# **App Manager General Function Checklist**

#### Open the App Repositories tab in Preferences.

• The App Repositories table matches the image below (both servers should be enabled).

C	ther Options	Toolbar	Data Sources	Tracks	Track Defaults	App Reposit	bries Cac
uain	Repositories						
	Name			U	RL		Enabled
	App Store	e	https:	//apps.biovi	z.org/obr/releases/		
	BioViz		h	nttps://bioviz	.org/igbserver		Image: A start of the start
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-							
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Mac

- Windows
- Linux
- 1. Click the Add... button.

  - a. Name: MergeAnnot
    b. URL: https://bitbucket.org/lorainelab/merge-annotation-operator/downloads/ (This URL contains an App jar file and OBR index file which makes this a valid App repository)
- 2. Click Submit.
- The MergeAnnot app repository has been added to the App Repositories table with the Name and URL displayed exactly as you entered them.

Name	URL	Enabled
App Store	https://apps.bioviz.org/obr/releases/	
BioViz	https://bioviz.org/igbserver	<b>V</b>
MergeAnnot	https://bitbucket.org/lorainelab/merge-annotation-operator/d	Image: A start of the start
Pending Apps	https://apps.bioviz.org/obr/pending_releases	

Mac

- Windows
- Linux

Close Preferences. Select the Plug-ins tab at the bottom of IGB.

• There is a Launch App Manager button.

Selection Info	Sliced View	External View	Piug-Ins
	Laund	h App Manager	

- Windows
- Linux

### Click Launch App Manager.

- The IGB App Manager opens and contains apps similar to those shown below.
  - Note: Before selecting any of the plugins at the left, the area at the right is blank. The letter/color for any plugins that are present in both the default set and the test repository will change. By default it is a B for BioViz. If you name the test repository "Test" then they all change to a "T". (UPDATE IMAGE)



#### Mac

- Windows
- Linux

Select Manage Repositories...

• The App Repositories tab in Preferences opens.

nno	tation Label Font Other Option	s Toolbar	Data Sources	Tracks	Track Defaults	App Repositories	Cache		
lugi	n Repositories								
	Name				URL			Enabled	
2	BioViz			http	p://bioviz.org/igb	oserver		$\checkmark$	
e.	BioViz development			http://e	eos.transvar.org	/igb_plugins			
2	Release Candidate Plugin Rep	0	http://eo	s.transva	ar.org/igb_releas	se_candidate_plugir	ns/		

Mac

Windows

Linux

- 1. Select the checked checkbox in the Enabled column to disable the MergeAnnot app repository.
- Ensure the BioViz app repository is enabled, and then click Done.
   Select the Plug-ins tab at the bottom of IGB and launch the IGB App Manager again.
- The available **BioViz** apps are listed and the color of the "Merge Annotation Track Operator" app's icon changes to indicate that the **MergeAnnot** app repository isn't being used **(UPDATE IMAGE)**:

Update All Manage Repositoria Manage Repositoria
0
0
0
0
0
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0
0

 Mac 

- Windows
- Linux

Install the Geometric Mean app by selecting it from the list and clicking Install.

• The Install button toggled to read Uninstall and there is a green dot next to the Geometric Mean app to indicate an installed status.

			Update All	Manage Repositories.
Geometric Mean	•	Geometric Mean		🛍 Uninstall
B Parent Operators	0	Version: 9.0.0 Repository: BioViz development		
B Find Annotations	0	com.affymetrix.geometric-mean		
B Command Socket	0			
B Combine Annotation Operator	0			
B Overlap Annotation Operator	0			
B sampleSelection	0			
B searchModeSymetryFilter	0			
B talleyHandler	0			

- Close the IGB App Manager.
   View the Log by selecting Help > Show Log.
- A logging statement confirms that the Geometric Mean app was installed correctly.

▲ IGB Console	-		×
10:14:23:975 INFO org.amdatu.remote.AbstractComponent - Kenroved remote endpoint re 10:14:23.976 INFO org.amdatu.remote.AbstractComponent - Importable endpoint re 10:14:25:303 INFO org.amdatu.remote.AbstractComponent - Adding remote endpoint 10:14:25:304 INFO org.amdatu.remote.AbstractComponent - Importable endpoint at 10:19:45:469 INFO c.a.genometry.util.ServerUtils - STOPWATCH METRICS for create 10:19:45:889 INFO c.a.igb.view.load.GeneralLoadUtils - Loaded TAIR10 mRNA in 4 10:20:06:850 INFO o.l.igb.plugin.manager.JSLogger - 10:20:07:772 INFO o.l.i.p.manager.BundleActionManager - Installed app: com.affym 10:20:07:784 INFO com.affymetrix.igb.IGB - bundle com.affymetrix.geometric-mean;	point: {component.id emoved: {component.id=1 dded: {component.id= eSymLoader 1.151 16.9 ms etrix.geometric-mea 9.0.0 installed	1-104, con t.id=164, c 64, compo d=164, con s m,9.0.0	
		1	
	Copy To Clipboard	Clos	e

- Windows
- Linux
- Launch the IGB App Manager again.
   Uninstall the Geometric Mean app by clicking the Uninstall button.
- The Uninstall button now reads Install and the green dot next to the Geometric Mean app is now gone.

ob App Manager				-		
t Search All Ap	ops 👻	•	Update All	Manage	Repositor	ries
Geometric Mean		Geometric Mean		±	Install	
Parent Operators	0	Version: 9.0.0 Repository: BioViz development				
Find Annotations	0	com.affymetrix.geometric-mean				
Command Socket	0					
Combine Annotation Operator	0					
Overlap Annotation Operator	0					
sampleSelection	0					
searchModeSymetryFilter	0					
talleyHandler	0					

- Mac
- Windows
- Linux

## Close the IGB App Manager and open the Log.

• A logging statement confirms that the Geometric Mean app was uninstalled correctly.

🕌 IGB Console	-		×	
10:14:25:303 INFO org.amdatu.remote.AbstractComponent - Importable endpoint removed. {component - 10:14:25:303 INFO org.amdatu.remote.AbstractComponent - Adding remote endpoint added: {component - 10:14:25:304 INFO org.amdatu.remote.AbstractComponent - Importable endpoint added: {component - 10:19:45:469 INFO c.a.genometry.util.ServerUtils - STOPWATCH METRICS for createSymLoader 10:19:45:889 INFO c.a.igb.view.load.GeneralLoadUtils - Loaded TAIR10 mRNA in 416.9 ms 10:20:06:850 INFO o.l.igb.plugin.manager.JSLogger - 10:20:07.772 INFO o.l.i.p.manager.BundleActionManager - Installed app: com.affymetrix.geometri 10:22:07.408 INFO o.l.i.p.manager.BundleActionManager - Uninstalled app: com.affymetrix.geometric-mean;9.0.0 installed	iponeni nt.id=16 nent.id 1.151 s ic-mear d etric-m	ng=104, 64, comp =164, co n,9.0.0 ean,9.0.1	oone omp	A construction of the second se
			•	]
Copy To Clip	board	CI	lose	



Windows

Linux
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Launch the IGB App Manager again and install the ProtAnnot app.

• The Install button toggled to read Uninstall and there is a green dot next to the ProtAnnot app in the list to indicate an installed status.

23andMe SNP Converter	0	ProtAnnot 💼 Uninstall
Command Socket	0	Version: 9.0.0 Repository: BioViz
B Merge Annotation Track Operator	0	ProtAnnot is a protein annotation viewer implemented in Java that displays protein annotations in th
B Geometric Mean Graph Operator	0	context of the genomic sequence, making it easy to see how alternative mRNA structures affect the various protein products encoded at a locus.
ProtAnnot	•	ProtAnnot is developed in the Loraine Lab, part of the Bioinformatics and Genomics Department at University of North Carolina at Charlotte.
		Starting ProtAnnot
		Once installed, you can open ProtAnnot in IGB by selecting one or more gene models on the same strand of DNA and selecting <b>Tools &gt; Start ProtAnnot</b> .

- Windows
- Linux

Close the IGB App Manager and click Tools.

• A new Start ProtAnnot option appears in the Tools menu.



- Mac
- Windows
- Linux
- 1. Launch the IGB App Manager again.
- 2. Uninstall the ProtAnnot app.
- 3. Close the IGB App Manager.
- 4. Click Tools.
- The Start ProtAnnot option has disappeared from the Tools menu.



- Mac
- Windows
- Linux

Click Open App Manager in the Tools menu.

• The IGB App Manager opened.



- Mac
- Windows
- Linux

Select the Command Socket app from the list.

• The **Command Socket** app contains content in the App Manager that provides additional details about the app (this ensures that the **IGB App Manager** is using the README files appropriately).

📓 IGB App Manager	- 🗆 ×
Q Search All Apps	Update All     Manage Repositories
B Geometric Mean	Command Socket
B Parent Operators	Version: 9.0.0 Repository: BioViz development
B Find Annotations	The IGB Command Socket App opens up a socket on port 7084 for receiving scripting
B Command Socket	commands. This feature can be useful for orchestrating IGB scripting commands for bash scripts or for interfacing with languages like R.
B Combine Annotation Operator	Example Bash Script for looping through a list of genomic coordinates and exporting an image from the Integrated Genome Browser using the 'Command Socket' plugin
B Overlap Annotation Operator	#1/bin/sh
B sampleSelection	<pre>* This script requires the command socket plugin be enabled from the plugins ' tab locationsOfInterest=('chr1:2,246,108-2,271,426' 'chr2:9,488,819-9,531,295' 'chr</pre>
B searchModeSymetryFilter	3:8,407,934-8,454,574')
B talleyHandler	<pre>function igbCommand(){     echo "\$1"   ncat 127.0.0.1 7084 }</pre>
	<pre>igbCommand 'genome A_thaliana_Jun_2009'</pre>
	sleep 0.5
	<pre>for i in "\${locationsOfInterest[@]}" do</pre>
	done C >

Mac

Windows

Linux

1. Install the Command Socket app.

2. Click Manage Repositories... and remove checks from the checkboxes for all of the app repositories.

• The **Command Socket** app is still installed (indicated with a green dot next to the app) and the letter next to the app's name has changed to an "L" (indicating that the app is now installed locally, not from a repository).

ፊ IGB App Manager			- 0
Q Search	All Apps 👻	Update All	Manage Repos
L Command Socket	•		

- Mac
- Windows
- Linux
- The IGB App Manager only lists installed apps.
- Mac
- Windows
- Linux

Click Manage Repositories... and remove all of the app repositories from the App Repositories table by selecting the repository and clicking Remove. Click Done.

• The IGB App Manager still only displays the Command Socket app.

🚳 IGB App Manager			- 0
Q Search	All Apps 👻	Update All	Manage Repositorie
L Command Socket	•		

- Mac
- Windows
- Linux

Finally, uninstall the **Command Socket** app by selecting it and clicking **Uninstall**.

• The IGB App Manager appears empty.

🔬 IGB App Manager			- 🗆 ×
Q Search All Apps	•	Update All	Manage Repositories

- Mac
- Windows
- Linux