KDEPIM - Akonadi local mail resources

Bertjan Broeksema

March 9, 2009

Abstract

1 Background and problem statement

Applications handling personal information management (PIM) data like contacts, email, appointments, etc. have taken an important place in nowadays desktop application suites. However the last decade some things with respect to PIM data have drastically changed. Two of the important changes are the amount of data that has to be handled and the number of different ways the data is accessed.

People nowadays receive hundreds of emails per month, if not more, often containing large attachments. Also people don't store there data only local but have one or more email/groupware servers containing their emails, contacts and appointments.

The KDE project has several applications that deal with PIM data like Kontact, KMail, KAddressbook and Akregator. However these programs where mostly designed for the requirements that where valid in that days. To cope with modern requirements for PIM applications a new framework was designed called Akonadi. This framework is designed with in mind the huge amount of items which might have potentially big payloads that occur in modern PIM applications. The mission statement for Akonadi was defined as follows:

"We intend to design an extensible cross-desktop storage service for PIM data and meta data providing concurrent read, write, and query access. It will provide unique desktop wide object identification and retrieval."

The development of Akonadi has started about two years ago and is currently in the phase of being adopted by the PIM applications. For applications to be ported so called Akonadi resources must be created. These resources provide an interface between the actual storage of the data and the application which want to make use of this data. One of the applications that still needs to be ported to this new framework is KMail. Currently work is being done to create an imap Akonadi resource, however there are also resources needed for the formats for local storage currently supported by KMail which are mbox and maildir. Also, a Akonadi resource for the POP3 mail protocol is lacking at the moment.

2 Goals

The main goal of this project is to do part of the porting of KMail to the Akonadi framework. More specific, the goals of this project are:

- 1. Create a mbox Akonadi resource.
- 2. Finish the maildir Akonadi resource.
- 3. Create a pop3 Akonadi resource.
- 4. Setup test frameworks for the resources.

3 Proposed activities

In this project I'll implementing the resources stated in the goals section and testframeworks for these resources in close collaboration with the Akonadi developers and the KMail maintainer.

4 Scope

This project serves as a bridge between my last courses at the university and the start of my master thesis. Therefore the time frame of this project will be from April to halfway september. In these months I will be able to work three days per week on this project.

5 About me

I'm Bertjan Broeksema a computer science student (at the university of Groningen [1]). Currently I'm in the last year of my study. I plan to finish my master (Software engineering and distributed systems) in February 2010. My involvement in FOSS started in 2005 with some small contributions to KPilot [2]. Last summer and in the summer of 2007 this involvement grew due to two successfully completed Google Summer of code projects. During this time I developed descent C++ and CMake skills. In this time I also started looking at code issues mostly in KPilot but more recent I broadened this to the KDEPIM project. I have been to KDEs contributors conference Akademy two times and also attended two developer meetings.

I have a passion for FOSS in general and KDE in particular.

6 References

- 1. http://www.rug.nl/informatica
- 2. http://www.kpilot.org/