

*semiAdvanced Mail Suite*

# semiAdvanced Mail Suite

czyli jak pogodzić

PostgreSQL · · Exim · · Courier-IMAP

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Wszelkie prawa zastrzeżone.

## *Abstract...*

### **semiAdvanced Mail Suite**

Współpraca programów EXIM, PostgreSQL oraz Courier-IMAP usprawnieniająca obieg poczty. Trochę teorii, struktura bazy danych, przykładowa konfiguracja programów.

## *Spis treści...*

- PostgreSQL
- Exim
- Courier-IMAP
- Panel Administracyjny
- Zalety i wady
- Pomysły na przyszłość

# *PostgreSQL*

- Tabele
  - ♦ struktura



<http://www.postgresql.org>

## *virtual\_users* główna tabela

```
1 CREATE TABLE virtual_users (  
2 id serial NOT NULL,  
3 uid integer DEFAULT '25' NOT NULL,  
4 gid integer DEFAULT '25' NOT NULL,  
5 password_crypt text,  
6 password_clear text,  
7 name text,  
8 surname text,  
9 quota_hard integer DEFAULT 1 NOT NULL,  
10 quota_soft integer DEFAULT 1 NOT NULL  
11 );
```

*virtual\_domains*  
tabela zawierająca domeny

```
1 CREATE TABLE virtual_domains (  
2     id serial NOT NULL,  
3     "domain" text NOT NULL UNIQUE  
4 );
```

## *virtual\_aliases* aliasy użytkowników

```
1 CREATE TABLE virtual_aliases (  
2     "alias" text,  
3     "domain" text,  
4     "id" integer NOT NULL  
5 );
```

Narzucone ograniczenia:

“**id**” musi znajdować się w “**virtual\_users**”

“**domain**” musi znajdować się w “**virtual\_domains**”

Para (“**alias**”, “**domain**”) musi być unikalna

*virtual\_configuration*  
tabela administratorów

```
1 CREATE TABLE virtual_configuration (  
2 id integer NOT NULL,  
3 is_admin boolean DEFAULT 'false' NOT NULL,  
4 can_chpass boolean DEFAULT 'false' NOT NULL  
5 );
```

Narzucone ograniczenia:

“**id**” musi znajdować się w “**virtual\_users**”



# *EXIM*

- configure  
– przykłady



<http://www.exim.org>

## *.../etc/configure*

```
# definicja
QUERY_VIRTUAL_DOMAINS =
SELECT domain from virtual_domains where domain = '$domain'

# lista domen
domainlist local_domains =
EXIM_CONF_DIR/local_domains:pgsql;QUERY_VIRTUAL_DOMAINS

# router
virtual_domains:
  driver      = accept
  domains     = pgsql;QUERY_VIRTUAL_DOMAINS
  local_parts = pgsql;QUERY_VIRTUAL_LOCAL_ID
  transport  = virtual_delivery
```

## *Courier-IMAP*

- `.../etc/authpgsqlrc`
  - `PGSQL_SELECT_CLAUSE`



<http://www.inter7.com/courierimap.html>

## *PGSQL\_SELECT\_CLAUSE*

PGSQL\_SELECT\_CLAUSE

```
select '$(local_part)' as username,  
       password_crypt as cryptpw,  
       password_clear as clearpw,  
       uid as uid, gid as gid,  
       ('/spool/path/' ||  
        (select id from virtual_aliases where  
         alias='$(local_part)' and domain='$(domain)')  
        ) as home,  
       'Maildir' as maildir,  
       quota_hard as quota,  
       (name || ' ' || surname) as fullname from virtual_users  
where  
id = (select id from virtual_aliases where  
alias='$(local_part)' and domain='$(domain)'  
)
```

## *Panel Administracyjny*

- wyszukiwanie
  - język zapytań
- karta użytkownika
  - nowy użytkownik
- dodawanie domen
- dodawanie administratorów



<http://pawelsawicki.com>

# Wyszukiwanie...

Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://localhost/search.php

http://localhost/search.php

SEARCH ADD A USER DOMAINS ADMINISTRATIVE TOOLS LOGOUT

**Search**

admin @ domain-one.nat  Exact match  Contains

SEARCH

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VERSION: 0.5.0

http://localhost/search.php

# *Język zapytań...*

Search

id:0

name:John

surname:Doe

alias:admin

# Wyniki wyszukiwania...

The screenshot shows a Mozilla Firefox browser window with the address bar set to `http://localhost/search.php`. The browser's menu bar includes File, Edit, View, Go, Bookmarks, Tools, and Help. The page content features a navigation bar with links for SEARCH, ADD A USER, DOMAINS, ADMINISTRATIVE TOOLS, and LOGOUT. Below this is a search form titled "Search" with an input field, an "@" symbol, a dropdown menu set to "Any", and radio buttons for "Exact match" and "Contains". A "SEARCH" button is positioned below the form. The search results are displayed in a table titled "Search results" with columns for ID, Last Name, and First Name. The results show a single entry with ID 0, Last Name John, and First Name Doe.

SEARCH      ADD A USER      DOMAINS      ADMINISTRATIVE TOOLS      LOGOUT

**Search**

@   Exact match  Contains

SEARCH

**Search results**

ID	Last Name	First Name
0	John	Doe

Done



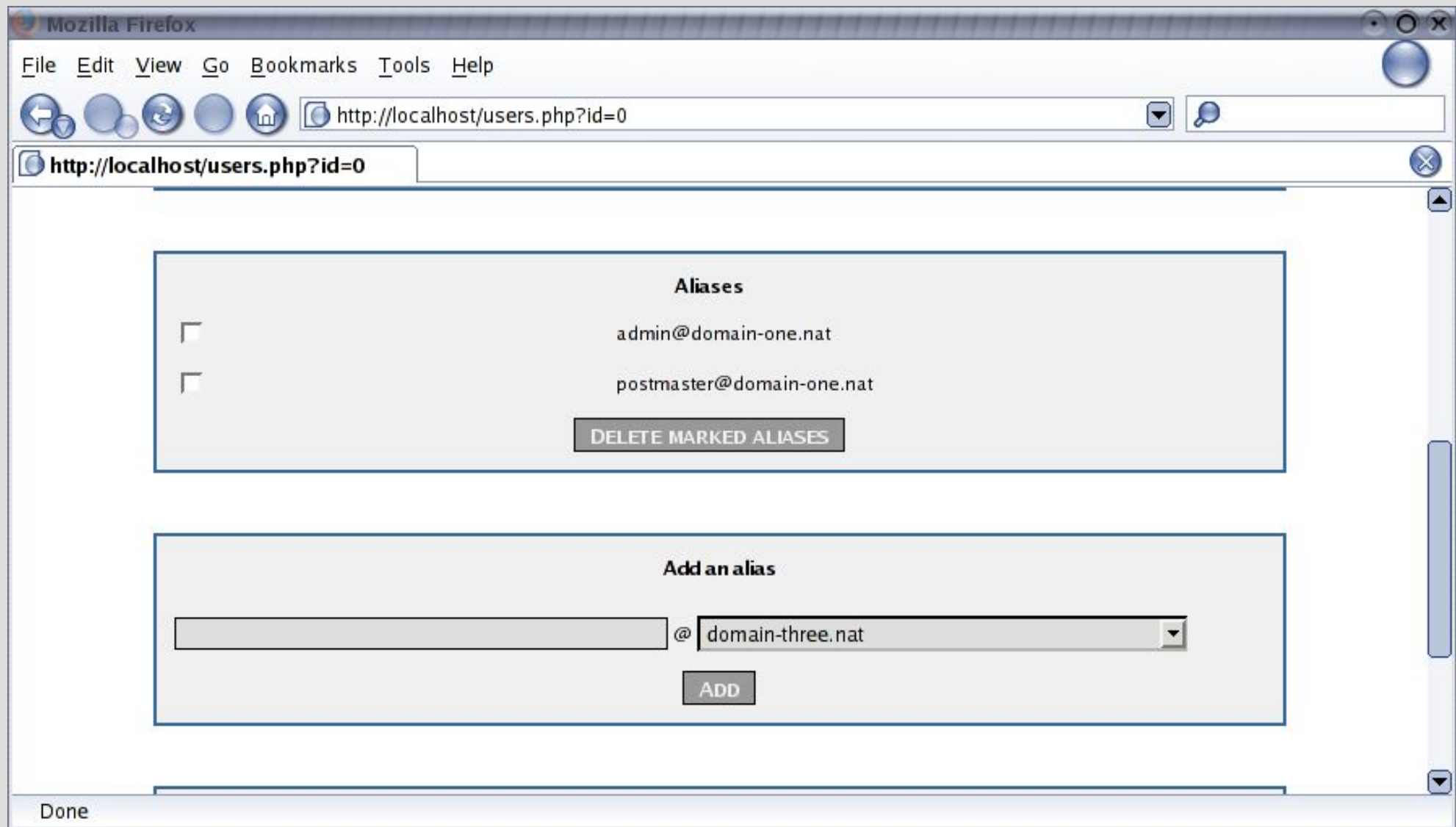
# *Karta użytkownika...*

The screenshot shows a Mozilla Firefox browser window with the address bar containing `http://localhost/users.php?id=0`. The page has a navigation bar with links: [SEARCH](#), [ADD A USER](#), [DOMAINS](#), [ADMINISTRATIVE TOOLS](#), and [LOGOUT](#). The main content area displays a form titled "Information about the user" with the following fields:

Id	0
Surname	<input type="text" value="John"/>
Name	<input type="text" value="Doe"/>
Password	<input type="text" value="password"/>
Soft quota	<input type="text" value="1"/>
Hard quota	<input type="text" value="1"/>

At the bottom of the form is an **APPLY** button. The browser's status bar at the bottom left shows "Done".

# *Karta użytkownika - c.d.*



# *Karta użytkownika - usuwanie...*

Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://localhost/users.php?id=0&command=del\_user

http://localhost...ommand=del\_user

SEARCH ADD A USER DOMAINS ADMINISTRATIVE TOOLS LOGOUT

**Information about the user**

Id	0
Surname	John
Name	Doe

**DELETE USER**

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VERSION: 0.5.0

Done

# Nowy użytkownik...

Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://localhost/users.php?command=new\_user

http://localhos...ommand=new\_user

SEARCH ADD A USER DOMAINS AD

**Adding a new user**

Password	<input type="text" value="aqq123"/>
Last name	<input type="text" value="Michelson"/>
First name	<input type="text" value="John"/>
Soft Quota (kB)	<input type="text" value="2000"/>
Hard Quota (kB)	<input type="text" value="3000"/>

ADD

New id:  
212

http://localhost/search.php

# Zarządzanie domenami...

The screenshot shows a Mozilla Firefox browser window with the address bar set to `http://localhost/domains.php`. The page content is divided into two main sections:

- Add a domain:** This section contains a label "NEW DOMAIN:" followed by a text input field containing "exemplary-domain.nat". Below the input field is a large grey button labeled "ADD".
- Delete a domain:** This section contains a label "DOMAIN:" followed by a dropdown menu. The dropdown menu is open, showing a list of domain names: "domain-one.nat", "domain-two.nat", "domain-three.nat", "domain-four.nat", and "domain-five.nat". The "domain-three.nat" option is currently selected and highlighted. To the left of the dropdown menu, there is a partially visible text label "Important note - the domai".

At the bottom of the page, there is a copyright notice: "Copyright © 2003 by PAWEŁ SAWICKI". The browser's status bar at the bottom left shows "Done", and the bottom right corner indicates "VERSION: 0.5.0".

# Administratorzy...

The screenshot shows a Mozilla Firefox browser window with the address bar set to `http://localhost/admin.php`. The page features a navigation menu with the following items: [SEARCH](#), [ADD A USER](#), [DOMAINS](#), [ADMINISTRATIVE TOOLS](#), and [LOGOUT](#).

The main content area contains two forms:

- Add an admin:** A form with a label "Id :" and a text input field containing the value "210". Below the input field is a large "ADD" button.
- Delete an admin:** A form with a label "ADMIN:" and a dropdown menu. The dropdown menu is open, showing three options: "John, Doe", "John, Doe", and "Michelson, John". The second option is currently selected.

The status bar at the bottom of the browser window displays the text "Done".

## *Zalety i wady...*

- **Zalety:**
  - szybkość
  - scentralizowana baza
- **Wady:**
  - skomplikowana budowa
  - obsługa części funkcji dostępna jedynie z poziomu czystego SQL-a

## *Pomysły na przyszłość...*

- Dopracowanie, poprawienie błędów...
  - Zagnieżdżanie katalogów:
    - ✓ /var/spool/virtual/1/2/123
- Dodanie do panelu obsługi funkcji:
  - vacation
  - forward
- Zmiana technologii – z PHP na JSP
- Zmiana bazy danych – z SQL na LDAP



*Koniec...*

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