

ViPAR

Virtual Pooling and Analysis of Research data

Quick Start Guide v1.0 October 2014

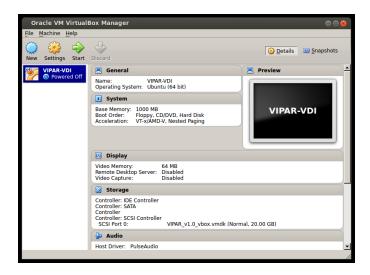
Quick Start Guide

The ViPAR Data Model begins with the creation of **Users**. Next **Studies** are created to which Users can be assigned. Within a Study, the **Variables** to be used are created and grouped into one or more **Data Dictionaries**. Collaborative data contributing **Sites** and **Servers** are then defined and added to the Study. **Resources** are then created by combining Data Dictionaries and the Servers that host the data. These Resources are then **Certified** for use to ensure data integrity. **Projects** are then created from the selection of Variables, Certified Resources and Users available within the Study within which analyses are performed.

For demonstration purposes we have pre-configured two Users (viparadmin and testuser) who are members of a Study called "vipar_test_study", one Data Dictionary within the Study containing four Variables (age, sex, bmi, eversmoke) and finally three Certified datasets hosted in separate Resources on the virtual machine (AUS_test, SWE_test, UK_test). These data are accessible for analysis within a Project called "Test_Project" within which the viparadmin user has the ability to perform analyses.

To initiate an analysis with this setup, follow the steps below:

- Download and install VirtualBox and extension pack from https://www.virtualbox.org/wiki/Downloads
- 2. Download and extract ViPAR VirtualBox Virtual Machine from http://bioinformatics.childhealthresearch.org.au/software/vipar/
- 3. In VirtualBox go to Machine > Add > Browse to and select extracted "VIPAR.vbox" file
- 4. Click "Start" to run the ViPAR Virtual Machine



5. At the system login screen login as the viparadmin system user

a. username: viparadminb. password: mimbADalmC



6. Double click the Web Browser icon on the desktop



7. At the ViPAR login screen log in as the viparadmin ViPAR user

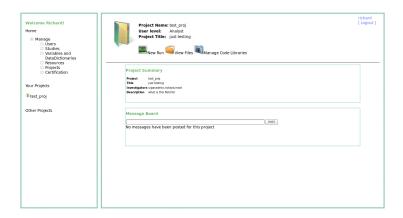
a. username: viparadminb. password: geatNinuaR



- 8. Once you have logged in you will see:
 - a. In the left hand bar
 - i. The Management Interfaces for configuring studies, users, variables and resources (servers hosting data).
 - ii. Projects those you are part of and those you can view shared results in. You should see a "Test_Project" within which you can run an analysis.
 - b. In the bottom bar
 - i. the status of all configured resources a green light means that the resource can be connected to check these are all green

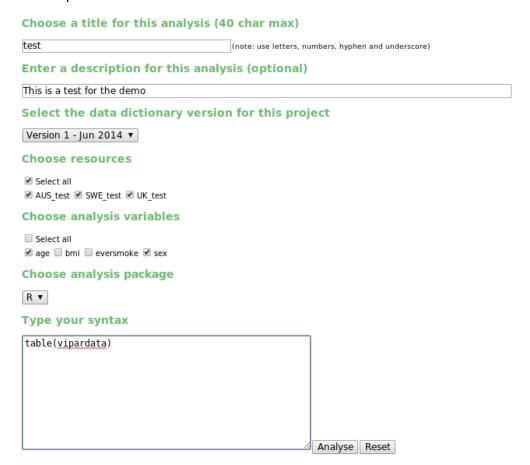


9. Click on the "Test_Project" test project - this takes you into the project page

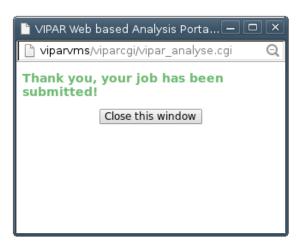


10. To view the results of existing analyses click "View Files" - there should be 1 pre-run result in this section

11. To initiate your own analysis click on "New Run" and complete the form as shown below. The analysis syntax shown will perform a simple tabulated aggregated representation of the age variable against the sex variable from the data in the pre-configured resources. Note that the R object returned by ViPAR is called 'vipardata'



12. Click Analyse. You will see the job has been submitted in the popup.



- 13. In the main window click on "View Files".
 - a. Click the date of the new analysis run you just performed
 - b. Click the time of that run and the results files will appear
 - c. Click on the R.log.txt file to initiate a download of the results
 - d. The text file you downloaded will contain the tabulated results



- 14. Now you can delve in to the manual to see how to initialise the database (i.e. start afresh) change the default passwords both within ViPAR and on the server that runs ViPAR and how to configure your own users, variables, resources and analysis projects.
- 15. To shutdown the VM, select the Icon at the bottom left of the desktop menu bar, select 'Logout' and then 'Shutdown' from the presented options, as pictured below.

