

# Mailing lists at DESY with SYMPA



**SY**stème de **M**ulti-**P**ostage **A**utomatique

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- **SYMPA**
  - **Système de Multi-Postage Automatique**
  - **Comité Réseau des Universités (France)**
  
- **the DESY-environment**
- **reasons to leave PMDF**
- **project objectives**
  
- **attractive features of SYMPA**
- **conclusions**





# Reasons to leave PMDF

## DESY-environment:

- ~ 7,000 @desy.de addresses
- ~ 5,800 registered persons
- ~ 800 central lists in total
- ~ 30,000 distinct subscribers
- 3 different e-mail inbox server

Hamburg:	UNIX + Exchange
Zeuthen:	UNIX

## Hamburg (700 lists):

- old PMDF Version 5.2
  - old PMDF needs Solaris 7
  - old hardware  
2 x Sun Ultra-10
- change is necessary anyhow

## Zeuthen (100 lists):

- Majordomo
- MIME issues



# Requirements



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## user requirements:

- **web interface – ease of use**
- **self-service configuration of personal list behavior**
- **distinct subscription options**
  - mail
  - digest for high frequency lists
  - pausing during holidays
  - archives (Web, ZIP)
- **not yet another plethora of passwords...**
- **internationalization**

## administrative requirements:

- **reliability**
- **web interface**
- **delegation**
- **dynamic import of subscribers**
- **easy integration into existing infrastructure (tech. & org.)**
- **virtual domains**
- **easy adaptation to local needs**
- **fulfillment of user requirements**
- **smooth transition**





# attractive features of SYMPA

- all user requirements named on the previous slide are satisfied
- delegation
- password only needed for list owners and web interface
- self-service password management
- multiple remote data sources
- list attribute management
  - inheritance of parameters for lists
  - specifically override parameters
- reliability; used by many organizations
- easy integration into existing infrastructure (tech. & org.)
- database backend
- multi-domain
- easy adaptation to local needs
- basic RSS functionality
- written in PERL
- command line interface
- no changes for subscribers



# web interface

features – refined – 1



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- **the web interface requires a password**  
except for the most basic functionalities
- **the username is the e-mail address**  
or alternate e-mail, or LDAP UID
- **self-service password management**  
get the password on your own request immediatly
- **the web interface looks similar for all roles**
- **searchable archives, ready for download**
- **document repositories**



# hierarchical organisation

features – refined – 2



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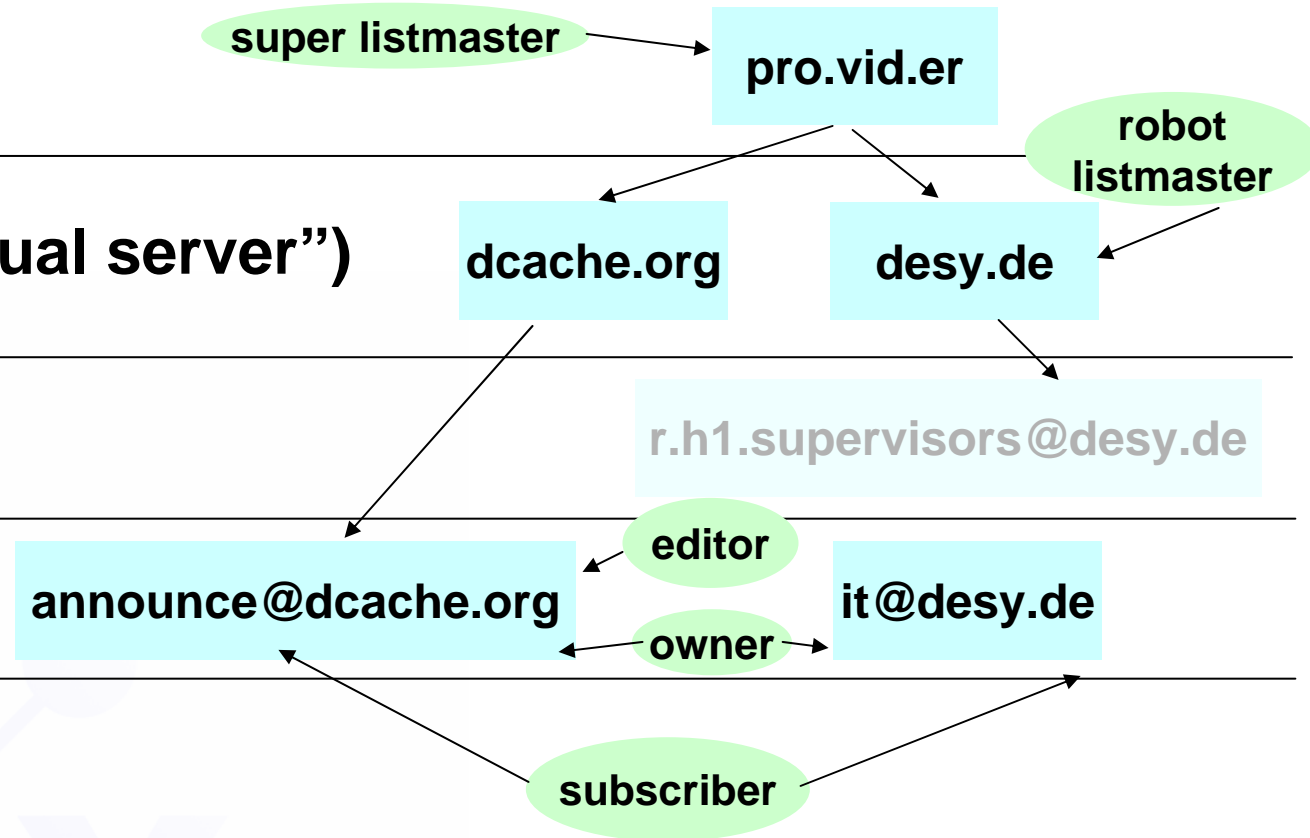
- per server

- per robot (“virtual server”)

- per list family

- per list

- per user



# delegation

features – refined – 3



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- **role based administration**
  - **list masters aka “root” → per server & per robot**
  - **list owners → handle subscriptions & list configuration (basic/privileged)**
  - **moderators → distribute or reject messages**
  - **subscribers → receive & probably send e-mail**
- **enable list owners to tune list parameters themselves**
- **some training has to be provided**
- **may be defined by data sources**
- **basic workflow**
  - **request list, “unsuspicious”, acknowledge**





# list attribute management – general

features – refined – 4



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- **parameters are inherited top-down**
- **site, robots, families and lists may have different attribute values if needed (and allowed)**
- **~ 50 parameters defining a list**
  - ➔ **“types” = presets of list parameters are offered**
- **families used by DESY-registry generated lists**  
(groups of accounts ➔ lists of e-mail addresses)
  - **fix parameters nobody may change, e.g. “closed” for subscription/unsubscription**
  - **leave attributed variable for list owners, e.g. URLize, subscription mode possibilities, ...**



# list attribute management – list families

features – refined – 5



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- management of large number of lists with similar properties
- XML-input
- list template: skeleton of configuration file, XML-variables are filled in
- parameter constraints: defined for each parameter
- list editing: which role may alter what parameters

```
<?xml version="1.0" ?>
<family>
<list>
<subj>xyzy</subj>
<sql>
  <ns>IT</ns>
  ...
</sql>
</list>
...
</family>
```

```
subject [% subj %]
visibility noconceal
[% IF sql %]
include_sql_query
```

```
...
sql_query select address from v_ml \
  where ns=[% sql.ns %] \
  and grp=[% sql.grpname %]
[% END %]
```

```
lang fr, us
archive.period days, week, month
visibility conceal, noconceal
shared_doc.d_read public
shared_doc.d_edit editor
```

```
# only listmaster can edit user_data_source
user_data_source listmaster write
# other parameters can be changed by owners
default owner write
```

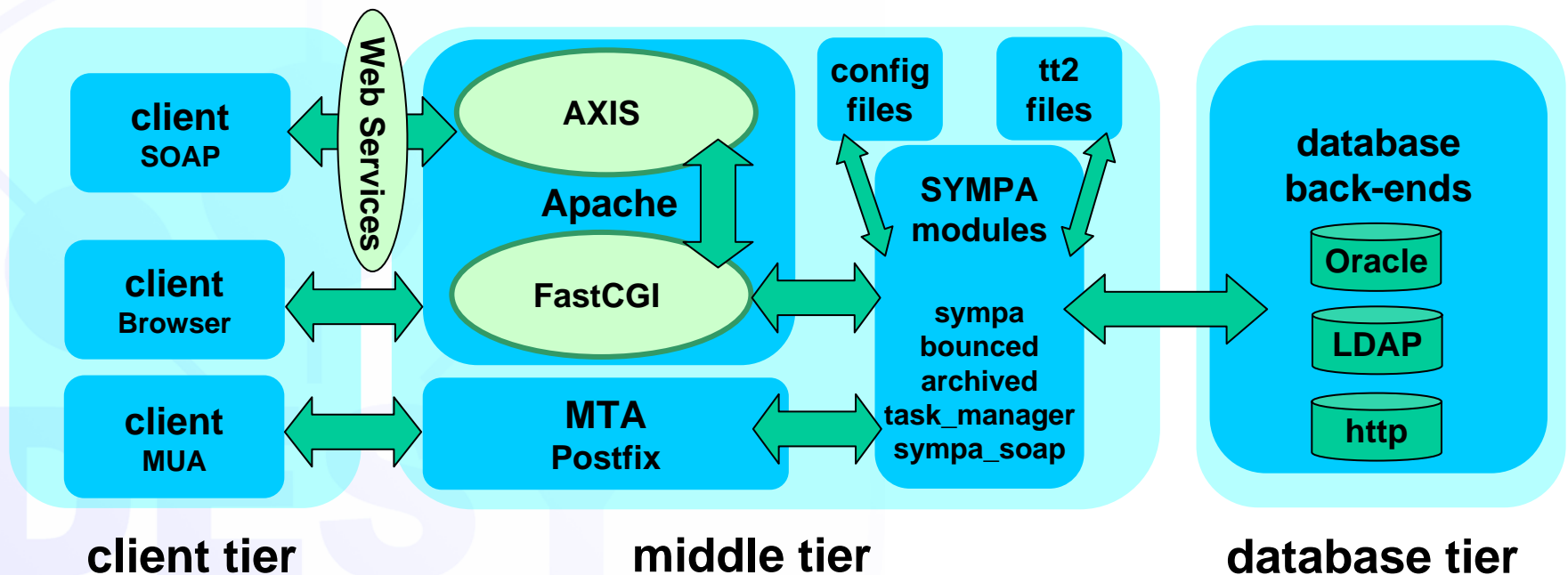
# integration

features – refined – 6



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- clearly separated units; facilitates changes
  - user interfaces: web and e-mail are widely accepted
  - middle tier: SYMPA utilizes common products for integration
  - database tier: usage of familiar systems (MySQL, PostgreSQL, http-access)
  - template mechanism facilitates adaptation to local needs



# adaptation to local needs

features – refined – 7



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## ▪ control of list behaviour (scenarios)

- lots of sensible scenarios included
- who may (un)subscribe, add or delete subscribers ?
- who may send e-mails ?

```
i s_subscri ber([l i stname], [sender]) smtp -> request_auth  
i s_subscri ber([l i stname], [sender]) smi me, md5 -> do_i t
```

- what kind e-mails are allowed ?

```
match([header->Content-Type], /mul ti part/) smtp, smi me, md5 -> edi torkey
```

## ▪ control of appearance via templates / TT2

**seperation of scenarios and templates per robot**



# data sources

features – refined – 8



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## ▪ different backends possible

- Oracle (MySQL, PostgreSQL, Sybase)
- LDAP
- http(s)-based  
(<http://xyz.desy.de/xyz-lists/abc-list.txt>)
- other mailing lists within SYMPA
- files

```
i ncl ude_l dap_query
port 389
host l dap. uni v. fr
suffi x ou=Peopl e, dc=uni v, dc=fr
scope one
timeout 10
fi lter (& (mai l=*)(group=xyz))
attr s mai l
sel ect fi rst
```

## ▪ used for including

- subscribers
- owners
- moderators
- scenarios (only using static files possible)





- **X.509 certificates**
  - user authentication (e-mail)
  - client authentication (web)
  - encryption (e-mail)
- **bounce management (2 stages: warn/kick)**  
**VERP-enabled = unique return-path**
- **subscription modes**  
e.g. URLize → leave attachments @ SYMPA
- **file/document upload**



# Conclusions



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- lots of really useful features providing a highly configurable system
- DESY still has not yet checked out all possibilities
- SYMPA development since 1997
- more than 4,000 sites using it
- e.g. tamu.edu manages 20,000 lists with SYMPA
- fast responses from the CRU team
- more configuration will go into database
- improving of history / tracking mechanism
- SYMPA is definitely worth having a look at
- <http://www.sympa.org/>





**Any questions ?**

**(any answers ?)**

DESY

