

Free CDN for Free Software



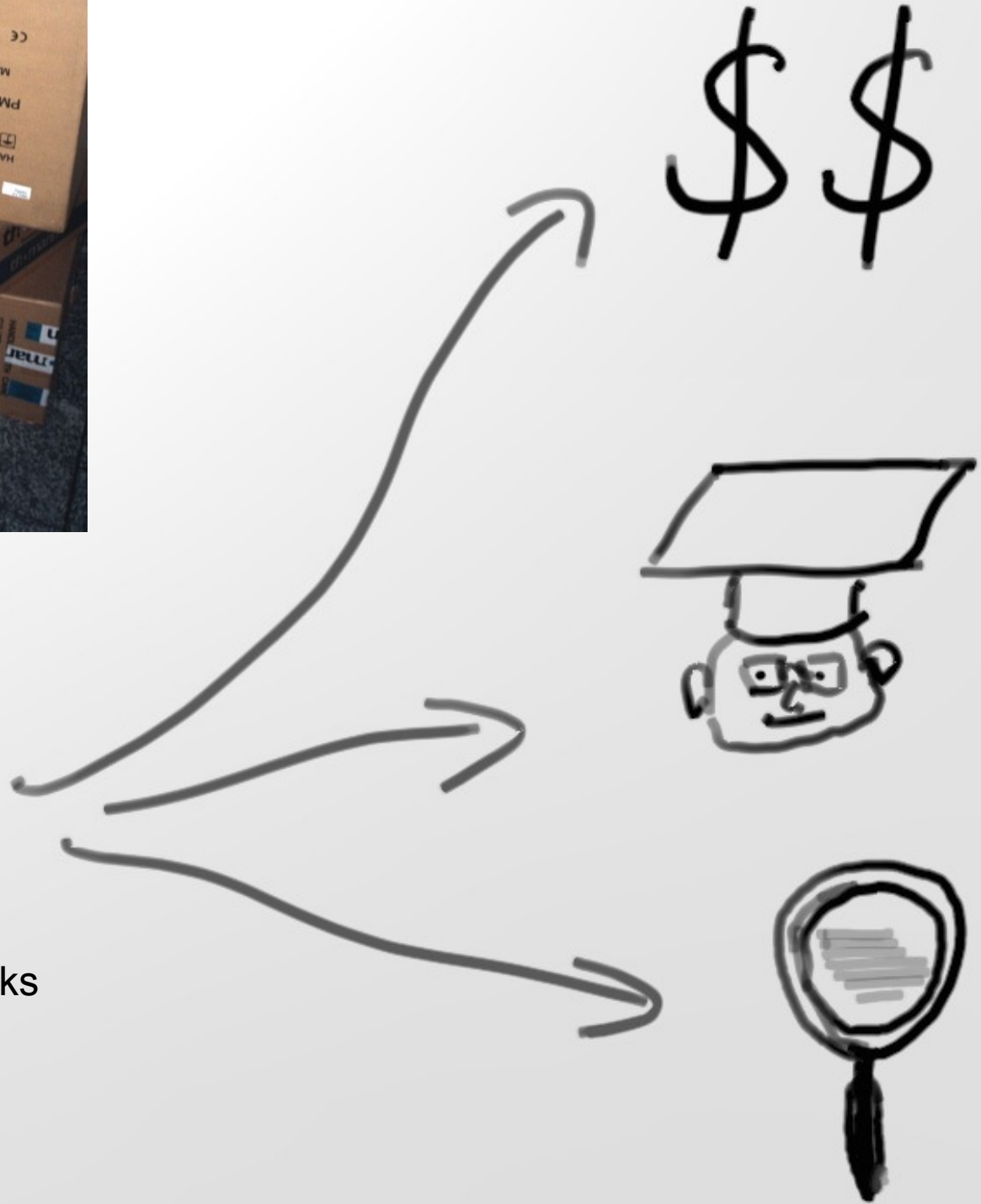
Sermon delivered by:
Dr. Peter Pöml poeml@suse.de





CDN

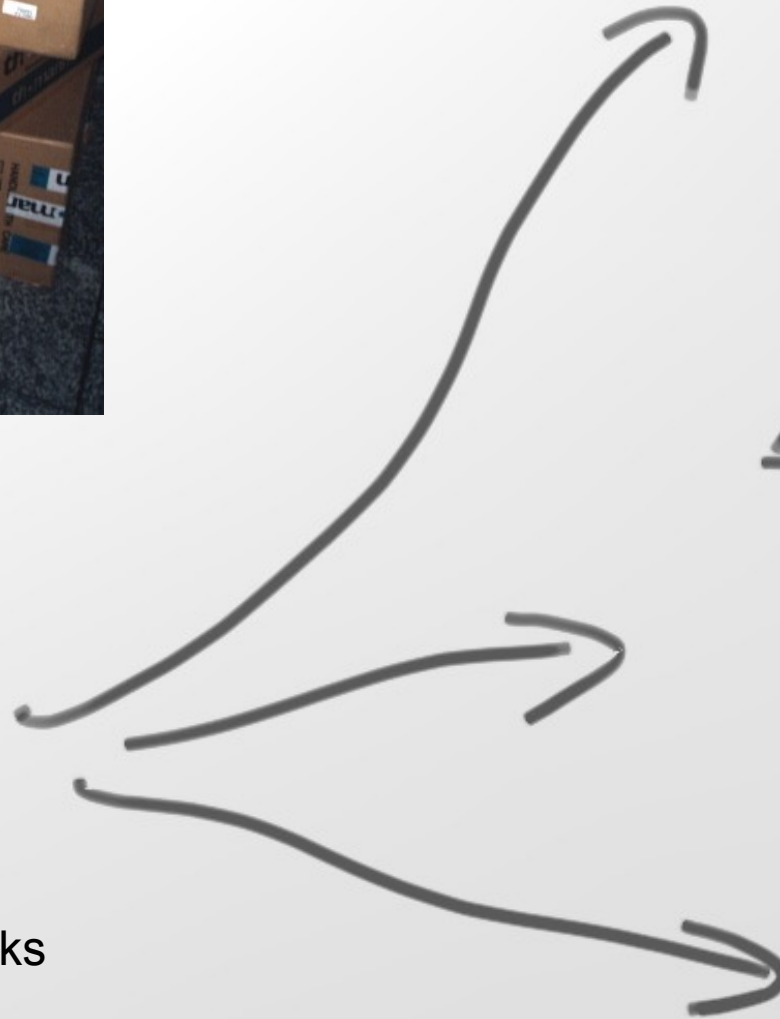
Content Delivery Networks





CDN

Content Delivery Networks



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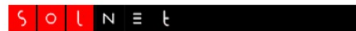
RUPRECHT-KARLS-
UNIVERSITÄT
HEIDELBERG

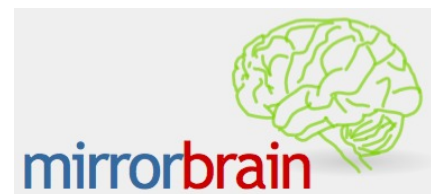
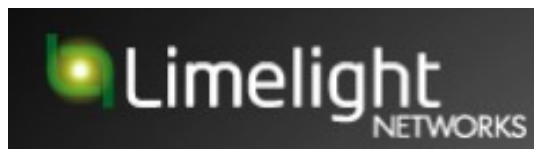


UNIXHEADS.ORG



Hochschule Esslingen
University of Applied Sciences





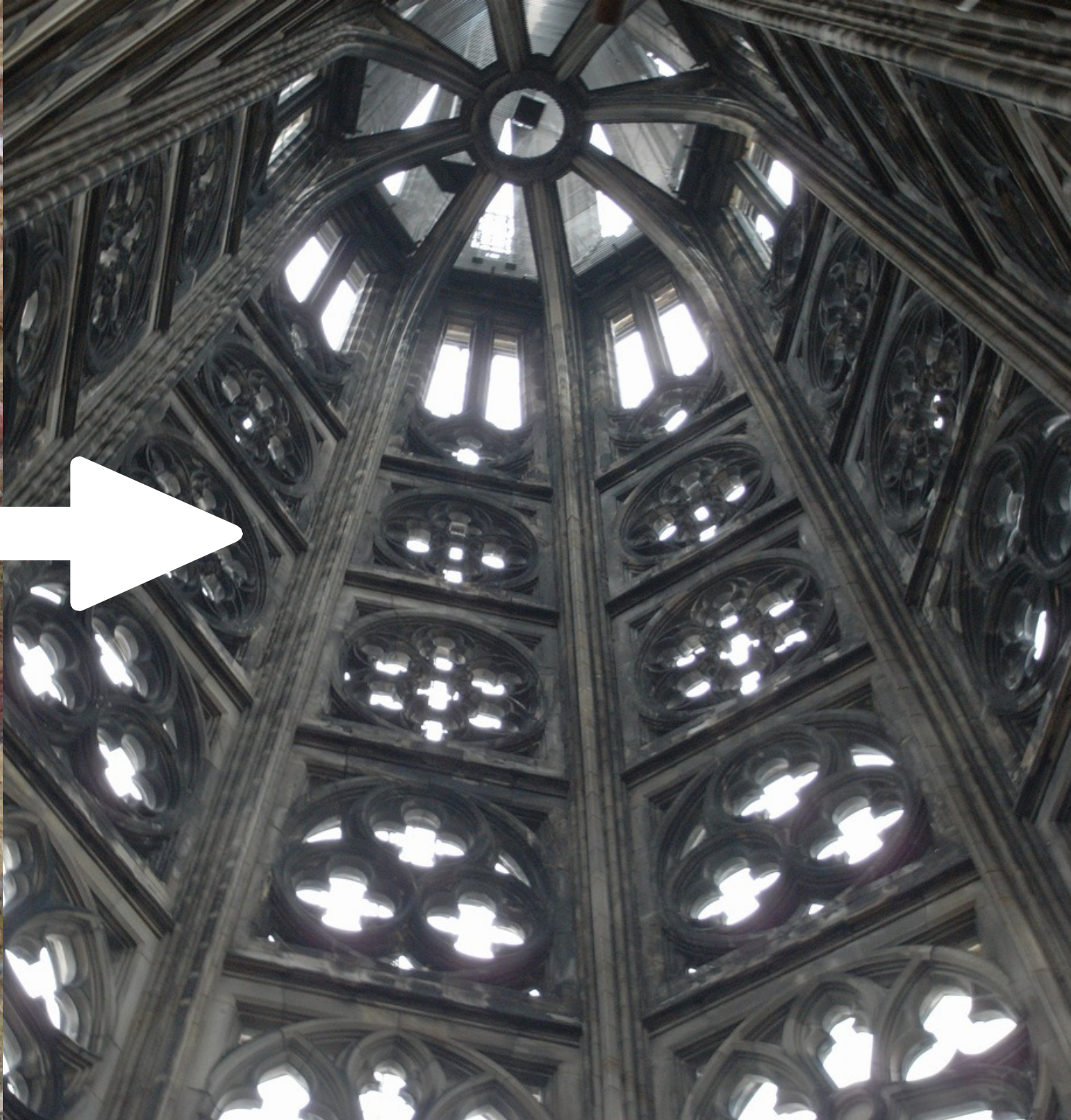


„Cairn“












Why collaborate?

?

E.g. because picking mirrors
is a difficult business

A photograph of two men in a kitchen setting, focused on examining mushrooms. The man in the foreground, wearing a brown jacket, is holding a mushroom and using a small tool to inspect it. The man in the background, wearing an orange shirt and glasses, is also examining a mushroom. On the counter, there are several mushrooms, some in a clear plastic container, and various kitchen items like bottles and a bowl. A speech bubble is overlaid on the image, containing the text "SO... WHICH OF THESE MUSHROOMS CAN WE EAT?".

**SO... WHICH OF THESE
MUSHROOMS CAN WE
EAT?**

A photograph of two men in a kitchen. The man on the left, wearing a brown jacket, is focused on peeling a mushroom with a small knife. The man on the right, wearing an orange shirt and glasses, is also working with mushrooms. In the background, there are various kitchen items including bottles, a container, and a bowl. A speech bubble is overlaid on the image, and a stylized logo is in the top right corner.

**DOES THE MIRROR
HAVE THE FILE?**

SCAM

A photograph of two men in a kitchen. The man in the foreground, wearing a brown jacket, is focused on peeling a mushroom with a small knife. The man in the background, wearing an orange shirt and glasses, is also working with mushrooms. On the counter, there are several mushrooms, a plastic container, and some bottles. A speech bubble is overlaid on the image, and a 'look up' sticker is in the top right corner.

**GEOGRAPHICALLY
CLOSE?**

look up



TRUSTWORTHY??

The image shows two men in a kitchen. The man in the foreground, wearing a brown jacket, is focused on preparing a piece of food, possibly a mushroom, with a small knife. The man in the background, wearing an orange shirt and glasses, is also working on food. A speech bubble from the man in the foreground contains the text 'TRUSTWORTHY?'. In the top right corner, there is stylized pink text that reads 'SIGN', 'ADD HASH', and 'DIY'.

SIGN
ADD HASH
DIY

A photograph of two men in a kitchen. The man on the left, wearing a brown jacket, is in the foreground, focused on peeling a mushroom with a small knife. The man on the right, wearing an orange shirt and glasses, is in the background, also working on mushrooms. On the counter, there are several mushrooms, a plastic container with more mushrooms, and some bottles. A speech bubble is overlaid on the left man, and a stylized graphic is in the upper right.

**PRIVATE
MIRROR?**

LIMIT



PERFORMANCE?

The image shows two men in a kitchen. The man on the left, wearing a brown jacket, is focused on peeling a mushroom with a small knife. The man on the right, wearing an orange shirt and glasses, is also working on a mushroom. In the background, there are various kitchen items including bottles, a plastic container with mushrooms, and a bowl. The scene is lit with warm indoor lighting.

PRIO

BALANCE

A photograph of two men in a kitchen setting, both focused on peeling mushrooms. The man on the left, wearing a brown jacket, is in the foreground. The man on the right, wearing an orange shirt and glasses, is slightly behind him. They are working at a counter with a newspaper spread out, which is covered with many peeled mushrooms. In the background, there are two dark beer bottles, a clear plastic storage bin, and a bowl. The image is annotated with comic-style elements: a large speech bubble from the man in the brown jacket, a thought bubble from the man in the orange shirt, and a stylized 'VERIFY' text graphic.

FILES >2GB?

I HOPE HE
KNOWS THIS
STUFF...

VERIFY



**FAST ENOUGH
FOR BULK
DELIVERY?**

CHECK



**ALIVE AND
KICKING?**

MONITOR

A photograph of two men in a kitchen. The man on the left, wearing a brown jacket, is focused on peeling a mushroom with a small knife. The man on the right, wearing an orange shirt and glasses, is also working with mushrooms. On the counter, there are several mushrooms, some in a plastic container, and a newspaper spread out. In the background, there are bottles and a can of Jolly. Overlaid on the image are two text elements: a speech bubble and a stylized word.

**CLIENT
PREFERENCE?**

RESPECT



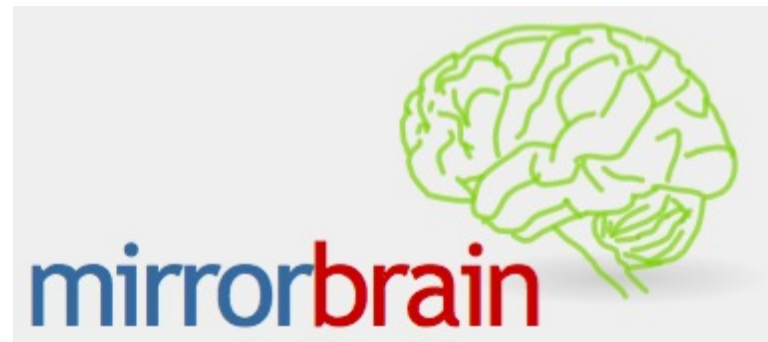
WHICH MIRRORS ARE
2ND CHOICE - AS
FALLBACK?

The image shows two men in a kitchen. The man on the left, wearing a brown jacket, is looking down at a piece of food he is holding. The man on the right, wearing an orange shirt and glasses, is also looking down at a piece of food. In the background, there are various kitchen items including bottles, a container, and a bowl. A speech bubble is overlaid on the image, and a sticker with the word 'SORT' is in the top right corner.

SORT

You see, it's not *quite* easy.

- Keep track of a lot
- Assign mirrors in **realtime**
- Not a simple task





Plain old FTP/HTTP = dumb

Metalink clients = intelligent

MirrorBrain = Metalink generator



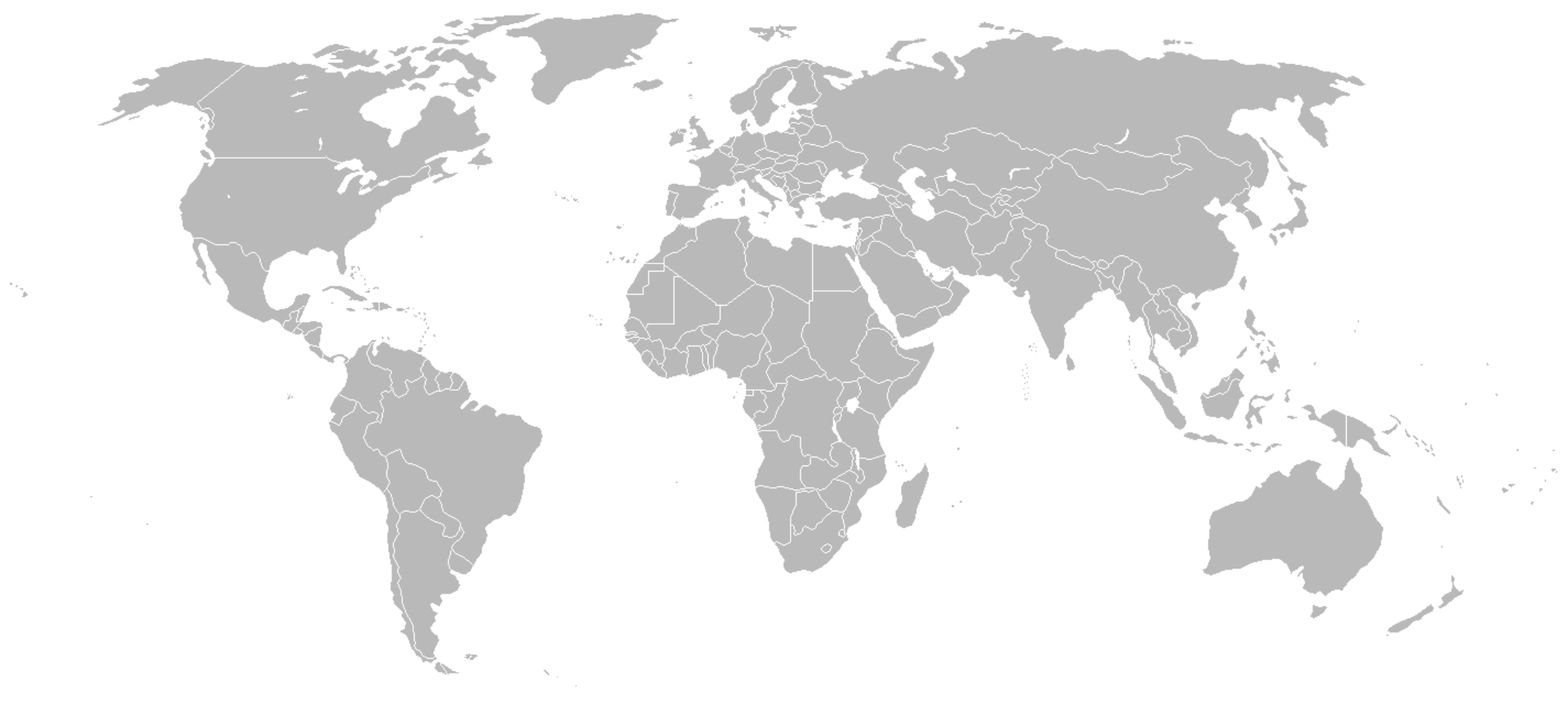
What is a Metalink?

- XML mirror list
- hashes and signatures
- „knowledge transfer“ from server to client

„Metalinks + MirrorBrain
= Killer Combo!“

Ant Bryan











Connectivity



Connectivity somewhere else





Information
=
Education

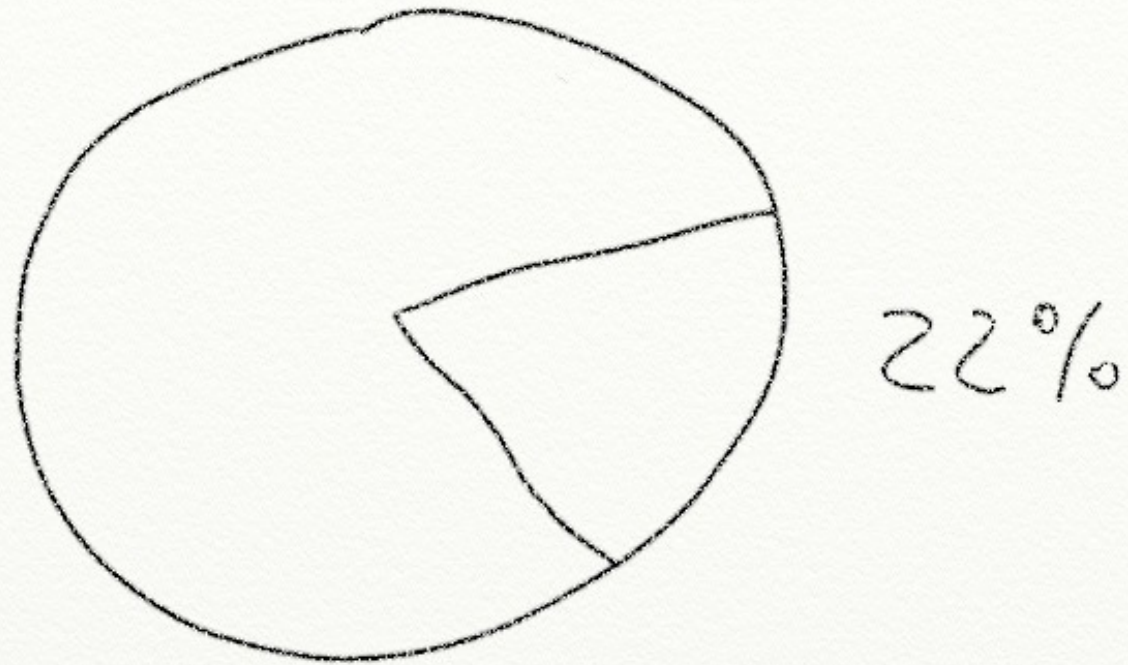
Health &
Work



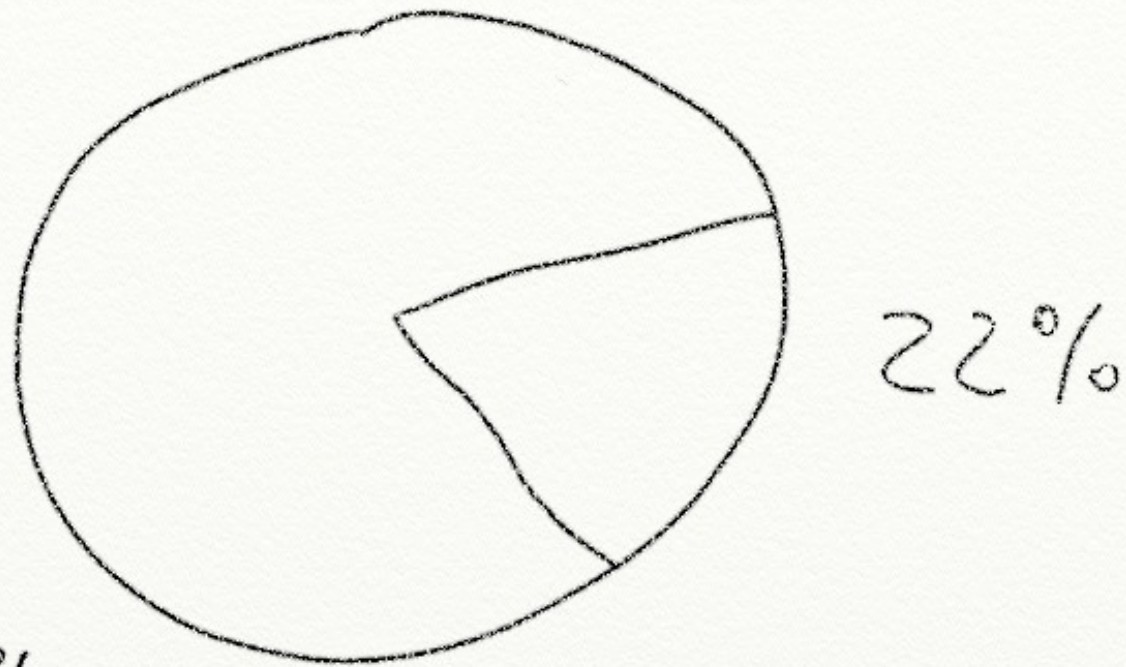
„It took me 30 hours
to download OpenOffice“

„It took me 3 weeks to
download OOo. I am in Africa.
Finally I had a successful download
from a Canadian mirror.“

People with Internet access
2008:



People with Internet access
2008:



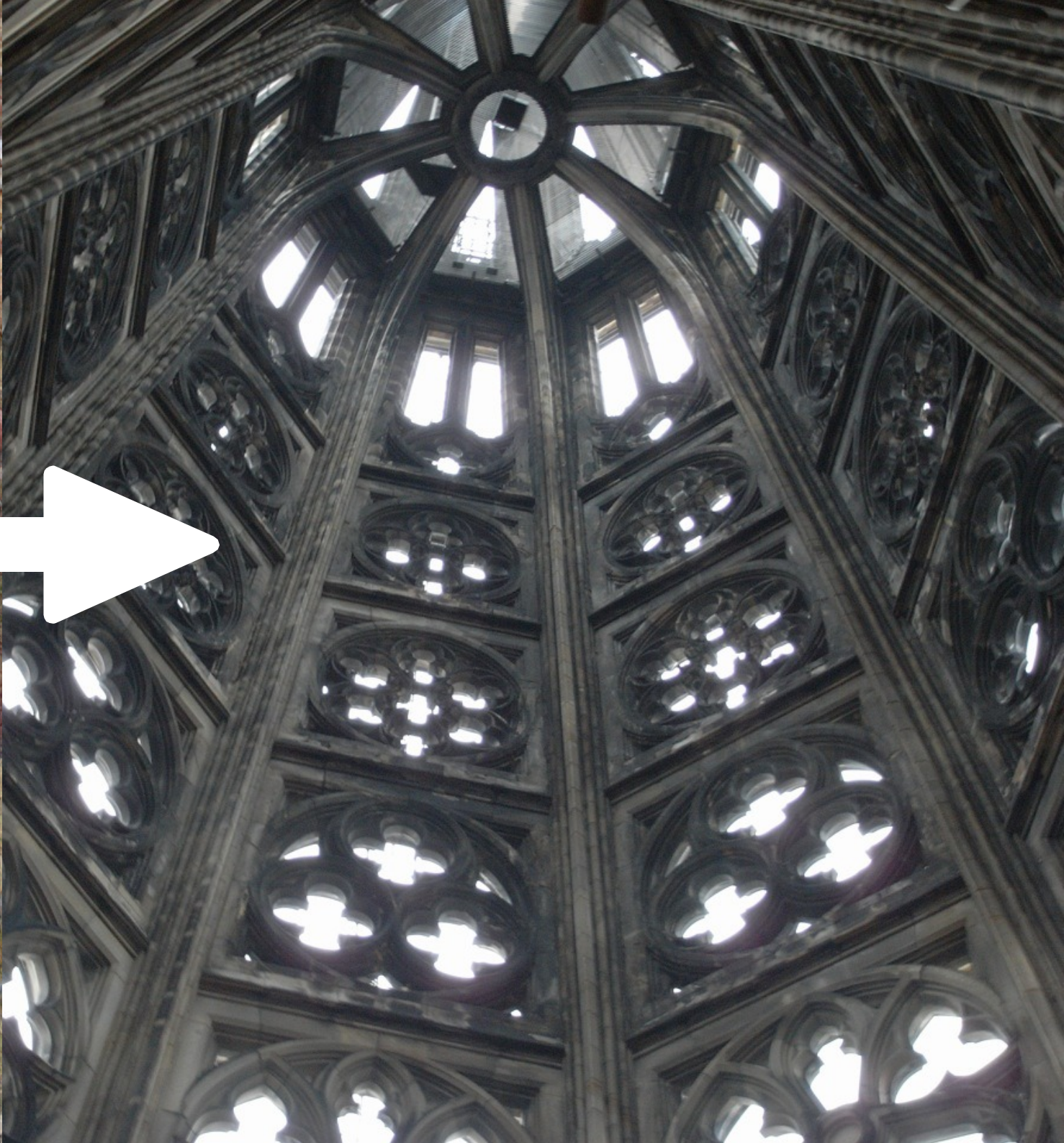
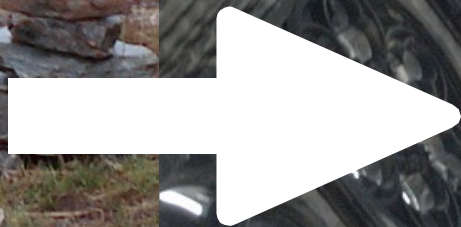
OECD 2008:

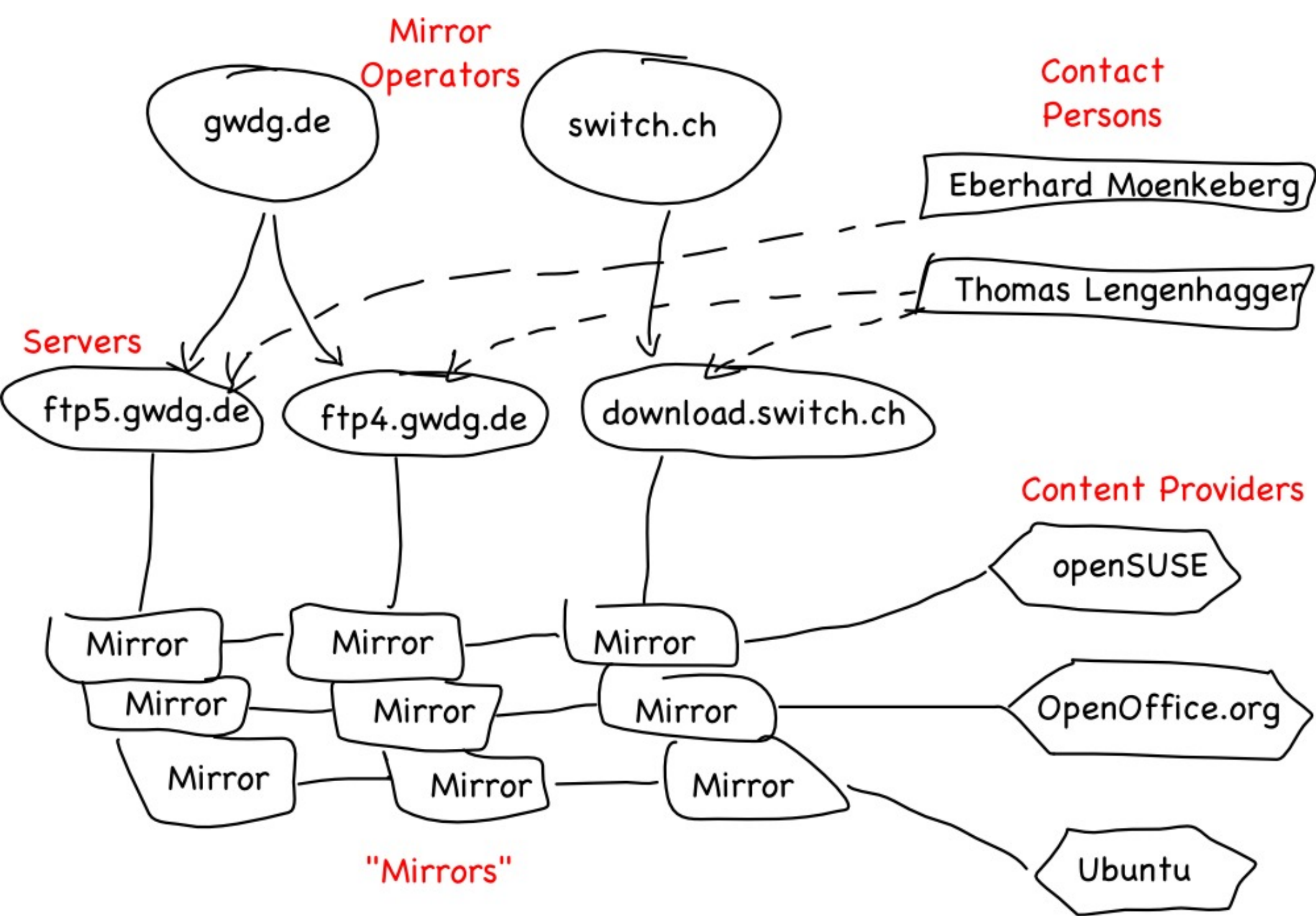
Broadband in

Germany: 24%

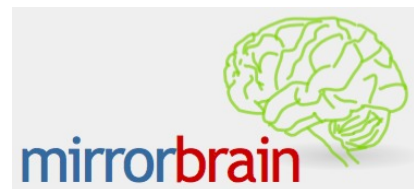
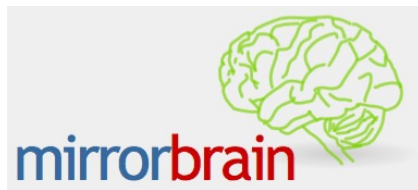
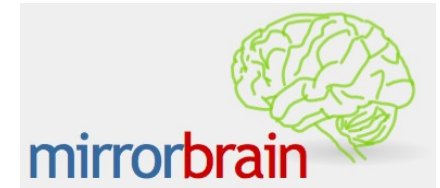
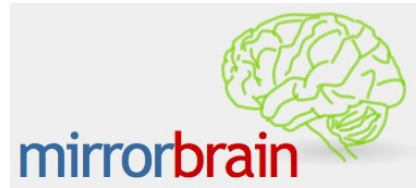
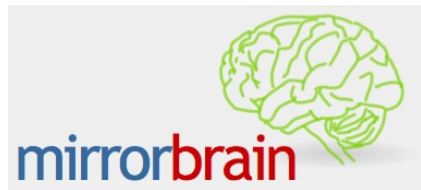
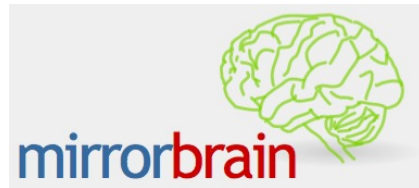
Korea: 8%

Slovak Rep.: 6%





Every project could have its own MirrorBrain



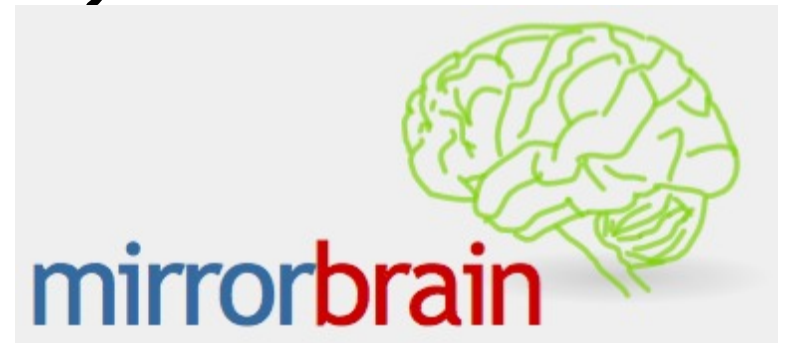
Super-

mirrorbrain



It nearly exists!

- look at the big mirrors...
- common database
- common file tree (namespace)
- syncing beyond rsync
- MirrorBrain 3.0?
- Free CDN



*A call for
collaboration*

DISCUSS @ MIRRORBRAIN.ORG

PLATFORM-NEUTRAL
MAILING LIST




INSIGHTS



IDEAS

DISCUSS @ MIRRORBRAIN.ORG

PLATFORM-NEUTRAL
MAILING LIST



INFRASTRUCTURE,
SCRIPTS,
MIME-TYPES



REGIONAL
REQUIREMENTS

VENDORS

MIRROR
ADMINS

USERS

RESEARCHERS

DISCUSS @ MIRRORBRAIN.ORG

PLATFORM-NEUTRAL
MAILING LIST

Thanks!