

BibiServ(ices)

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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



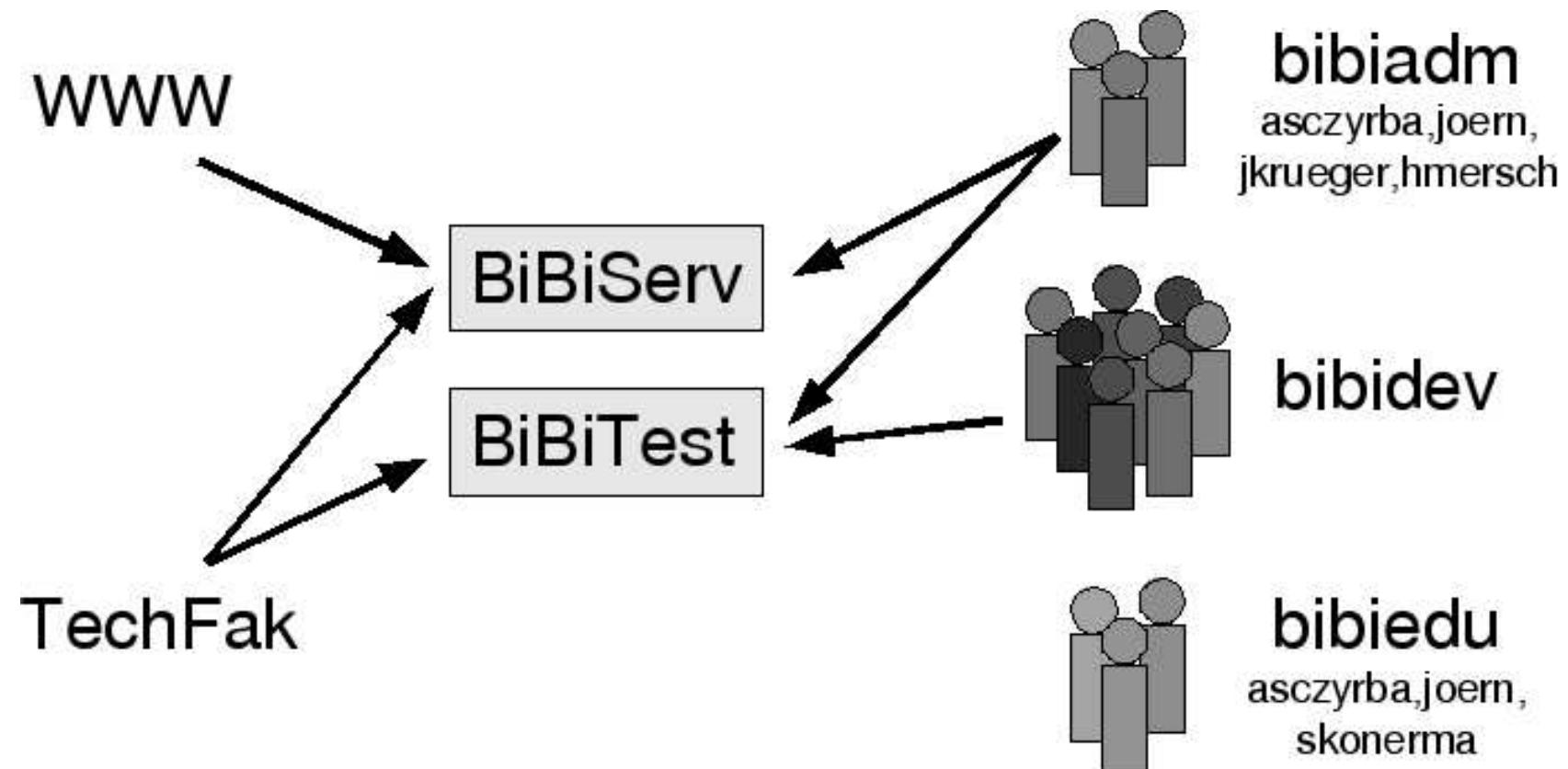
ComputeServer

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

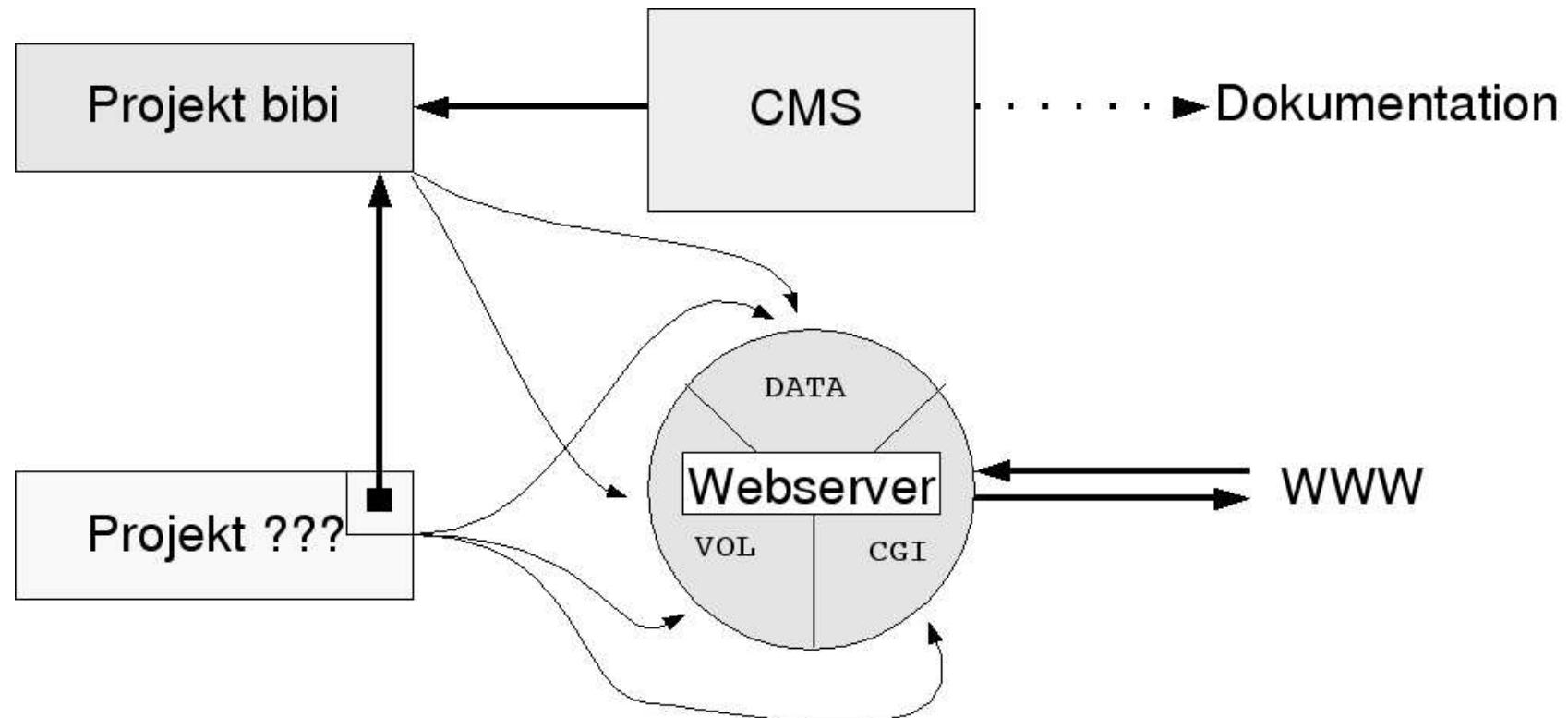
Apache Webserver

- chroot Umgebung
- Perl 5.8 (zukünftig : PHP)
- PostgresSQL
- 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>Dalign</projectname>
  <fullname> ...
  <department value=Alignments/>
  <author> ... <contact> ... <contact-mail>
  <description> Dalign is a novel ...
  <download>
    <version>2.2.1</version>
    <platform os=solaris arch=sparc/> ...
    <ignoreaddr 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)



BiBiServ
Bielefeld University Bioinformatics Server

Tools Education Administration News Links

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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

Projekt Bibi - Überblick(3)

The screenshot shows the BiBiServ website. At the top left is the University of Bielefeld logo with a DNA helix. To its right is the BiBiServ logo with the text "Bielefeld University Bioinformatics Server". Below the logo is a horizontal navigation bar with five tabs: Tools, Education, Administration, News, and Links. On the far left, there is a sidebar titled "Tools" containing links to various bioinformatics tools categorized by function: Genome Comparison, Alignments, Primer Design, RNA Studio, Evolutionary Relationship, and Others.

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 main content area starts with a section titled "The BiBiServ Tool section currently offers bioinformatics tools for a large variety of tasks:" followed by a bulleted list of tool categories. Below this is a paragraph explaining the result delivery mechanism, and another paragraph about the UNIX environment and data storage.

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

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

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Projekt Bibi- Überblick(4)

The screenshot shows the BiBiServ website. At the top left is the University of Bielefeld logo with a DNA helix icon. To its right is the BiBiServ logo: "BiBiServ" in a large serif font above "Bielefeld University Bioinformatics Server" in a smaller sans-serif font. Below the logo is a horizontal navigation bar with five tabs: "Tools", "Education", "Administration", "News", and "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 main content area contains the following text:

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.

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Welcome
Submission
Download
References
Manual
Contact

Projekt Bibi- Überblick(5)

The screenshot shows the BiBiServ website interface. At the top left is the University of Bielefeld logo with a DNA helix icon. To its right is the site title "BiBiServ" in a large serif font, followed by "Bielefeld University Bioinformatics Server" in a smaller sans-serif font. A horizontal navigation bar below the title contains five items: "Tools", "Education", "Administration", "News", and "Links". The "Tools" item is currently selected, indicated by a grey background and white text. On the left side, there is a sidebar titled "Tools" which lists several bioinformatics tools categorized under "Genome Comparison", "Alignments", "Primer Design", "RNA Studio", "Evolutionary Relationship", and "Others". Each category has a list of tools and a "more" link. The main content area on the right contains three paragraphs of text. The first paragraph describes the current state of the Tool section. The second paragraph discusses result delivery mechanisms for analyses. The third paragraph provides information about the UNIX environment and data storage.

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.

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Projekt Bibi - Überblick(6)



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
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Evolutionary Relationship
ROSE
SplitsTree
...more

Others
GenDB
Phase4
...more

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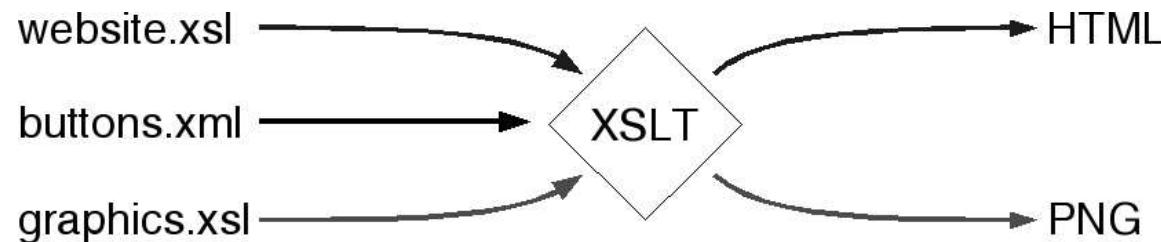
- Genome Comparison
- Alignments
- Primer Design
- RNA Studio
- Evolutionary Relationships
- Others

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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>Dalign</content>
<bcolor>FFFFFF</bcolor>
<ccolor>669966</ccolor>
<fc>000000</fc>
<tbc>99cc66</tbc>
<moc>FFFFFF</moc>
<font name="lsm_" size="12" linespacing="0%" />
<size x="130" y="25" offset="25" move="10" tab="5" />
<distance size="100" />
...

```

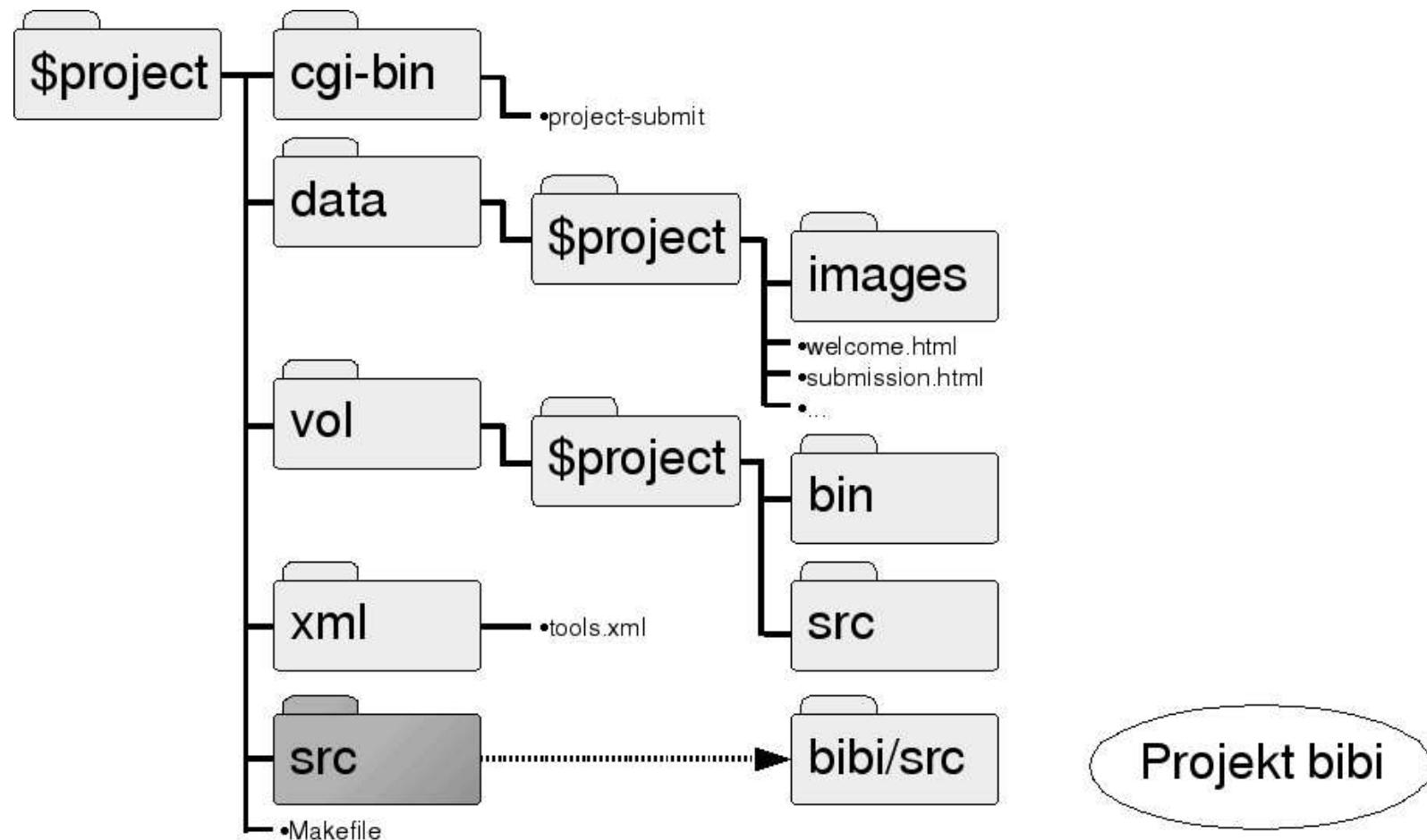


Welcome
Submission
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Contact

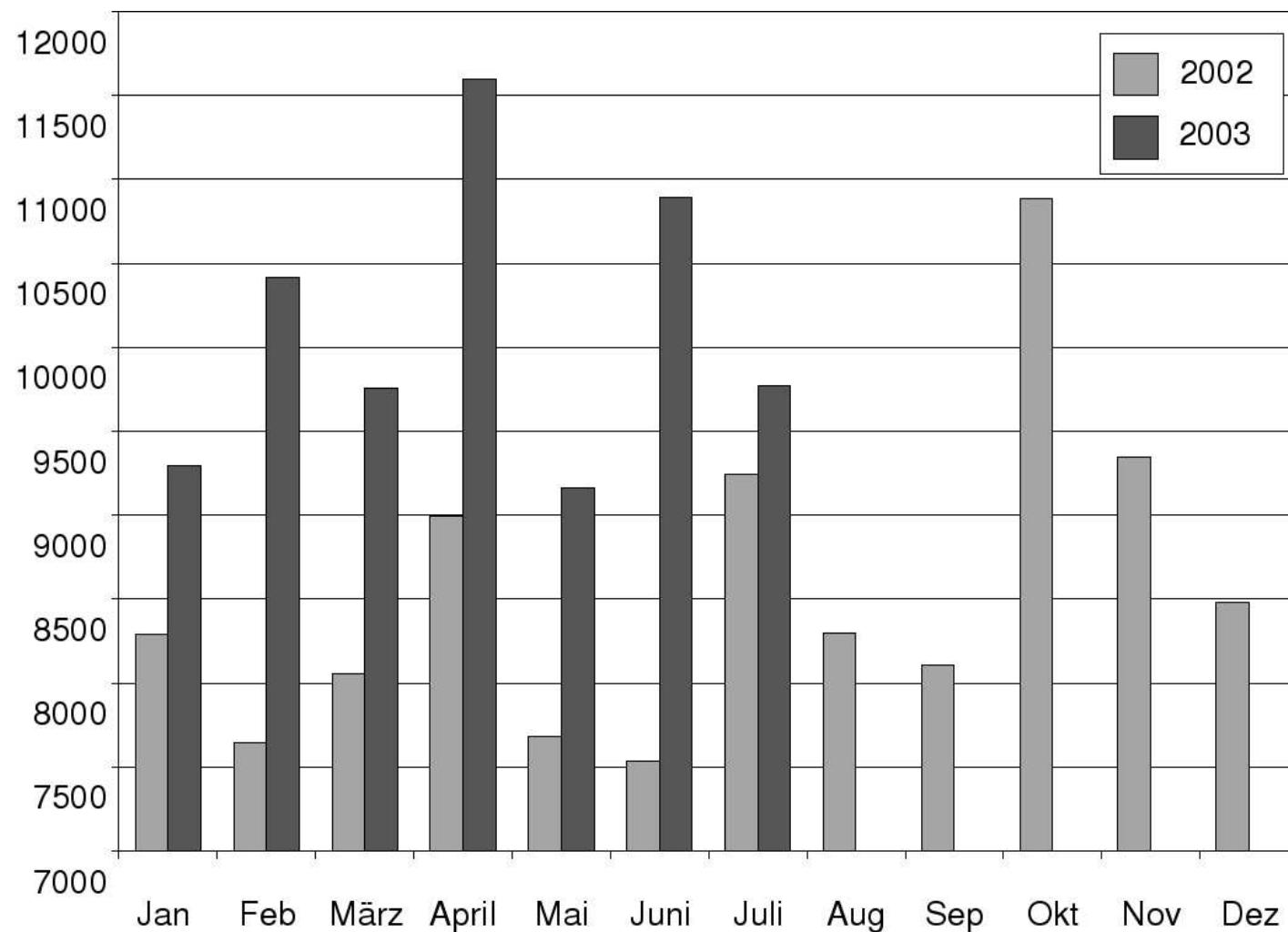
Ein neues Projekt

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

Ein neues Projekt



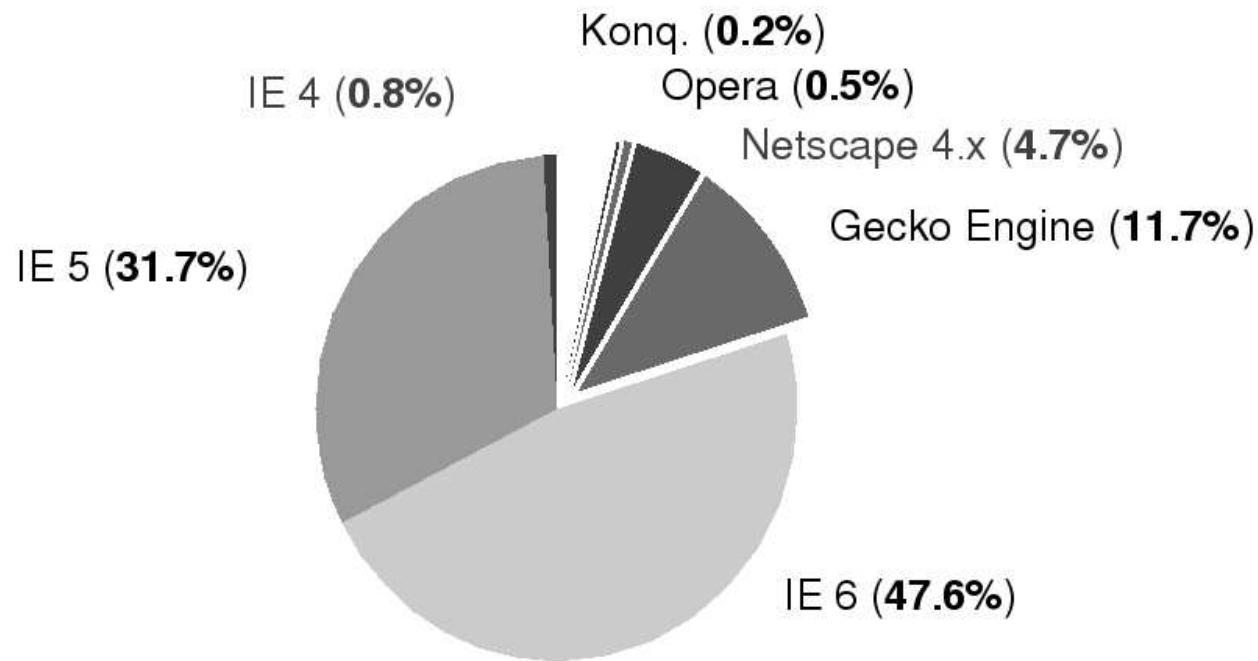
Statistik - 2002/2003



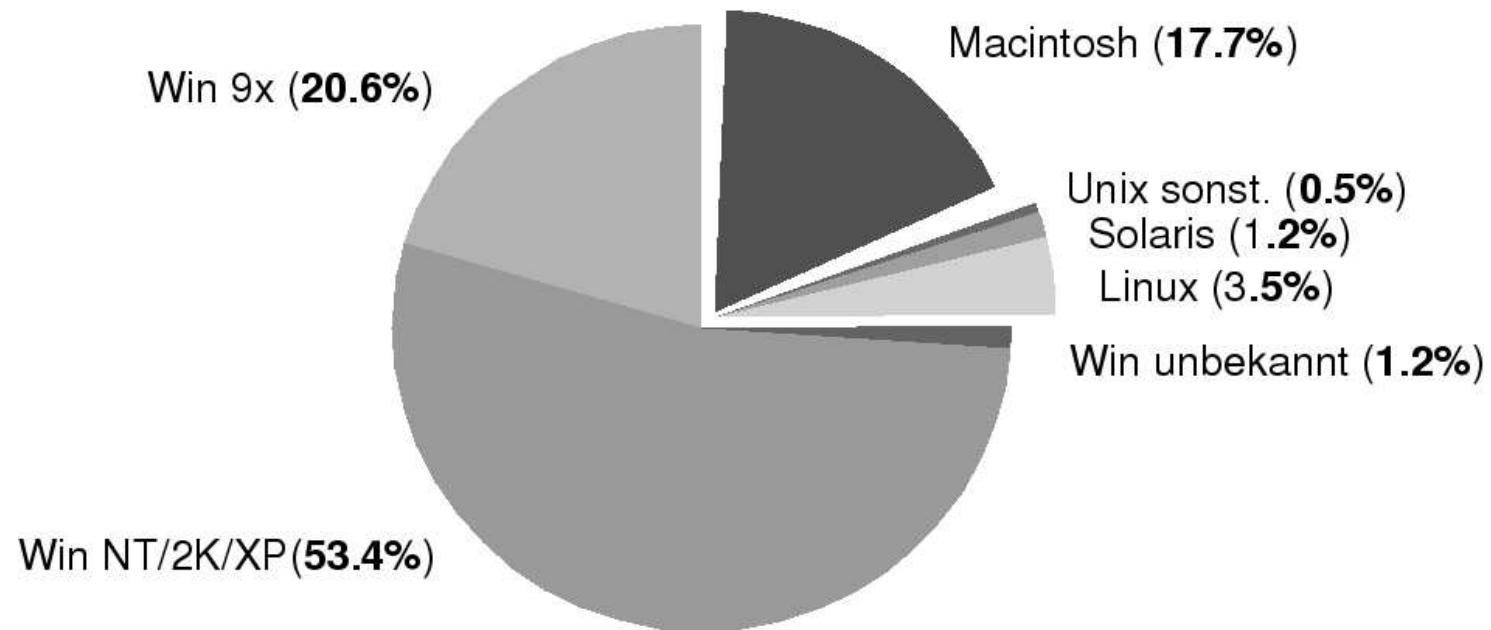
Statistik - Tools 2003

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
Dalign	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
- ...