



<http://www.flickr.com/photos/fatmandy/>

# Apps für SmartTV ...



<http://www.flickr.com/photos/fatmandy/>

# mit freier Software

Apps für den Fernseher  
(Smart TV)

Schnelle(re)  
Entwicklung  
mit freier Software



Smart TV



Smart Phone

Smart TV

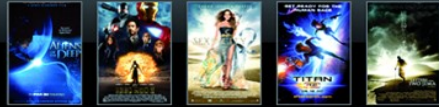
# SMART HUB

Search All



## Your Video

NEW



## Samsung Apps

NEW



## Recommended



SamsungSport



Origo



Facebook



Twitter



Skype



YouTube



Favorite



Channel



Guide



Web Browser



Videos



Photos



Music



Schedule Manager



Source



AllShare



Social TV



MiniMini Cook

Samsung

A Log-out B Sorting C Edit D Setting

Wetter ...

## Heute Deutschland

Wechselhaft und mäßig warm.

Radar Deutschland

**Radar Europa**

Satellit Deutschland

Satellit Europa

Regionen

## Vorhersage Deutschland

Mittwoch 28-07



14 25



50%  
3 W

Donnerstag 29-07



15 22



46%  
4 W

Freitag 30-07



13 22



5%  
3 W

Samstag 31-07



15 23



36%  
4 SW

Sonntag 01-08

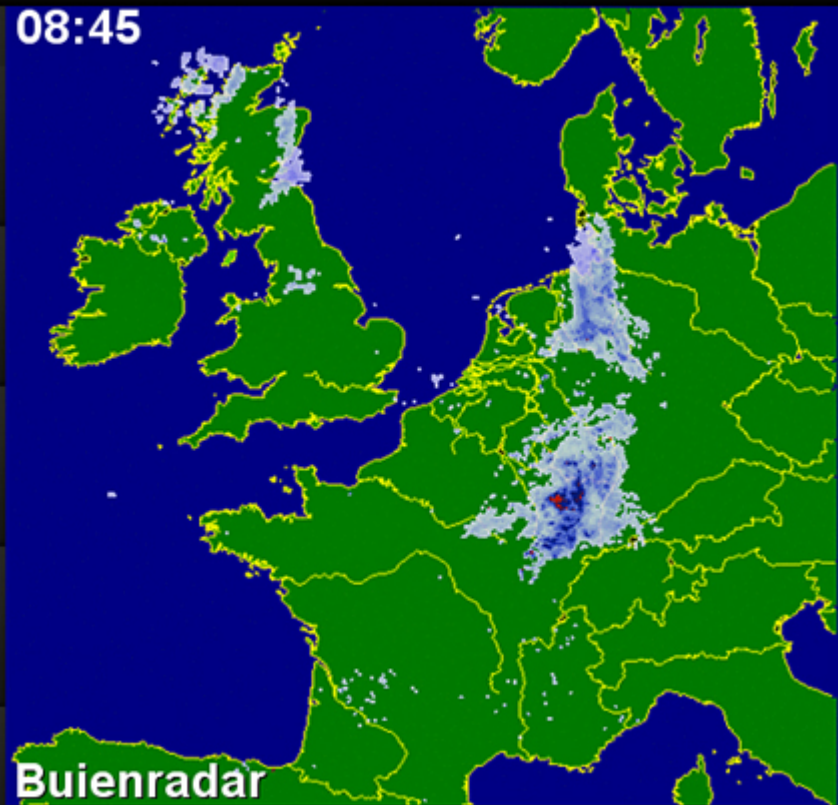


17 27



50%  
4 S

08:45



Buienradar

↕ Bewegen Sie Ihre Auswahl    🗨 Wählen Sie    ↶ Zurück

Programm ...

TAGESTIPPS

WAS LÄUFT GERADE?

PRIMETIME

KINOTRAILER

tvDIGITAL

Spielfilm

Serie

Sport

Doku & Info

Unterhaltung

Kinder



22:25  
Der siebte Himmel

3sat

3sat - Romantik/Liebe - 1997 - 85 min.



20:17  
Betty

arte

Arte - Romantik/Liebe - 1992 - 98 min.



13:05  
Krambambuli



Heimatkanal - Heimat - 1940 - 80 min.



20:15  
Lola



Das VIERTE - Humor - 1981 - 145 min.



IMPRESSUM



EXTRAS



INTERNET@TV

Konzerte ...



Live concerts



Concert archive



Video specials



Search video



My account

www.digitalconcerthall.tv

New in the concert archive

**Concert to commemorate the  
25th anniversary of the  
Chernobyl nuclear disaster**



Claudio Abbado und Maurizio Pollini haben einen Großteil ihres künstlerischen Weges zusammen zurückgelegt und unzählige gemeinsame Konzerte gegeben. Auch bei den Berliner...

Next Live

**Stanisław Skrowaczewski  
dirigiert Bruckner**



Stanisław Skrowaczewski gehört zu den Grandseigneurs der Bruckner-Interpretation und hat erst im März dieses Jahres den Ehrenpreis der Bruckner Society of America erhalten. ...

Daten, Daten,  
Daten ...

OK, got it





freie

Software

# Ökosysteme



free software  
is made  
to get used

re-used in  
other people  
projects



small pieces

large parts

free software  
is made in  
collaboration

free software  
**does**  
collaborate

free software  
implements  
open  
standards



free software  
early adapts  
new ways



suitable for

my project

un-  
conventional  
projects



some

conventional

projects too

about the  
smart tv  
app?  
project ...



runs in a  
browser



is made with  
**HTML**

is made with  
CSS



is made with  
**JavaScript**

makes heavy  
use of open  
standards

even more  
about the  
smart tv app  
project ...

makes heavy  
use of  
dynamic data




expecting  
10.000  
requests/sec

existing data  
located in a  
relational  
database

existing data  
reads as  
(mostly) flat  
XML

but frontend  
wants deep  
structured  
JSON

existing  
database is  
required to  
keep doing

existing  
relational  
database does  
not  scale well

software  
architect  
came up with  
mid-layer

further on  
called the  
“proxy”

getting  
technical ...



import XML

export JSON

relational  
database not  
suited

relational

=

SQL

no relational

=

NoSQL

stores data  
in a NoSQL  
database

runs on

**Linux**

tools used to  
run the proxy

MongoDB, curl,  
libxml, xsltproc,  
PHP, gm, cron,  
bash, jsonlint, ...

tools used to  
develop the  
proxy

Linux, KDE, Firefox  
& Firebug, vim,  
JSONView, Modify  
Headers, curl ...

all tools used to  
run and develop  
the “proxy” are  
Open Source

