

AireLinux: Review and Plans

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Ambition

- To make maintenance of AIRE(Astrophysical Integrated Research Environment) easier, well-organized and more reproducible.
- To explore the possibilities in virtual observatory
- To coordinate and initiate high performance computing and large data processing in astrophysics
- To practise the philosophy of free software in astronomy community

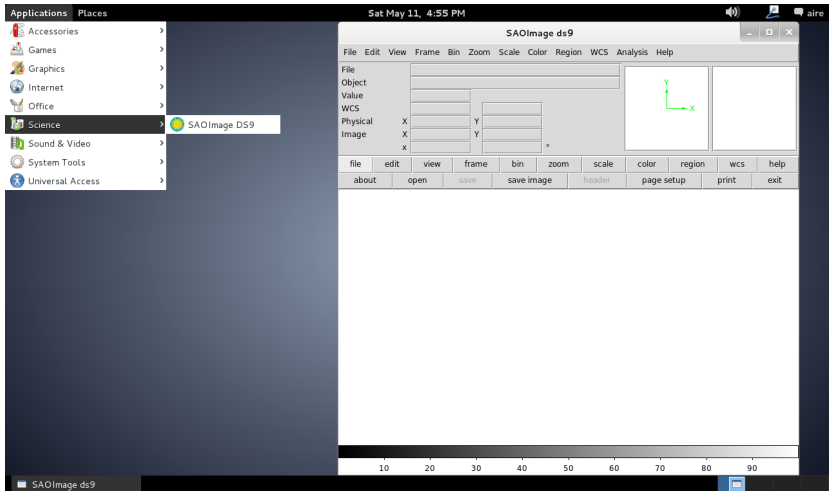
Overview

- A binary Linux distribution based on Debian
- People involved: THCA, TUNA
- Distribution: DebianLive, virtual machine

OVF

- Open Virtual Format
Standard by VMWare, Oracle, etc.
- Demonstration
 - 1 Virtual Machine on VirtualBox
 - 2 A normal debian installation
 - 3 Installing astronomy packages
 - 4 Export OVA from within VirtualBox

OVF (screenshot)



OVF Build Farm

- Automated generation over manual creation
- Input
 - 1 list of packages
 - 2 custom files
- Output
 - 1 LiveCD
 - 2 LiveUSB
 - 3 OVA
- DebianLive as framework
 - systematic way to generate customized LiveCD
- adding OVA output to DebianLive
- upgrade path using apt-get natively

Packages

Pkg	Debian	HP
iraf	ITP: #690531	http://iraf.noao.edu
casa	ITP: #688107	http://casa.nrao.edu/
heasoft		http://heasarc.nasa.gov/lheasoft/
ds9	saods9	http://hea-www.harvard.edu/RD/ds9/site/H
fv	ftools-fv	http://heasarc.gsfc.nasa.gov/ftools/fv/fv_do
fftw	fftw3	http://www.fftw.org
scipy	python-scipy	http://www.scipy.org

■ more packages follows

Timeline

- 2013.2 Proposal
- 2013.8 Started: build infrastructure
- 2013.10 Packaging: casa, iraf, heasoft
- 2014.1 Beta release

Contribute to airelinux

if you are

- an enthusiastic astronomer
Try out our future release
- active in the community of free software, esp. Debian
Help us package and do quality assurance
- an artist
Help us with the splash screen, logo, website design, wallpaper, screensaver, etc.