New OS for the Mark5 System

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Haystack Observatory

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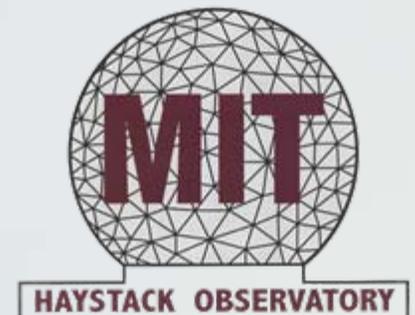
Objective

- State of our Current Mark5 OS
- Benefits of Upgrading
- Requirements of a New OS
- The New OS
- The End User
- Process of Availability
- Preview the New OS
- Q&A / Discussion

Current Mark5 OS's

RedHat 7.1 – 9.0

- Freely Distributed OS

- Kernel 2.4.xx

- No longer supported

  - Security issues

  - Drivers & Patches

  - Outdated

Current Mark5 OS's

Lifespan of RedHat 7.1 – 9.0

April 16 2001	RHL 7.1	Seawolf
August 2, 21 2001	RHL 7.1.93, 7.1.94	Roswell
October 22 2001	RHL 7.2	Enigma
March 22 2002	RHL 7.2.91	Skipjack
May 6 2002	RHL 7.3	Valhalla
May 6 2002	RHEL 2.1 AS	(Pensacola)
July 4, 29; August 19 2002	RHL 7.3.29, 7.3.93, 7.3.94	Limbo/(null)
September 30, 2002	RHL 8.0	Psyche
March 31 2003	RHL 9	Shrike

Why Upgrade?

• Technological disadvantage

• Stable environment

• Security patches

• Up-to-date support

• Support current operations
of VLBI and eVLBI

• Support future operations
of VLBI and eVLBI

OS Requirements

What do we need?

- Freely Distributed
- Stable releases
- Updates and Patches
- Ease of maintenance
- Support Mark5A & Mark5B

Future Support

- Kernel 2.6.x
- Support GigE xfer rates
- Net tools

The New OS

The Contenders

Fedora Core3

Debian "Sarge"

Ubuntu Hoarty Hedgehog

The New OS

Fedora Core 3

- Sponsored by RedHat
- Geared towards Developer Community
- 4-6 month release cycle
- 2-3 month support after next release
- Freely distributed

September 25 2003	FC 0.94	Severn
October 13 2003	FC 0.95	Severn
November 5 2003	FC 1	Yarrow
January 19 2004	FC 0.96	Severn
February 12; March 29; April 27 2004	FC 1.90, 1.91, 1.92	
March 5 2004	FC 1	Yarrow
May 18 2004	FC 2	Tettnang
July 13; September 20; October 11 2004	FC 2.90, 2.91, 2.92	
November 8 2004	FC 3	Heidelberg

The New OS

Debian "Sarge"

- Still a release candidate
- Very large community of contributors
- Last release was 07/2002
- Freely distributed

June 17 1996	1.0	Buzz
December 12 1996	1.2	Rex
June 2 1997	1.3	Bo
July 24 1998	2.0	Hamm
March 9; August 28 1999	2.1; 2.1.11	Slink
April 14 2000; July 13 2002	2.2; 2.2r7	Potato
July 19 2002; April 16 2005	3.0; 3.0r5	Woody
??/??/2005?	3.1	Sarge

The New OS

Ubuntu Hoarty HedgeHog

- Sponsored by Canonical Ltd.
- Debian Foundation
- Full-time Ubuntu contributors
- 6 month release cycle
- 18 month support after next release
- Freely distributed

October 2004	4.10	Warty Warthog
April 2005	5.04	Hoarty Hedgehog
October 2005	5.10	Breezy Badger

Which OS?

Factors

- A Debian-based OS would sync with the Field System
- A well supported OS with security patches
- Keeping up to date with new applications
- Installation and Upgrading ease

The End User

Installation Process

- New hard drive
- Simple step by step installation
- Minimum interaction
- Parameter basics

Mark5 Operations

- No operational changes
- Transparent OS switch
- System Administrations similar to FS

Availability of the New OS

Phase I : Beta Sites

- Testing of installation and upgrading procedures

Phase II : Beta Testing

- Run test sessions and test functionality of the Mark5

Phase III : Full Availability

- Make installation procedures and software scripts available to the entire community

Timeline

May '05 – June '05 : Beta Sites

June '05 – Aug '05 : Beta Testing

Aug '05 – Dec '05 : Full Availability

Q & A/ Thoughts/ Suggestions?

Thank you