

KDE-PIM: Akonadi Integration with BasKet Notepads

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1. Background

Personal information management (PIM) software has quickly developed into one of the most important and useful aspects of the everyday lifestyle. KDE addresses a large variety of needs with its KDE-PIM collection of applications, such as KMail and Kontact. These tools make it very convenient for end users to organize their lives via electronic means. A new framework introduced in KDE 4, the Akonadi framework, makes it easy for PIM applications to synchronize data with each other. This allows a user to store calendar entries, address book contacts, journal entries, and other personal information on a remote server or a PDA and access it from any Akonadi-enabled application.

BasKet[1] is a KDE 4 application which provides a well-featured and user-friendly means for users to graphically organize personal notes and schedules. While BasKet is in some ways similar to stick note programs such as KNotes, it allows the user to embed images, links, movies, sound clips, and rich text into their notes. This makes BasKet much more powerful than other programs of its type. It is ideal for organizing menu plans, todo lists, brief reminders, shopping lists, bookmarks, or even class notes.

The current "trunk" of BasKet is stable and is very much ready for additional feature development. One useful feature that is currently missing from BasKet is the ability to retrieve personal information from a common storage space for display in notes and baskets. This could be achieved through integration with Akonadi and would greatly enhance BasKet's ability to interact with other applications. Such integration could also make it possible to store baskets in an external location, such as a server or PDA.

The Akonadi system provides an excellent medium for storing large quantities of structured data in one space. Successful integration would not only allow for many more features to be implemented in the BasKet project, but would also be a very effective method of streamlining the way in which the program stores its notes and baskets.

Completing these goals requires development effort with both Akonadi and BasKet. Firstly, a new resource would need to be created so that Akonadi can handle the notes and baskets that it will be storing. Secondly, BasKet will need to be modified in several ways so that it can interact with the resource, and will likely need to store and load basket data in a different way than is currently implemented.

2. Project Goals

The goal of this project is to develop an Akonadi resource for storing BasKet data, and to provide a means for BasKet to store and retrieve this data. In addition, it would be desirable for BasKet to be able to "pull in" data from other PIM applications, such as contact information, so that it can be included in notes. This can be essentially broken down into two parts:

1. Developing an Akonadi resource for handling BasKet's data
2. Modifying BasKet to interact properly with Akonadi's resources

3. Project Timeline

The project will be undertaken by myself, in conjunction with the Akonadi development team and the BasKet development team. At least one member of BasKet has agreed to co-mentorship throughout the course of the project, and I would have no other obligations during the summer months, so work on the project would most likely fill (at minimum) a five-day working week. Work will begin with Project Goal 2 (modifying BasKet) on May 23 at the latest. This portion of the project is to be completed by the mid-session review date of July 13, leaving Project Goal 1 for the second portion of the summer. The entirety of the project should be finished and functional by August 17, as noted by Google's project timeline[2].

4. Personal Information

I am currently in my third year with the Mathematics and Computer Science department at Longwood University[3], which is located in Virginia in the United States. I expect to graduate in May of 2010 with a Bachelor of Science in Computer Science. I began as a self-taught programmer when I moved myself over to *NIX operating systems in 2005, and also learned Perl so that I could modify the source of a MUD client (Xpertmud[4]) that I was using. In my college courses, I have used C, C++, Python, and the Qt libraries extensively. I have also contributed to open source projects. In addition to my work on Xpertmud, I have contributed patches for the Mudlet[5] MUD client, which helped to familiarize me with both CMake and qmake. I have a great passion for FOSS, and a great respect for the developers that create and maintain FOSS libraries and applications.

5. Informational Sources

1. <http://basket.kde.org/>
2. <http://socghop.appspot.com/document/show/program/google/gsoc2009/timeline>
3. <http://www.longwood.edu/mathematics/>
4. <http://xpertmud.sourceforge.net/>
5. <http://www.mudlet.org/>