Install The Ark VM:

Please follow these instructions to successfully initiate The Ark system in your local computer and explore the system capabilities without configuring The Ark deployment environment.

Note: You can skip **Set-up Oracle Virtual Box step** if you have already installed a virtual box in your workstation.

Set-up Oracle Virtual Box

- Download the Oracle Virtual Box suitable for your operating system.
    - Windows: http://download.virtualbox.org/virtualbox/5.0.8/VirtualBox-5.0.8-103449-Win.exe
    - Linux: https://www.virtualbox.org/wiki/Linux_Downloads
- For Windows execute the exe as an administrator or for Linux follow the instructions in the download page according to your local Linux distribution.

Set-up a virtual machine inside the Oracle Virtual Box manager

- Download the Ark virtual disk archive from the following link and extract to your local computer using this password: TryArkNow
    - https://cloudstor.aarnet.edu.au/plus/index.php/s/7MYjeQ1sFarQbU2
- Extract the downloaded disk archive to a preferred directory.
- Start the Oracle Virtual Box Manager installed in your computer.
- Create a new Virtual Machine by click on the new button and follow these wizard steps below.
    - For the new virtual machine, give a preferred name and select Type as Linux and Version as Ubuntu (64 bit)
    - Assign minimum 2048 MB as the memory.
    - For Hard disk, choose the "Use an existing virtual hard disk file" option and select the downloaded VDI file in your local directory.
    - Then Click the create button.

The Ark pedigree module navigation

- Start the new virtual machine by double click on the virtual machine name.
- Use following user name and password to login to the system.
    - User: ark Password: pleaseletmein
- After completing the VM boot process, the Ark icon is visible in the desktop.
- Double click on The Ark icon and new browser will be open with The Ark login page.
- Use the following ark administrator user name and password to login to the system.
    - User Name: arksuperuser@ark.org.au Password: TheArkSuperPassword
- After successfully login to the system, user will see the list of studies available for login user under the top level Study tab.
- Select the Demo study from the study list by clicking on the study name.

- Then go to the top level subject tab and click on subject UID in the study subject list.
- There in top of the screen shows the study and the subject in context at given time.
- Go to the pedigree sub-tab under the subject tab and see all the relatives in the subject in context's blood line.
- Click the visualization button to visualize the subject in context's pedigree diagram in a pop-up window.
- The Ark user can download the pedigree diagram as PNG or PDF formats.
- Click on the Set Twin button will open list of siblings who share the same parents as subject in context and their twin status. The Ark user can change the twin status by clicking on appropriate twin type buttons (MZ/DZ) or Unset button to remove the twin status.
- Click on the Configuration button to see the controls enabled for current pedigree mechanism. This included:
    - Plot affected status – To plot the affected status in the pedigree diagram
    - Affected status field – To select a subject custom field from the drop down list and interpret its Yes or No value in the pedigree diagram.
    - Plot date of birth – To plot the date of birth in pedigree diagram
    - Plot age – To plot age in the pedigree diagram
    - Family Id – To select a custom field to represent family id for a subject
    - Inbreeding allowed – choosing whether this study allows the inbreeding relationships among the subjects and this is a onetime selection per study.
- Click on the Family Data button to see family specific metadata assigned for the subject family id.
- User can navigate to the other relatives in the list by click on their subject UIDs.
- If they haven't specify the parents for subject in context would enable the set parent's buttons (Set Father/ Set Mother) to choose a subjects resides in the study with appropriate gender category. (Show male subjects to select father and female subjects for mother)
- User can remove the existing parents by clicking on the remove link assigned to father/ mother relatives in the relative list.
- When click on the Subject UID make that subject to subject in context.