Selfhosting as an alternative to the public cloud

Pitfalls and how to work around them

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What is this cloud thing?

Or perhaps something like this?

"It was raining in the datacenter," he explains.
This resulted in cold aisle supply temperature exceeding 80°F[1] and relative humidity exceeding 95%. The Open Compute servers that are deployed within the data center reacted to these extreme changes. Numerous servers were rebooted and few were automatically shut down due to power supply unit failure.[Cla13]

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[1]approx. 26,67°C

Maybe this goes in the right direction

"The beauty of Telescript," says Andy, "is that now, instead of just having a device to program, we now have the entire Cloud out there, where a single program can go and travel to many different sources of information and create sort of a virtual service.[Lev94]

There is NO CLOUD, just other people's computers

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What Services do we want to run

- synchronization
    - contacts
    - calendars
    - files
    - notes
    - photos
    - . . .
- collaborative editing
- . . .

Main Threats

- data loss
- data breach

Have a BACKUP!

- if you think you don't need one think hard about it and reavaluete reagularly, as the nature of new data tends to change
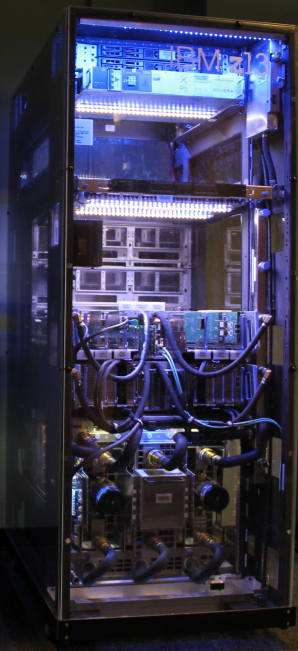- have a least one copy at a different location
- test it!

There are no 100% secure
systems!

Data Breach
Considerations

- who needs to access the data?
- does it need to be publicly availible?
- are there legal implications if there is a problem?

You are going to need some computing power

Some Storage

...and something for
connecting it to the internet

No Seriously, *think about what you are you are going to need before you start!*

Basic Considerations
Before you start

- ▶ pick something whith which you are comfortable with
- ▶ find out how to keep track of news/updates about the system you are using

Basic Considerations
Before you start

Usecase

- home use
- small to medium sized buisness
- large enterprise
- number of users
- amount of data
- do you have an admin at hand with expirence in running the stuff you need?
- do you have the resources to hire one?
- do you need/want/must have it on site?
- is paying somebody to run it for you a valid option?

Basic Considerations
Operationally

- ▶ use strong authentication methods
- ▶ use two factor authentication if availible
- ▶ consider using automatic updates

Sources I

[htt14] [htt12] [Net14] [Mei16]

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Netapp fas3240 (second from bottom) with three ds4243
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Questions?

THANK YOU