

Hermes Message Dispatching

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Novell.



Topics

Hermes Message Dispatching

1. What is the Problem?
2. Get Back Control!
3. Technical Details
4. You want it, Q&A

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What is the Problem?

The Beginning:

- “Send me a quick email!”
- Important Information is coming along
- Email is Fun
- Work organization uses a lot of email, very very efficient

... and then the machines started to send emails!



What is the Problem?

Everything turns upside down:

- Tons of email that look similar
- Important Information gets lost
- Email is not fun anymore
- Work organization breaks



Get Back Control!

Hermes lets YOU decide which messages you get when and in which way!

- The client systems deliver notifications to Hermes
- Users decide themselves which information they are interested in and subscribe consciously at Hermes
- Messages are kept on the server for backup
- The message is configurable by Hermes admin & individually



Various Deliveries

- Mail
- RSS feeds
- Jabber
- Twitter
- HTTP Post
- Webclient
- your idea



picked by the individual user.

Digests

Messages can be collected and sent as one later.

```
home:rwooninck:UNSTABLE_KDE4/amarok-unstable ->
KDE:KDE4:Playground/amarok-unstable

https://build.opensuse.org/request/diff/31421

Description: Amarok trunk version. Will update on weekly basis
```

To REVIEW against the previous version:

```
osc request show --diff 31421
```

To ACCEPT the request:

```
osc request accept 31421 --message="reviewed ok."
```

To DECLINE the request:

```
osc request decline 31421 --message="declined for reason xyz
(see ... for background / policy / ...)."
```

To REVOKE the request:

```
osc request revoke 31421 --message="retracted because ...,"
```

Digests

Messages are combined into one with header and footer.

Dear Klaas,

```
home:rwooninck:UNSTABLE_KDE4/amarok-unstable ->  
KDE:KDE4:Playground/amarok-unstable
```

```
home:rwooninck:UNSTABLE_KDE4/dolphin ->  
KDE:KDE4:Playground/amarok-unstable
```

```
home:rwooninck:UNSTABLE_KDE4/kwrite ->  
KDE:KDE4:Playground/amarok-unstable
```

```
home:rwooninck:UNSTABLE_KDE4/konqueror ->  
KDE:KDE4:Playground/amarok-unstable
```

```
https://build.opensuse.org/request/diff/31421
```

```
Description: Amarok trunk version. Will update on weekly basis
```

To REVIEW against the previous version:

```
osc request show --diff 31421
```

To ACCEPT the request:

```
osc request accept 31421 --message="reviewed ok."
```

...

Digests

The digested messages are sent out on a

- minutely
- hourly
- daily
- weekly

Base.

Technical Details

Outline

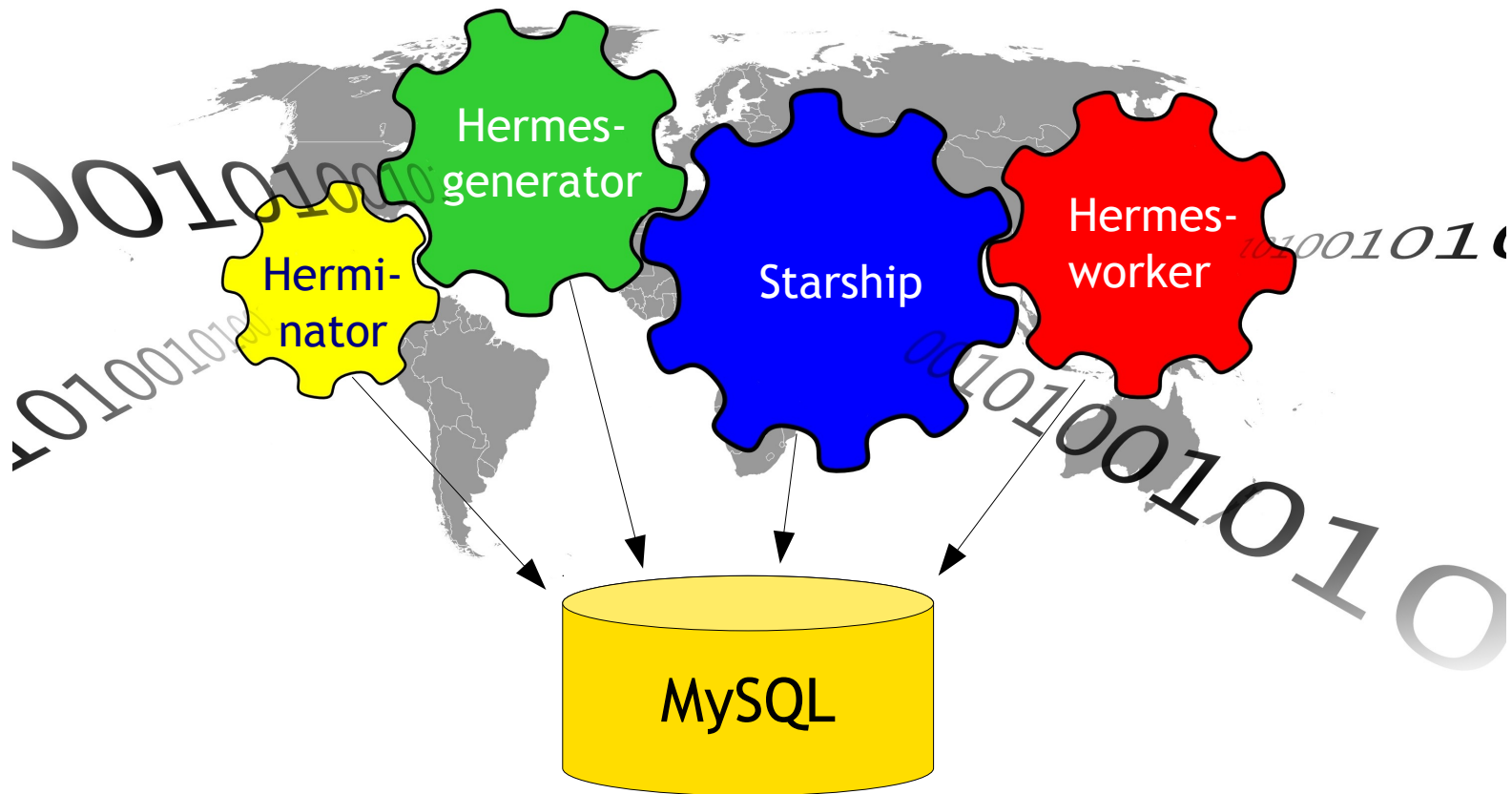
Hermes currently consists of four parts:

- **Herminator**
 - Receives notifications from clients
- **Hermesgenerator**
 - Connects notifications and receivers
- **Hermesworker**
 - Sends out messages
- **Starship**
 - User configuration webapp



Fundament: MySQL Database

All parts of Hermes share data using a MySQL Database with a pretty optimized schema.



Herminator

Small Perl-CGI-Application based web application, running in lighttpd or apache

- **Client Interface:** Notifications can be posted to a specific url on herminator
 - Required Parameter: notification type
 - Optional: notification parameters, random key-value pairs
- **Admin Interface**
 - Message template administration
 - Descriptions etc., input for Starship

<http://notify.opensuse.org>

Hermesgenerator

Perl script that connects incoming notifications to subscriptions, creates messages out of notifications.

Hermesgenerator checks based on the message type if there are subscriptions of users for the type and generates a message out if it.

```
Running hidden as  
infinite task
```



Hermesworker

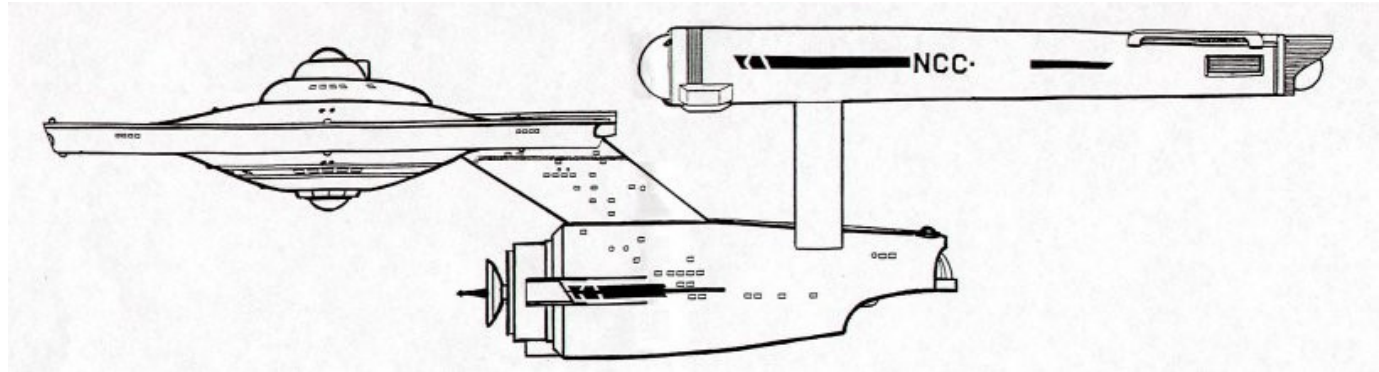


Also perl script that actually sends the messages depending on the users delivery type selection.

Currently implemented is Mail, RSS, Twitter, HTTP, Jabber (experimental).

Running hidden as
infinite task

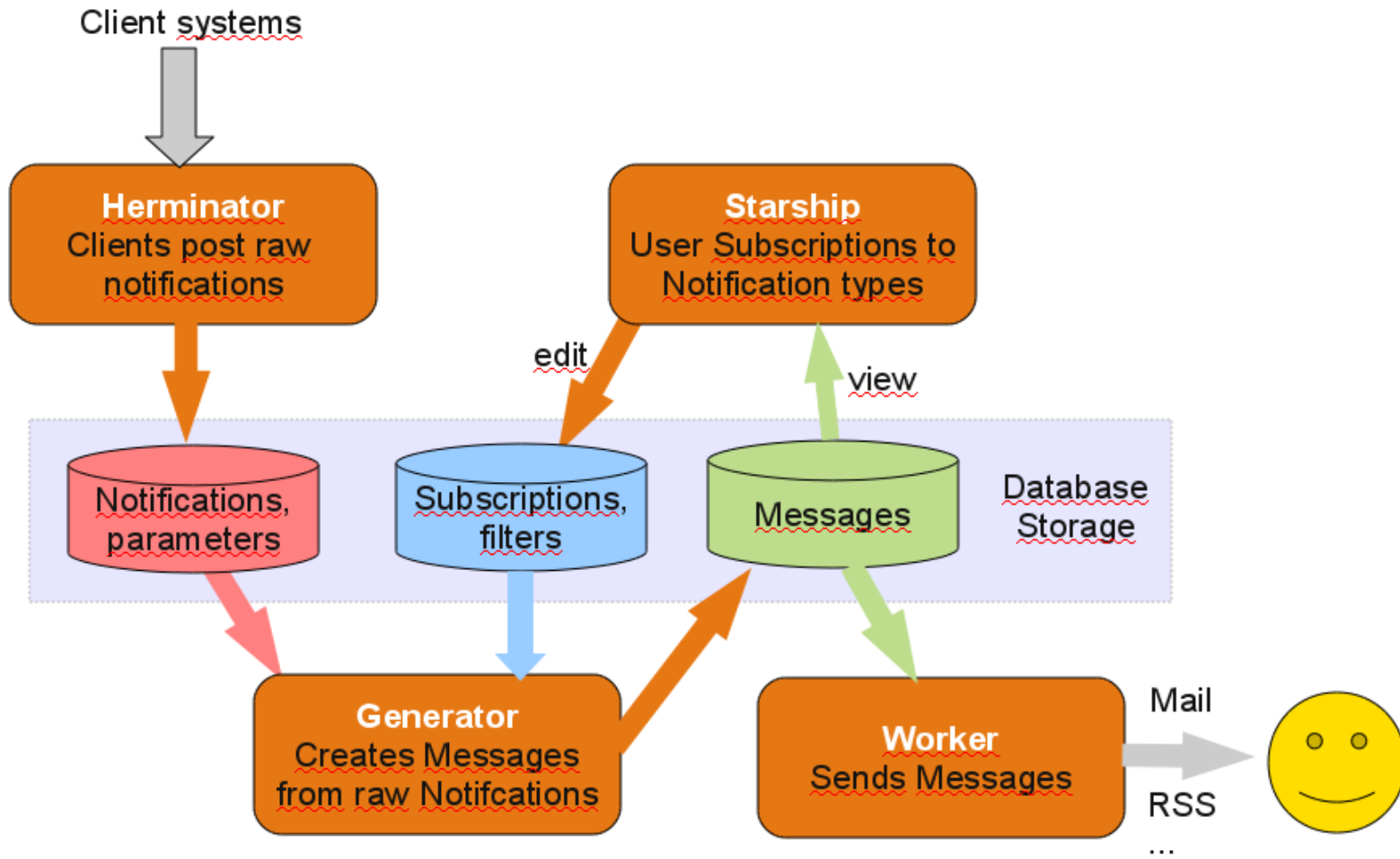
Starship



- Hermes user interface, Rails App
- Maintain Subscriptions
 - User mode
 - Expert mode
- User can read messages Online
- RSS feed handling

<http://hermes.opensuse.org>

Hermes Overview Diagram



You want it!



- Hermes runs in production for the openSUSE project (OBS, openFATE)
- More than 50,000 notifications are processed every day
- Project page:
<http://en.opensuse.org/Hermes>
- Please join in, its **free** software

Thank you very much! Questions?



<http://www.openSUSE.org>