

IRAF for CYGWIN インストール記録

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<http://www.asahi-net.or.jp/~se2k-sgwr/>

1 使用した環境

PC SONY VAIO PCV-RX56

Pentium®4 CPU 2.00GHz 1.21GB RAM

OS Microsoft Windows XP Home Edition Service Pack 3

2 必要なファイルをダウンロード

IRAF の Web サイト

<http://iraf.nao.ac.jp/iraf/web/>

から

- as.pcix.gen.gz
- ib.cygw.x86.gz,
- nb.cygw.x86.gz

を適当な場所にダウンロード。

今回は、/home/ken/tmp/IRAF においた。

3 シェルを一時変更

```
$tcsh
```

4 必要なディレクトリの作成

```
$ mkdir /iraf
```

```
$ cd /iraf
```

```
$ mkdir iraf
```

```
$ mkdir irafbin
```

```
$ mkdir irafbin/bin.cygwin
```

```
$ mkdir irafbin/noao.bin.cygwin
```

5 ファイルの解凍

```
$ cd /iraf/iraf
```

```
$ tar xpf /home/ken/tmp/IRAF/as.pcix.gen.gz
```

同様に、

```
$ cd /iraf/irafbin/bin.cygwin
```

```
$ tar xpf /home/ken/tmp/ITAF/ib.cygw.x86.gz
```

```
$ cd /iraf/irafbin/noao.bin.cygwin
```

```
$ tar xpf /home/ken/tmp/IRAF/nb.cygw.x86.gz
```

6 インストールスクリプトの実行

```
$ setenv iraf /iraf/iraf/      # 最後の / を忘れないこと！
```

```
$ cd $iraf/unix/hlib
```

```
$ ./install
```

これで、スクリプトが走る。

質問には全て enter で応えた。

```
[Ken@RX56 ...irafbin/bin.cygwin]$ tar xpf /home/ken/tmp/IRAF/ib.cygw.x86.gz
```

```
IRAF V2.13 System Installation
```

```
=====
```

```
Welcome to the IRAF installation script.  This script will first prompt you for several needed path names.  The system will be verified for proper structure before the actual install begins, all error must be corrected before you will be allowed to continue.  Recommendations for fixing problems will be made but no corrective action will be taken directly.  Once properly installed, you will be allowed to do some minimal configuration.
```

```
For each prompt: hit <CR> to accept the default value, 'q' to quit, or 'help' or '?' to print an explanation of the prompt.
```

```
=====
===== Query for System Settings =====
```

```
=====
New iraf root directory (/iraf/iraf):
Default root image storage directory (/iraf/imdirs):
Local unix commands directory (/usr/local/bin):
=====
```

```
=====
=====  Verifying System Settings  =====
=====
```

```
Hostname      = RX56                OS version   = CYGWIN_NT-5.1 1.5.25(0.1)
Architecture  = cygwin              HSI arch    = cygwin
New iraf root = /iraf/iraf        Old iraf root = /iraf/iraf
New imdir     = /iraf/imdirs      Old imdir    = /iraf/imdirs
Local bin dir = /usr/local/bin
```

```
Checking definition of iraf root directory ...      [ OK ]
Checking iraf root and imdir directory ...         [ OK ]
Checking iraf directory write permissions ...      [ OK ]
Checking file permissions ...                      [ OK ]
Checking proper iraf tree structure in /iraf ...
  Checking for 'iraf' subdir ...                   [ OK ]
  Checking for 'irafbin' subdir ...                [ OK ]
  Checking for 'irafbin/bin.cygwin' subdir ...     [ OK ]
  Checking for 'irafbin/noao.bin.cygwin' subdir ... [ OK ]
Checking Core system binary directory ...          [ OK ]
Checking NOAO package binary directory ...         [ OK ]
Checking that local bin directory exists ...       [ OK ]
Checking for existing commands directory...        [ OK ]
```

Proceed with installation? (yes):

```
=====
=====  Begin Installation  =====
=====
```

```
Editing Paths
-----
```

```
Editing the iraf user .login/.cshrc paths ...      [ OK ]
Editing iraf/imdir paths into system files ...     [ OK ]
```

```
Checking File Permissions
-----
```

```
Checking iraf file permissions ...                [ OK ]
Creating root imdir at /iraf/imdirs ...          [ OK ]
Reset /tmp sticky bit setting ...                 [ OK ]
Checking alloc.e permissions ...                  chown: `iraf/
e' の所有権を変更中: Invalid argument
[ OK ]
```

Creating File Links

Checking for /iraf symlink ... [OK]
 Checking /usr/include directory ... [OK]
 Creating <iraf.h> symlink ... [OK]
 Creating iraf command links in local bin dir ... [OK]
 Marking system update time hlib\$time ... [OK]

Creating Graphics Device Files

Checking /usr/local/lib directory ... [OK]
 Creating /usr/local/lib/imtoolrc link ... [OK]
 Checking if termcap file contains an XGterm entry ... [OK]
 Checking graphcap file for XGterm/imtool entries ... [OK]

=====
 ===== Post-Install Configuration =====
 =====

The system should be fully functional at this point however some post-install configuration may be required to make use of all the features such as networking or tape access. Additional software such as external packages or display servers will need to be installed separately. Some minimal configuration can be accomplished now but you should consult the IRAF Site Manager's Guide for a more complete discussion of IRAF system management, configuration of printers, etc.

Proceed to post-install configuration stage? (yes):

IRAF Networking Config

IRAF Networking can be used to access a remote image, tape device, display server, or other network service. It's configuration is not a requirement for normal IRAF operations and it can be updated at any time by editing the IRAF dev\$hosts file with new entries.

In this stage we will add an entry for the current platform to the hosts file. In a local network installation this script should be run on each system to add a networking entry as well as to install other system files needed by IRAF.

Configure IRAF Networking on this machine? (yes):

Recommended dev\$hosts file entry used for this machine:

RX56 : RX56!/iraf/iraf/bin.cygwin/irafks.e

Proceed with this entry? (yes):

*** or it's mirror sites.
*** For information on DS9 please see

*** <http://hea-www.harvard.edu/RD/ds9/>

*** Please contact <http://iraf.net> with questions.

Graphics Terminal Availability

Graphics Terminals Found on This Machine:

(Date: 22 2007 /usr/bin/xterm) /usr/bin/xterm

=====
Congratulations! IRAF has been successfully installed on this system.
=====

To begin using the system simply log in as any user and from the directory you wish to use as your iraf login directory type:

```
% mkiraf      # create a login.cl file
% cl          # start IRAF
```

The 'iraf' user is already configured with a login.cl file so a simple 'cl' command is sufficient to start the system.

Additional information can be found at the IRAF.NET web site:

<http://iraf.net>

Please contact <http://iraf.net> with any questions or problems.

=====
===== Installation Completed With No Errors =====
=====

7 xgterm.cygwin の取得

IRAF を動かすターミナルとして xgterm が必要。

```
$wget http://iraf.net/ftp/pub/fitz/xgterm.cygwin
```

```
$mv xgterm.cygwin /usr/local/bin/xgterm
```

```
$cd /usr/local/bin  
$chmod +x xgterm
```

8 X と xgterm の起動

```
$startxwin.sh  
$xgterm
```

9 最後の儀式

このあと、通常 IRAF を使用するディレクトリ (今回は/home/ken) に移動し

```
$ cd  
$ pwd  
/home/ken
```

```
$ mkiraf  
Initialize uparm? (y|n): y
```

と聞かれるので、y を応えると、
initializing uparm

```
Terminal types: xgterm,xterm,gterm,vt640,vt100,etc.  
Enter terminal type: xgterm
```

と聞かれるので、xgterm と入力。

A new LOGIN.CL file has been created in the current directory.
You may wish to review and edit this file to change the defaults.

ここまで来たら完了。

```
$ cl
```

で、無事起動した。!

setting terminal type to xgterm...

IRAFNET PC-IRAF Revision 2.13-BETA2 Wed Apr 19 21:21:13 MST 2006

This is the IRAFNET version of IRAF V2.13 supporting PC systems.

```
(_)__  __ /_  __  __||_      http://iraf.net
|||'_/_`||  _| |'\'/_-)|  _|      IRAF Software and
|||_ \_|||  ()|||\_||\_|      User Support
```

Welcome to IRAF. To list the available commands, type ? or ???. To get detailed information about a command, type `help <command>'. To run a command or load a package, type its name. Type `bye' to exit a package, or `logout' to get out of the CL.

Please visit <http://iraf.net> if you have questions, to report problems, or would like to help to support this project.

The following commands or packages are currently defined:

```
ace.      dimsum.   guiapps.  mxtools.  plot.     system.
color.    fitsutil.  images.  nlocal.   proto.    tables.
ctio.     fuzzy.     language. nmisc.    softools. utilities.
dataio.   gemini.    lists.   noao.     spectime. vol.
dbms.     gmisc.     mscred.  obsolete. stdsdas.  websvc.
```

ec|>

10 DS9

最後に、IRAF での画像表示用に DS9 を用意する。

<http://hea-www.harvard.edu/RD/ds9/>

から windows 用のバイナリを get。

解凍し、適当な場所におく。

(パス名に日本語が入る場所におくとトラブルの元になるらしい)。

ここでは、

d:\usr\DS9

に実行ファイルを置いた。

Windows 上で、ds9 を起動しておき、

Cygwin から

\$cd

\$pwd

/home/ken

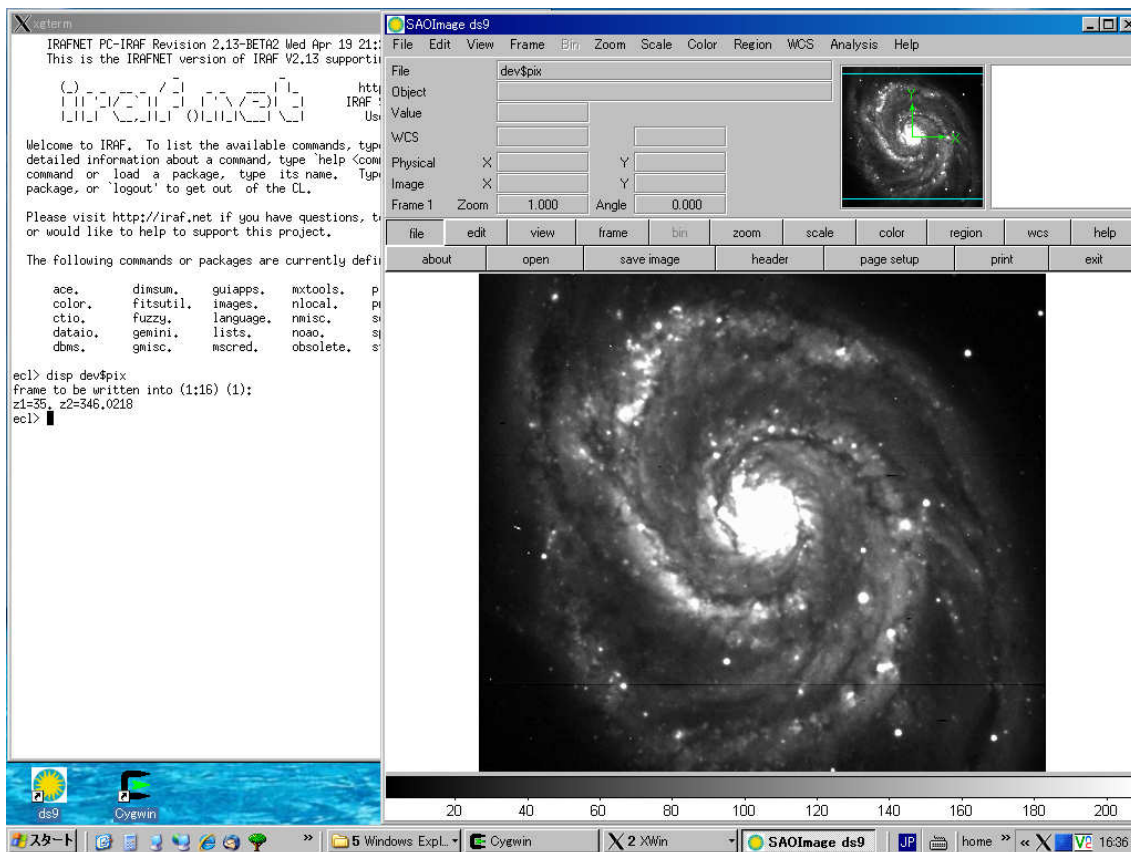
\$cl

ecl>disp dev\$pix

frame to be written into (1:16)(1):

と出るので、enter すると、M51 の画像が現れる。

以上。



●補足

(1) ERROR: Cannot open device (node!imtool,,512,512)

他のマシンにインストールした際、

```
ecl>disp dev$pix
```

とすると、

```
ERROR: Cannot open device (node!imtool,,512,512)
```

というエラーが出る場合があった。

cl を起動する前に xgterm の中で、

```
$export IMTDEV="inet:5137:127.0.0.1"
```

としておくと回避できた。

●参考資料 (敬称略)

有益な情報を提供してくださった皆様に感謝します。

PC-IRAF Installation Guide (Doug Tody and Mike Fitzpatrick)

<http://iraf.noao.edu/iraf/web/docs/src/pcix/pciraf-toc.html>

Windows XP で IRAF の minimal メモ (松本 桂)

<http://quasar.cc.osaka-kyoiku.ac.jp/~katsura/iraf-cygwin.html>

PC-IRAF (Cygwin 版) インストールの手引 (濱部 勝)

http://hamalabo.sakura.ne.jp/Soft/iraf_cygwin/index.html

ERROR: Cannot open device (node!imtool,,512,512)の対処方法

<http://iraf.net/phpBB2/viewtopic.php?t=85205&postdays=0&postorder=asc&start=0>

の

Posted: Tue Apr 25, 2006 8:11 pm Post subject: cygwin port on win2k

●改訂の記録

- ・ 2009/09/14 ミスタイプを修正
- ・ 2008/10/13 Cannot open device (node!imtool,,512,512)の対処方法を追記