

# Recovery Disk for Appliances How to Guide

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## Overview

PINsafe Hardware appliances allow an ISO image to be generated to build a new hardware appliance from new hardware, also known as a 'bare metal recovery'. The created ISO image creates a system backup at the moment of its creation. This can then be brought up to date using regular backups, see [Automated FTP Backups](#). The CMI is not available during ISO creation.

It is recommended to create ISO images before and after any major system changes.

## Prerequisites

### Recovery CD Creation Prerequisites

PINsafe hardware appliance

CDROM

Writeable CD's

### Recovery CD Usage Prerequisites

PINsafe Hardware appliance to be installed. **Note: This must be of the same hardware type**

Recovery CD's created earlier

Keyboard, Monitor attached to PINsafe Hardware appliance

## Creating the Recovery CD

### Create the ISO image

From the PINsafe CMI select the Option for 'Backups and Restore Options', then navigate to the create ISO image option. At the prompt *Are you sure?* (Yes/No): enter *y*

```
10.90.55.170 - PuTTY
WELCOME TO MONDO RESCUE

Making catalog of files to be backed up
Dividing
Copying M
Calling M
Preparing
Archiving

Done.
Done.
Done.
Done.
Done.

I am backing up your live filesystem now.
Please wait. This may take a couple of hours.

1% done          99% to go

Mindi 2.0.
End date : Tue Feb  1 13:14:41 CET 2011
-----
Boot+data disks were created OK
Archiving regular files
I am backing up your live filesystem now.
```

```
10.90.55.170 - PuTTY
WELCOME TO MONDO RESCUE

Making catalog of files to be backed up
Dividing filelist into sets
Copying Mondo's core files to the scratch directory
Calling MINDI to create boot+data disks

Done.
Done.
Done.

Generating boot+data disks

Generating boot+data disks

1%

Working...

Using modules for kernel: 2.6.9-89.ELsmp
Using modules for kernel: 2.6.9-89.ELsmp
Mindi-BusyBox v1.7.3-r1892 (2008-03-22 10:54:33 CET) multi-call binary
Analyzing dependency requirements

48% -

Generating boot+data disks
```

```
10.90.55.170 - PuTTY
WELCOME TO MONDO RESCUE

Making catalog of files to be backed up
Dividing
Copying M
Calling M
Preparing
Archiving

Done.
Done.
Done.
Done.
Done.

Backing up filesystem

I am backing up your live filesystem now.
Please wait. This may take a couple of hours.

ISO 1: [*****.....] 22% used

19%

1:20 taken      5:34 remaining
19% done        81% to go

Mindi 2.0.
End date : Tue Feb  1 13:14:41 CET 2011
-----
Boot+data disks were created OK
Archiving regular files
I am backing up your live filesystem now.
```

```
10.90.55.170 - PuTTY
WELCOME TO MONDO RESCUE

Making catalog of files to be backed up
Dividing filelist into sets
Copying Mondo's
Calling MINDI to
Preparing to arc
Archiving regula
Archiving large
Writing any rema
Backup and/or ve

Done.
Done.
Done.
Done.
Done.
Done.
Done.
Done.
Done.

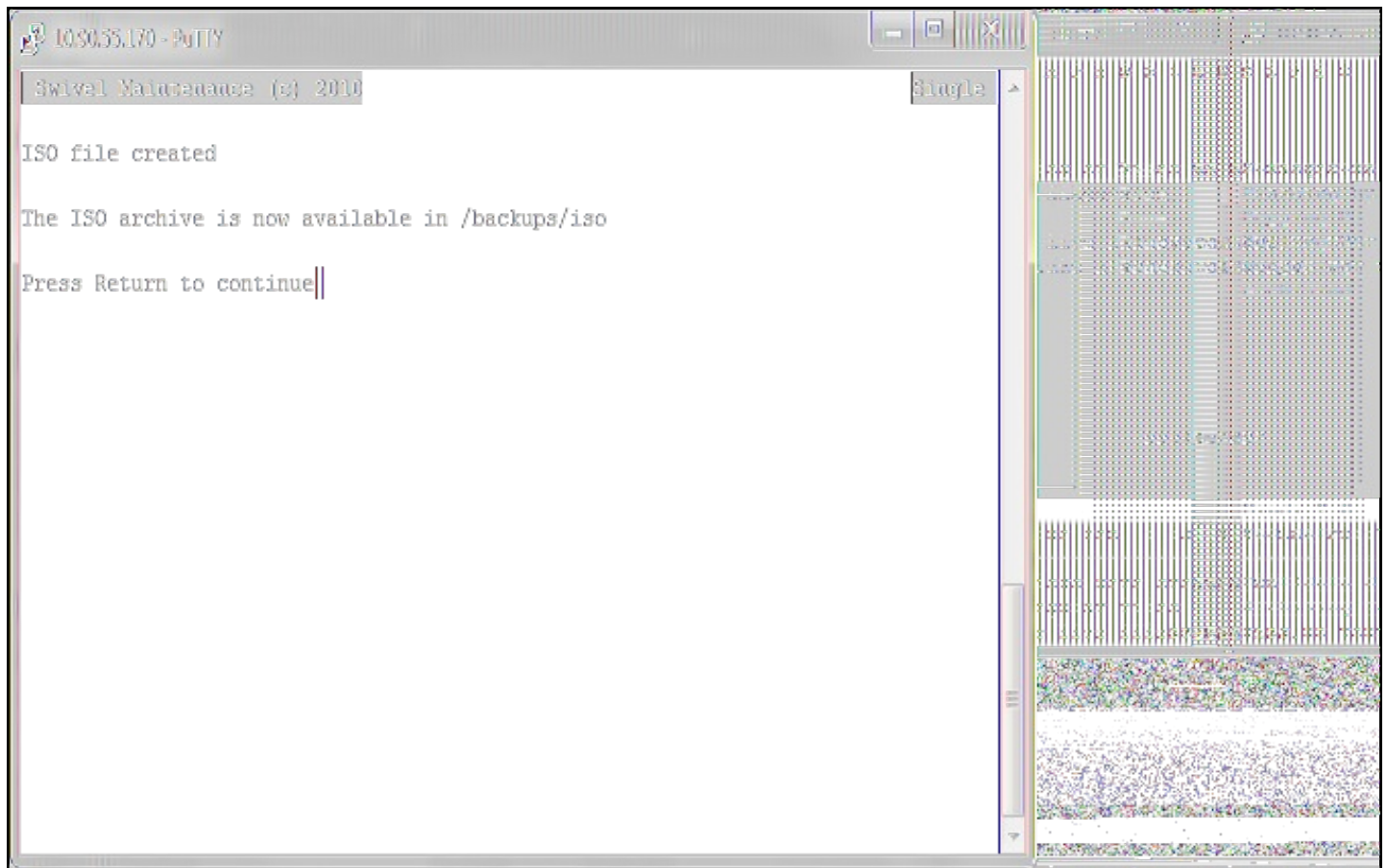
Alert

Mondo Archive has finished its run. Please
press ENTER to return to the shell prompt.

OK

fine.

35440 extents written (69 MB)Mondoarchive ran OK.
[Main] libmondo-fork.c->run_prog_in_bkgd_then_exit#784:
Call to mkisofs to make ISO (ISO #2) ...OK
/var/cache/mindi/mondorescue.iso, a boot/utility CD, is available if you want i
Data archived OK.
Mondo Archive has finished its run. Please press ENTER to return to the shell pr
```



## Copy the ISO images off of the Appliance

Copy the ISO images off of the hardware appliance from /backups/iso. See [Copying appliance files How to Guide](#). There are usually two ISO images for each hardware appliance.

## Burn ISO image

Use your preferred CD recording software to create a CD of the ISO image. (Ensure that the ISO image itself is not burnt onto CD but the file structure within the ISO image). Label the recovery disks as Recovery CD 1 and Recovery CD 2 as appropriate.

## Repeat Process for Each hardware Appliance

Each Swivel hardware appliance will have a different configuration. Also Swivel HA Primary, HA Standby, Standalone and DR appliances have different builds so recovery CD's should be created for each appliance.

## Testing Recovery CD

Ensure Recovery CD can be read.

## Restoring from a Recovery CD

### Install new Hardware

Install the new hardware appliance. A USB or PS2 keyboard and VGA monitor are required to view the console and select the boot options.

### Boot from Recovery CD

**Note: This process will overwrite any existing data on the Appliance**

Insert Recovery CD 1 and power on the appliance.

The following message will appear:

```
Warning: this will restore the data from the recovery disks and overwrite existing data on the PINsafe Hardware Appliance
```

Wait for command prompt of ?boot:? Type RESTORE Press enter

```
boot: RESTORE
```

Observe install and follow any instructions. The process would normally take around 15 minutes.

## Restore from latest backup

Use the CMI options to restore the PINsafe server from the latest backup. See [Restore Appliance](#)

## Known Issues

The VMware image does not contain the create Recovery ISO image option. Use VMware backups and snapshots as appropriate.

## Troubleshooting

If the ISO image creation terminates early, or the end **OK** button cannot be selected, then the Mondo file creation may appear at the [CMI](#) login. Pressing the RETURN key should allow the [CMI](#) to be accessible. To remove this message delete the file /tmp/iso.creation