YouTube Presentation

Setting up LittleBrother
on
Ubuntu 18.10

https://github.com/marcus67/little_brother

What is LittleBrother?

- Debian Tool to monitor and limit login time of users on Linux Clusters (or single hosts)

- Should run on most Debian-based distributions

- Permitted login times can be set individually for each user according to schedules

- Remote administration possible through web interface

- International language support (EN, DE, IT)

Agenda

- Describe Setup of Target System

- Install the Debian Package

- Describe Configuration File

- Setup LittleBrother Database

- Start the Application

- Show Web Frontend

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Setup of the Target System 1/2
Your System

- Package „mysql-server"

- mysql Database Setup
  - root password must be known
  - allow TCP connections
  - allow root login over TCP

Setup of the Target System 2/2
My System

- Gnome Boxes

- Ubuntu Version 18.10 Virtual Machine

- Ubuntu Packages
    - mysql-server
    - mate
    - lightdm

- Two users „`seth`" and „`jennifer`"

- Already pre-installed:
    - Popup message tool „`zenity`"

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Installing the Debian Package

- Download from master directory on SourceForge:

  `https://sourceforge.net/projects/little-brother/files/master/`

- Install package

  `dpkg -i PACKAGE.deb`

- Fix dependencies

  `apt-get install -f`

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Configuration File

- Section for the database connection

```
[Persistence]
# See http://docs.sqlalchemy.org/en/rel_0_9/dialects/mysql.html#module-sqlalchemy.dialects.mysql.pymysql
# Set the details and credentials for connecting to the backend database

# Set the name of the database driver. Default: mysql+pymysql
# For more information on how to configure the database driver see https://docs.sqlalchemy.org/en/13/core/engines.html
#
database_driver = mysql+pymysql
# Set the name of the database host. Default: 'localhost'
database_host = localhost
# Set the port number of the database running on the host above. Default: 3306  (for mysql)
database_port = 3306
# Name of the database scheme used to create the tables for the application. Default: little_brother
database_name = little_brother
# Name of the database user accessing the scheme above (application user). Default: little_brother
database_user = little_brother
# Password of the user above. Default: None
database_password = my_little_brothers_password
```

Configuration File

- Section for the web server

```
[StatusServer]

# Set IP address that the webserver will listen to. Default: 0.0.0.0, hence it will listen to all local interfaces.
host=localhost
# Set the port number, the webserver will listen to. Default: None, hence the webserver will not be started.
port=5560
# Set the password for the administration user ("admin"). Default: None
admin_password=hello
# Set a unique secret which will be used to generate HTML cookies
app_secret=SOME_OTHER_LONG_AND_SECRET_TOKEN
# Set a prefix for all web pages of the application. Default: None, which implies no prefix at all
#proxy_prefix=/LittleBrother
```

- Section for the popup handler

```
[PopupHandler]
# Choose the handler for showing a popup notification
# Possible values:
# * yad: use "apt-get install yad" to install
# * gxmessage: use "apt-get install gxmessage" to install
# * zenity: use "apt-get install zenity" to install
# * yad: use "apt-get install yad" to install
# The default is None, which deactivates popup notifications.
popup_engine=zenity
# Choose the encoding of the string passed to the notification tools. Defaults to "UTF-8".
encoding=UTF-8
# Set the mimimum waiting time in seconds before a popup messages is repeated. Any request to issue the same messages
# before this time will be silently ignored. Default: 30
mininum_waiting_time_before_repeat = 20  # seconds
```

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Setting up the Database 2/2

- Run helper script (as root!)

```
run_little_brother.py \
--config /etc/little-brother/little-brother.config \
--create-databases \
--option \
Persistence.database_admin=root
Persistence.database_admin_password=mypassword
```

Agenda

- Describe Setup of Target System

- Install the Debian Package

- Take a Look at the Configuration File

- Set Up LittleBrother Database

- Start the Application

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Starting the Application

- Start the service

  `systemctl start little-brother`

- Check the logfile

  `/var/log/little-brother/LittleBrother.log`

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Showing the Web Frontend

- Allow popup messages to be displayed:

  xhost +SI:localuser:little-brother

- Use browser to open web frontend

  `http://localhost:5560/`

Thank You for Watching!

- Visit LittleBrother at

  - `https://github.com/marcus67/little_brother`

  - `https://www.facebook.com/littlebrotherdebian`

- Send mail to

  - little-brother@web.de