

Sources

Attributes/Capabilities

- filterable ^{no, everything must be filterable}
- support ^{which kinds of} seeds
- rating scheme
- Requests allowed
- Song permissions

Likely rating scenarios:

- $\pm$ good (3: good/neutral/bad)
- 5 ratings + unheard
- 5-5 (10 ratings) + unheard
- seed may/may not be allowed to any.

- rate
- manipulate seeds
- create playlists
 - some sources may allow playlists created/owned by others.
 - other sources only source owner can create playlists.

Permissions

Public user

Disowned

Private

Shared

Published / Restricted *only for privileged if user is an admin

Public

owner (all cases)

owned

Usable

Editable

depreciable

X

X

X

X

*

X

X

X

X

X

Appropriate checks by action

use source: Usable

rate: Editable, if common ratings, otherwise usable

adjust stats: Editable

Request music: Usable

Get suggestions: if requests, usable; otherwise editable.

Create station from station: depreciable

create/delete/rename stations: editable

Filter to query requests

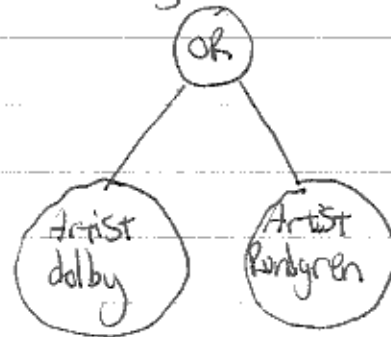
- Can only query on certain fields
 - fields may vary by source abilities
 - fields we don't understand can be constraints or expansions
- ∴ Need an "incapable" flag

1. Query "dolby" + "Flac Earth"
(only if Native And supported)



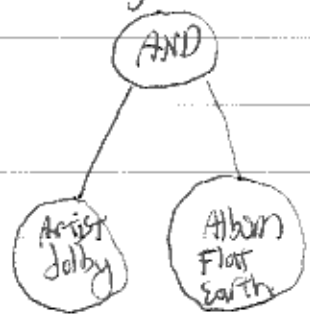
- OR implies a query for each of the subtrees.
- AND implies a query on the best subtree, then filter locally/algorithmically

Figure 1



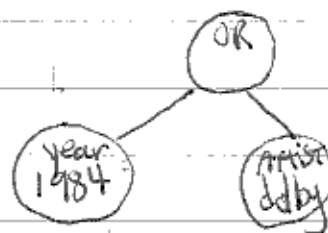
1. Query dolby
2. Query Rindgren

Figure 2



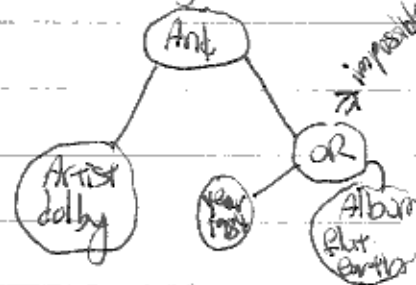
1. query dolby
2. Refine results with filter.

Figure 3



Query dolby fail:
Query capabilities of source exceeded.

Figure 4



1. query dolby
2. Refine with filter.

- If any OR portion can't be queried, that whole subtree is invalid impossible to process
- If an impossible subtree is ~~passed~~ ^{belongs} to an and, and the other subtree is possible,

Service vs. Locally managed sources

Source type	Service	Local
Playlists	Created by source owner	Created by anyone
Ratings		
Song	by source owner only	by each user (biasing)
Album	" (if allowed by source)	by each user
Artist	" "	by each user
Playlist ratings	by each user	by each user
Seeds	by source owner	by playlist owner

owned things
Sources
Playlists

Flipping axis —

Source is either owned, or shared, or "restricted".

- Playlists by source owner, or anyone for shared
- Playlist revision ^(locally) by playlist owner only.
- Playlist rating always by discrete users.
- Everything else, by rule is the same as for the source.

Q.

Is there ever a hybrid/other condition?

- solution: ACL Class:

variables: manager, rule

options: private, disowned, shared,

SameAsParent, public

methods: is Usable By (user)
is Editable By (user)
is Derivable By (user)