Quick instructions on getting started with the PAMGuard GIT repository.

PAMGuard source code was migrated from SVN to GIT on 7 January 2022

The last commit to SVN at

<u>https://sourceforge.net/p/pamguard/svn/HEAD/tree/PamguardJava/branches/NOAA/</u> was r6278. A copy of this was then pushed to <u>https://github.com/PAMGuard/PAMGuard</u>

Since GIT is a distributed code version management system, only the core PAMGuard team will have write access to the main PAMGuard repository and they will only use it for small bug fixes and to merge in larger changes from other working repositories.

This document is NOT a set of instructions on how to use Git. There are many resources you can turn to for this. Whether you use command line options, the git interface built into Eclipse (<u>https://www.eclipse.org/egit/</u>) or the Github desktop application (<u>https://desktop.github.com/</u>) is entirely up to you.

Clone the Repository

To get started in Eclipse you should perform the following steps. These are assuming that you are using Github and have a Github account and that you are using the latest Eclipse IDE.

1. Go to your Github account and select 'import repository'



 For the URL to clone, enter <u>https://github.com/PAMGuard/PAMGuard</u> and give the Repository a name in your own space.
 Import your project to GitHub

Import all the files, including the revision history, from another version control system.

Your old repositor	y's clone URL	
https://github.com/PAM	Guard/PAMGuard	
Learn more about the type	es of supported VCS.	
Your new reposito	ry details	
Owner *	Repository Name *	
🍘 douggillespie 🗸	/ MyPamguardDevelopment 🗸	
Privacy		
Public Anyone on the inte	rnet can see this repository. You choose who can	commit.
O Private You choose who ca	in see and commit to this repository.	
		Cancel Begin import

3. The import process will take a couple of minutes, you'll then have a clone of the repository in your own work space. Share this with any collaborators you are working with.



Setting it up in Eclipse

There are several ways in which you can open the code with Eclipse. Easiest is probably to use the <u>GitHub desktop</u> application which you can download from here. Alternatively, you can import it directly into Eclipse using the Eclipse GIT integration <u>EGit</u>.

Using GitHub Desktop

Make sure GitHub desktop is installed.

From the GitHub webpage, view the repository. Click on the green 'Code' button, and from the menu, select 'Open with GitHub desktop and you'll get a dialog asking you to confirm the repository you want to clone, and asking for a Local path on your computer.

GitHub.com	GitHub Enterprise	URL
Repository URL or GitHub (hubot/cool-repo)	username and repository	
https://github.com/douggillespie/PAMGuard-Development		
Local path		

Where you put the repo on your own machine is up to you. Some like to put the repo in a shared OneDrive folder, others think this can cause problems. Your call !

Press 'Clone' and the repository will be cloned to your local machine. Press the 'Show in Explorer' button on GitHub desktop and it will open the folder on your local machine which contains the repository.

Open Eclipse and either start a new workspace, or an existing one if you want to have PAMGuard open alongside other projects (for example the latter is useful if you're developing a plugin).

From the Eclipse file menu, select 'Import', then 'Existing Projects into workspace'. On the next tab, enter the path to the repository and click Finish.

Import		_		×		
Select			\ \			
Create new projects from	an archive file or di	irectory.	2	-		
Select an import wizard:						
type filter text						
🗸 🗁 General						
🚇 Archive File						
😂 Existing Project	s into Workspace					
Preferences						
Projects from F	older or Archive					
> 🗁 Git						
> 🥟 Gradle						
> > Maven						
> 🦻 Oomph						
> 🗁 Run/Debug						
> 🔁 leam						
icktiviate						
? < Back	Next >	Finish	Canc	el		
Import					_	
Import Projects						
Select a directory to sear	ch for existing Ecl	ipse projects.				
Select root directory:	C:\Users\dg50\s	ource\repos\P	AMGuard-De	velopme	nt ~	Browse
O Select archive file:					~	Browse
Projects:						
PamGuard GPL (C	:\Users\dg50\sou	rce\repos\PAM	IGuard-Deve	lopment)		Select All
						Deselect All
						Refresh
Options					1	
Search for nested pro	ojects					
Copy projects into w	orkspace					
Close newly importe	d projects upon c	ompletion				
Hide projects that all	ready exist in the v	workspace				
Working sets						
Add project to work	ing sets					New
Working sets:					~	Select
?		< Back	Next >		Finish	Cancel

As soon as the project is imported, it should build. The first build will take several minutes while it updates Maven dependencies.

Import		×
Select Create new projects from an archive file or directory.	Ľ	1
Select an import wizard:		
type filter text		
 ✓ ➢ General . Archive File ➢ Existing Projects into Workspace . File System . Preferences . Projects from Folder or Archive > ➢ Git > ➢ Gradle > ➢ Install > ➢ Maven > ➢ Oomph > ➢ Run/Debug > ➢ Team > ➢ TextMate 		
? < Back Next > Finish	Cance	el

Using EGit

1. Open (or create) an Eclipse work space.

2. From the File menu, select 'import' then 'Projects from Git'

● Import	
Select	~
Import one or more projects from a Git repository.	
select an import wizard:	
> > C/C++	
V 🔁 Git	
Projects from Git (with smart import)	
> 🍃 Gradle	
> 🥟 Install	
> > Oomph	
> > Plug-in Development	
> 🗁 Run/Debug	
> 🔁 SVN	
> 🗁 Tasks	~
(?) < Back Next > Finish	Cancel
Hit Next, then select 'Clone URL'	
Import Projects from Git	— 🗆 X
Select Repository Source	CIT
Select a location of Git Repositories	
type filter text	
Existing local repository	
? < Back Next > Finish	Cancel

3.

4. Go back to your github site and copy the URL for your repository into URI field of the next dialog and the rest of the dialog will automatically fill itself.

C Incorect Dec	ningto forme Cit			~
				^
Source Git R	lepository		GIT	
Enter the loc	ation of the source repository.			1
				A
Location				
URI:	https://github.com/douggillespie/MyPamguardDevelopment Local Folder	Local B	undle File	
Host:	github.com			
Repository	path: Vdouggillespie/MyPamguardDevelopment]
Connection	n			
Protocol:	https ~			
Port				
Authentica	ation			
User:	douggillespie			
Password:	•••••			
Store in	Secure Store			
?	< Back Next > Finish		Cancel	

- 5. Note that if at this point you're having trouble with passwords see <u>https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/creating-a-personal-access-token</u>. You probably need to go back to Github and create an access token which you use in place of your regular Github password.
- 6. The next page may ask which branch you wish to select. There is currently only one called 'main' and this is probably the one you want even if others have appeared over time.

7. The next page will ask where you want the repository to be on your local machine. This is up to you, either select the default, or wherever you want.

Import Projects from Git		
Local Destination Configure the local storage location for MyPamguardDevelopment.		
Destination Directory: C:\Users\dg50\git\MyPamguardDevelopment	Browse	
Initial branch: main	~	
Configuration Remote name: origin		
Seck Next > Finish	Cancel	

- 8. The repository will then be copied to your own computer. The time this takes will depend on your internet connection, but should be complete within a minute or two.
- 9. Select the option to import existing Eclipse projects.

Cloning from https://github.com/douggillespie/MyPam
Select a wizard to use for importing projects
Depending on the wizard, you may select a directory to determine the wizard's scope
Wizard for project import
Import existing Eclipse projects
O Import using the New Project wizard
O Import as general project
Booking Tree - C:\Users\dg50\git\MyPamguardDevelopment
(?) < Back Next > Finish Cancel

10. There are a couple of issues with the Maven repositories that PAMGuard uses, so find and edit the pom.xml file. At around line 250 you'll find a comment that the Repo for Jamie's

code is interfering with other repo's. Follow the instructions to comment out that repo, do a Maven update, uncomment the repo and update again.

249	
250	Repo for Jamie's code
251⊖	IMPORTANT: SOMEHOW THIS REPO INTERFERES WITH THE</th
252	JAVAFX DEPENDENCIES. Don't understand how, but it
253	does. If Maven is not downloading the JavaFX dependencies
254	and is instead throwing errors, try commenting out this
255	repository. Let Maven download the JavaFX files, and
256	then uncomment this repo again.
257	Same thing seems to be occurring if I try to update the postgresql library.
258	<repository></repository>
259	<snapshots></snapshots>
260	<enabled>false</enabled>
261	
262	<id>cid>central</id>
263	<name>a0u0ltozdsehx-artifactory-primary-0-releases</name>
264	<url>https://jmachund.jfrog.io/artifactory/jpam2</url>
265	>
266	
267	Repo for netCDF

11. You may need to fiddle with project settings a little, depending on JDK versions on your computer, but you should now be in a position to build, run and modify the PAMGuard source.