

# BibiServ(ices)

Jan Krüger

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# Übersicht

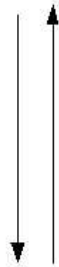
- BiBiServ - Struktur
- BiBiServ - CMS
- Das Projekt "bibi"
- Ein neues Projekt ...
- Statistik
- Ausblick

## Struktur - Umgebung



### Webserver

4 CPU's @ 166 Mhz  
1.5 GB RAM



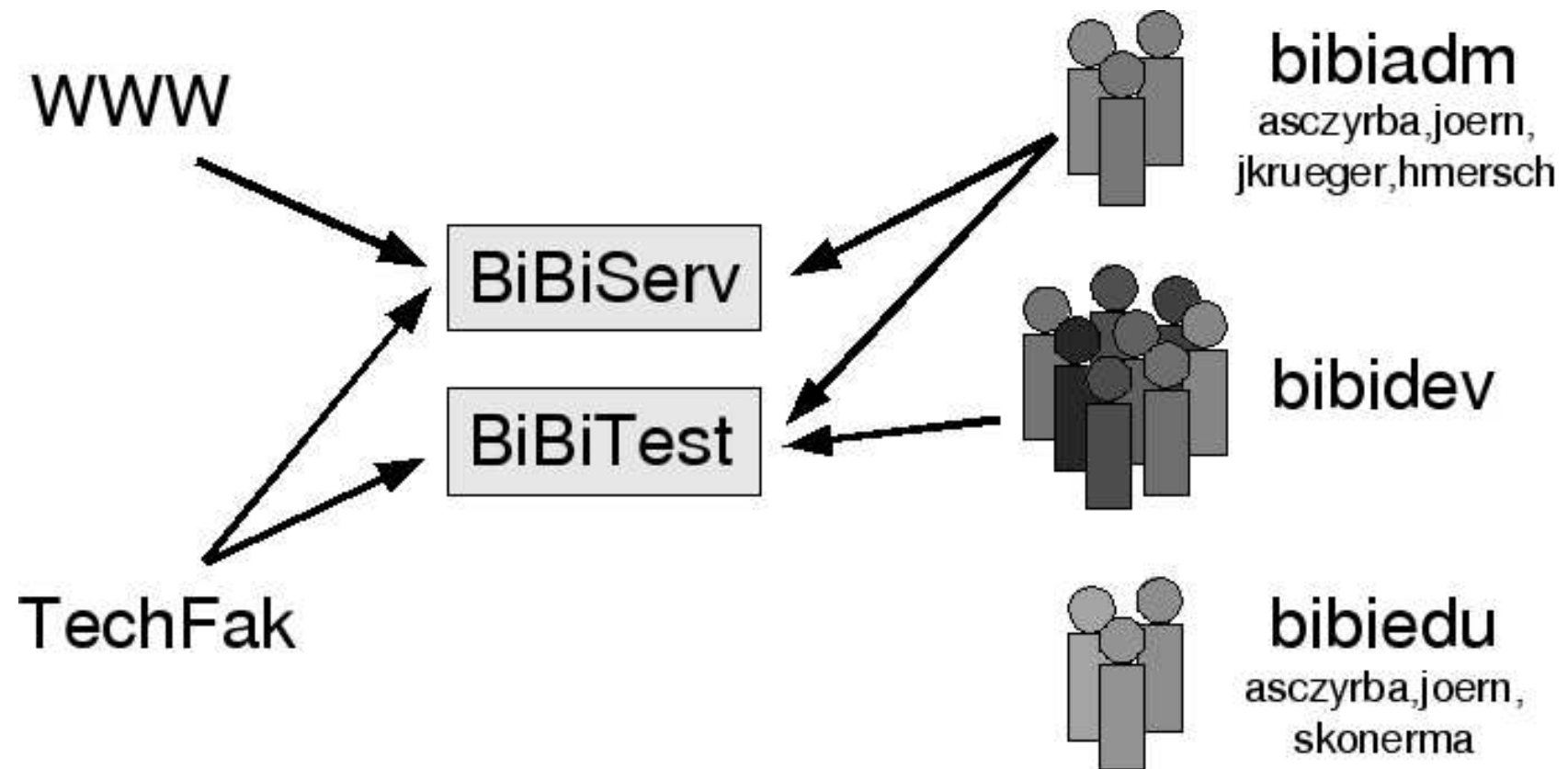
### ComputeServer

8 CPU's @ 900 Mhz  
64 GB RAM  
800 GB local disk space

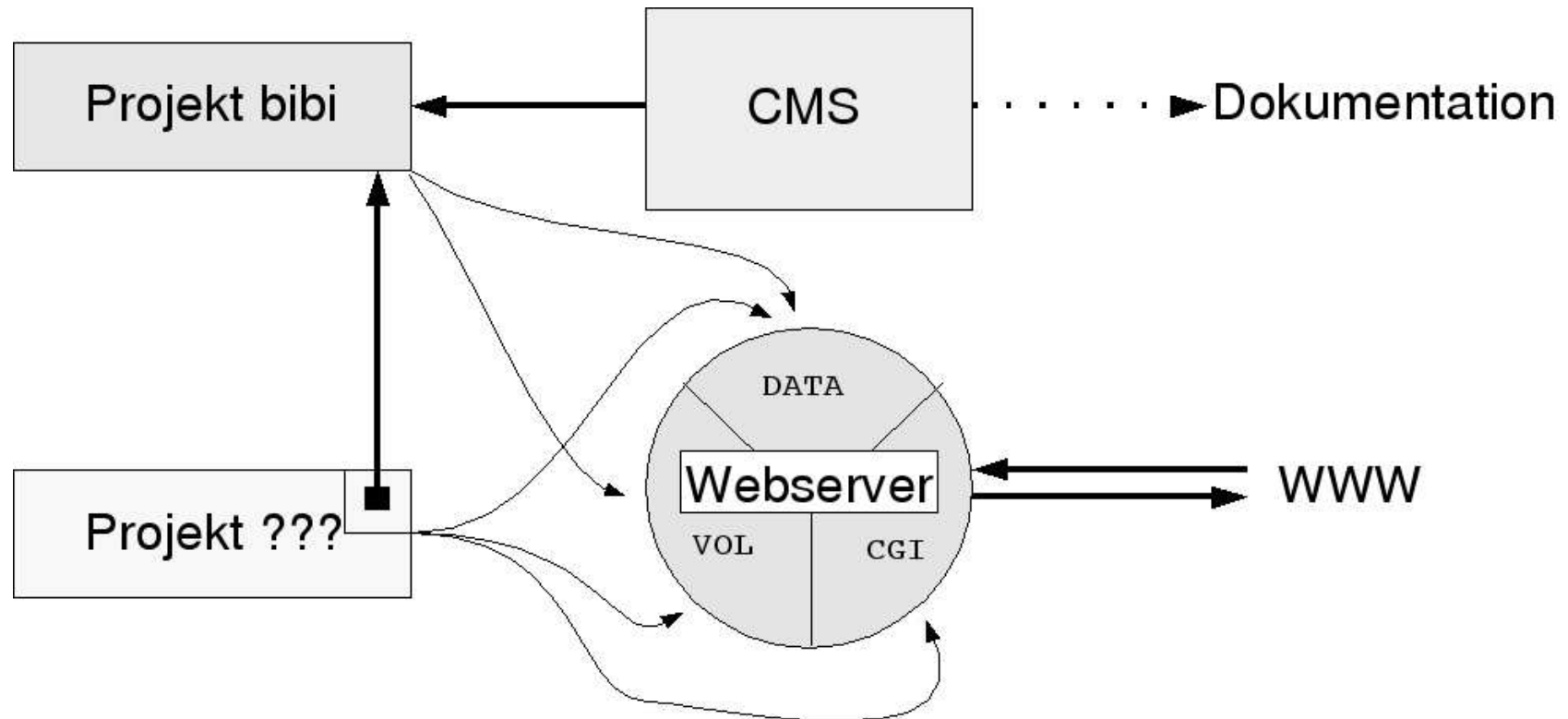
### Apache Webserver

- chroot Umgebung
- Perl 5.8 (zukünftig : PHP)
- PostgreSQL
- SRS (7.1) - wöchentliche Updates
  - Genbank, TREMBL, Swissprot
  - PFAM, Unigene

## Struktur - Gruppen



## Struktur - Zusammenhänge



- zunächst : eine Ansammlung von Daten in XML
- später : Datengrundlage für das BiBiServ CMS System
  
- Coocon, Zope, CWeb, ...
- XML, XSLT, ...

# Datengrundlage

```
<project>
  <projectname>Dialign</projectname>
  <fullname> ...
  <department value=Alignments/>
  <author> ... <contact> ... <contact-mail>
  <description> Dialign is a novel ...
  <download>
    <version>2.2.1</version>
    <platform os=solaris arch=sparc/> ...
    <ignoreadr value=no>
    <depend url= ...
  </download>
  <biotool-uses> ... <perl-uses> ...
</project>
```

## Projekt Bibi- Rahmenbedingungen

- einfach zu pflegen
- flexibel
- kompatibel
- einheitlich



# Projekt Bibi - Überblick



## BiBiServ

Bielefeld University Bioinformatics Server

Tools

Education

Administration

News

Links

### Tools

#### Genome Comparison

MGA  
REPuter  
...more

#### Alignments

DIALIGN  
DCA  
...more

#### Primer Design

GeneFisher

#### RNA Studio

paRNAss  
RNA Movies  
...more

#### Evolutionary Relationship

ROSE  
SplitsTree  
...more

#### Others

GenDB  
Phase4  
...more

The BiBiServ Tool section currently offers bioinformatics tools for a large variety of tasks:

- ◆ Genome Comparison
- ◆ Alignments
- ◆ Primer Design
- ◆ RNA Studio
- ◆ Evolutionary Relationships
- ◆ Others

As some analyses can take a long time – sometimes over several hours – BiBiServ provides two different result delivery mechanisms. Results of short analyses (less than 5 minutes compute time) are shown immediately in the browser. For longer analyses (maximum of one day compute time) the result is stored on a temporary web-site and the corresponding URL is sent to the user via E-mail.

BiBiServ runs in a UNIX environment. The data stored locally can be accessed only by the BiBiServ administrators. The result of a calculation is stored temporarily for three days and deleted afterwards. We do not offer encrypted submissions.

# Projekt Bibi - Überblick(2)



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# Projekt Bibi - Überblick(3)



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...more

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# Projekt Bibi- Überblick(4)



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### Tools

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Welcome

Submission

Download

References

Manual

Contact

# Projekt Bibi- Überblick(5)



Universität Bielefeld

## BiBiServ

Bielefeld University Bioinformatics Server

Tools   Education   Administration   News   Links

### Tools

- Genome Comparison**
  - MGA
  - REPuter
  - ...more
- Alignments**
  - DIALIGN
  - DCA
  - ...more
- Primer Design**
  - GeneFisher
- RNA Studio**
  - paRNAss
  - RNA Movies
  - ...more
- Evolutionary Relationship**
  - ROSE
  - SplitsTree
  - ...more
- Others**
  - GenDB
  - Phase4
  - ...more

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# Projekt Bibi - Überblick(6)



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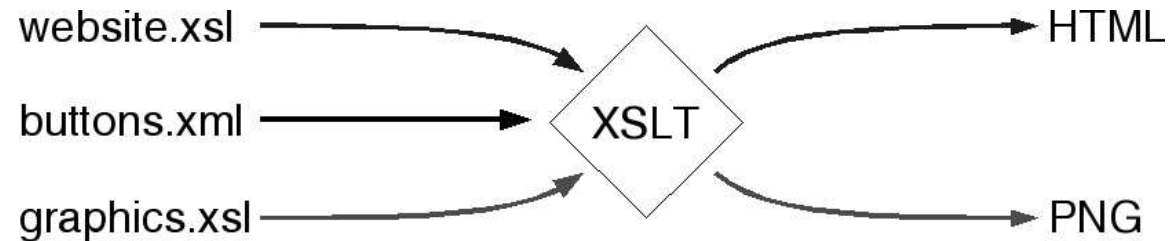
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# Projekt Bibi - Navigationsleiste

- muss nicht definiert sein
- kann für jedes Projekt anders sein
- Kritikpunkt : kann übersehen werden
- . . .



## Projekt Bibi - Navigationleiste (2)

```
...
  <menue>
    <content>Submission</content>
    <url target="_self">submission.html
  </menue>
  <menue>
    <content>Download</content>
    <url target="_self"> ...
  </menue>
...
  <content>Dialign</content>
  <bgcolor>FFFFFF</bgcolor>
  <color>669966</color>
  <fontcolor>000000</fontcolor>
  <tablebgcolor>99cc66</tablebgcolor>
  <mouseovercolor>FFFFFF</mouseovercolor>
  <font name="lsm_" size="12" linespacing="0%"/>
  <size x="130" y="25" offset="25" move="10" tab="5"/>
  <distance size="100"/>
...
```



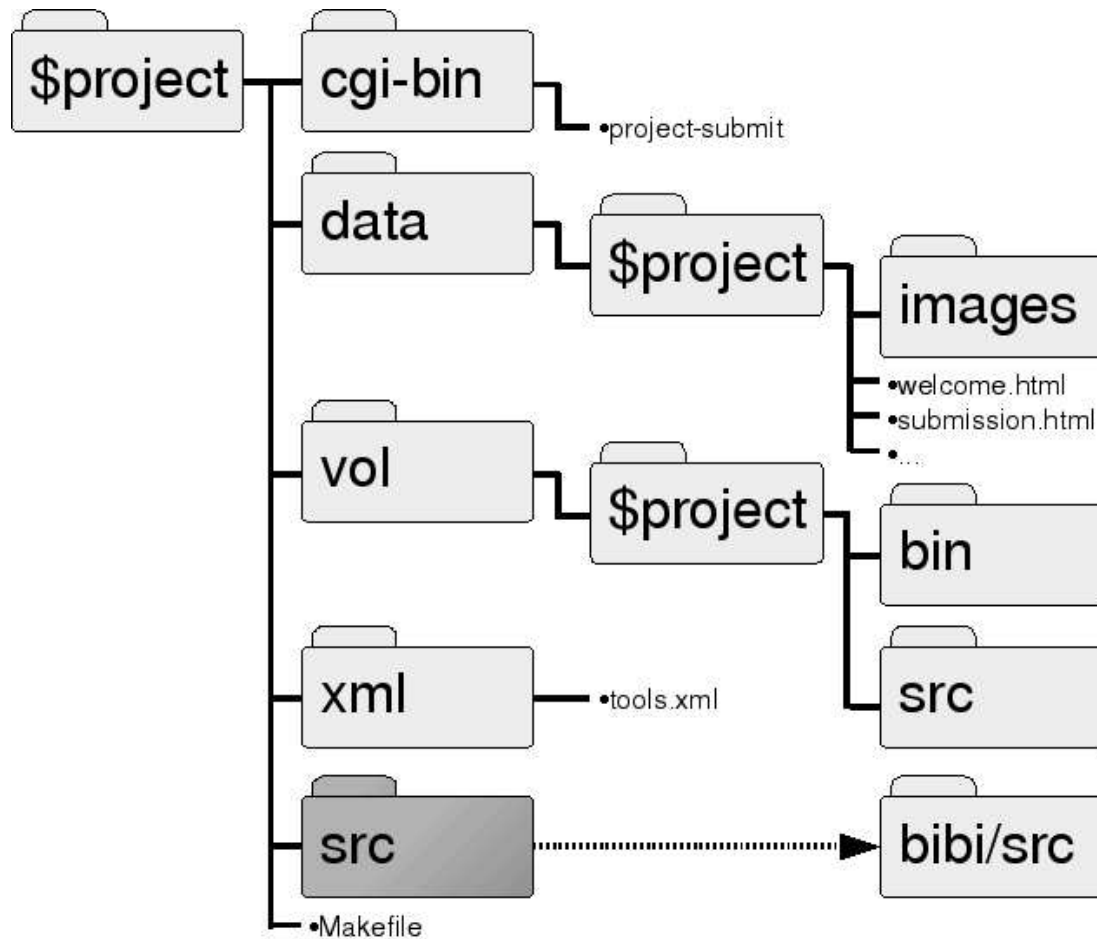
Welcome  
Submission  
Download  
References  
Manual  
Contact



## Ein neues Projekt

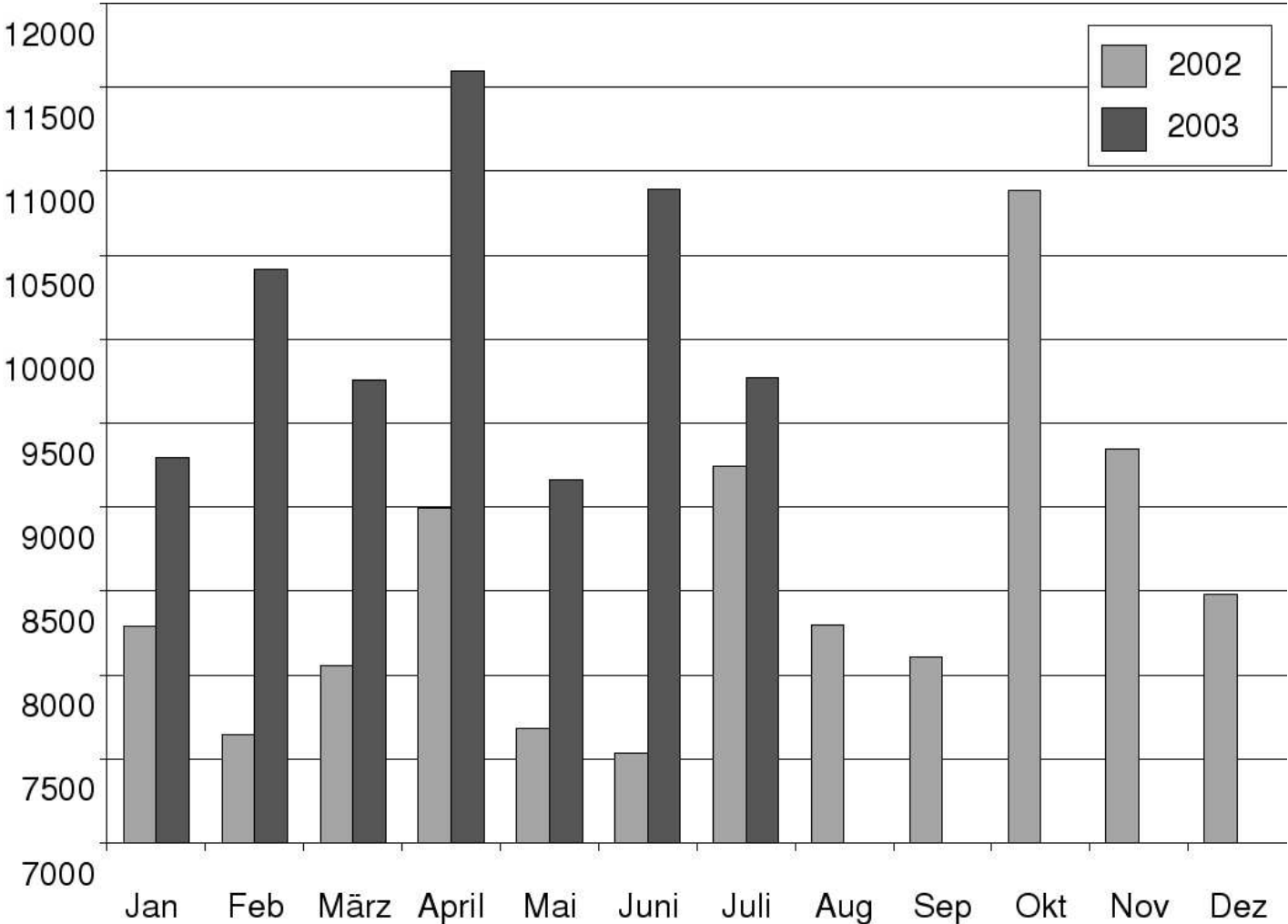
- BiBiServ Umgebung (Projektstruktur, Standardprojekt)
- zu beachten :
  - Policies
  - Laufzeitbeschränkung
  - Uploadbeschränkung
  - Verzeichnisrechte und Gruppen
- wünschenswert : Vortrag

## Ein neues Projekt



Projekt bibi

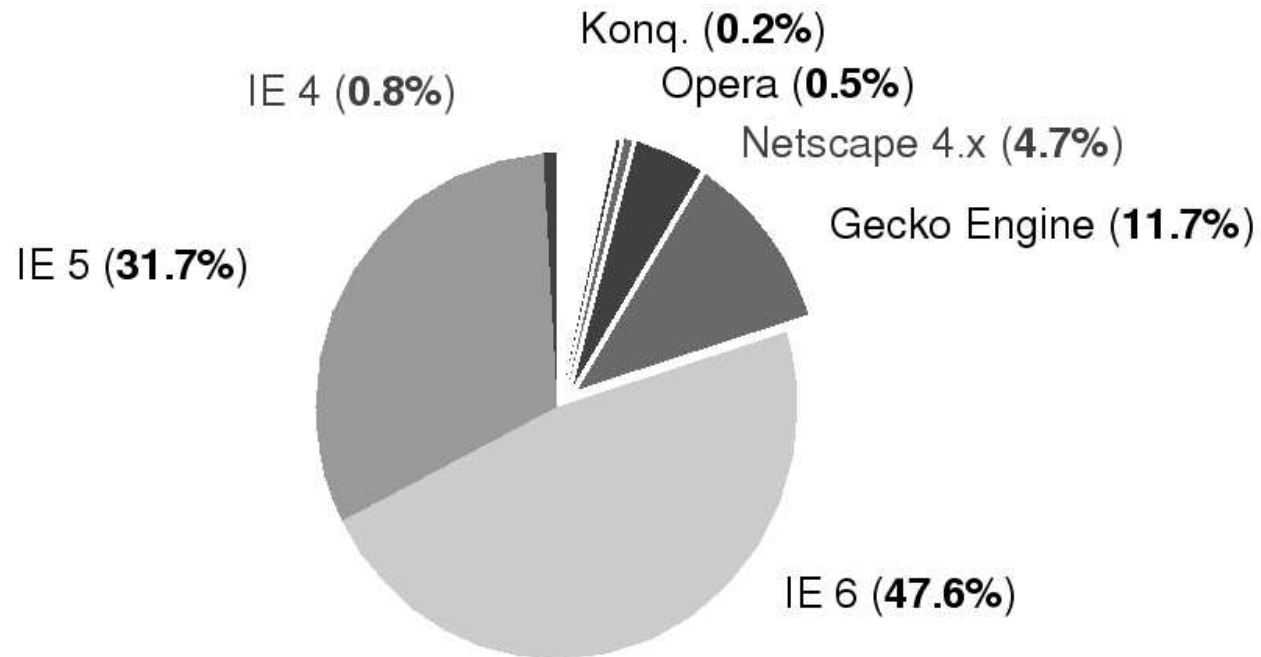
# Statistik - 2002/2003



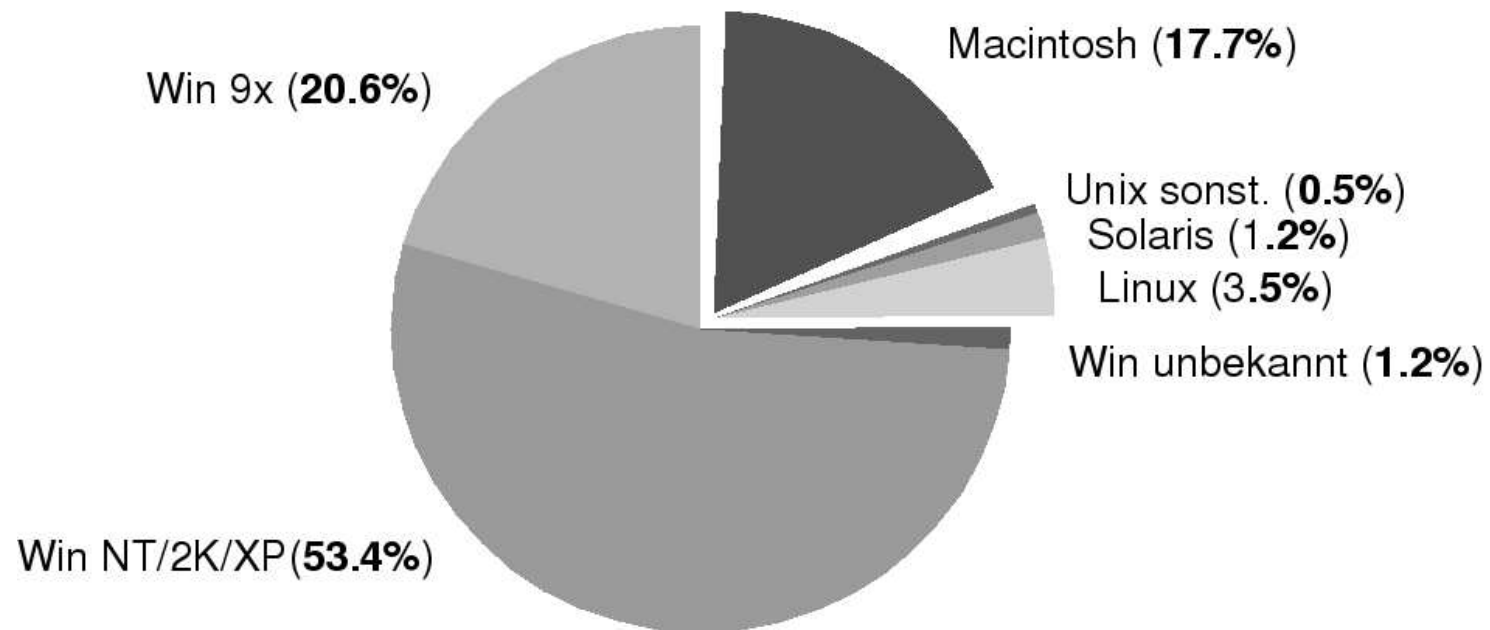
## Statistik - Tools 2003

2003	Januar	Februar	März	April	Mai	Juni	Juli	August
Agenda	90	128	122	357	156	57	68	106
Reputer	217	313	335	376	482	347	209	316
Altavist	40	216	244	210	139	260	224	230
DCA	723	832	797	1004	536	792	749	568
Dialign	2226	2416	2275	2452	2168	2846	2271	1952
Jali	44	61	38	71	16	25	29	19
Tsda	14	11	12	23	5	7	8	4
GeneFisher	4044	4242	4022	4255	3948	4323	4152	3545
PaRNAss	57	127	227	86	76	85	179	101
pknotsRG	-	49	150	119	103	24	76	151
RNA Forester	0	29	1	52	60	44	62	55
RNA Movies	-	-	-	-	-	-	43	328
Rose	67	55	65	155	53	223	244	238
SplitsTree	-	68	116	163	366	367	247	134
Mfold	1769	1870	1342	2355	1046	1513	1260	1058
Paper2Seq	-	-	7	1	7	0	21	7
PREdictor	-	-	-	-	14	3	4	11

## Statistik - Browser Juli 2003



## Statistik - Systeme Juli 2003



## Ausblick

- SUN GridEngine
- Webservices
- BiBiServ (Perl) Module
- neues Design für alle Tools
- Suche
- . . .