

Data Rescue

Overview

I ran into trouble when I attempted to upgrade my laptop from ubuntu 18.04 to 20.04. My release_upgrade from Ubuntu 18.04 to Ubuntu 20.04 got hung up, so after waiting quite some time I decided to break out of the upgrade script.

I looked around and version 20.04 seemed well installed and working properly.

I hoped that the version would just work now, So I rebooted without taking any precautions.

The ubuntu boot sequence got hung up but I managed to use a rescue option in the Grub menu that booted an old archived partition of ubuntu16.04 that I happened to have on the drive.

I blindly assumed that my issue was merely which partition was set to active. So I changed that and rebooted and it made matters worse.

uhoh

output:

```
error: no such partition.  
Entering rescue mode... grub rescue>
```

Now nothing booted.

Doh!

What to do?

1. Look around.

```
grub rescue> ls
```

output:

```
(hd0) (hd0,msdos3) (hd0,msdos2) (hd0,msdos1)
```

Those are (device,partition) references.

```
ls (hd0)
```

output:

```
(hd0): Filesystem is unknown.
```

```
ls (hd0,msdos2)
```

output:

```
(hd0,msdos2): Filesystem is ext2.
```

Note It guessed ext2, but actually it is ext4.

```
ls (hd0,msdos2)/home
```

output:

```
./ ../ ubuntu/ pierre/
```

That is the partition I **wanted**

```
ls (hd0,msdos1)/home
```

output:

```
./ ../ dev/ sysadmin/
```

The partition that **worked**, now I want it back working.

Ubuntu live USB to the rescue.

Follow this article: [Ubuntu Live Rescue](#)

Ok Now we are back with booting the relic partition. Now this time **Preserve Critical Info First**

1. **`\${HOME}/jnut**

I maintain a subdirectory on my computer where I put essential files that are important to me. Files that I need to preserve from one incarnation of a workstation to another. Among other things, it contains my latest password database. I preserve this on USB flash drive.

2. Project sources which were being maintained on the faulty partition.

These projects are under revision control, off the workstation. We still need to preserve the information of where they are and how to access their git repository..

3. Anything else that needs preserving that is not already preserved on jnut.

To accomplish the preservation of the above I recursively copied `"/mnt/ubuntu20.04/home/ubuntu/jnut"` to USB flash drive.

I copied all the information for 2 and 3 above to a sub-directory "ship_toUSB" and I will also replicate that onto the flash drive. The file "ship_toUSB/billomaterials.txt" indicates what the directory contains.

```
cat ship_toUSB/billomaterials.txt
```

output:

```
Bill of materials
=====

allsources.txt      List of project directories on the faulty partition.
billomaterials.txt  This file.
listrepos           Bash script to list repos existing on guanabana and give you a few tips.
mangobichel6_04.zip Some old jpeg images I want to keep for personal reasons.
skeleton.kdbx       Transition password database.
venv.pdf            Doc helps with virtual environements.
vwrapper.pdf        Same as above.
venvlist            List of virtual environments under ubuntu on the faulty partition.
reqs/               Contains requirements files corresponding to each item in venvlist.

Personal Reading lists:

  Norm-BookList-2021.docx.rtf
  Norm-BookList-2022.docx.rtf
```

Among those files two of them are informative enough to list them in this document.

```
cat ship_toUSB/allsources.txt
```

output:

```
# Our project sources make use of git repositories.
# for repos at gituser@guanabana.bernatchez.net you need the ssh private key: id_guanabana_admin
# then git push/pull etc will work properly
# for repos at git@github.com:pierrebernatchez/ you need the key: mangobiche_github,
#
# Note: You can find both private keys in "jnut/private_pack/"
# and their passwords in the password database that holds them "jnut/pierreKeepass.kdbx"
# and also in "ship_toUSB/skeleton.kdbx"
#
# Working copies of these sources existed on the now faulty partition
# in these directories.
#
# from /home/ubuntu/collab:
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/wait_ssh.git
url = git@github.com:pierrebernatchez/handyhelper.git
url = git@github.com:promotionefx/animbboard.git
url = git@github.com:pierrebernatchez/latexhelper.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/peripherals.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/restdocs.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/metarepos.git
url = git@github.com:pierrebernatchez/mathsansmystere.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/personalnotes.git
url = git@github.com:pierrebernatchez/msmsite.git
# from /home/ubuntu/repos:
url = git@github.com:pierrebernatchez/srcgif.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/srctemplate.git
url = git@github.com:pierrebernatchez/minifirewall.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/ubuntuprereq.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/bernatchez_staticweb.git
url = git@github.com:pierrebernatchez/srcgeek.git
url = git@github.com:pierrebernatchez/srcdrawhead.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/ogopogo_staticweb.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/geekutils.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/bboards.git
url = gituser@guanabana.bernatchez.net:/home/gituser/repos/cssbootstrap.git
```

```
cat ship_toUSB/venvlist
```

output:

```
#
# List of virtual python environment directories that existed under
# the home/ubuntu/ directory on the faulty partition.
# I am not sure which if any were still relevant, nor which projects
# assumed which virtual environment. But just in case, I have
# captured each one's context with a 'pip freeze' so that any one of
# these can presumably be resored for use with any any of the projects.
#
# The list indicates each environment's saved requirements context file.
#
devpi_venv          reqs/devpi_venv_requirements.txt
django_venv        reqs/django_venv_requirements.txt
latexhelper_venv  reqs/latexhelper_venv_requirements.txt
mathsansmystere_venv reqs/mathsansmystere_venv_requirements.txt
msm_site_venv     reqs/msm_site_venv_requirements.txt
```

```
msmsite_venv          reqs/msmsite_venv_requirements.txt
restdocs_venv         reqs/restdocs_venv_requirements.txt
```

When I was ready to copy the files to the USB flash drive I ran into another issue. This resolved it.

[USB drive issue](#)

Epilog

Now this important data is backed up to USB flash drive I feel more adventurous.

I have decided to correct my 20.04 partition by simply re-using the partition space to install a recent version of UBUNTU onto it from scratch.

But first just as an added fallback precaution, I plan to deep copy everything under /home/ubuntu onto the old 16.04 partition.