

# Akonadi

# The KDE4 PIM Framework

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# Overview

- Why a new PIM Framework
- Akonadi
  - ▷ History
  - ▷ Concepts
  - ▷ Current State
  - ▷ The Future
- Questions & Answers

# Problems with old Framework

- Bad Performance
- Synchronous Access
- Memory Consumption
- Missing Notifications
- Missing Locking

# Akonadi

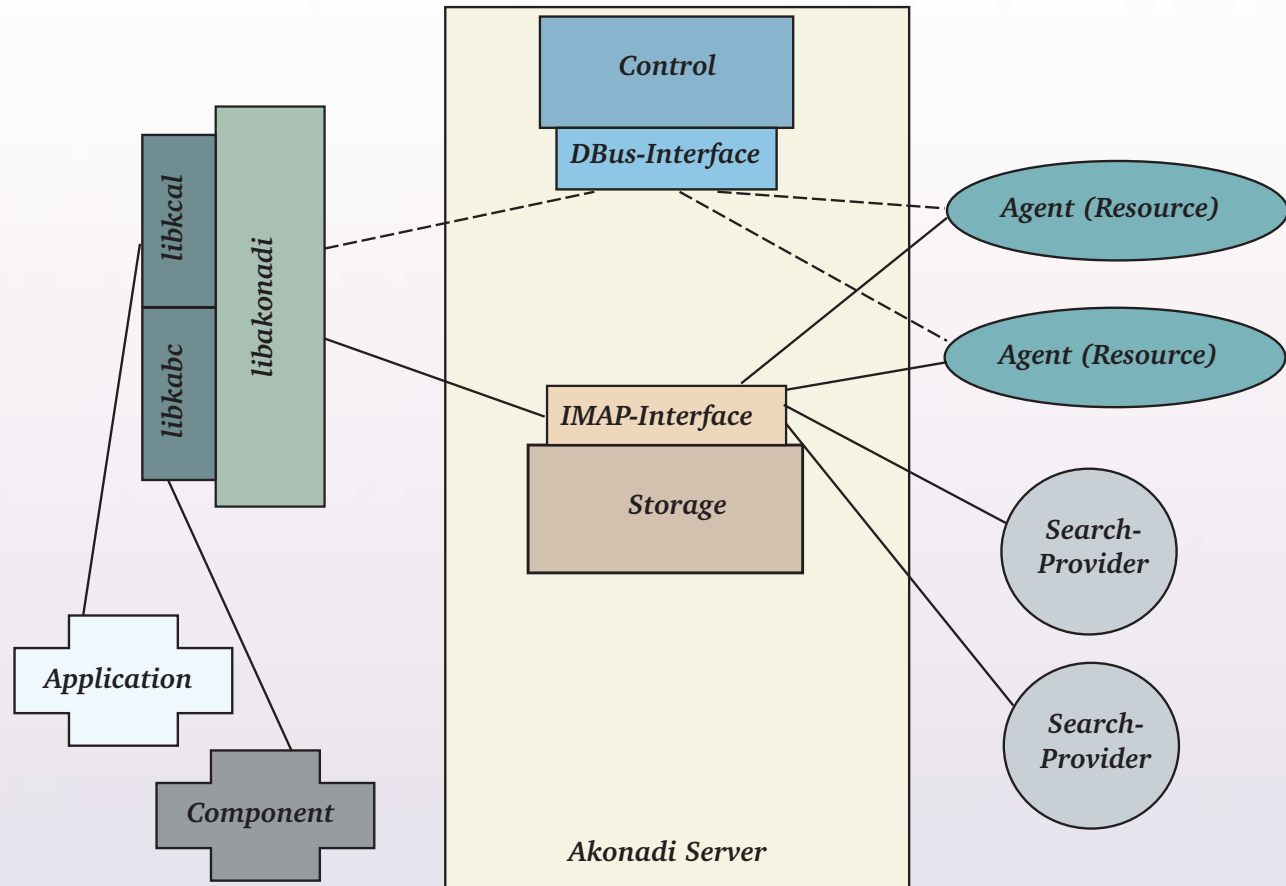
- A general storage for PIM data
- Aims to solve the problems of kabc/kcal
- Modular design for robustness and easy integration

# History

- First ideas of a PIM daemon at Osnabrück meeting 2005
- Sample code for address book daemon
- General agreement for PIM service at Osnabrück meeting 2006
- 'Akonadi' was born

# Concepts

# Concepts



# The Storage

- Accessible via extended IMAP  
=> high performance on data delivery
- Caches all PIM items of the resources  
(depending on the policy)
- Informs the Control about changes
- Provides basic search features (IMAP)
- Delegates extended search requests to SearchProviders



# The Resources

- Applications which synchronize data between the Storage and an external data source (e.g. groupware server or file)
- Asynchronous communication
- Profiles for grouping Resources together

# The Control

- Starts and monitors the Storage and resource processes
- Provides D-Bus API for managing resources and profiles

# The SearchProviders

- External applications which process more complex search queries
- One SearchProvider for every PIM item type
- Store search results in collections inside the Storage

# Collections

- Virtual containers inside the Storage
- Contain PIM items/references
- Root collection '/'
- Every Resource provides at least one collection
- Easy to realize virtual folders

/

/resource1

/resource1/calendar

/resource1/addressbook

/resource2

/search

# Current State

# Current State

- Storage
  - ▷ Provides all needed IMAP commands
  - ▷ Stores items in Collections
- Control
  - ▷ Lifetime management for Storage and Resources
  - ▷ D-Bus API nearly completed
- Resources
  - ▷ Simple iCalendar file
  - ▷ Dummy resource 'Knut'

**Demo...**



# TO DO

- Implementing SearchProviders  
(mail, calendar, address book)
- Defining asynchronous client library
- Implementing full featured resources  
(remote and local file)
- Writing documentation!!!



# The Future

# The Future

- Goal: Components based PIM library
- Components as standalone views and editors of PIM data
- Plasma applets for calendar and address book

**We need developers!**

**Questions?**

**Thank you**