Nephthys Documentation 1.x

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Chapter 1. Introduction

1.1. Nephthys

Nephthys is an administration tool for file sharing with common file transfer methods like WebDAV and FTP.

To be more specific, Nephthys provides a web interface for handling file sharing slots (so called 'buckets') and the necessary directory structure on the server. Nephthys it self does not provide any functionallity for WebDAV or FTP - it relys on well known projects like Apache, proftpd, ...

The interface has been designed to be simple and easy to handle so that everybody can use it to share files.

1.2. How does Nephthys its job?

Via the Nephthys web interface a user can create buckets. These buckets stand for directories in the webserver's file system. Each of the buckets has a corresponding directory in the filesystem which get identified by a SHA1-hash.

The idea behind is, that no authentication for the access protocol (WebDAV, FTP, ...) is necessary. Instead the access protocol only needs to ensure, that no directory-listing is possible in the root directory. Otherwise it would be possible to find out which buckets are there. Because of the SHA1-named, 40 characters long directory names, it is difficult to locate them without the possibility of directory-listing.

1.3. Requirements

- On client side - a web browser that supports JavaScript (like all modern browsers)
- Linux-based operating system
- Apache HTTP webserver (http://httpd.apache.org/)
- PHP5 (http://www.php.net/)
- proftpd (http://www.proftpd.org, or any other suiteable FTP server)
- MySQL (>= 5.0, http://httpd.apache.org) or SQLite (2.0, http://www.sqlite.net)

1.4. Installation

For now please follow the installation instructions that can be found on the project's website (http://oss.netshadow.at/wiki/nephthys/Installation).

Chapter 2. Definitions and Terms

Nephthys uses some terms in its web interface which will be explained below.

2.1. Bucket

A bucket (as the name says) is a virtual pot where files and directories can be thrown in or fished out. Usually the bucket has lifetime - when reached, it will be removed automatically by the server including all data within.

2.2. User

A user is necessary to login to Nephthys. This user can have different privilege levels. Standard users can maintain their profiles and buckets. Users quipped with the "Manager" privilege can also modify other's buckets. "Admin"'s have the same rights as "Manager"'s but in addition can maintain the Nephthys user database.

2.3. WebDAV

The "Web-based Distributed Authoring and Versioning" is an extension to the HTTP protocol to transfer files. For more information see http://en.wikipedia.org/wiki/WebDAV.

2.4. FTP

The "File Transfer Protocol" is a widley used file sharing protocol. For more information see http://en.wikipedia.org/wiki/File_Transfer_Protocol.
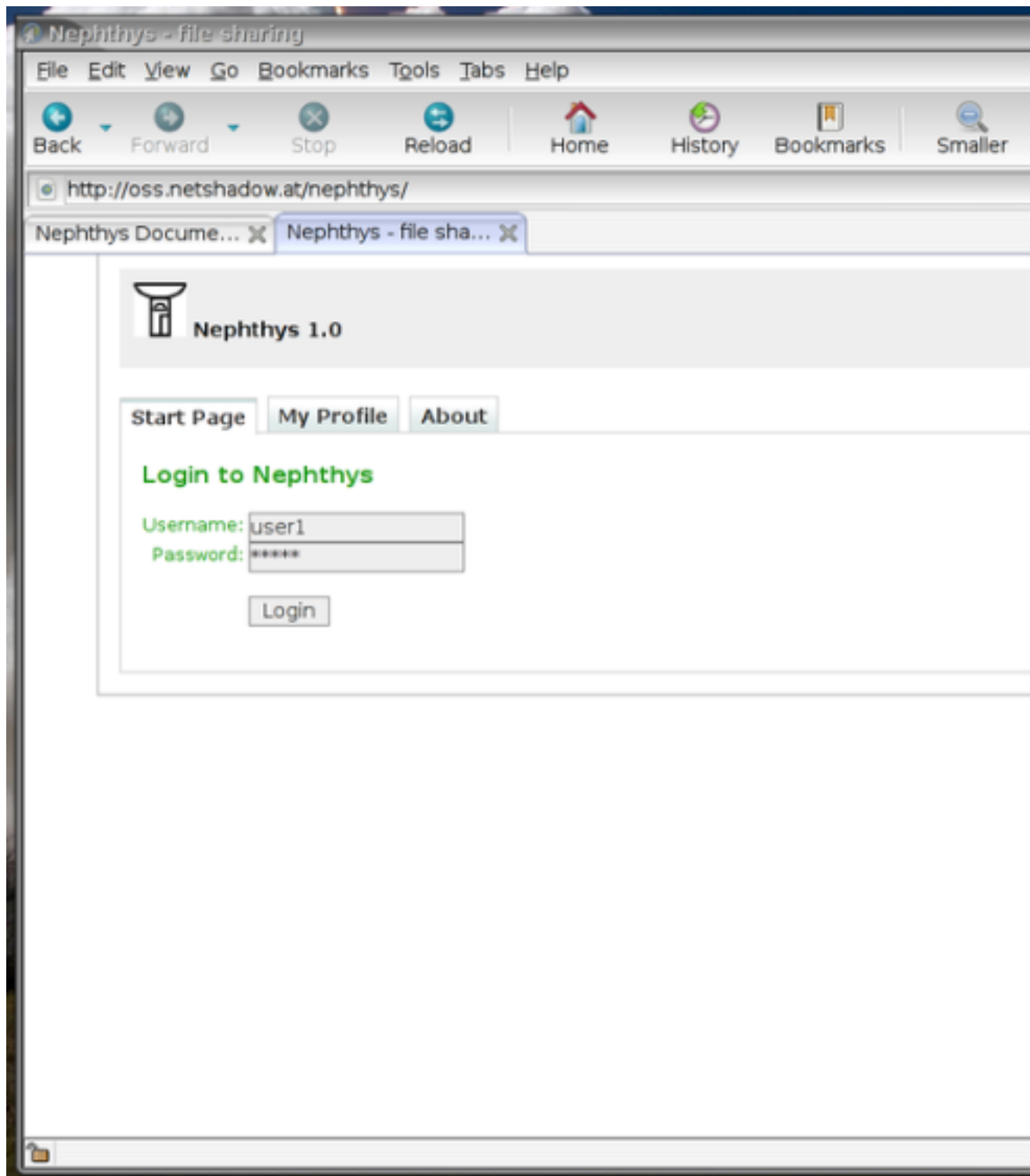
Chapter 3. Usage Guide

3.1. I want to share some files

The following example describes the procedure to share files with someone else. For this a bucket needs to be created, afterwards it can be filled with data. Then the receiver has to be notified on how he can access the data.

To start, open Nephthys in your browser and login.

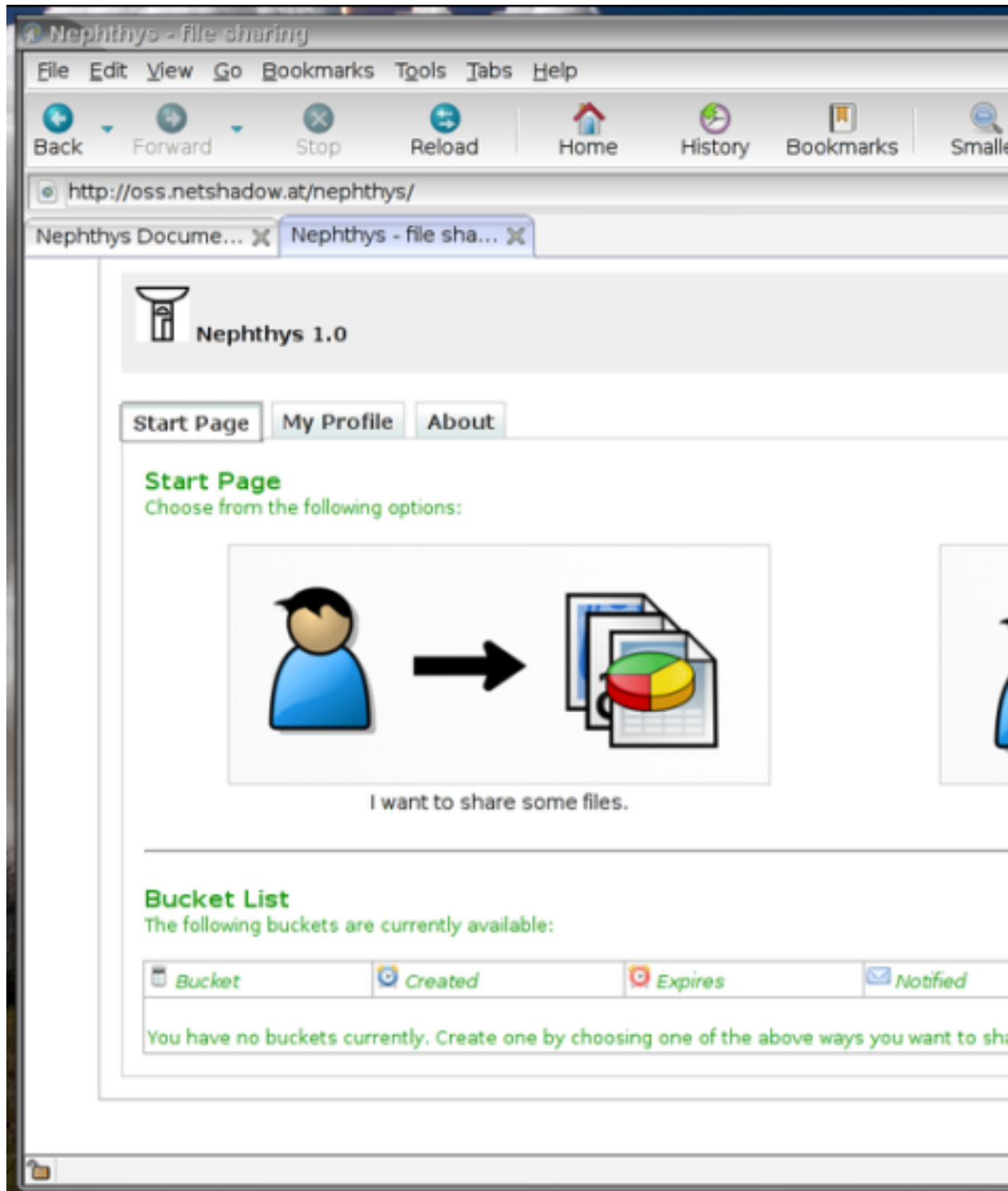**Figure 3-1. Nephthys - waiting for login**

3.1.1. Create bucket

First of all, a bucket needs to be created. A bucket needs a name to be identified easily afterwards. So, follow the procedure below:
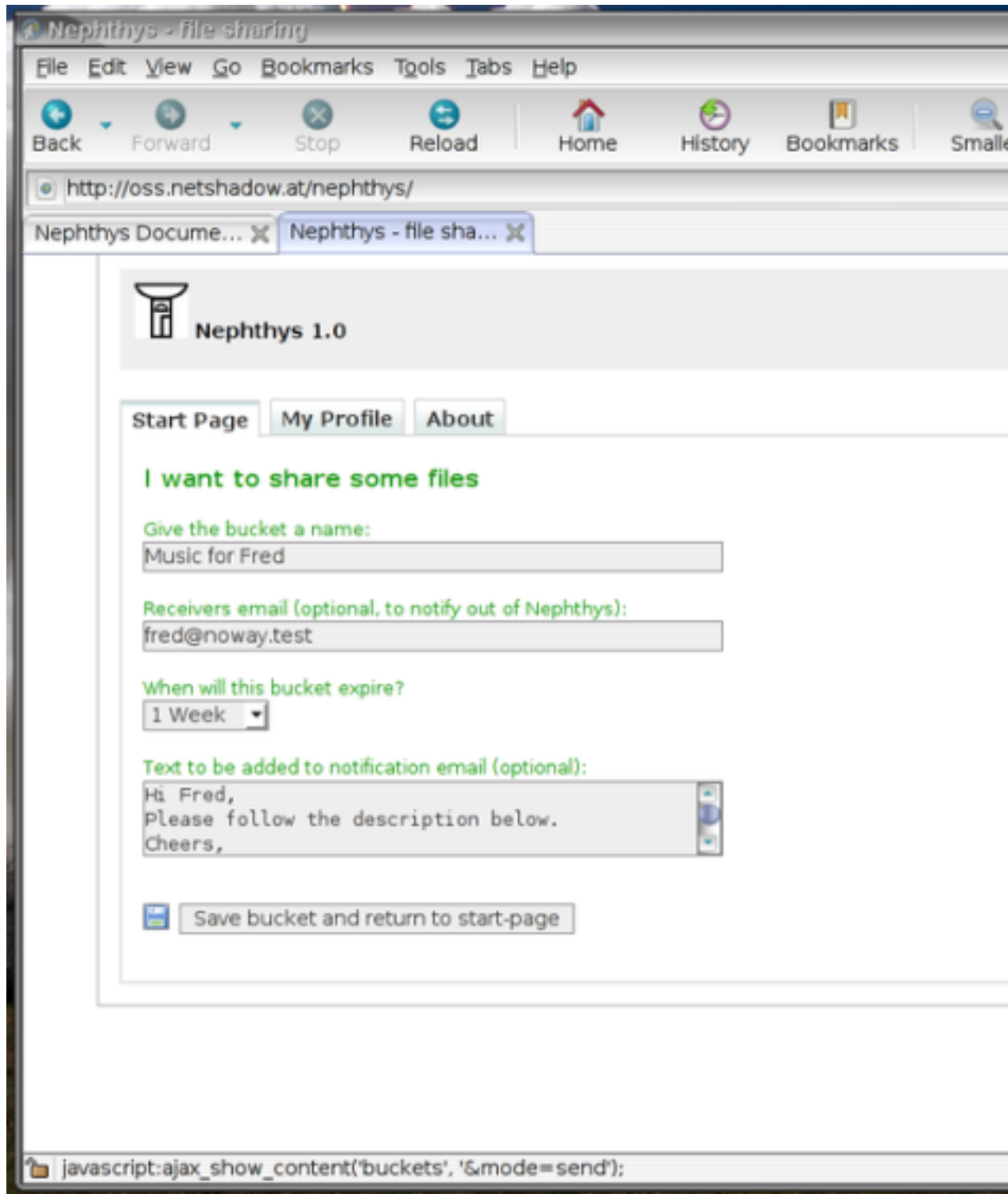
1. Click on "I want to share some files".

Figure 3-2. Nephthys - Start Page without any exiting buckets

2. "Give the bucket a name" - enter a name for the bucket.

**Figure 3-3. Nephthys - Create a Bucket - I want to share some files**

3. "Receivers email" - enter the e-mail address of the receiver. This field is optionally and is used to

notify receivers out of Nephthys. If you leave it empty and click on "Notify" later after creating the bucket, you will receive the notification email - to forward it manually for example.

4. "When will this bucket expire?" - expiration time. Unprivileged users are not permitted to create never expiring buckets. But a privileged user can set it for them.

5. "Text to be added to notification email" - optionally you can enter a text into the box, which then will be included in the notification email.

6. Click on the save-button to let Nephthys create the bucket for you.

Figure 3-4. Nephthys - I want to share some files - Start Page with the newly created bucket
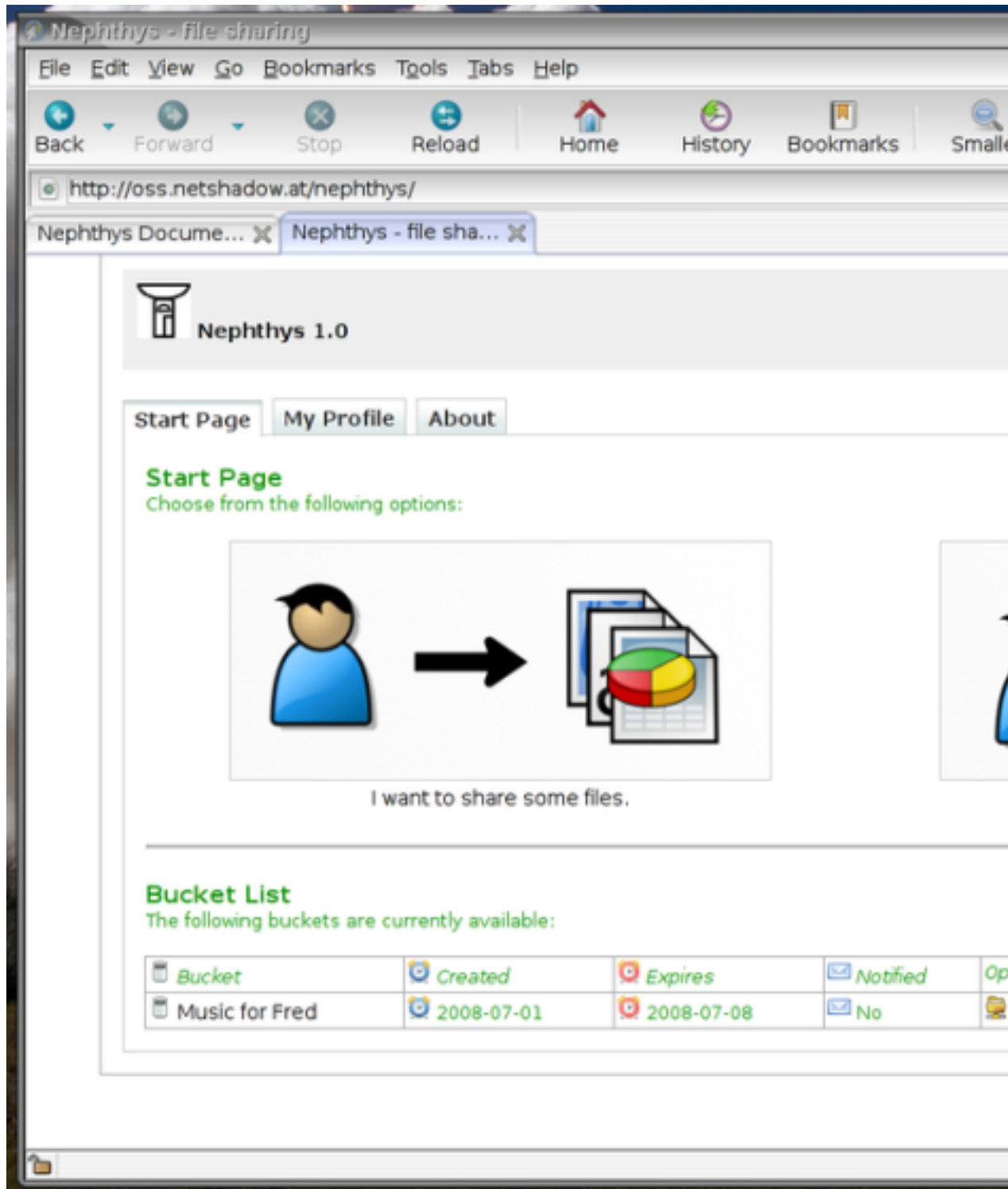
3.1.2. Upload files

After the bucket has been created, it is time to fill it with some stuff.

3.1.2.1. WebDAV

The "Start Page" contains at the bottom of the page a list of all your buckets. One of the column contains a link to "WebDAV". If you are using a Microsoft Windows operating system, you can simply click with the left mouse-button on this link. After some seconds, Windows Explorer should appear in an extra window in which you can drag & drop files into. Non-MS users need to use their favorite WebDAV browser - GNOME desktop handles it internally (for example with Nautilus), Apple's Mac OS-X too.

3.1.2.2. FTP

The "Start Page" contains at the bottom of the page a list of all your buckets. One of the column contains the link to "FTP". The most browsers are capable of browsing FTP directories directly and permitting downloads. Internet Explorer is capable of switching to a "Explorer"-mode where you can drag & drop files. For all others normally you have to use a dedicated FTP client (Filezilla for example) to upload files.

3.1.3. Sharing

You have now filled your bucket with all the necessary data. Now it is time to share it. There are several ways to do this.

Use the "Notify"-Feature of Nephthys (Start Page -> Locate bucket in list -> Actions -> Notify). It will send an e-mail to the receiver containing details how to access your bucket. If you have specified the receiver's email address when creating the bucket, the email will be directly sent to him. If you did not entered a email address, the email will be delivered instead to your email address. You can also copy the WebDAV link and FTP link from the bucket listing and sent it manually.

3.2. Someone wants to send me files

The following example describes the procedure if some one wants to send you files. For this you will need to create a bucket on your own first, afterwards you send the receiver a notification containing links to the bucket so he can upload data to it. Then the receiver notifies you, that he has finished uploading.

To start, open Nephthys in your browser and login.

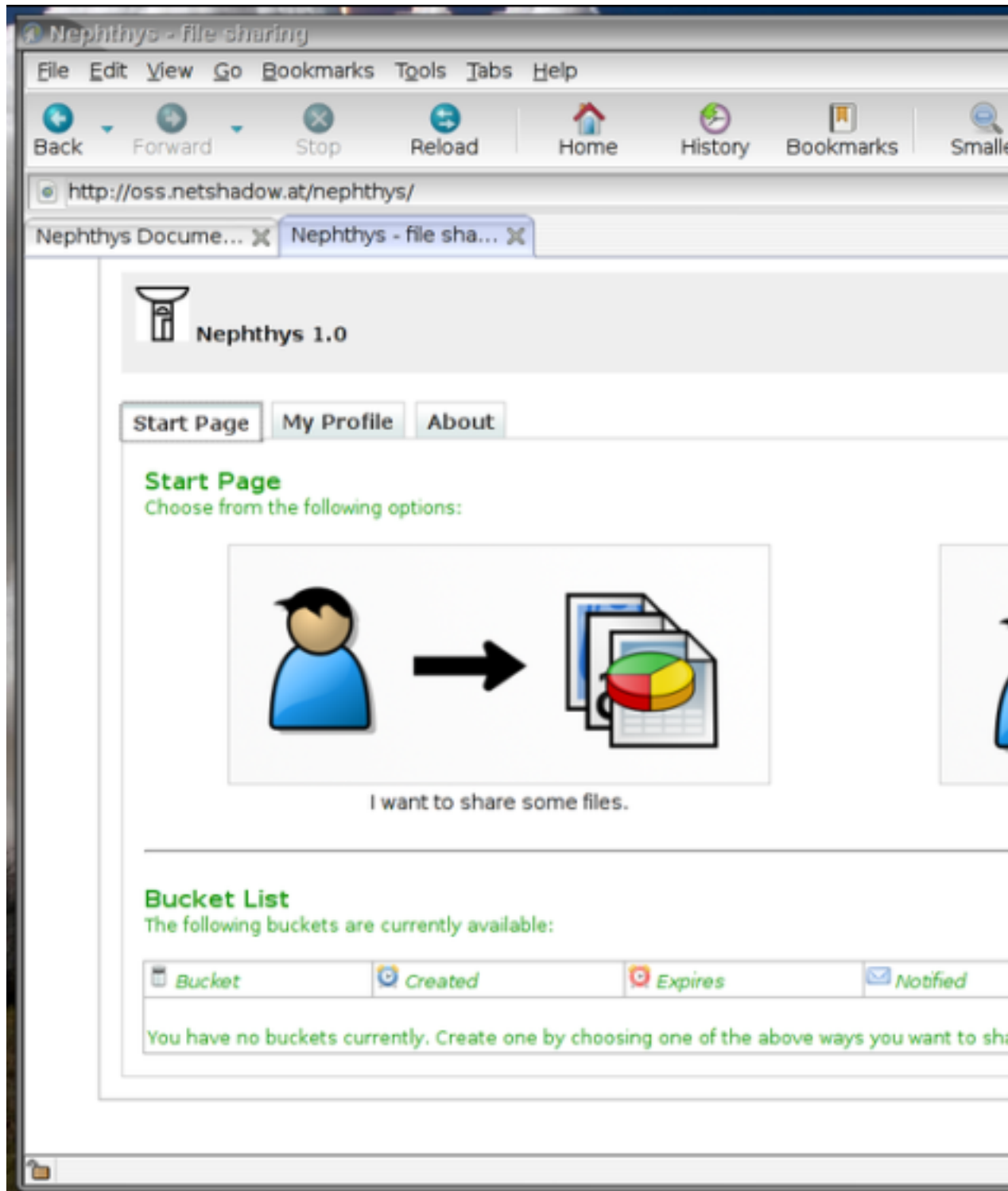**Figure 3-5. Nephthys - waiting for login**
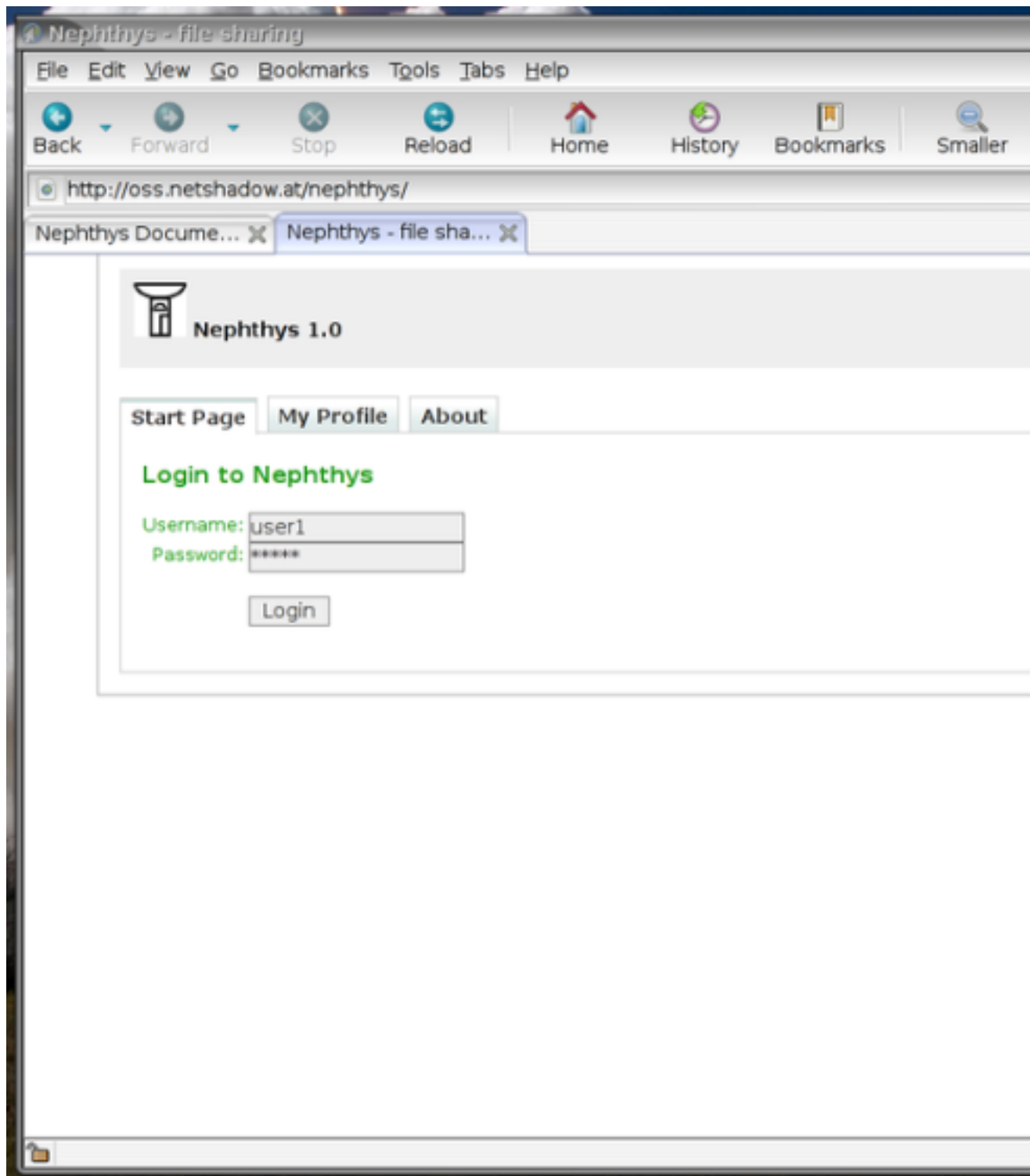
3.2.1. Create bucket

First of all, a bucket needs to be created. A bucket needs a name to be identified easily afterwards. So, follow the procedure below:

1. Click on "Someone wants to send me files".

Figure 3-6. Nephthys - Start Page without any exiting buckets

2. "Give the bucket a name" - enter a name for the bucket.

Figure 3-7. Nephthys - Create a Bucket - Someone wants to send me files

3. "Receivers email" - enter the email address of the receiver (mandatory).

4. "When will this bucket expire?" - expiration time. Unprivileged users are not permitted to create never expiring buckets. But a privileged user can set it for them afterwards.

5. "Text to be added to notification email" - optionally you can enter a text into the box, which then will be included into the notification email.

6. "Send email notification to receiver..." - if this option is checked, immediately after pressing the save button, an e-mail with information on howto access the bucket will be sent to the receiver. Otherwise the notification needs to be invoked manually via the "Start Page".

7. Click on the save-button to let Nephthys create the bucket for you.

Figure 3-8. Nephthys - Someone wants to send me files - Start Page with the newly created bucket
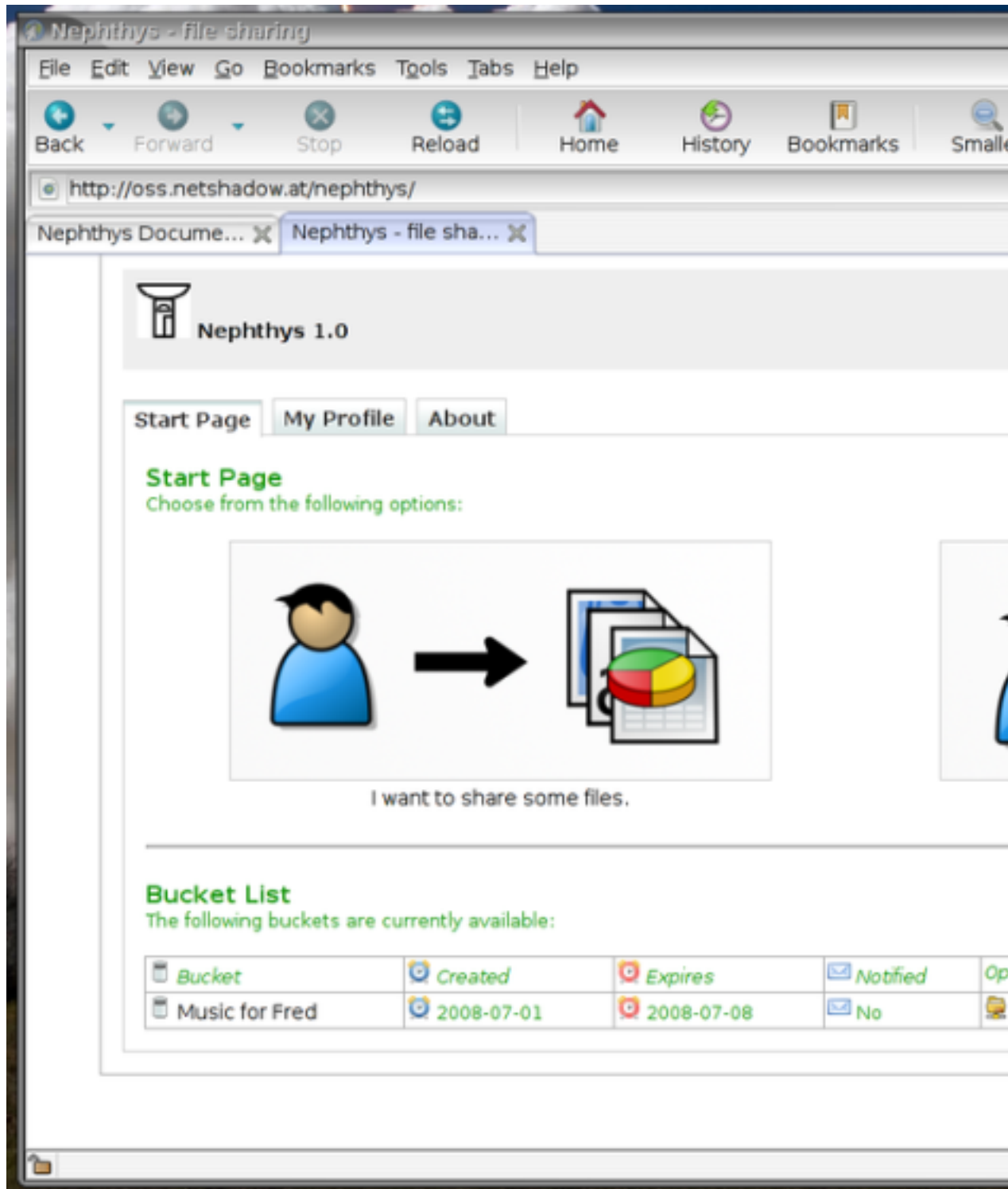
If you have checked "Send email notification to ...", a notification has been sent to the receiver containing information on howto access the bucket.

3.2.2. Download files

As soon as the receiver has notified the sender (...) that the transfer has been finished, proceed below on howto access the bucket from your side.

3.2.2.1. WebDAV

The "Start Page" contains at the bottom of the page a list of all your buckets. One of the column contains a link to "WebDAV". If you are using a Microsoft Windows operating system, you can simply click with the left mouse-button on this link. After some seconds, Windows Explorer should appear in an extra window in which you can drag & drop files into. Non-MS users need to use their favorite WebDAV browser - GNOME desktop handles it internally (for example with Nautilus), Apple's Mac OS-X too.

3.2.2.2. FTP

The "Start Page" contains at the bottom of the page a list of all your buckets. One of the column contains the link to "FTP". The most browsers are capable of browsing FTP directories directly and permitting downloads. Internet Explorer is capable of switching to a "Explorer"-mode where you can drag & drop files. For all others normally you have to use a dedicated FTP client (Filezilla for example) to upload files.

3.3. Address-Book

The per-user address-book helps saving some time when entering receivers.

Everytime a new bucket gets created and the "add email to address-book" option remains checked, Nephthys will record the entered receiver email address and to the address-book. The next time another bucket gets created, start typing in the receiver's email address input box will cause Nephthys to suggest matching address-book entries.

Address-book entries can be modified or delete via the "Address-Book" tab in the menu.

Chapter 4. License

Nephthys is licensed by GNU General Public License (GPL) Version 3. All rights reserved by author Andreas Unterkircher (unki@netshadow.at), http://oss.netshadow.at/projects/show/nephthys.