



Mondo Rescue: A GPL disaster recovery solution

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Contents

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



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



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Archiving: mondoarchive



- 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/vmlinuz-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
```



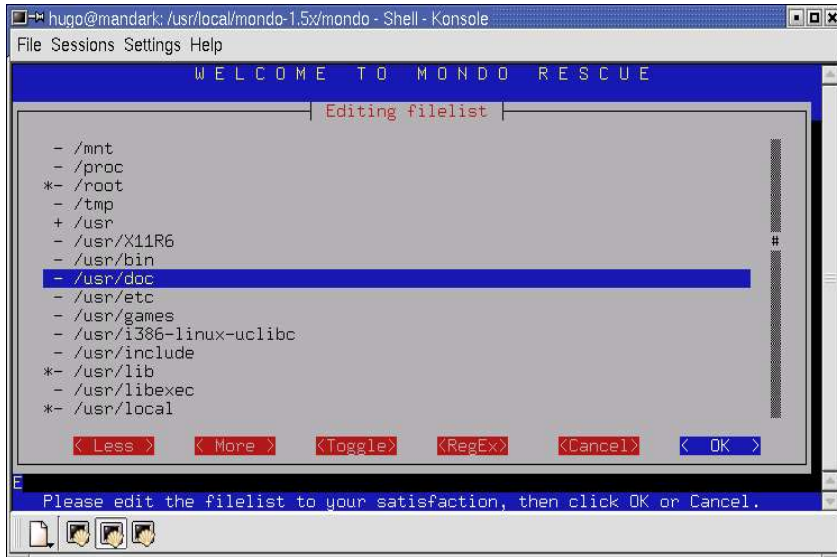
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## Restoring: mondorestore

- 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.





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## 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=eth1:192.168.0.1:255.255.25
```

```
5.0:192.168.0.255:192.168.0.254
```

```
nfsmount=192.168.0.10:/export/mond
```

```
o 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



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## 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

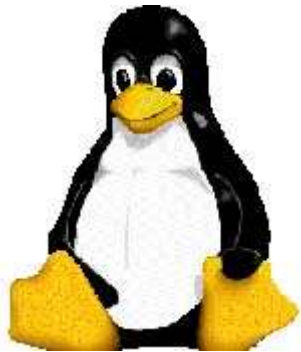


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## Which future ?



“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.mondorescue.org>
- BerliOS version  
<http://mondorescue.berlios.de>
- Busybox  
<http://www.busybox.org>



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





## Contact

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HP/Intel Solution Center)

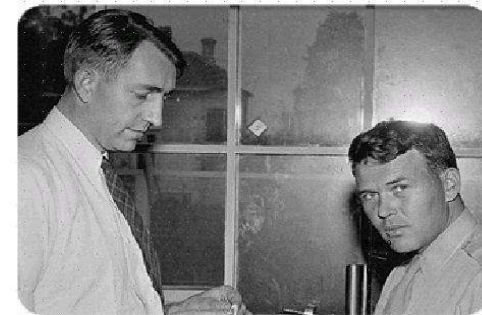
<http://www.hp.com/linux>

”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



Linus Torvalds, Richard Stallman,  
Eric Raymond, Nat Makarevitch,  
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 :-)