

Solang

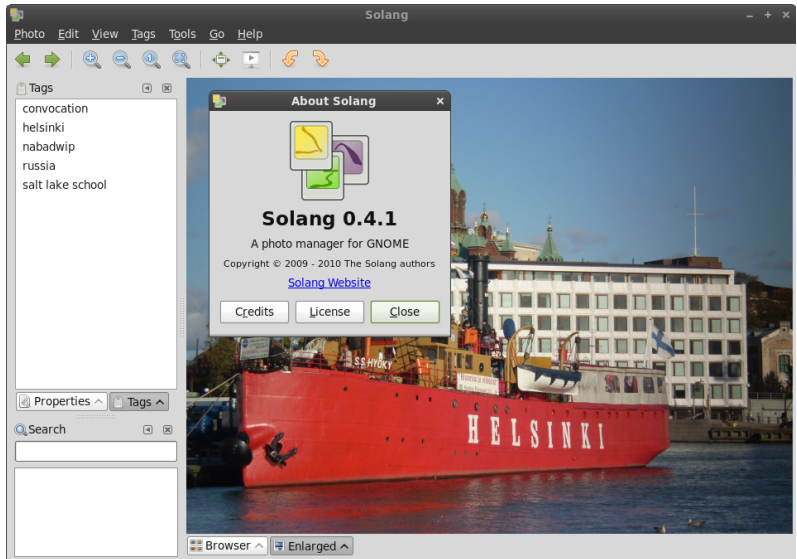
SPARQLing Your Photo Manager

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What Do We Need?

- Search
- Tags
- Meta-data



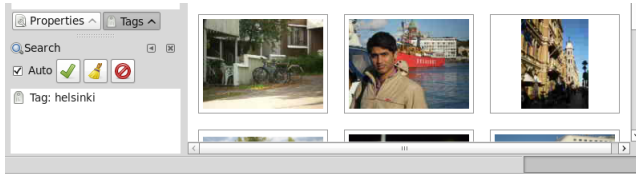
Find All Photos



SPARQL query

```
SELECT ?photo ?mime
WHERE {
  ?photo a nmm:Photo ;
  nie:mimeType ?mime .
}
```

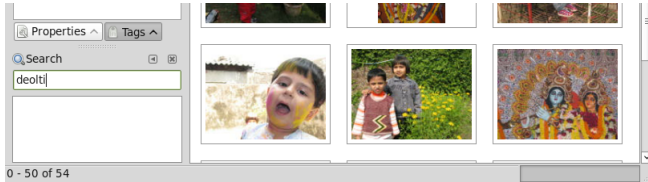
Find Photos Based On Tags



SPARQL query

```
SELECT ?photo ?mime
WHERE {
  ?photo a nmm:Photo ;
  nie:mimeType ?mime .
  {?photo nao:hasTag <urn:uuid:2680792f-...-dcc7780de246> .}
}
```

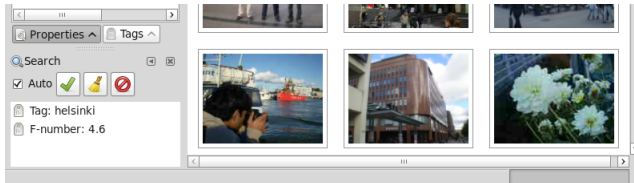
Find Photos Based On URLs (fake free text search)



SPARQL query

```
SELECT ?photo ?mime
WHERE {
  ?photo a nmm:Photo ;
  nie:mimeType ?mime .
  {?photo nie:url ?url . FILTER REGEX (?url, 'deolti', 'i')}
}
```

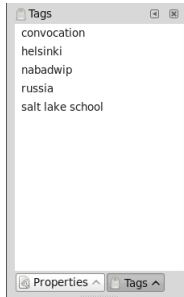
Find Photos Based On Multiple Criteria



SPARQL query

```
SELECT ?photo ?mime
WHERE {
  ?photo a nmm:Photo ;
  nie:mimeType ?mime .
  {?photo nao:hasTag <urn:uuid:2680792f-...-dcc7780de246> .}
  {?photo nmm:fnumber '4.6' .}
}
```


Retrieve All Tags



SPARQL query

```
SELECT DISTINCT ?tag ?desc ?urn
WHERE {
    ?urn a nao:Tag ;
    nao:prefLabel ?tag .
    OPTIONAL {
        ?urn a nie:InformationElement ;
        nie:comment ?desc .
    }
}
ORDER BY ASC(?tag)
```

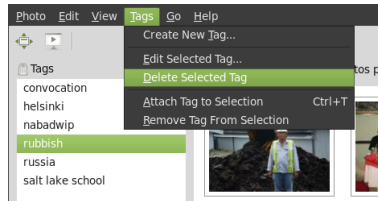
Create A Tag



SPARQL query

```
INSERT { _:tag a nao:Tag ; nao:prefLabel 'favourites' ;
          a nie:InformationElement ; nie:comment 'All those...' .
} WHERE { OPTIONAL {
  ?tag a nao:Tag ; nao:prefLabel 'favourites' ;
  a nie:InformationElement ; nie:comment 'All those...' . }
  FILTER (!bound(?tag))
}
```

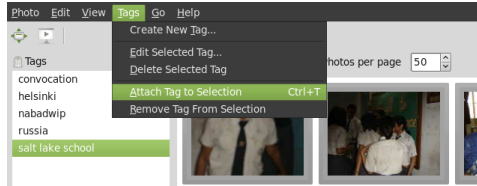
Delete A Tag



SPARQL query

```
DELETE {
  <urn:uuid:2680792f-...-dcc7780de246> a rdfs:Resource .
}
```

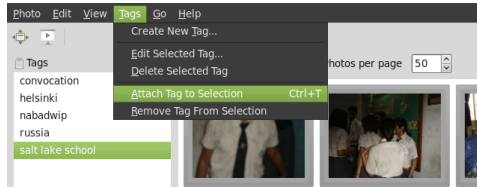
Attach Tags To Photos



SPARQL query

```
INSERT {
    ?photo nao:hasTag <urn:uuid:2680792f-...-dcc7780de246> .
}
WHERE {
    ?photo nie:url 'file:///home/.../class.jpg' .
}
```

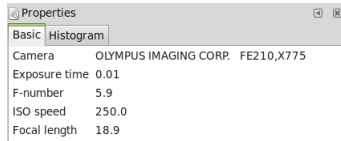
Detach Tags From Photos



SPARQL query

```
DELETE {
    ?photo nao:hasTag <urn:uuid:2680792f-...-dcc7780de246> .
}
WHERE {
    ?photo nie:url 'file:///home/.../class.jpg' .
}
```

Extract Meta-data



SPARQL query

```
SELECT nmm:exposureTime(?photo)
WHERE {
    ?photo a nmm:Photo ;
    nie:url 'file:///home/.../class.jpg' .
}
```

That's all, folks.
Any questions?

Solang

`http://projects.gnome.org/solang`
`#solang on irc.freenode.net`

