

Galaxy Tool - Versioning

Changes you make to your tool code can be called:

An update: a cosmetic change or functional enhancement that doesn't affect the previous output behaviour of the tool. (This can also include bug fixes that remedy previously useless output.)


A revision: a functional enhancement that changes the previous output of the tool, or marks other significant enhancements.



Mask of Yul Brynner, Westworld (1973)

Sharing your Galaxy tool with the world

This involves uploading the tool files into a Galaxy "toolshed" where a Galaxy admin can select it for installation at their own location.

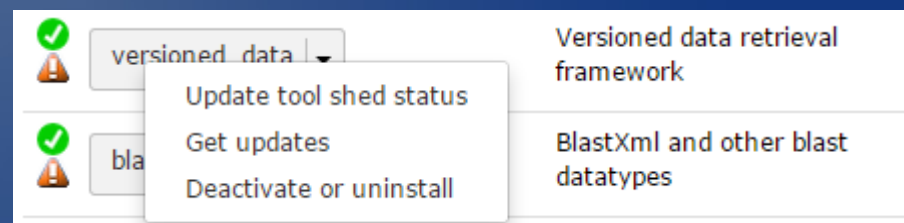
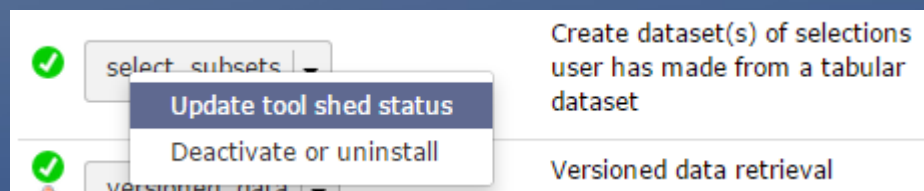
Valid Repositories						
<input type="text" value="search repository name, description"/> 						
Name	Synopsis	Type	Installable Revisions	Tools or Package Verified	Owner	
<input type="text" value="blast_reporting"/>	Allows filtering, sorting, and reference bin comparison of NCBI Blast report results	Unrestricted	46 (2014-06-20)	no	ddooley	
<input type="text" value="ffp_phylogeny"/>	Feature Frequency Profile toolkit	Unrestricted	18 (2014-08-13)	no	ddooley	
<input type="text" value="sandbox"/>	Test repository for Philipp	Unrestricted	0 (2014-08-08)	no	philipprentzsch	
<input type="text" value="versioned_data"/>	Versioned data retrieval framework	Unrestricted	23 (2014-12-08)	no	damion	

Galaxy Tool – Version Id

One should increment a tool's version number if the latest changes are a revision (rather than an update).

```
<tool id="bccdcBLASTreporting" name="BLAST Reporting" version="1.0.5">
```

Incrementing the version number causes the Toolshed (and Galaxy) to treat the version of a tool as its own entity, like a new model of a car that can be taken out for a drive. With more than one tool version installed, a user will have a choice of which to run on their data.



	ncbi_blast_plus	NCBI BLAST+	devteam	4c4a0da938ff	Installed
	pac	NCBI BLAST+ 2.2.28 (binaries only)	iuc	23b9ba41ad00	Installed
Contains a tool dependency					

Galaxy Tool – Version Id

Note: The Galaxy toolshed “Revisions” list is a bit odd in that it lists off its own item record id and upload date, but doesn't list the tool's version id. (View its record to see this).

<u>Name</u>	<u>Synopsis</u>	Type	Metadata Revisions
blast_reporting	Allows filtering, sorting, and reference bin comparison of NCBI Blast report results	Unrestricted	46 (2014-06-20) ▼ 46 (2014-06-20) 32 (2014-05-08) 21 (2014-01-21) 19 (2014-01-21) 18 (2014-01-20)
ffp_phylogeny	Feature Frequency Profile toolkit	Unrestricted	

If you don't change the version number, the upload will be considered an update to the existing toolshed version (same car). Your changes can be downloaded to other Galaxy installs, but are applied to their currently loaded tool if has the same version number.

Preparing a Toolshed Update

Make a tar archive of the tool folder contents for upload to a toolshed.

Select which files or subfolders to include or exclude in the archive.
E.g. include all files **except** text editor backups, compiled python templates, and planemo output reports:

```
tar -zcvf [tool name].tar.gz * --exclude "*~" --exclude "*.pyc" --exclude  
"tool_test_output*" --exclude "*.gz"
```

Download to your local computer so that it can be uploaded to a Galaxy toolshed. The last “./” places the file in your current folder.

```
scp [your user name]@[your server name]:\  
/usr/local/galaxy/galaxytest/galaxy-dist/tools/TESTING/[folder]/[tool  
name].tar.gz ./
```

Links

- <https://wiki.galaxyproject.org/ToolShed/PublishTool>