11 | CHIP-seq 02 | gops_join_1 | 2.0.2 | gops_join_1 2.0.2 | installed |
| 12 | CHIP-seq 02 | count | 1.0.0 | count 1.0.0 | installed |
| 13 | CHIP-seq 02 | cut | 1.0.2 | cut 1.0.2 | installed |
| 14 | CHIP-seq 02 | sed | 1.0.0 | sed 1.0.0 | installed |
| 15 | CHIP-seq 03 | bowtie2 | 0.4 | bowtie2 0.4 | installed |
| 16 | CHIP-seq 03 | bam_to_sam | 1.0.4 | bam_to_sam 1.0.4 | installed |
| 17 | CHIP-seq 03 | sam2interval | 1.0.1 | sam2interval 1.0.1 | installed |
| 18 | CHIP-seq 03 | peakcalling_sicer | 0.0.1 | peakcalling_sicer 0.0.1 | installed |
| 19 | CHIP-seq 03 | awk | 0.0.1 | awk 0.0.1 | installed |
| 20 | CHIP-seq 03 | macs | 1.0.1 | macs 1.0.1 | installed |
| 21 | CHIP-seq 03 | macs14 | 1.4.2 | macs14 1.4.2 | installed |

Workflow

Workflow ID

Workflow Name

Tool

Tool ID

Tool Version

Workflow ID

Repository ID

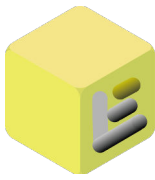
Repository Owner

Repository Revision

Tool ID

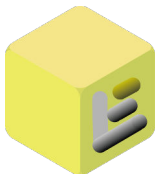
Tool Version


Spreadsheet ...



Building A Community

Australian USE-GET-LEARN Model



**Genomics Virtual Lab**[Use](#)[Get](#)[Learn](#)[Help](#)[About](#)

Search

Genomics Virtual Lab

A virtual laboratory for genomics research and training.

GVL Launcher

Easily launch [CloudBioLinux](#), [CloudMan](#) and [Galaxy](#) platforms on Cloud Computing resources (i.e. Amazon EC2, OpenStack, etc).

Cloud:

Access key:

Secret key:

Institutional email:

USE

Use our Galaxy servers and genome browser.

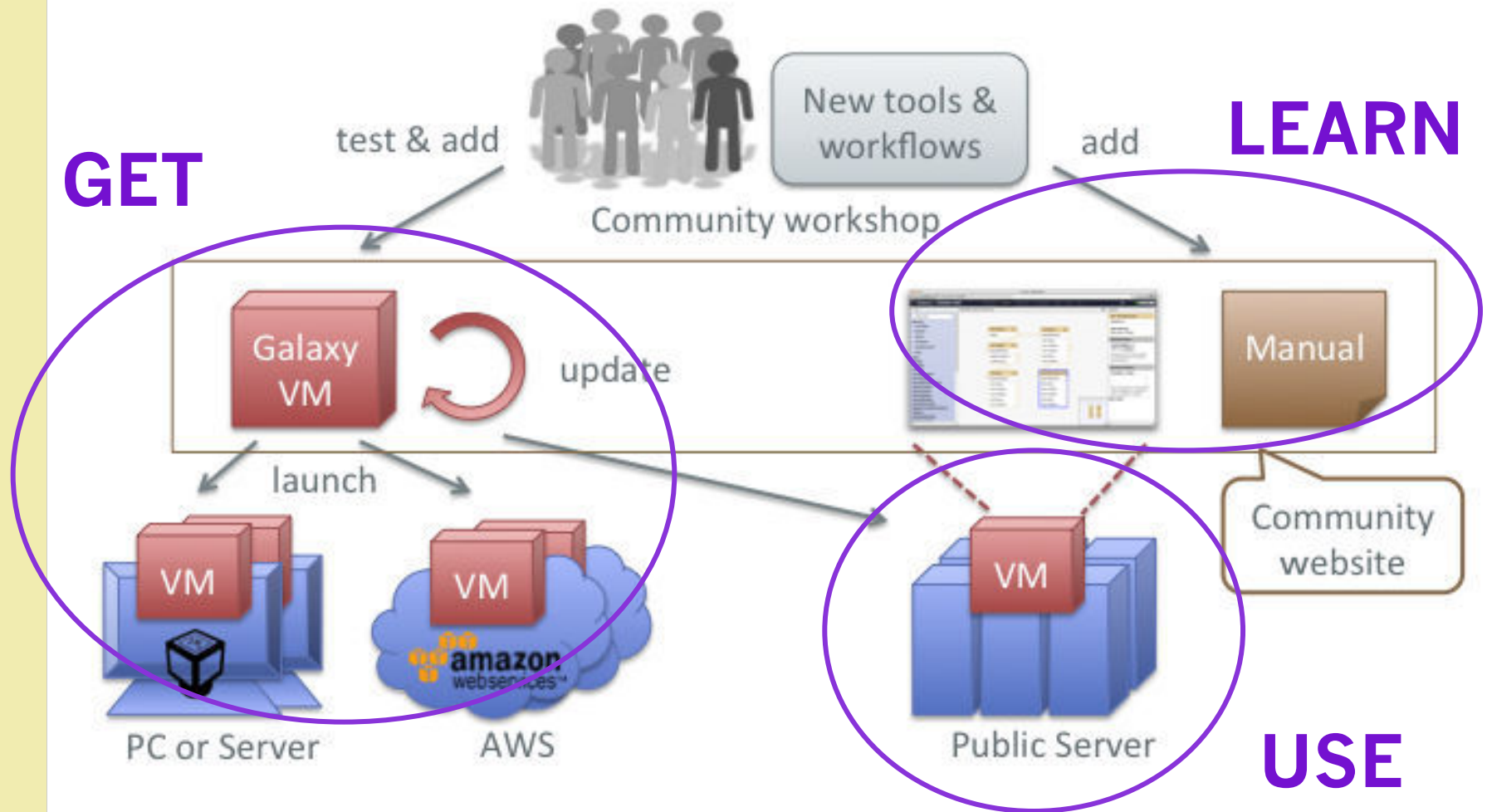
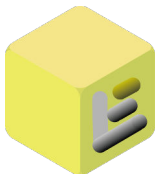
GET

Get your own private server in the cloud with Galaxy, command-line bioinformatics, RStudio Server and IPython Notebook.

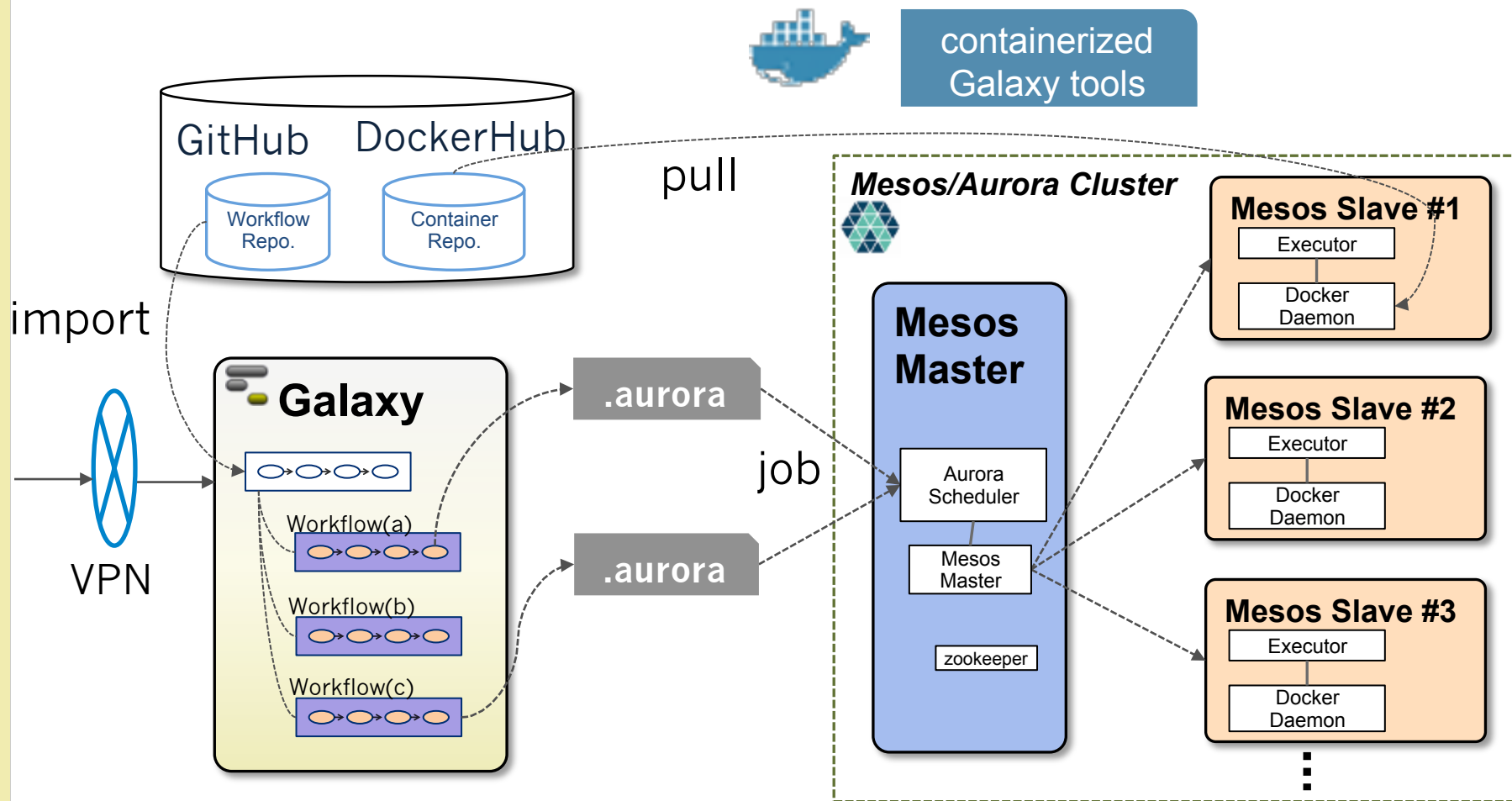
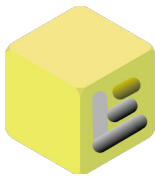
LEARN

Learn genomics methods using our tutorials.

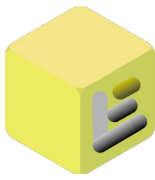
GET-USE-LEARN Model with VM



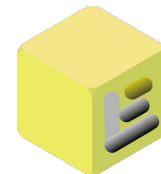
USE: Mesos Cluster



USE: Public Servers



LEARN: Wiki



Research

94.118.0.14 Talk for this IP address Log in


Page Read

Main Page


ピタゴラギャラクシーのWikiへようこそ



ワークフローの説明



ツールの説明



イベント




ダウンロード

- 管理者向けページ にも役立つ情報がいろいろあります。
- このWikiの編集のためにアカウントが必要な方は yamanaka [at] genome.rcast.u-tokyo.ac.jp までご連絡ください。

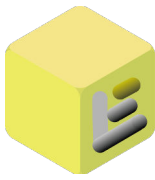
This page was last modified on 4 March 2015, at 08:18.

This page has been accessed 6,950 times.

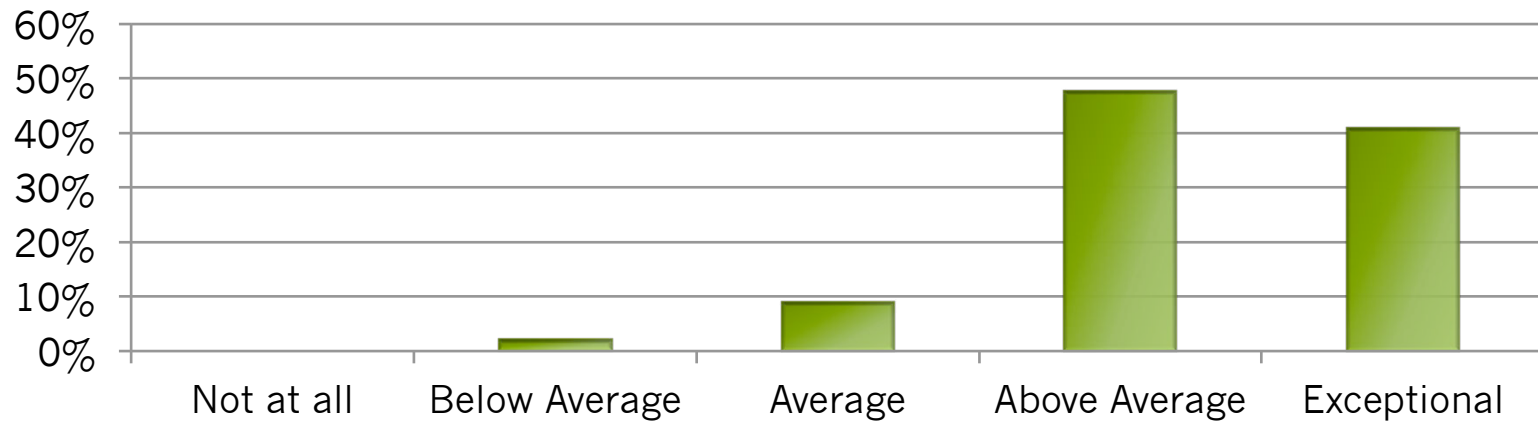
[Privacy policy](#) [About Pitagora-Galaxy Wiki](#) [Disclaimers](#)

 Powered By MediaWiki

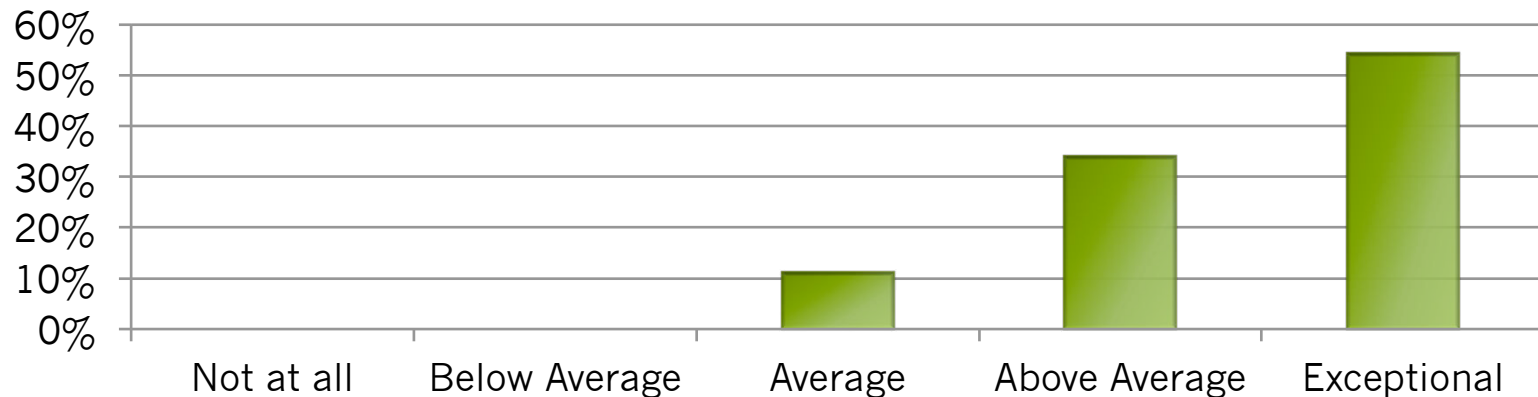
LEARN: Workshop



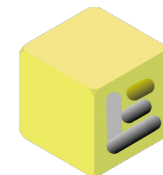
How useful was the meeting?



Was the workshop well run and organized?



LEARN: Workshop



Where can you find news?

| Platform | Link |
|----------------|------------------------------|
| Twitter | #usegalaxy @galaxyproject |
| Announce List | bit.ly/gxynellist |
| Trello Board | bit.ly/gxytrello |
| Galaxy Updates | bit.ly/gxyupdates |
| Dev Briefs | bit.ly/gxydevbriefs |
| Galaxy News | bit.ly/gxynews |

Participants: A man with glasses and a beard is visible in the video feed.

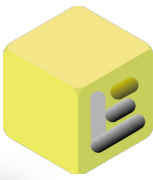
GET a GVL

<http://genome.edu.au> → GET

Building (deploying and running) a GVL instance:

1. Create an Ubuntu-based server VM
2. Download and install a preconfigured Galaxy
3. Attach pre-populated indexed genomes data
4. Start Galaxy, RStudio, iPython Notebook
5. Add extra compute nodes as required

Participants: A man is visible in the video feed.



Speakers @ Galaxy Workshop Tokyo