

# **Brekeke SIP Server**

## **Using a Third Party Database Tutorial**

**Brekeke Software, Inc.**

## Version

Brekeke SIP Server v2.0 Administrator's Guide  
Revised January 12, 2007

## Copyright

This document is copyrighted by Brekeke Software, Inc.  
Copyright © 2003-2007 Brekeke Software, Inc.

This document may not be copied, reproduced, reprinted, translated, rewritten or readdressed in whole or part without expressed, written consent from Brekeke Software, Inc.

## Disclaimer

Brekeke Software, Inc. reserves the right to change any information found in this document without any written notice to the user.

## Trademark Acknowledgement

- ◆ *Linux is a registered trademark of Linus Torvalds in the U.S and other countries.*
- ◆ *Red Hat is a registered trademark of Red Hat Software, Inc.*
- ◆ *Windows is a trademark or registered trademark of Microsoft Corporation in the United States and other countries.*
- ◆ *Mac is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.*
- ◆ *Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.*
- ◆ *Other logos and product and service names contained in this document are the property of their respective owners.*

## 1. Introduction

This document describes steps needed to use a third party database instead of using the embedded database in Brekeke SIP Server. You can add or modify the database from your own database management tool. Here is an example using MySQL.

Note: Other databases can be used in a similar way.

## 2. Using MySQL for Brekeke SIP Server

The following section describes the steps to use MySQL with Brekeke SIP Server.

1. Open a MySQL command line window and create a database (for example "osddb").

```
mysql> create database osddb;
```

2. Create a table "t\_registered" and indexes using the commands below: (This table stores the data of registered user agents.)

Note: If you upgraded from version 1.X to 2.X you will need to add the last two lines for useragent and param, as shown in the table below.

```
CREATE TABLE t_registered
(
    skey                BIGINT,
    namealias          VARCHAR(300),
    nameoriginal       VARCHAR(300),
    urlalias           VARCHAR(300),
    urloriginal        VARCHAR(300),
    acceptpattern      VARCHAR(300),
    requester          VARCHAR(100),
    expires            BIGINT,
    priority           INT,
    timeupdate         BIGINT,
    expiretime         BIGINT,
    mappedport         VARCHAR(100),
    awake              INT,
    useragent          VARCHAR(300),
    param              VARCHAR(300)
);
```

```
CREATE INDEX idx_registered_skey ON t_registered( skey );
CREATE INDEX idx_registered_urlalias ON t_registered( urlalias );
CREATE INDEX idx_registered_urloriginal ON t_registered( urloriginal );
CREATE INDEX idx_registered_expiretime ON t_registered( expiretime );
```

3. Create a table "t\_userdir" and indexes using the commands below.  
(This table stores authentication data of users.)

```
CREATE TABLE t_userdir
(
    uid          BIGINT,
    username     VARCHAR(100),
    longname     VARCHAR(200),
    password     VARCHAR(100),
    email        VARCHAR(100),
    description  VARCHAR(200),
    gid          BIGINT,
    timeexpire   BIGINT,
    timemake     BIGINT
);
```

```
CREATE UNIQUE INDEX idx_userdir_uid ON t_userdir( uid );
CREATE INDEX idx_userdir_username ON t_userdir( username );
CREATE INDEX idx_userdir_timeexpire ON t_userdir( timeexpire );
```

4. Obtain the latest JDBC driver for MySQL "MySQL Connector/J" from <http://www.mysql.com/products/connector/j/>
  - Copy the file "mysql-connector-java-3.0.XX-ga-bin.jar" into the lib directory pbx\_install\_dir\webapps\pbx\WEB-INF\lib

|           |                    |                 |           |                      |
|-----------|--------------------|-----------------|-----------|----------------------|
| Dial Plan | Registered Clients | Active Sessions | Call Logs | <b>Configuration</b> |
| System    | SIP(General)       | SIP(Advanced)   | RTP       | <b>Database</b>      |

## Configuration

**Embedded Database**

Port Number

**Thirdparty Registered Database**

On/Off

Registered Database URL

Registered Database Driver

User Name

Password

**Thirdparty Users Database**

On/Off

Users Database URL

Users Database Driver

User Name

Password

5. Go to **Brekeke SIP Server > Configuration > Database** and insert the following information:

Registered Database

[On/Off]

[Registered Database URL]

[Registered Database Driver]

[User Name]

[Password]

Select "on" to enable Registered Database URL for the Registered Database.

(for example jdbc:mysql://localhost/osmdir)

JDBC Driver for the Registered Database

(for example com.mysql.jdbc.Driver)

User name for the 3<sup>rd</sup> party database

Password for the 3<sup>rd</sup> party database

Users Database

[On/Off]

[Users Database URL]

[Users Database Driver]

[User Name]

Select "on" to enable Users Database URL for the Users Database.

(for example jdbc:mysql://localhost/osmdir)

JDBC Driver for the Users Database

(for example com.mysql.jdbc.Driver)

User name for the 3<sup>rd</sup> party database

[Password]

Password for the 3<sup>rd</sup> party database

To record user passwords in plain text in the “t\_userdir table”, add the following line in the sv.properties file:

net.userdir.cryptpw=false (Passwords are encrypted by default)

6. Save your work.
7. Restart your machine.

### **3. Troubleshooting**

If you receive the error message "Can not open a database" at Brekeke SIP Server's Admintool, you can usually see some detailed error message which is related to the database connection in the file pbx\_install\_dir\webapps\pbx\WEB-INF\work\logs.log.

For technical support, the Brekeke Technical Support Forum is available for help with configuration of Brekeke products. For more information, visit our website at [www.brekeke.com](http://www.brekeke.com).