

Tracker

Metadata central storage for the Desktop

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Tracker 0.6.6

- 1.5 years ago
- Obvious decision for maemo
 - Linux-based distribution for the internet tablets
- It needed some work
 - Difficult to extend and fix
- Deep rewriting of the daemon

Tracker 0.6.95

- Today
- The “same” with better code
 - No API break (few new methods)
 - GObject, cleaner modules/libraries
 - Unit tests
 - Better memory and CPU consumption
- Ready to ship with Fremantle/Maemo5

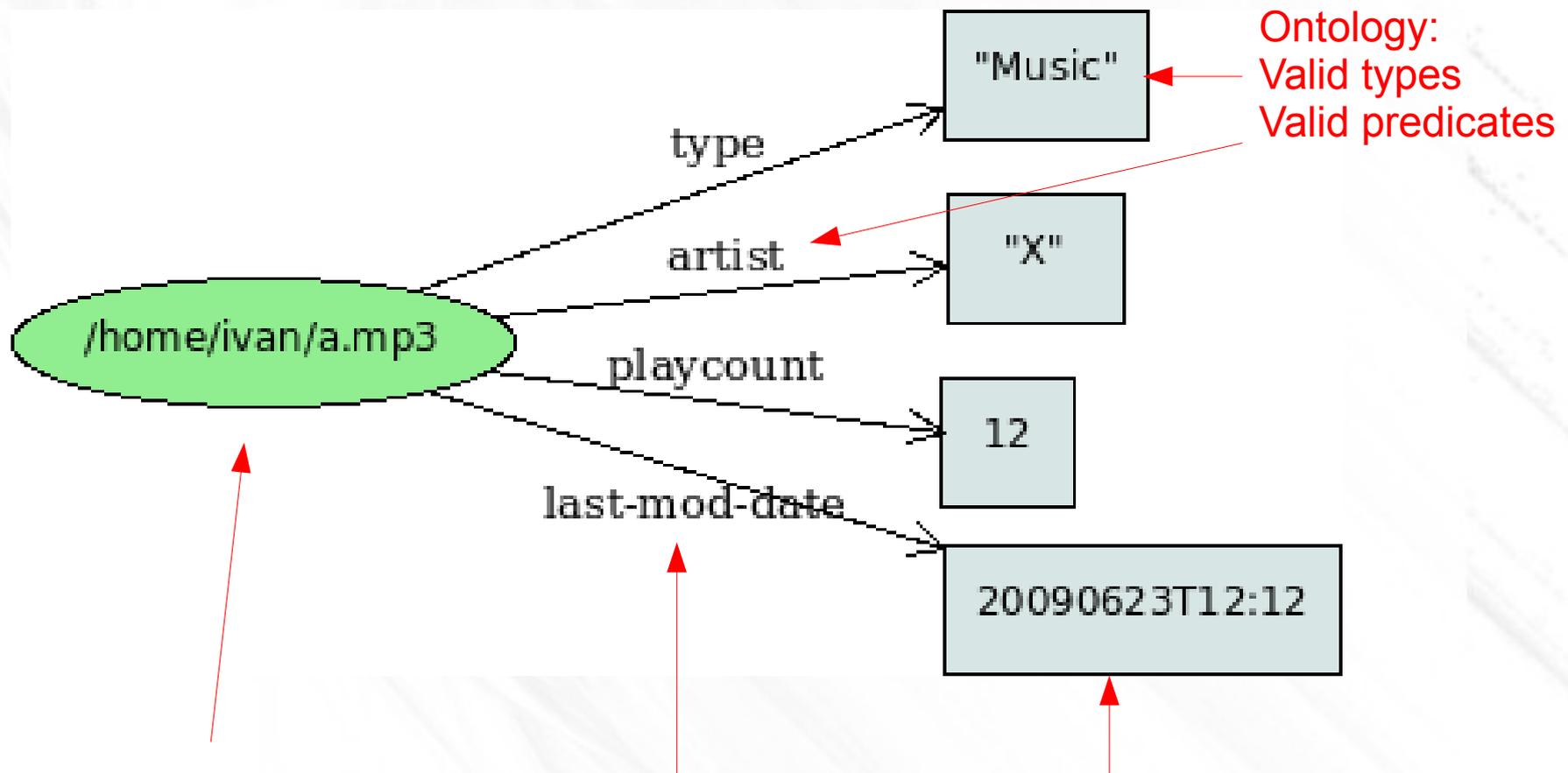
Is Tracker finished?

The current tracker works and does what we expected it to do.

We want to do MORE, better and faster.

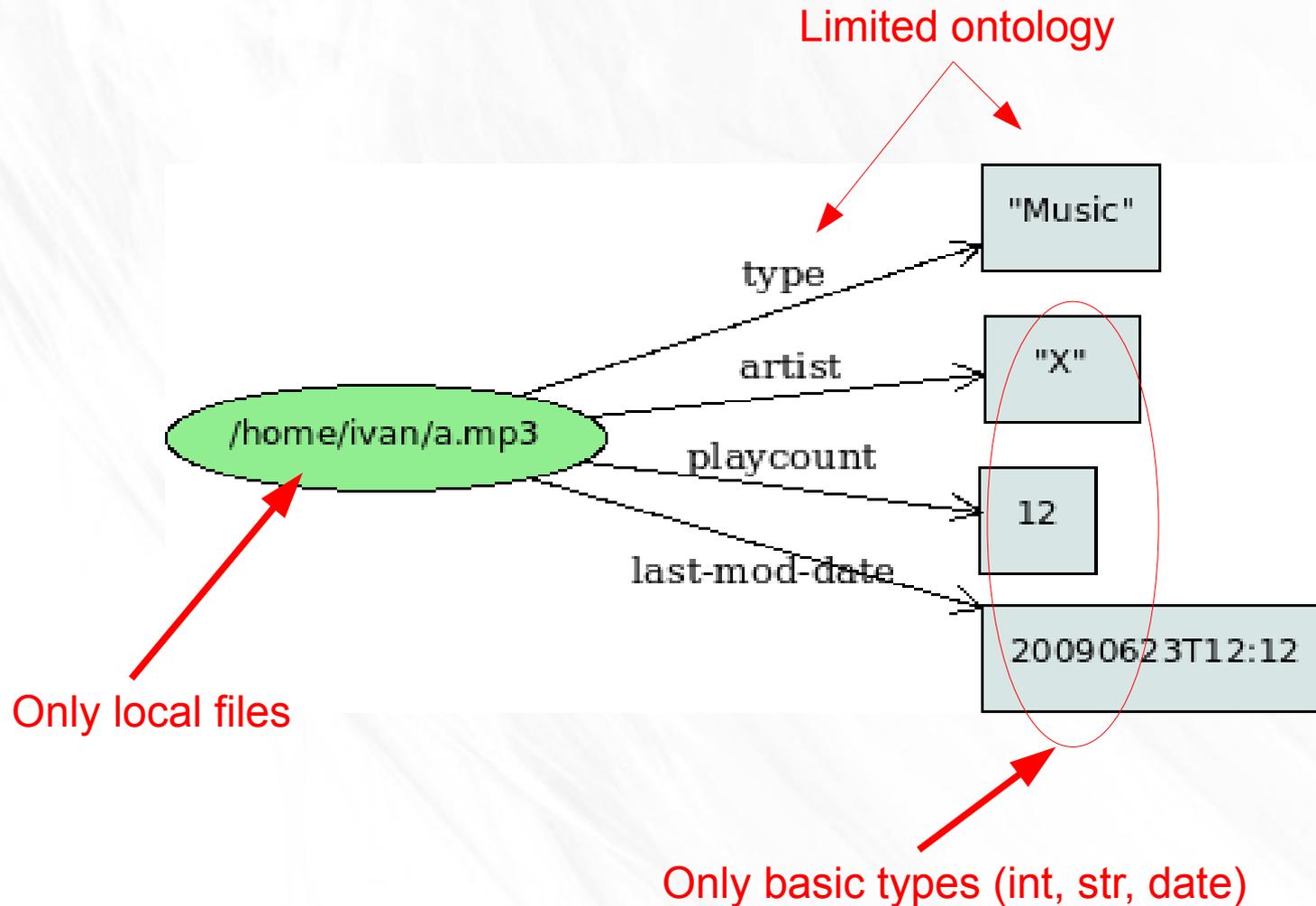
Tracker 0.6's data model

- The famous words: triplets and ontologies



Triplet: [subject, predicate (property), object (value)]

Tracker 0.6's limitations

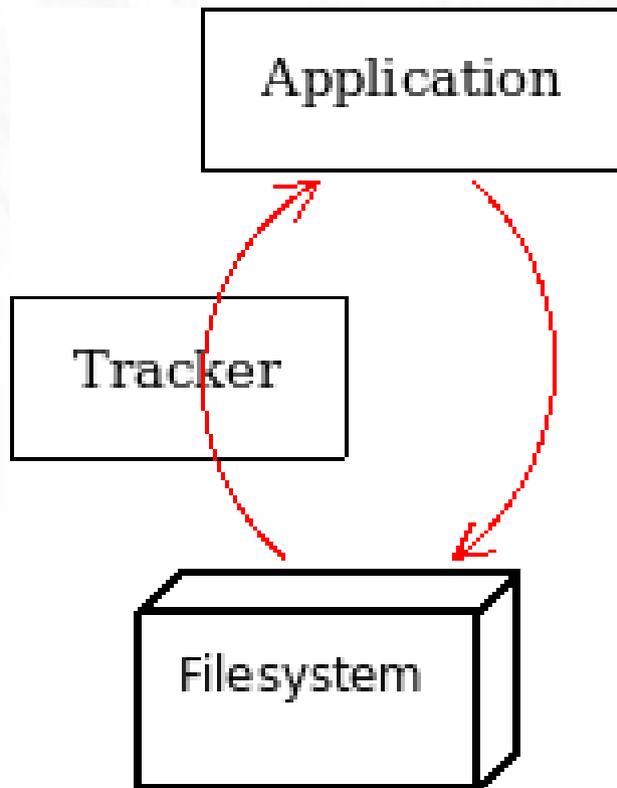


Tracker 0.6's limitations

- Too simple query language
 - Half-fixed using API parameters → Ugly API

“Make everything as simple as possible,
but not simpler.” (Albert Einstein)

Tracker 0.6's data flow

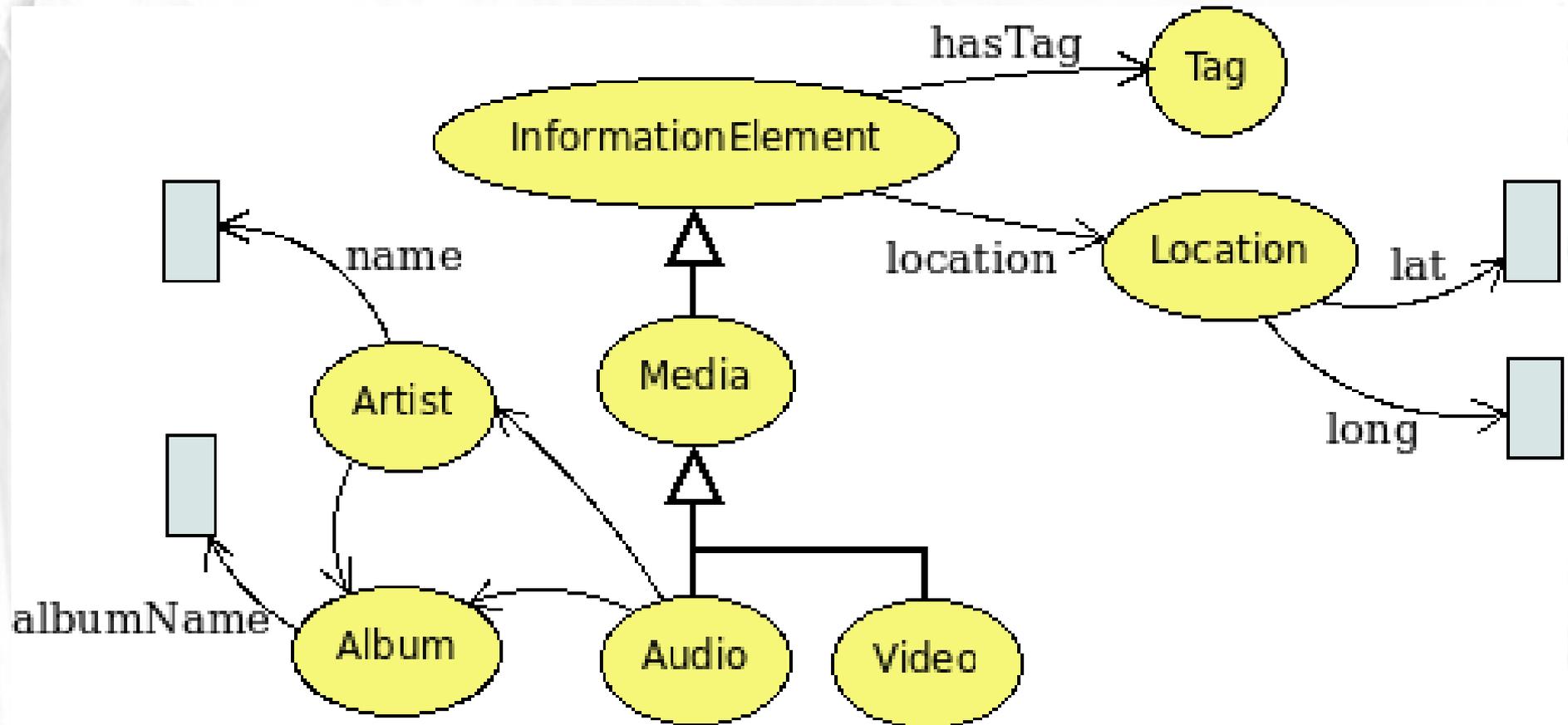


- Caches local content
- Isn't a primary store
- Is passive

Tracker 0.7: basics

- Supports real graphs
- Has a rich ontology: Nepomuk
- Resources instead of only files
- Has a better query language: SparQL
- Uses a different data flow

Tracker 0.7: we can say more...



...about more things

- Web history / Bookmarks
- Rss feeds / entries
- Playlists
- Geolocation / Tags
- IM Messaging
- Online information (flickr / facebook integration)

Tracker 0.7: Easier to query

- SparQL: URI and title of all songs with playcount > 10

```
SELECT ?u ?title WHERE {  
    ?u a nmm:MusicPiece ;  
        nie:title ?title ;  
        nie:usageCounter ?playcount .  
  
    FILTER (?playcount > 10)  
}
```

Tracker 0.7: Easier to query

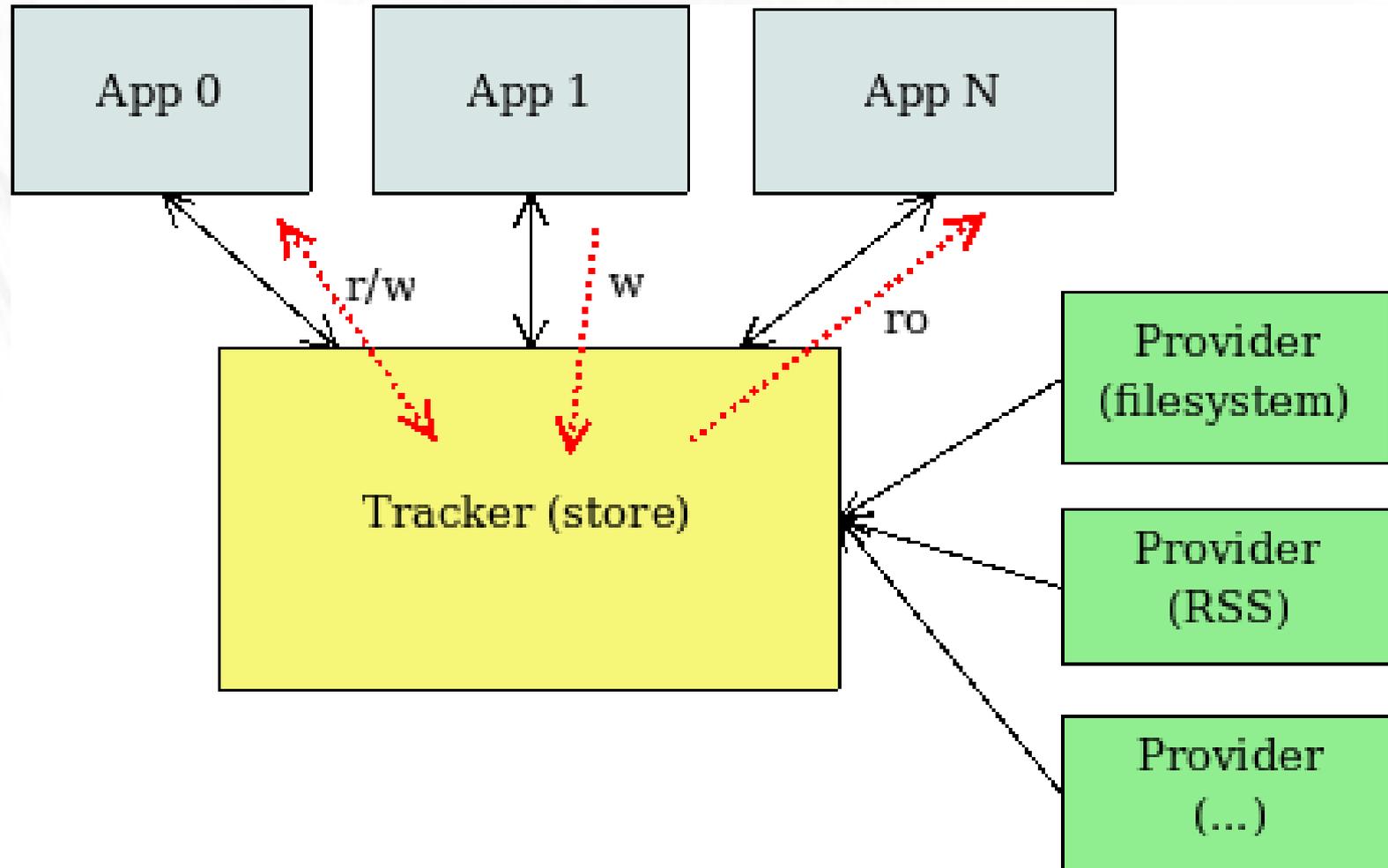
- All files received from Martyn in the last three days ordered by date

```
SELECT ?u WHERE {  
    ?u a nie:FileDataObject .  
    ?contact a nco:PersonContact ;  
             nco:name "Martyn".  
    ?transfer a ex:Transfer ;  
             ex:sender ?contact ;  
             ex:content ?u ;  
             ex:date ?date .  
    FILTER (date > 20090702)  
} ORDER BY DESC (?date)
```

Tracker 0.7: One more

- SparQL supports INSERTS and DELETE
 - Apps can store things directly into tracker
- New signals system
 - An app knows insertions/update/deletes in its relevant categories

Tracker 0.7: New data flow



Tracker 0.7: Desktop impact

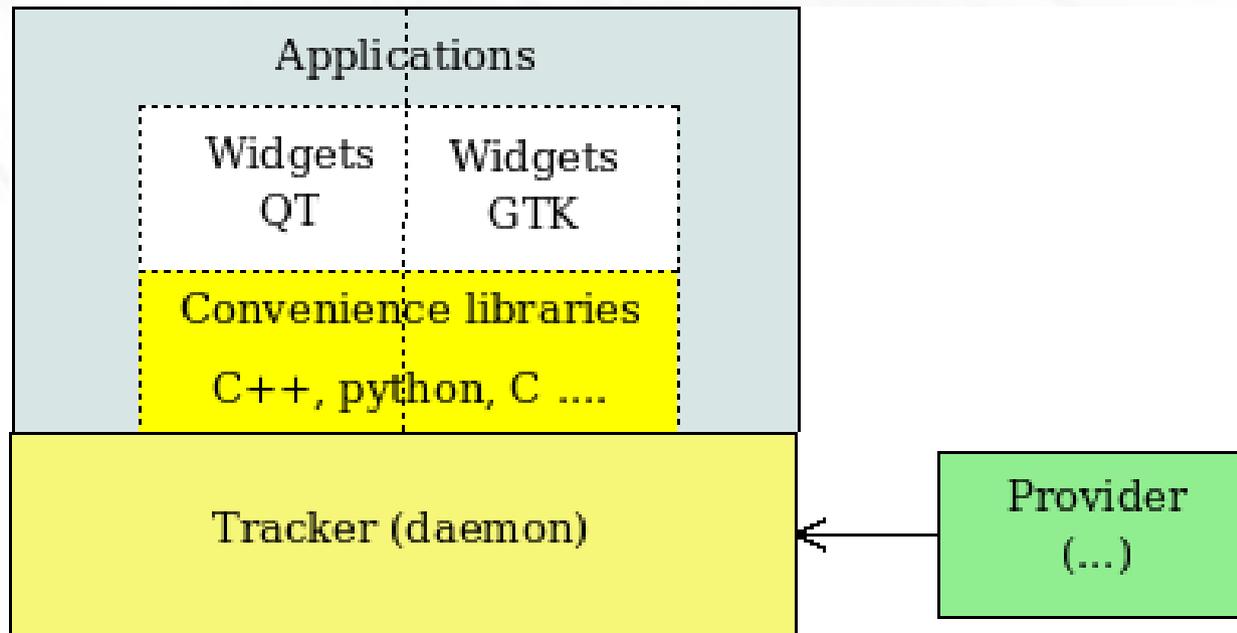
- Cross application / desktop data
 - Shared tags
 - E.G. Bookmarks between browsers
 - Nepomuk de-facto standard

Tracker 0.7: Desktop impact

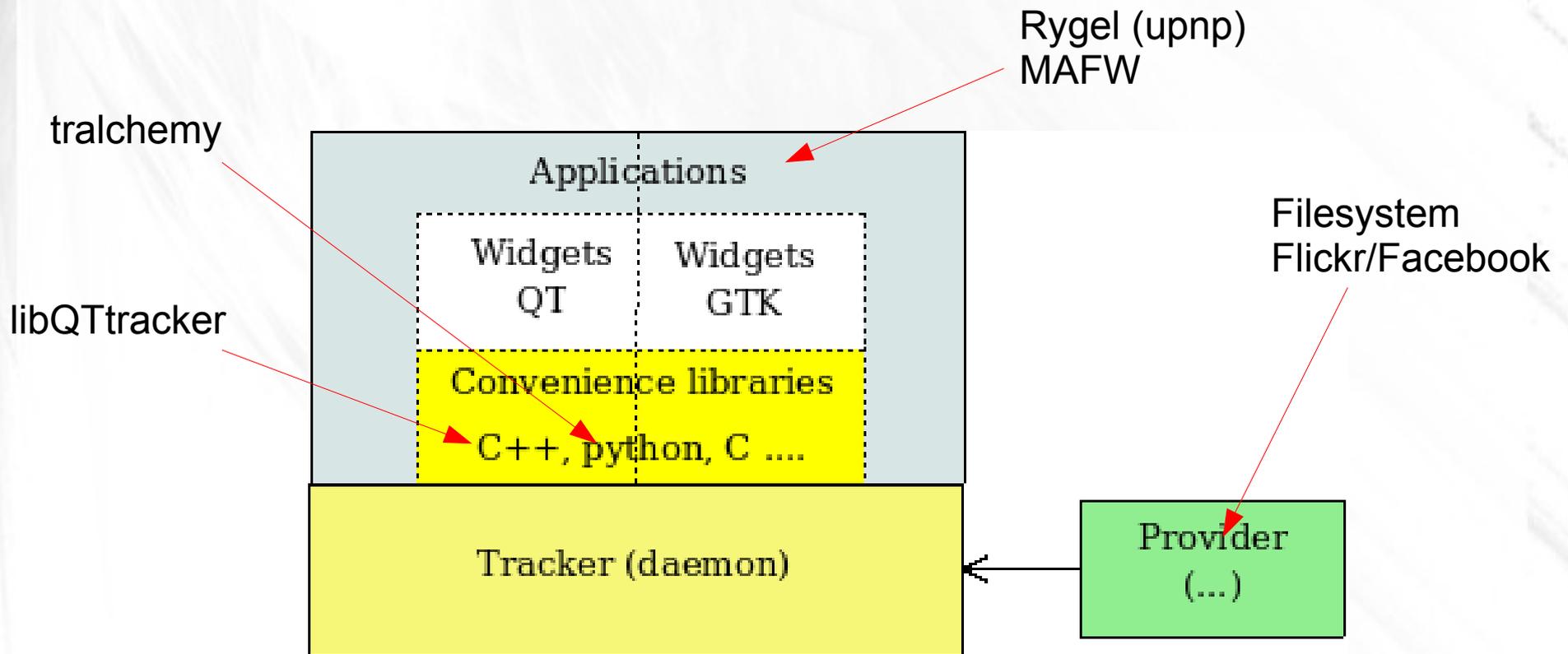
- Information mash-up
 - Relevant information for a contact
 - Geolocation
 - Integrate online/offline information

Tracker: Freedesktop

- Dbus API + SparQL + Nepomuk
 - Desktop neutrality
- The value is on the stack



Is everything already done?



Interesting links

- Code: <http://git.gnome.org/cgiit/tracker/>
 - Branch tracker-0.6 for 0.6
 - Branch master for 0.7
 - Various branches for incomplete features
- IRC (#tracker in GIMPnet), mailing-list
- About online providers:
 - <http://live.gnome.org/Tracker/TrackerWebService>
- Some documentation:
 - <http://live.gnome.org/Tracker/Documentation>

Come and talk with us

- Tracker developers here around this week
 - Jürg Billeter
 - Ivan Frade
 - Carlos Garnacho
 - Martyn Russell
 - Jamie McCracken
 - Philip Van Hoof
- Participate, visit the BOFs!

Q&A