IRAF Installation

Introduction

The procedure below outlines the process for end users to install IRAF on USQ's HPC. During the installation process you will need to decide:

1. **Where IRAF will place the default directories of imdir and cache**:
   These directories are used by IRAF to store images. These directories can be created in numerous places.   It is highly recommended they are created in either the users home directory or the system directory *scratch*.
2. **Where IRAF will install its program files**:-
   This can be either in the users home directory or use the system installation. It is high recommended that users use the system installation as this will be kept up to date.

Installing IRAF in users home directory

1. Run the IRAF installation script as below:

   username@hpc-login-prd-t1 ~:   */usr/local/opt/software/iraf/iraf/install*

2. Anwer the following five questions:
   a. **Question 1**:   "iraf root directory", leave as default.
   b. **Question 2**:   "root image storage", leave as default.
   c. **Question 3**:   "root cache directory", leave as default.
   d. **Question 4**:   "bin directory", change to:

      /usr/local/opt/software/iraf/bin
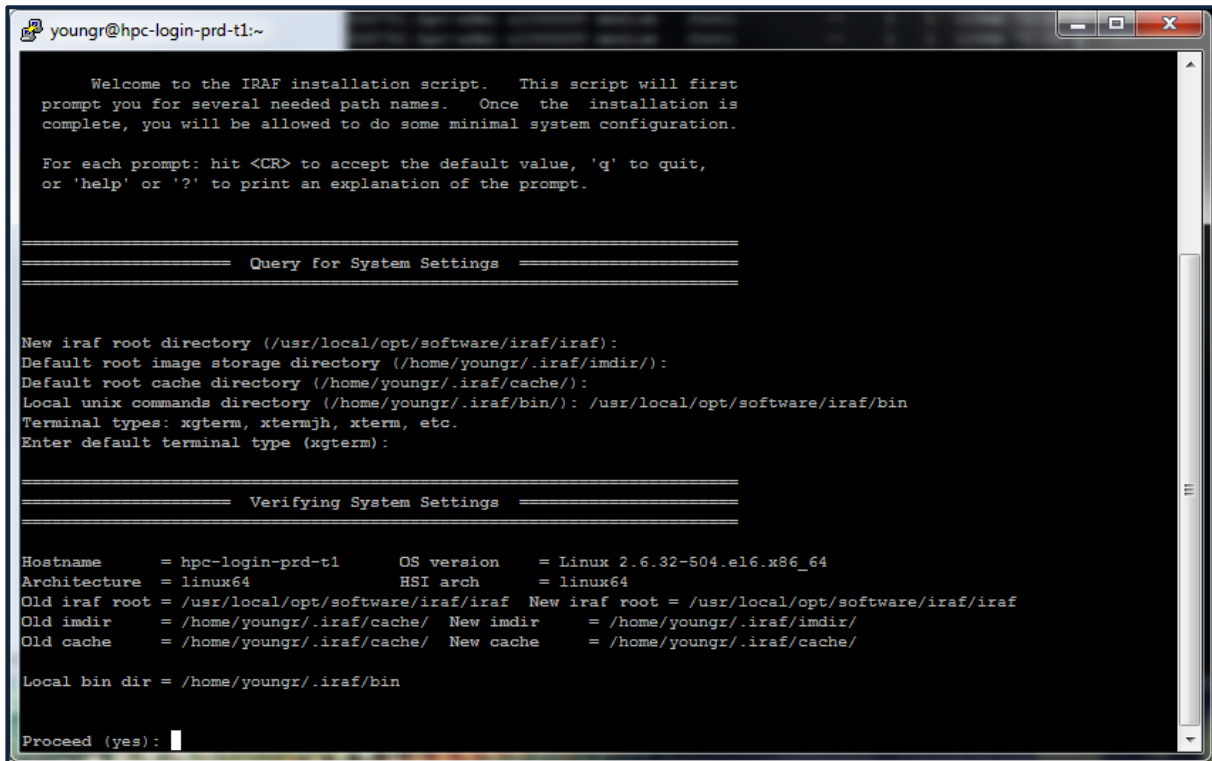
      If you wish to copy the IRAF program files to your home directory leave this as the default of:

      /home/"username"/.iraf/bin

   e. **Question 5**:   "terminal type", leave as default.
   f. Answer "**yes**" if you wish to proceed.
   g. Once run IRAF will setup the user's home directory to find and use IRAF.

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An example of the installation procedure as follows:

Figure 1 – IRAF Installation using home directories

Installing IRAF using system directories

1. Run the IRAF installation script as follows:

    username@hpc-login-prd-t1 ~:   */usr/local/opt/software/iraf/iraf/install*

2. To install directories in system:

    Option 1 is too install images and caching in /scratch directory:

    a. **Question 1**: "iraf root directory" leave as default.
    b. **Question 2**: "root image storage" change to "*/scratch/imdir*".
    c. **Question 3:** "root cache directory" change to "*/scratch/cache*".

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d. **Question 4:** "bin directory" set to:

/usr/local/opt/software/iraf/bin

If you wish to copy the IRAF program files to your home directory. If using this option leave this as the default of:
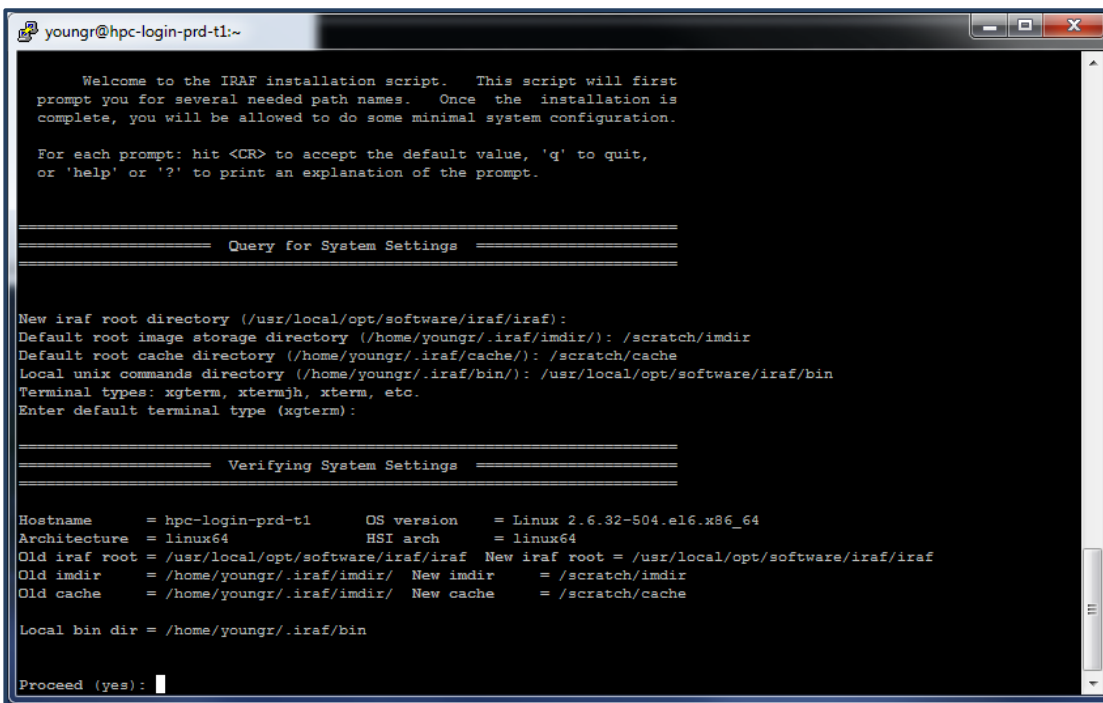
/home/"username"/.iraf/bin

e. **Question 5:** "terminal type" leave as default
f. Answer "yes" if you wish to proceed.
g. Once run IRAf will setup the user's home directory to find and use IRAF.

An example of the installation procedure as follows:

Figure 2- IRAF Installation using system directories

DS9 Installation

IRAF Installation

For use with IRAF DS9 has been installed in /usr/local/opt/software/iraf/bin. To use after installing IRAF simply run ds9 command. If IRAF hasn't been installed load the ds9-7.4 module, then run the ds9 command.