

# Mirroring made easy

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Dr. Peter Pöml

Powered by

**MirrorBrain**



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**MirrorBrain**



- What is MirrorBrain?
- What can MirrorBrain do?
- Who uses MirrorBrain — and why?
  - Case study

## What is MirrorBrain?

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- MirrorBrain is a download redirector that organizes heterogenous mirroring servers
- MirrorBrain is highly scalable, secure and adaptable
- MirrorBrain is fully Open Source and licensed under GPL and Apache license
- MirrorBrain is a mature Open Source project in active development and in use since 3 years

## What can MirrorBrain do?

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- MirrorBrain automatically maintains the mirror network through monitoring, scans, mirror list generation
- MirrorBrain uses load-balancing for each request
- MirrorBrain uses geolocation and global routing data to optimize the use of the mirror network
- MirrorBrain facilitates reliable downloads by using Metalinks and P2P technology
- MirrorBrain works in the background — to the user, it remains invisible

Who uses MirrorBrain – and why?

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**xbmc**



**sugar**labs

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LINUX-ADMINISTRATOR



**OpenOffice.org**®

Education  
**openSUSE**

Who uses MirrorBrain – and why?

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## OpenOffice.org<sup>®</sup> Case Study – The Admin View

- Reasons why OOO was looking for a new download-management solution
  - Mirror-managing software didn't scale and ran into bottlenecks under load (e.g. release day)
  - Mirror-managing software picked a download location **randomly** from all mirroring servers, no geolocation
  - Mirror-managing software was isolated and abandoned with no development

Who uses MirrorBrain – and why?

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 **OpenOffice.org**® Case Study – The Admin View

**Mirror-managing software didn't scale and ran into bottlenecks under load (e.g. release day)**



MirrorBrain has been handling the entire openSUSE mirror network for 3 years

That's 20B downloads without downtime\*

\* which wasn't caused by human error or hardware failure

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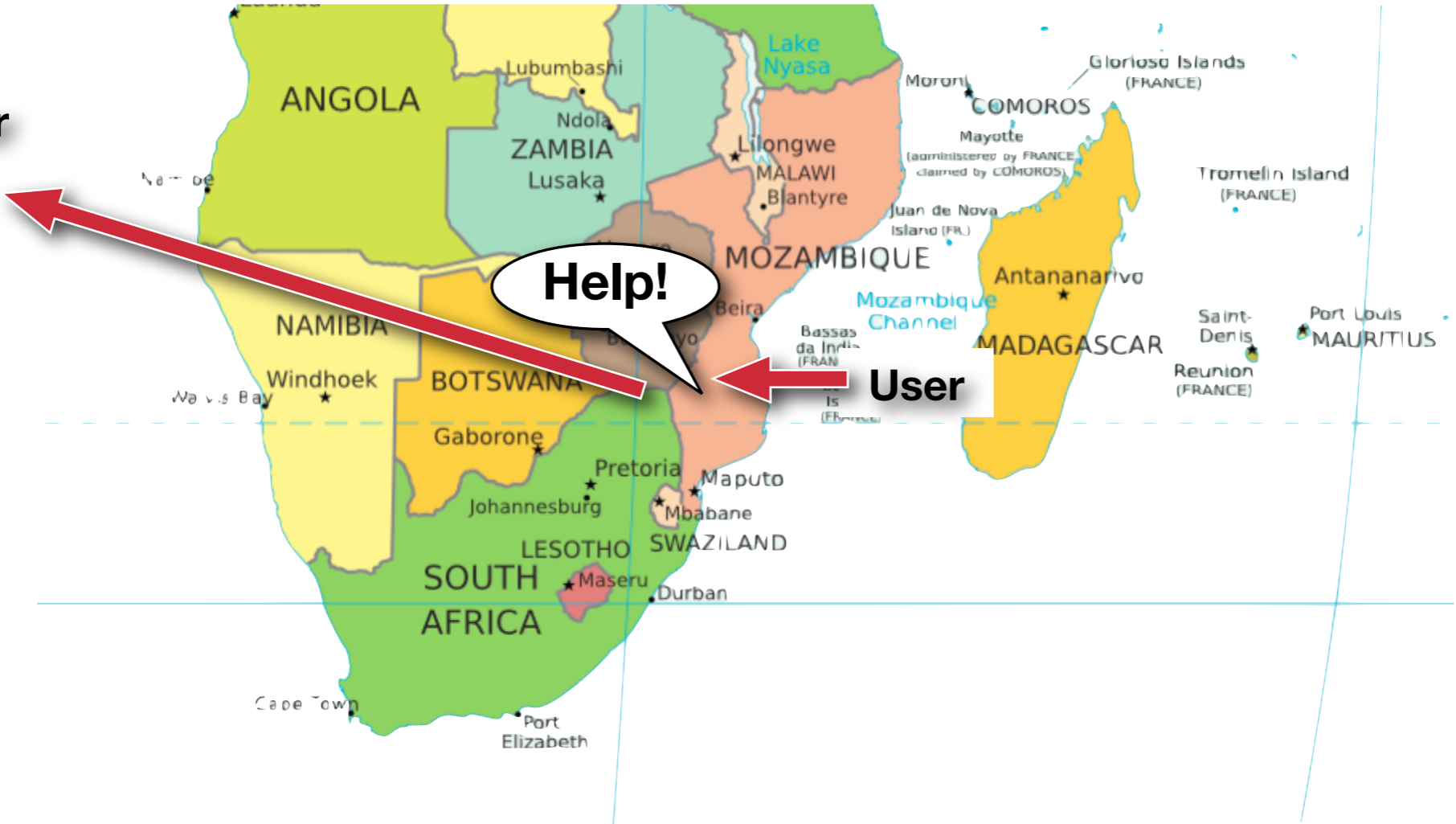


Who uses MirrorBrain – and why?

**OpenOffice.org** Case Study – The *User View*

**Problem: no geolocation for mirror selection**

OOo Mirror  
(Brazil)





Who uses MirrorBrain – and why?

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**OpenOffice.org**® Case Study – The *User View*

**Problem: proximity- or geolocation-based mirror selection**



Who uses MirrorBrain – and why?

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 **OpenOffice.org**® Case Study – The *User View*

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

Who uses MirrorBrain – and why?

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**OpenOffice.org** Case Study – The *User View*

**MirrorBrain uses geolocation, global routing data, but easily handles more advanced scenarios**



Who uses MirrorBrain – and why?

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## OpenOffice.org® Case Study – The Admin View

**Mirror-managing software was isolated and abandoned  
with no development**



xbmc



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MirrorBrain has been in active development for three years, is fully open source, and is picked up by others

MirrorBrain has been in use across multiple organizations and content providers

MirrorBrain is generic, modular and extensible – and open for collaboration and synergies

Who uses MirrorBrain – and why?

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 **OpenOffice.org** Case Study – The Admin View

After evaluating and testing MirrorBrain for almost a year, OpenOffice.org decided to switch from their old software to MirrorBrain for their next release.

*“Have I told you already that I love MB? :-D”*

*Marcus, OpenOffice.org*

# Mirroring made easy

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**MirrorBrain**



- MirrorBrain is a rock-solid, highly scalable download redirector that organizes heterogenous mirrors
- MirrorBrain is secure, adaptable and in use by content distributors large and small
- MirrorBrain is a mature Open Source project in active development and has been in use for 3 years
- 20B downloads, without any downtime which wasn't caused by hardware failure or human error

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For more information: [mirrorbrain.org](http://mirrorbrain.org)

„I think mirrorbrain is vital to the build service, and i like how it is designed“, Chaz6

„It is one of the best and most needed ideas since long, a solution for a lot of problems at the mirror sides“,

Eberhard

„Thanks for your excellent Mirrorbrain!“, Bernie from Sugar Labs

„I would like to donate a few \$ to the project if that's ok, I think you guys are doing a fantastic job!“

Dan

„Top Entwicklung, macht wirklich Spass damit zu arbeiten.“, Carsten

„Keep doing the good work, the mirrorbrain redirector is a jewel I have to confess.“, Fridrich

„geile Sache das mit dem MirrorBrain!“, Jonathan T