How to speed up your website access

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Content

Gerold Rupprecht: Open Source Involvement

- financial software
- evaluation and optimization of IT-related processes
- supports the GNUstep project, especially at FOSDEM

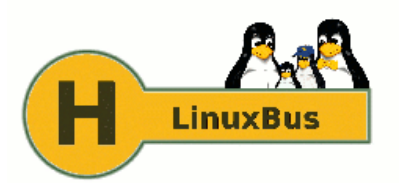
Frank Hofmann: Open Source Activities and Projects

Chemnitzer Linux-Tage since 2000

Brandenburger Linux-Info-Tag (BLIT) 2006-2012

since 2009

Regional LUG meeting Berlin-Brandenburg since 2008



LinuxBus Berlin-Chemnitz since 2007

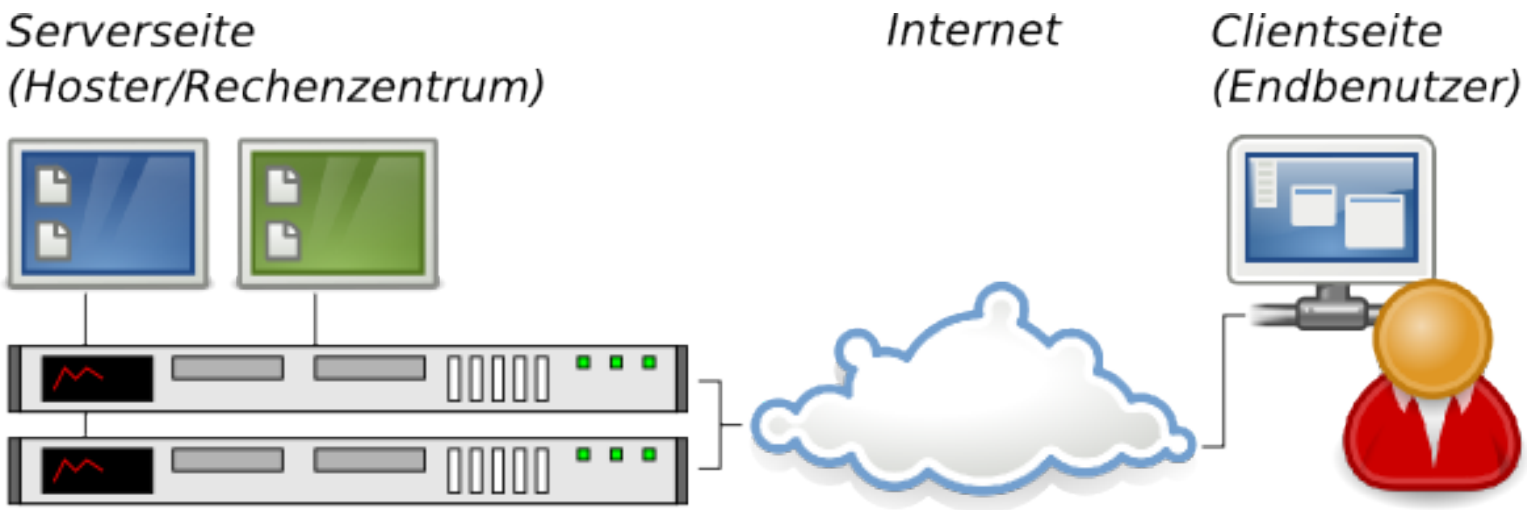
Frank Hofmann: About Hofmann EDV – Linux, Layout und Satz

Linux, Layout & Satz

WIZARDS OF FOSS
Open Source Schulungen

- Layout and typesetting, pre-press production
- Automated technical documentation
  - Development and automatization
  - Authentification
- Trainings for IT experts
  Co-founder and trainer

Levels and Observations



- Server and hosting
  offering the webseite
- Author/editor
  publishing the website content
- Visitor
  access the website via webbrowser

Different Factors to Take Into Account

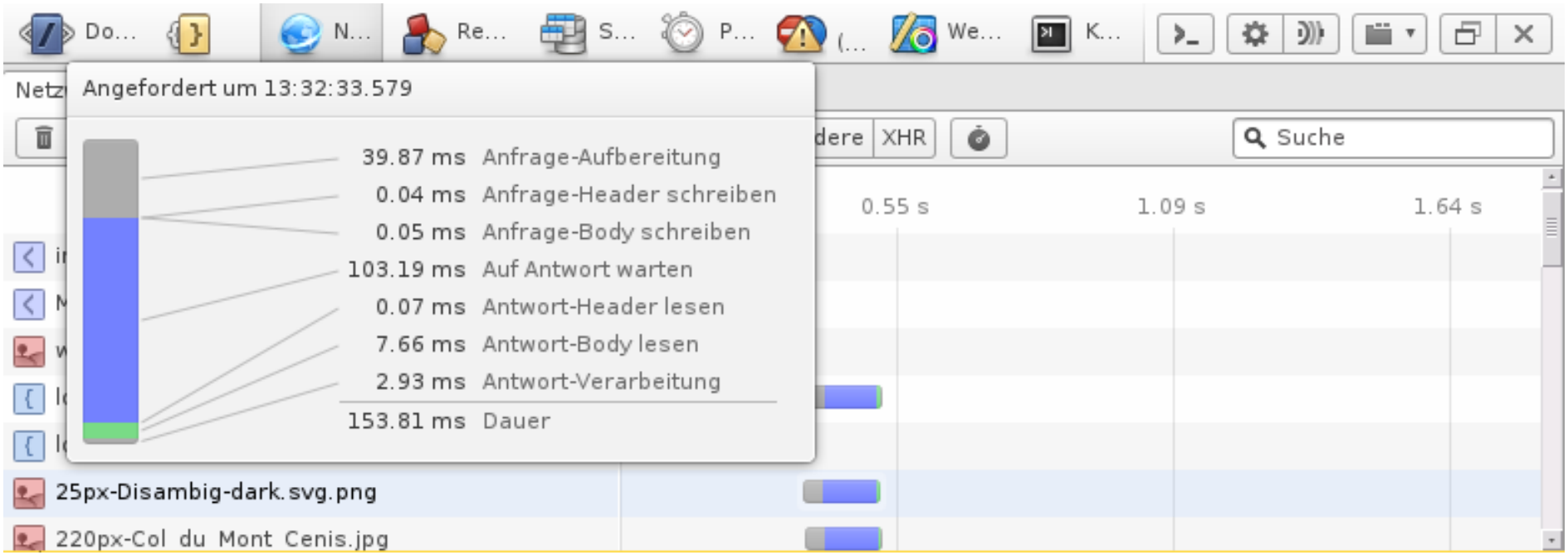
- Server and hosting
  - hardware specifications
  - network connectivity (IPv4, IPv6)
  - DNS entries
  - server configuration and memory
- Data (the website itself) – static, or dynamic
- Network connectivity
- Output device – monitor, tablet computer or mobile phone
- Webbrowser
  - character encoding
  - output language
  - fonts to be rendered to display the content
  - images
  - further content
  - advertisments
  - pipelining

Accessing the Website

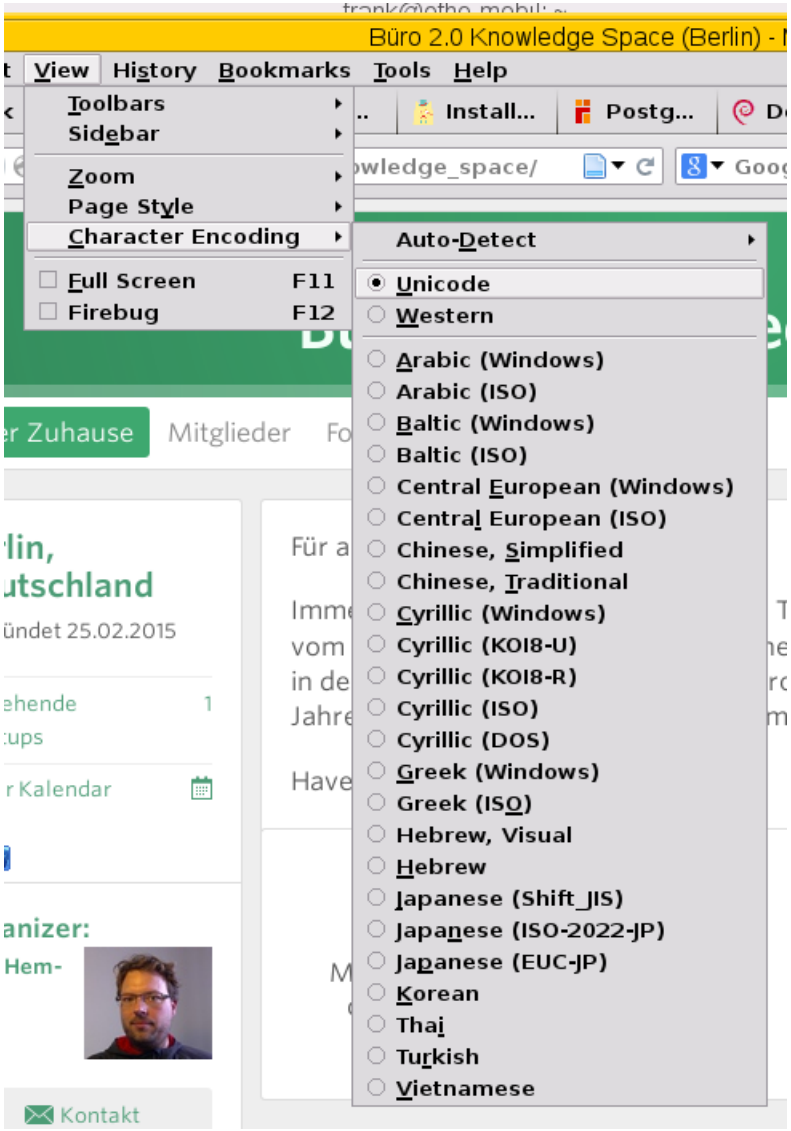
1. DNS connection request
2. Retrieving the HTML document as a data stream
3. Retrieving external data that are referenced in the HTML document
   - images
   - cascading style sheets (CSS files)
   - JavaScript code snippets
   - Flash data incl. preview image
4. Rendering of the retrieved content, and output in the browser window

Tools to Measure the Retrieval Time

- Firefox/Iceweasel: Firebug
- Opera: DragonFly
- Chrome: Developer Extension



HTML and Encoding



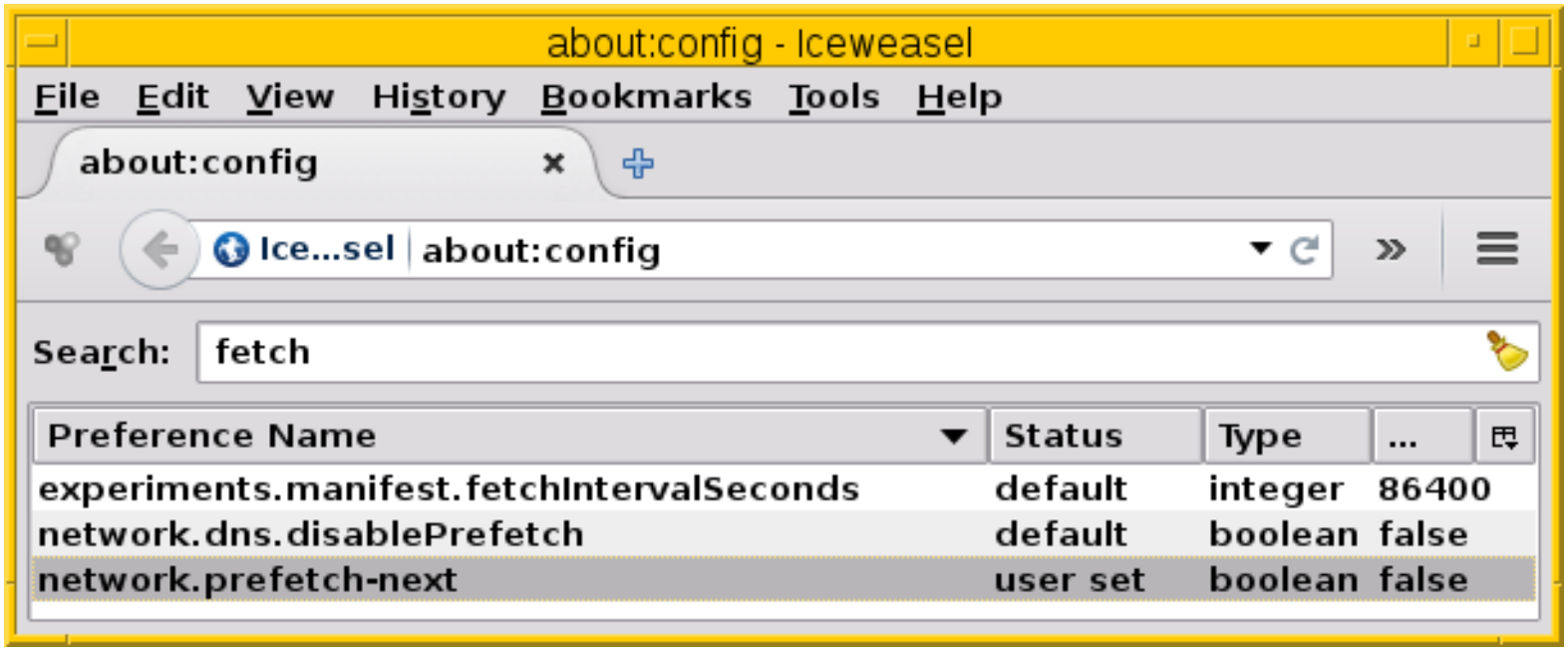
- HTML
  - wrong order of HTML tags
  - HTML tags that are forgotten, or not closed
  - forgotten apostrophes for attributes
  - specific content to cope with vendor-specific dialects and non-standard extensions
- Encoding
  - declaration in the HTML header
  - file format of the HTML file
  - local webbrowser configuration (settings and preferences)

External Elements (part 1)

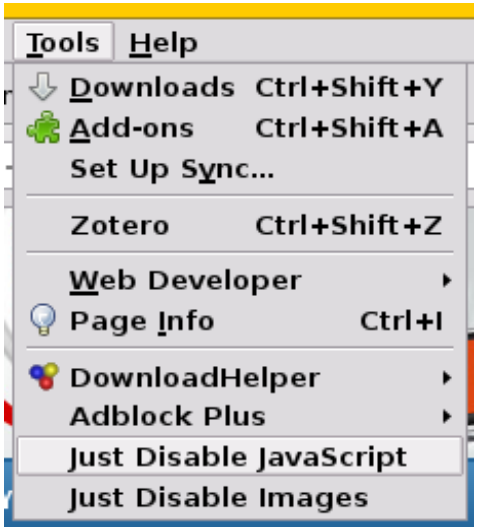
- cascading style sheets (CSS files)
  - combine several files into a single css file
  - determine which style sheets are in use, actually
- advertisements and banner
  cause about 70% of data transfer
- disable guest content
  - disable personalized content and adwork
  - disable content delivered by Flickr, Twitter, Blogroll, Facebook and Google

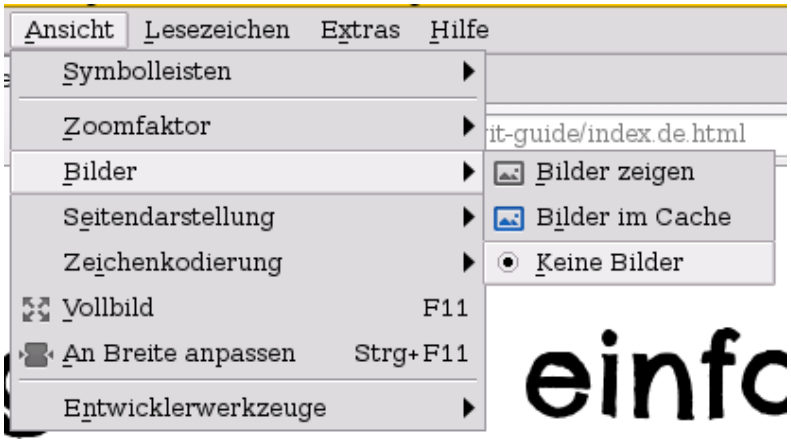
External Elements (part 2)

- disable pre-loading of content in the background
  - preparation and pre-rendering of website content that might be interesting for you – displaying goes faster
  - requires more bandwith
  - results in higher network traffic
  - results in entries of visited webpages in the webbrowser cache that you have never visited



External Elements: Images (part 3)





- Firefox/Iceweasel
  - disable images per webseite
  - disable completely
  - webbrowser plugin *Just Disable Stuff*
- Opera
  menu entry *View*
- Google Chromium
  ?

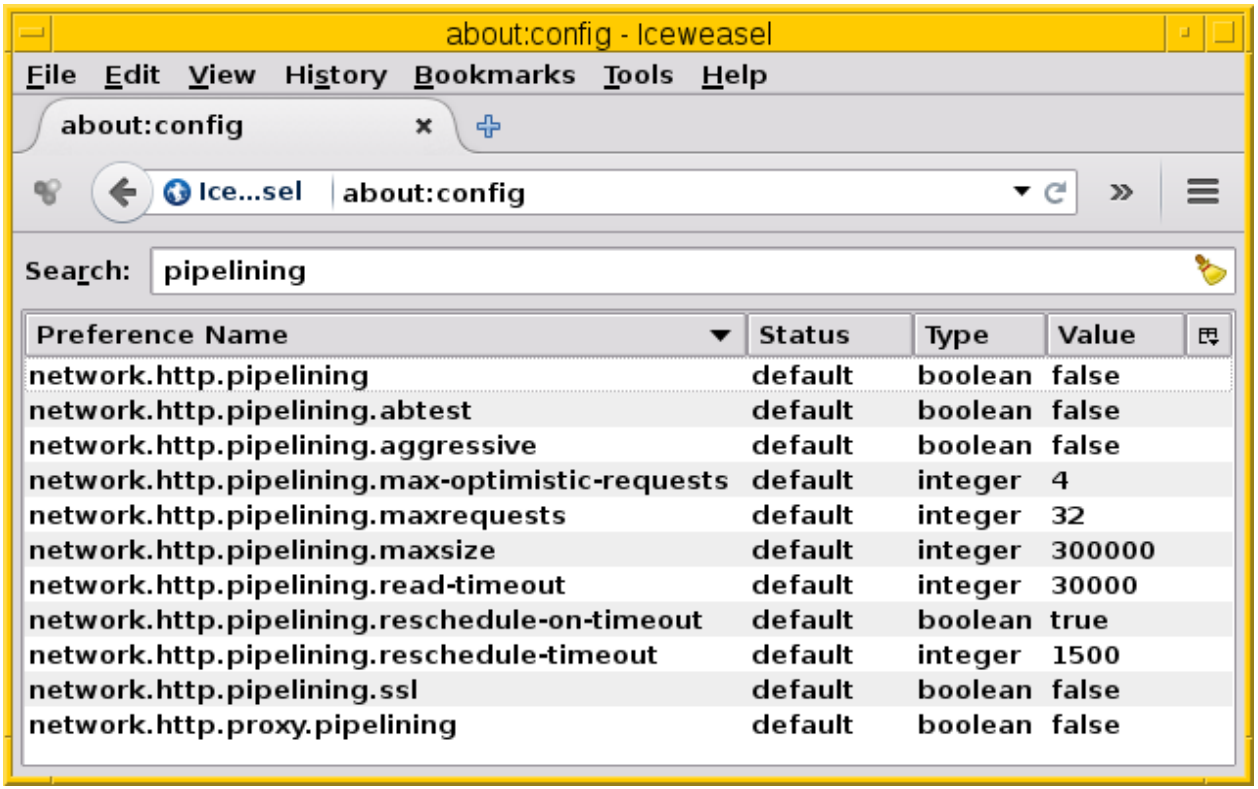
Language and Fonts

- choose the language in which you can understand the content as quick and easy as possible
  prefer the most efficient language

- set a default font
  - this includes both serif and sans-serif fonts
  - post-loading of fonts is time-consuming

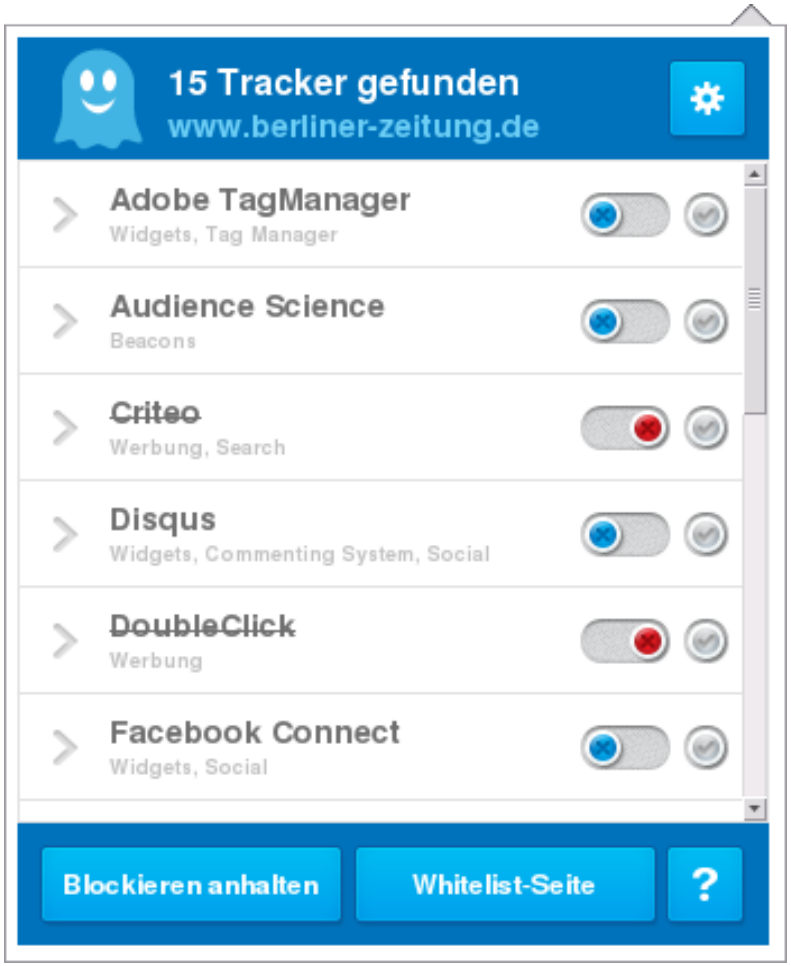
Pipelining

- parallel data transfer using the same network connection
  - Firefox/Iceweasel: can be enabled
  - Opera: active (via presets)
  - Chrome: can be enabled



Preference Name	Status	Type	Value
network.http.pipelining	default	boolean	false
network.http.pipelining.abtest	default	boolean	false
network.http.pipelining.aggressive	default	boolean	false
network.http.pipelining.max-optimistic-requests	default	integer	4
network.http.pipelining.maxrequests	default	integer	32
network.http.pipelining.maxsize	default	integer	300000
network.http.pipelining.read-timeout	default	integer	30000
network.http.pipelining.reschedule-on-timeout	default	boolean	true
network.http.pipelining.reschedule-timeout	default	integer	1500
network.http.pipelining.ssl	default	boolean	false
network.http.proxy.pipelining	default	boolean	false

Tracking and Spyware



- Analyze the visitors of your website
  - visitors that come back
  - from which URI the visitor comes from?
- Useful plugins (selection)
  - *Just Disable Stuff*
  - *Adblock Plus*
  - *Ghostery*

Merci beaucoup!

Lassen Sie es setzen.

LLS
Linux, Layout & Satz

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