Mondo Rescue: A GPL disaster recovery solution

Bruno Cornec
 Linux Solution Consultant
Contents

- What is it?
- Backup with mondoarchive
- Restore with mondorestore
- Extended usages
- Project management
- Future directions
Mondo Rescue

A GPL disaster recovery solution

- Distribution neutral (Mandriva, Fedora, RHEL, OpenSuSE, SLES, Debian)
- Supports any FS accessible by the kernel (including dual boot systems) and boot loader (+LVM, +SW Raid)
- Supports CD-R[W], DVD[+R[W], Tapes, NFS, local FS (ISO9660 files)
- Uses mindi for mini-distro (running or fail-safe kernel)
- Full, differential backups are supported
- CLI + curses based UI
Mondo Rescue

Contents

- What is it?
- Backup with mondoarchive
- Restore with mondorestore
- Extended usages
- Project management
- Future directions
Uses either bzip2, gzip or lzo for data compression

Uses afio for reliable backup (supports compression on a file basis, ASCII headers, cpio comp.)

Generates variable size bootable ISO images or burns media / creates tapes

Use running kernel + modules or a generic set

```
/usr/sbin/mondoarchive -O -k /boot/vmlinux-2.6.16 -p mach1 -E ""/usr/share/doc /usr/src /mnt/fs2" -F -N -T /home/mondo/tmp -n server.hpintelco.org:/writer/nfs -d / -s 700M
```
Mondo Rescue

Contents

- What is it?
- Backup with mondoarchive
- Restore with mondorestore
- Extended usages
- Project management
- Future directions
Mondo Rescue

Restoring: mondorestore

- From bootable physical medias (floppy, CDs, tapes), images on disks, network, virtual media (Proliant specific) or PXE
- Interactive restore from image files under the OS
- mindi.iso tool set
- Various modes: Automatic, Interactive, Selective, Compare
- Ability to change FS type, layout, SW Raid, even HW configuration.
Contents

- What is it?
- Backup with mondoarchive
- Restore with mondorestore
- Extended usages
- Project management
- Future directions
Mondo Rescue

Proliant features

- With the iLO and Virtual Media function, ability to boot from a (central) server hosting (all) ISO images without physical media.
- Creates backup with media mounted through iLO.
- Smart Array support
- NIC support
- HP patches
PXE support

- Using PXE boot ROM, ability to integrate mondo images with a generic deployment server based on pxelinux. (HP Patches)

```
label mondo

kernel kernel/vmlinuz-mondo

append root=/dev/ram rw pxe
initrd=initrd/initrd-mondo.img
ramdisk_size=32768 prefix=mach1
load_ramdisk=1 prompt_ramdisk=0
ipconf=eth1:192.168.0.1:255.255.255.0
      0:192.168.0.255:192.168.0.254
nfsmount=192.168.0.10:/export/mond
ping=5
```
Cloning support

- Requires knowledge of master and target platforms (potential different drivers)
- All drivers should be part of the mindi image created (either used on master or forced in mindi)
- Use –H if master and target are identical hardware platforms
- In other cases, all functions are also available (partition resizing, filesystem type change ...) + hardware adaptation
Contents

- What is it?
- Backup with mondoarchive
- Restore with mondorestore
- Extended usages
- Project management
- Future directions
Mondo Rescue

Project Management

- In the project since Dec. 2000 – Project Maintainer since Oct. 2005
- New subversion repository (Thanks BerliOS)
- 5 versions published
- New Build process (Generated pkgs – 2 generations)
- 12 distributions (Thanks Qemu)
- New Website (Thanks Ayo)
- Mondorescue HOWTO Rewritten
- Mailing List activity
Mondo Rescue

Contents

• What is it?
• Backup with mondoarchive
• Restore with mondorestore
• Extended usages
• Project management
• Future directions
Which future?

“World domination (Linus Torvalds)”

- v 2.0.9
  - Debian, Gentoo, Slackware pkgs
  - LVM and md fixes
  - Some limits increased
- V 3.0.0
  - IA-64 port & FreeBSD tests
  - Internationalization
  - Configuration files
  - Code cleanup (memory mngt)
  - Build env. improvements (tests programs, QA, splint, valgrind...)
Web Resources

- Mondo rescue main site
  http://www.mondo rescue.org
- BerliOS version
  http://mondo rescue.berlios.de
- Busybox
  http://www.busybox.org

“The evolution of FLOSS and the Internet are tightly coupled”
Contact

"Changes are never easy to make. There is comfort and safety in tradition, but change must come, no matter how painful or expensive it may be."

Bill Hewlett

Thanks

Bruno_Cornec@hp.com
(Windows Solution Consultant in the HP/Intel Solution Center)
http://www.hp.com/linux

Linus Torvalds, Richard Stallman, Eric Raymond, Nat Makarevich, René Cougnenc, Eric Dumas, Rémy Card, Mike Balma, Hugo Rabson, Gallig Renaud among others, for their work and devotion to the Open Source Software cause... and my family for his patience :-)

© Bruno Cornec / HP - Document under/sous FDL