

WebObjects Java Client, the 3rd way

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An introduction by Florijan Stamenkovic

What is this all about?

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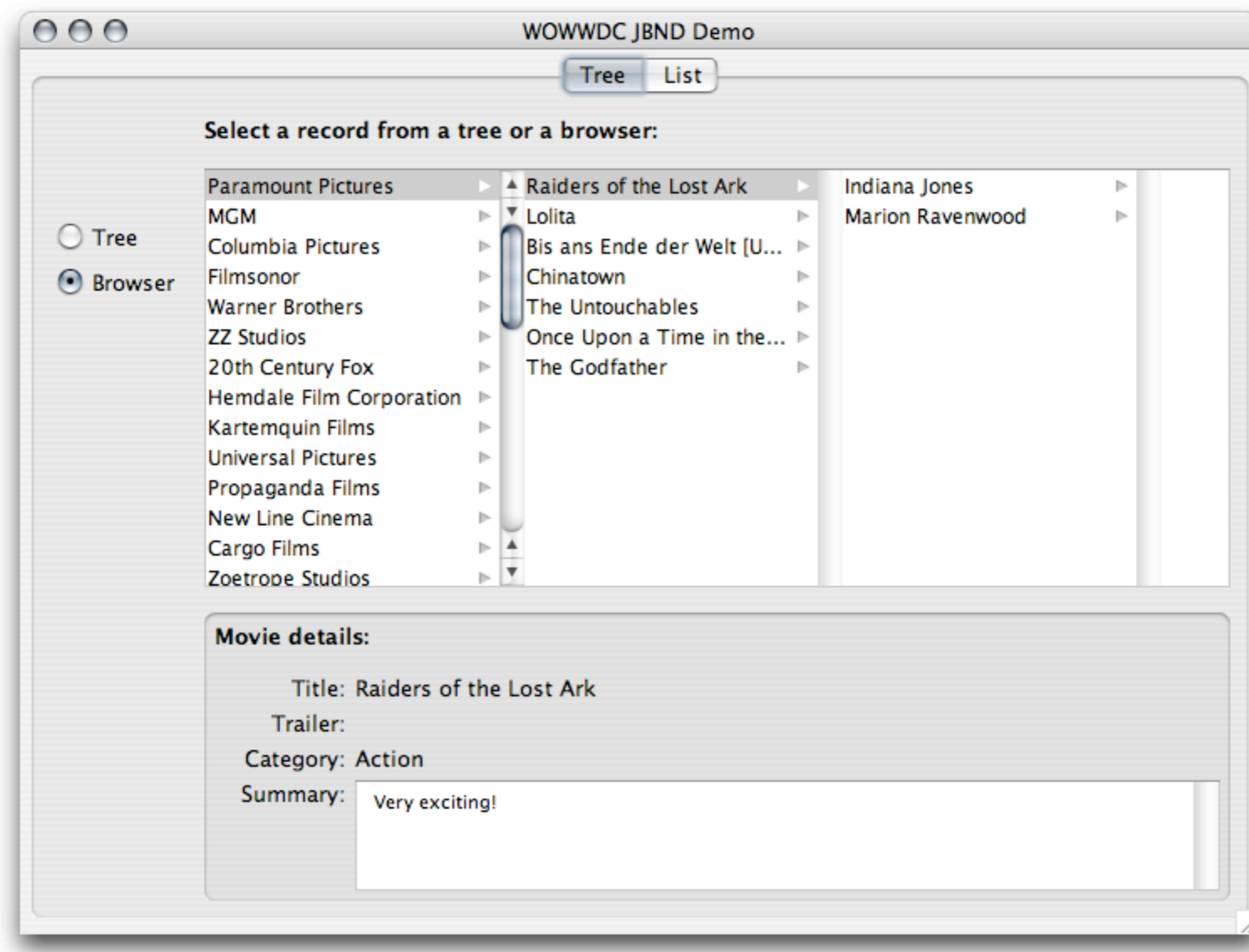
- Making applications that are:
 - Remote persistence based
 - Rich user interfaces
 - Based on client-server architecture
 - Written in Java
 - Made with WebObjects

**Why make Desktop apps
when we have browsers?**

Why make Desktop apps when we have browsers?

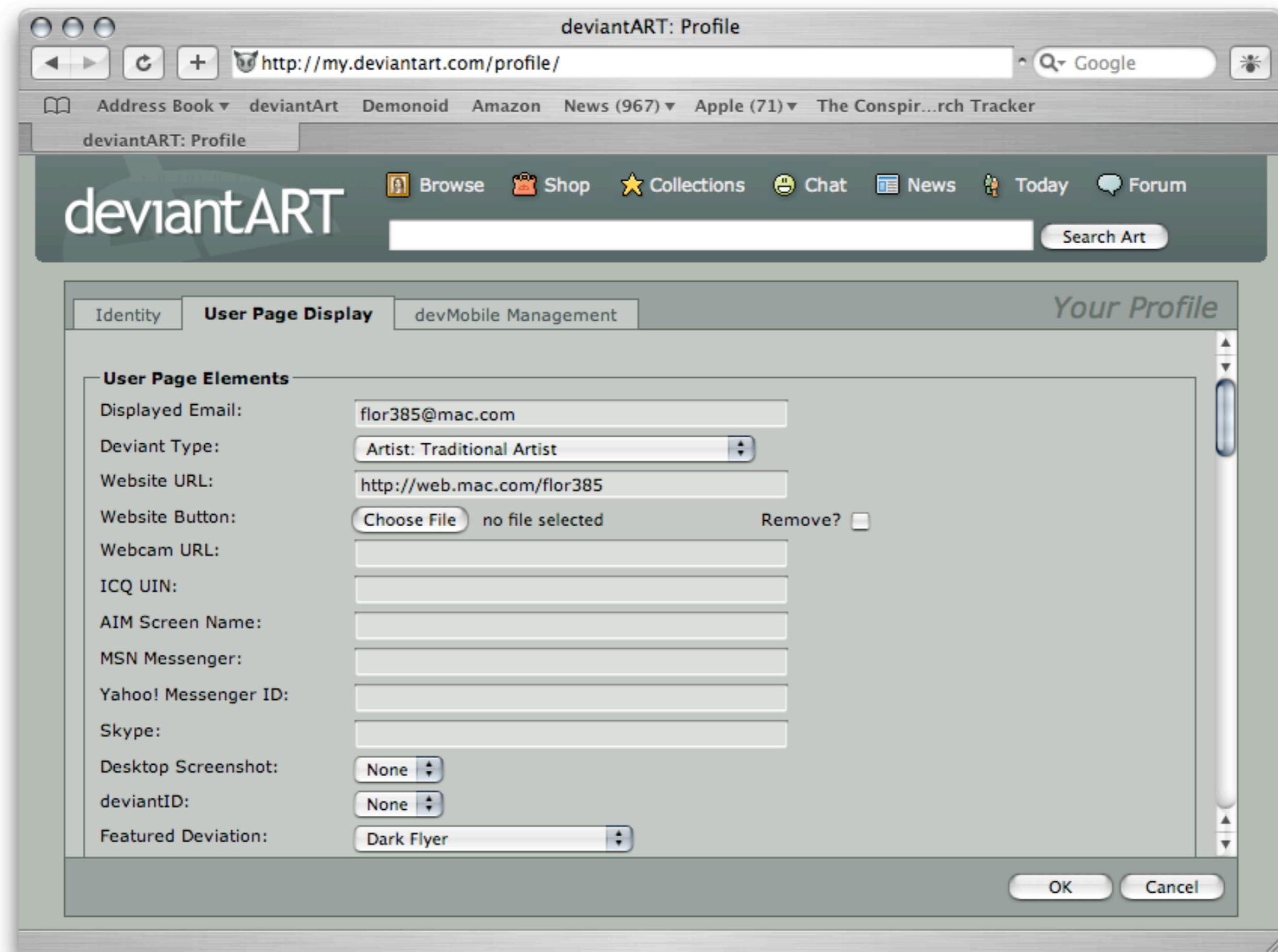
- Desktop apps are more responsive
- They have more processing strength
- Better data input capabilities
- Can perform immediate validation
- Can do better visualizations of data
- Can be cross platform as well
- Many other reasons that don't fit here...

In short, this...



In short, this...

...can be better than this.



...can be better than this.

Why use WebObjects?

Why use WebObjects?

- That's just a silly question, but OK:
 - It is a ripe, time-tested technology
 - Takes care of database connectivity
 - Data structure modeling
 - Serving data to clients, web page generation
 - Deployment, load balancing, automatic scaling
 - And does other cool things...

So, when use this?

So, when use this?

- Whenever there's a lot of data input going on
- When the input process is complicated
- When specialized visualization is necessary
- When a highly dynamic interface is required
- As support for a web based WO apps

Why not use it?

Why not use it?

- For simple scenarios it's an overkill
- Desktop apps suck at custom styling
- They're not as accessible as web pages

Now that's settled...

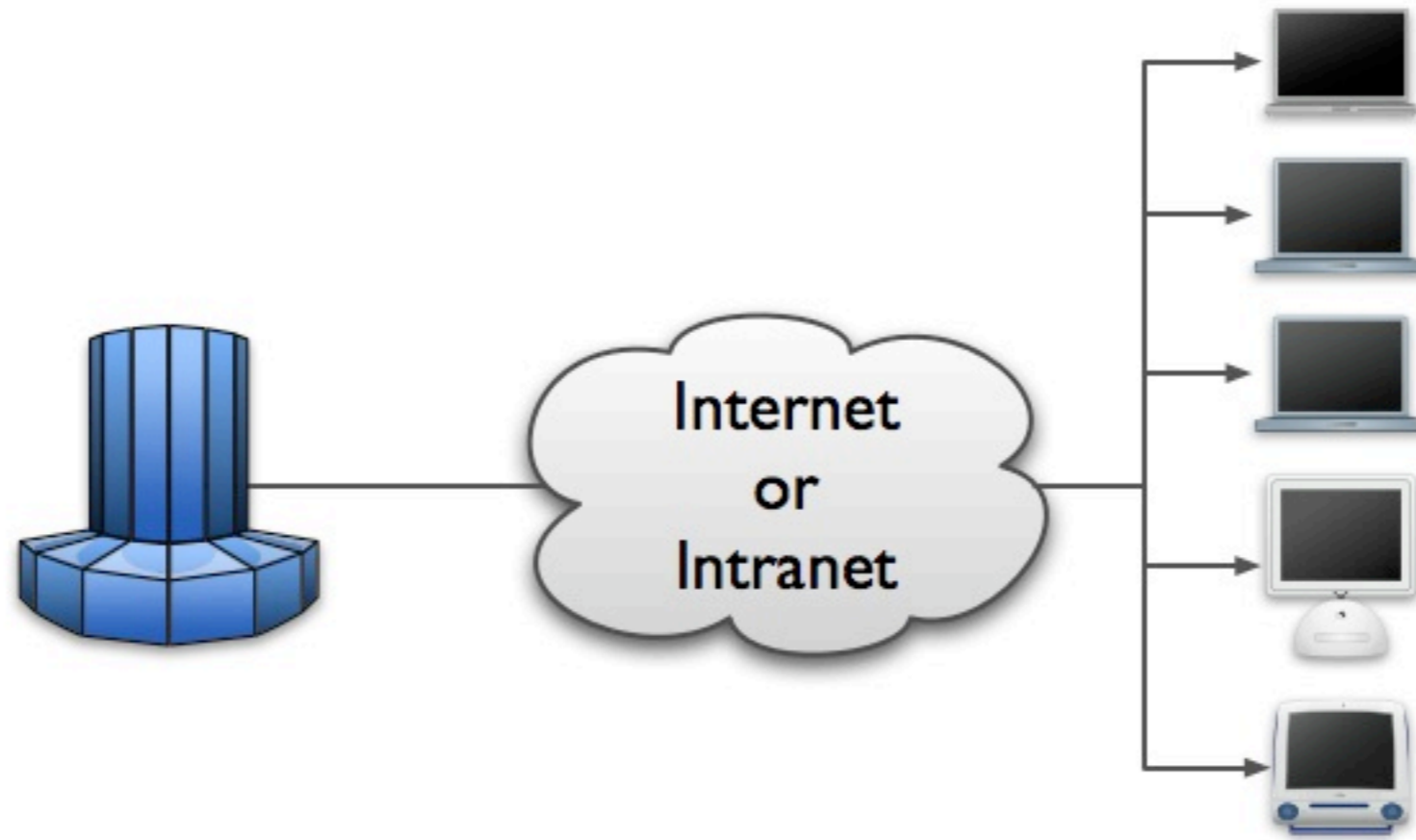
Now that's settled...

Let's go to work !

Some basics...

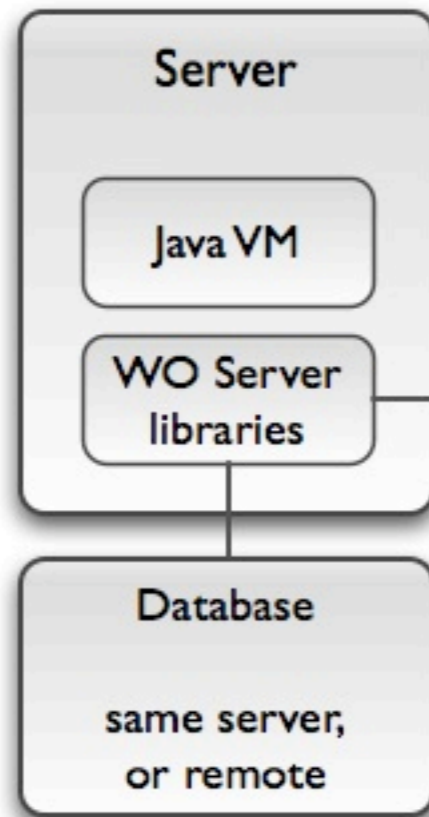
WO Server

Clients

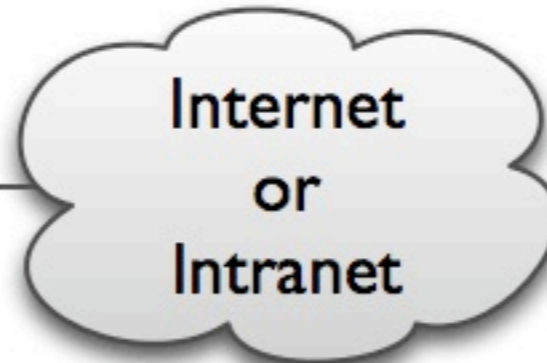
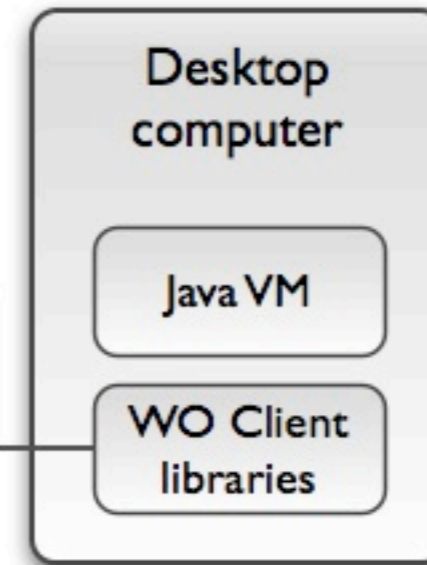


From high above...

WO Server



Clients



A bit more detail...

Let's talk about clients...

Client apps can be:

Client apps can be:

- Full blown Desktop apps written in Swing
- Or in SWT or AWT
- Applets
- Command line Java tools
- Already existing Java apps, enriched with remote data persistence capability

**What do client apps
need to do?**

What do client apps need to do?

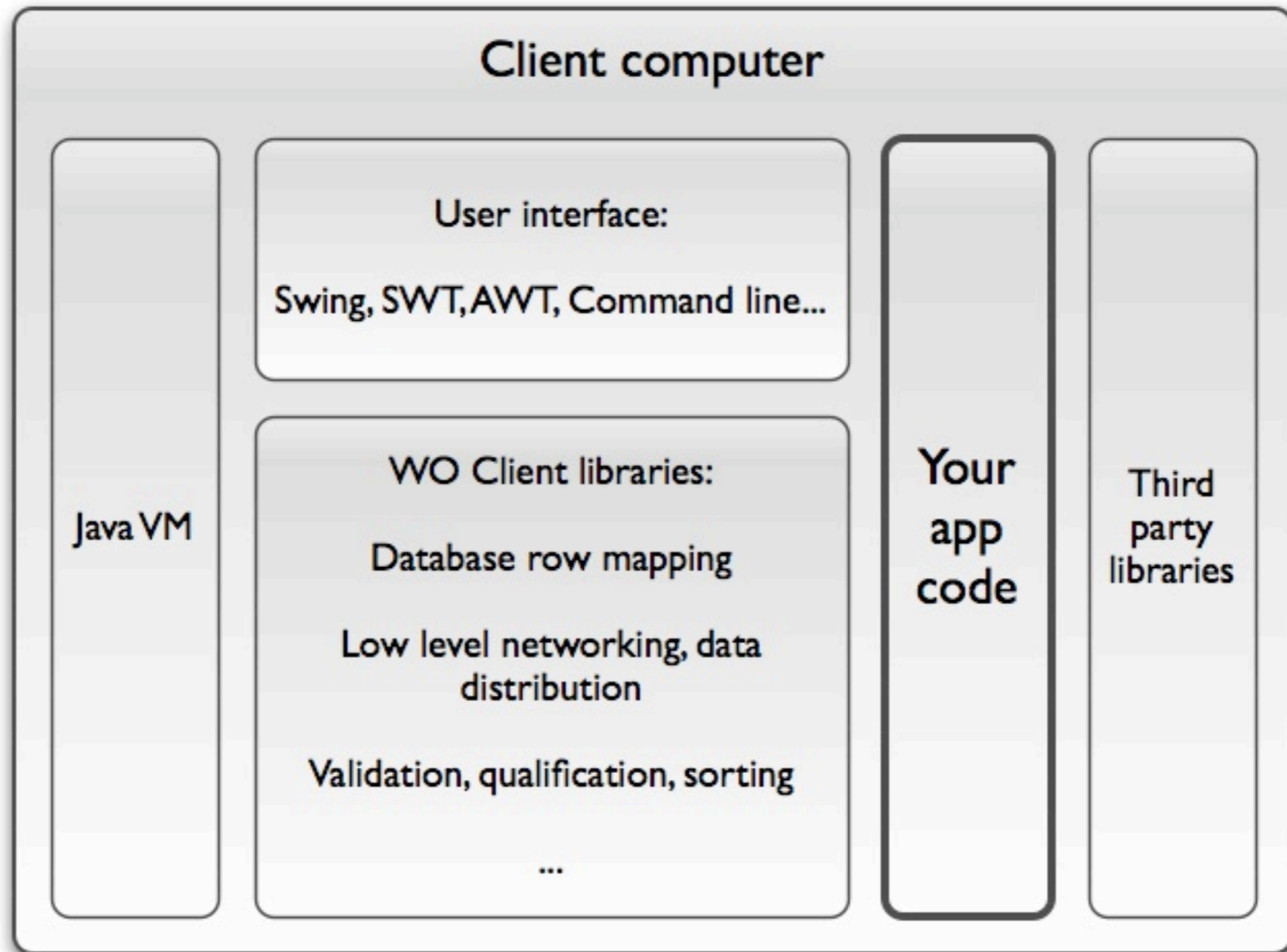
- Include WebObjects client side libraries
- Establish a connection to a WebObjects server
- Retrieve data using the client side EOF
- Do something with the data!

**Client side WO libraries
provide:**

Client side WO libraries provide:

- Data objects that map to database rows
- Data object graph management
- Data distribution facilities
- Dynamic key-value based access to properties
- Validation, qualification, sorting
- Remote Method Invocation
- Metainfo (info about the data structures)
- and more...

More or less like this...



More or less like this...

**For those familiar with
WO that means:**

For those familiar with WO that means:

- Good ol' EOF:
 - EOEnterpriseObject, EOEditingContext
 - NSValidation
 - EOQualifier and subclasses, EOSortOrdering
 - EOClassDescription
- Foundation
- and more...

So much about clients...

So much about clients...

**Let's talk about the
server...**

For those familiar with
WebObjects Web Apps

For those familiar with WebObjects Web Apps

- Server apps work more or less the same, but...
- There is no HTML generation going on
- The application only serves data to `EOEditingContexts` on the client
- All the in-between is automated by WebObjects
- There's very little to do
- Once the database is setup, deploy in an hour!

**Can the same WO app
serve HTML and Java
Clients?**

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Clients?**

YES.

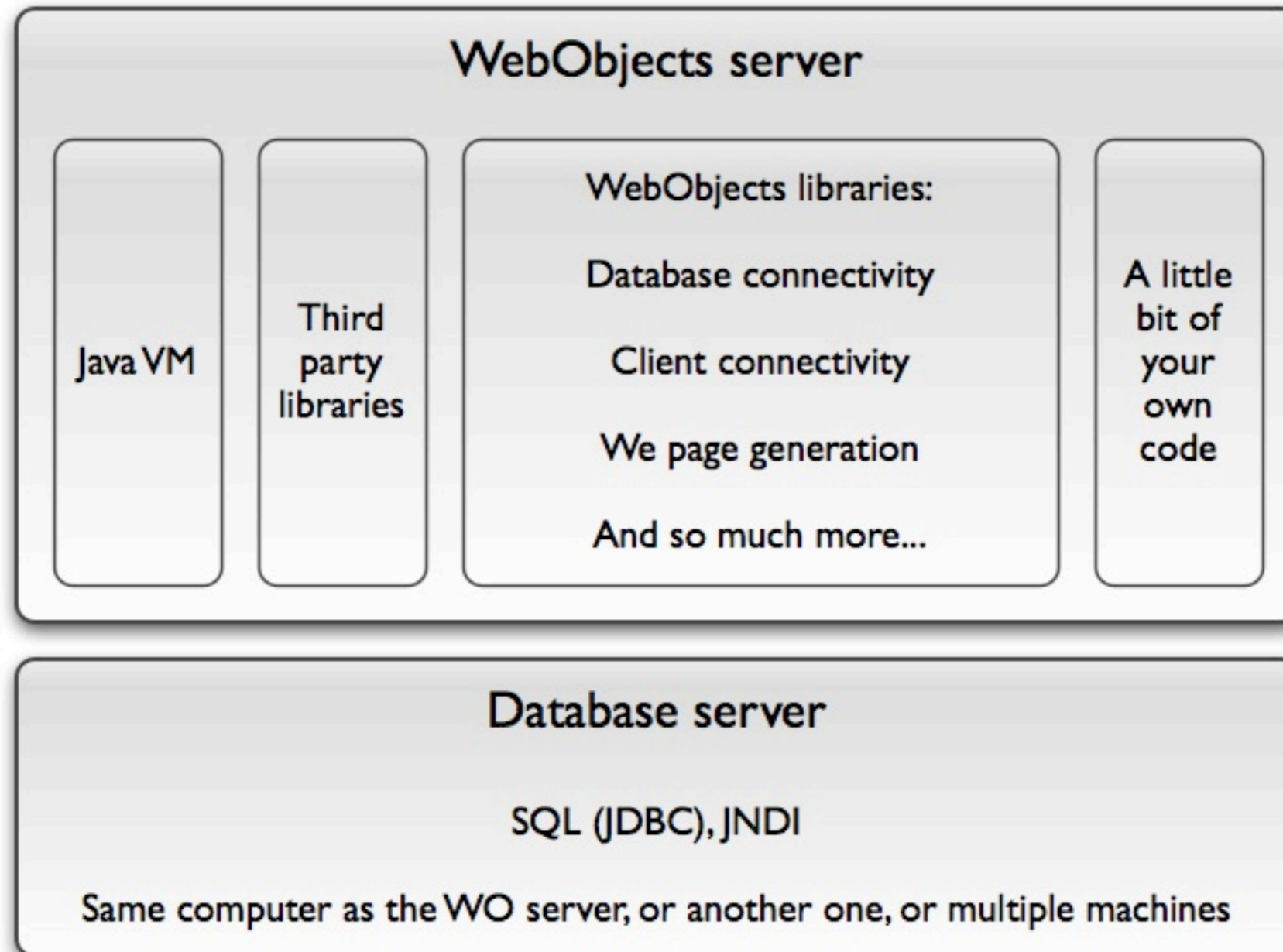
For those NOT familiar
with WebObjects...

For those NOT familiar
with WebObjects...

WO rocks, so get
familiar!

We'll give some info on how and where later on...

Summary of the server...



Summary of the server...

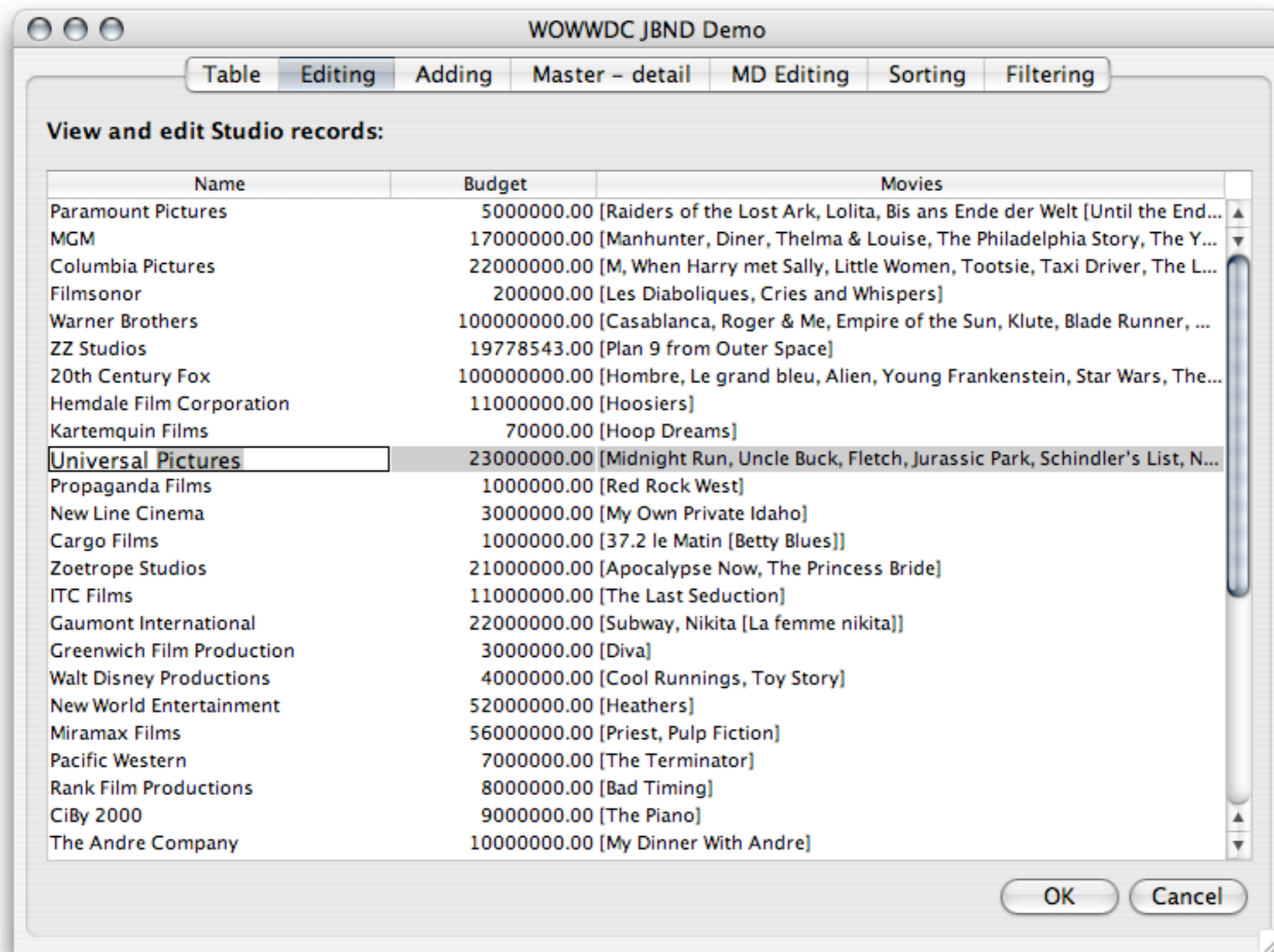
Sounds good, no?

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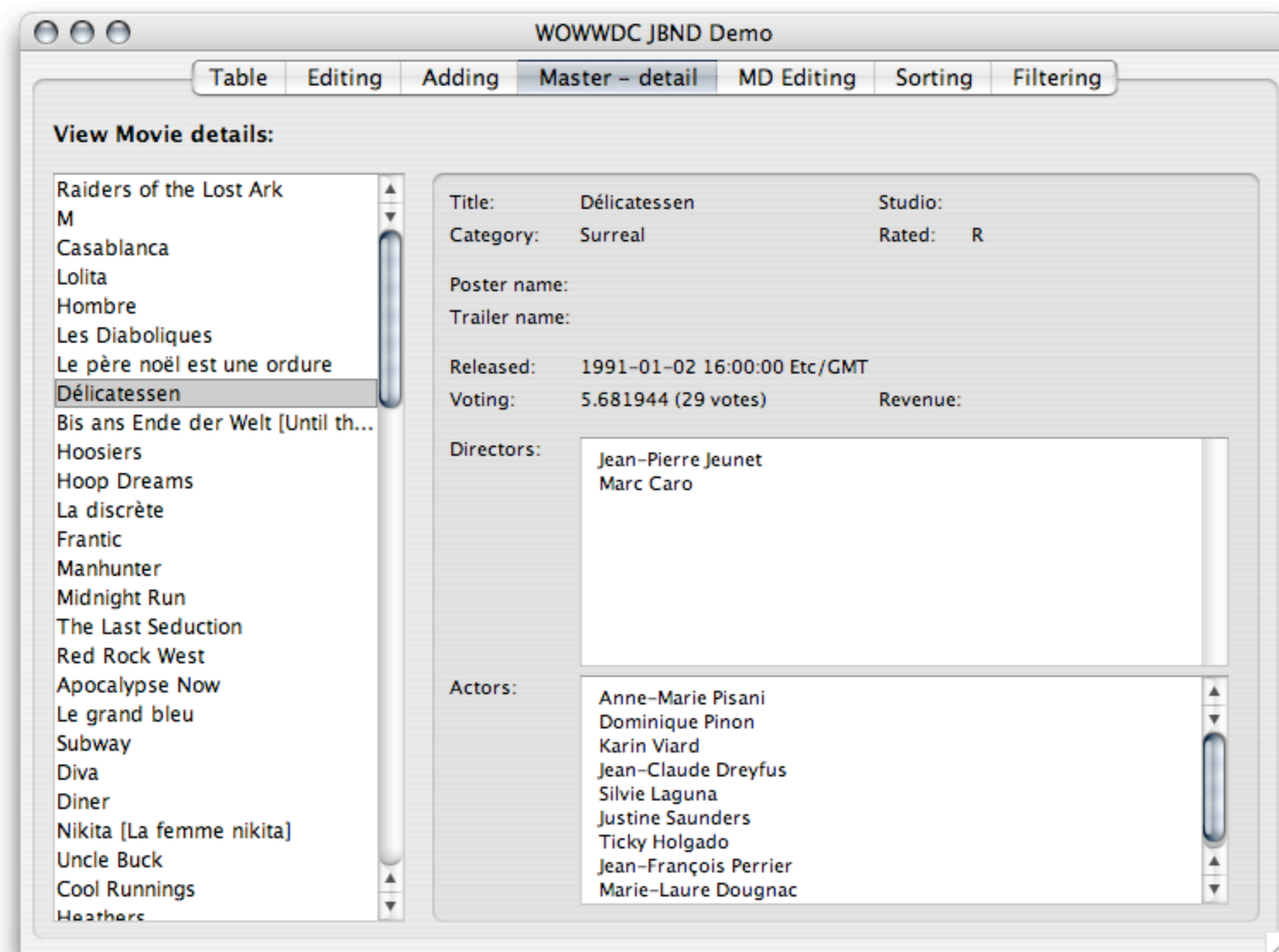
Here's how it looks...

Basic data handling...

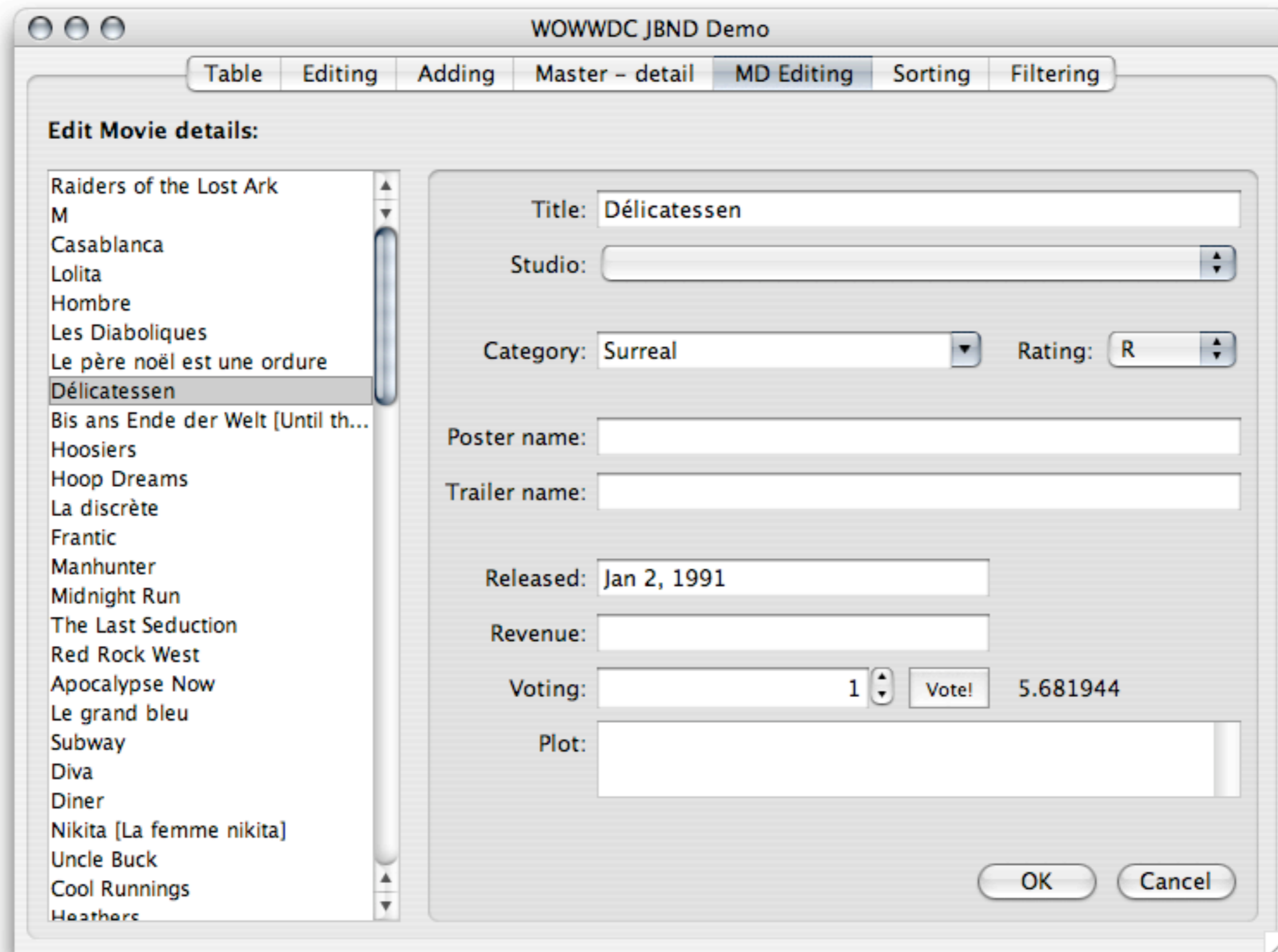
Batch viewing / editing...



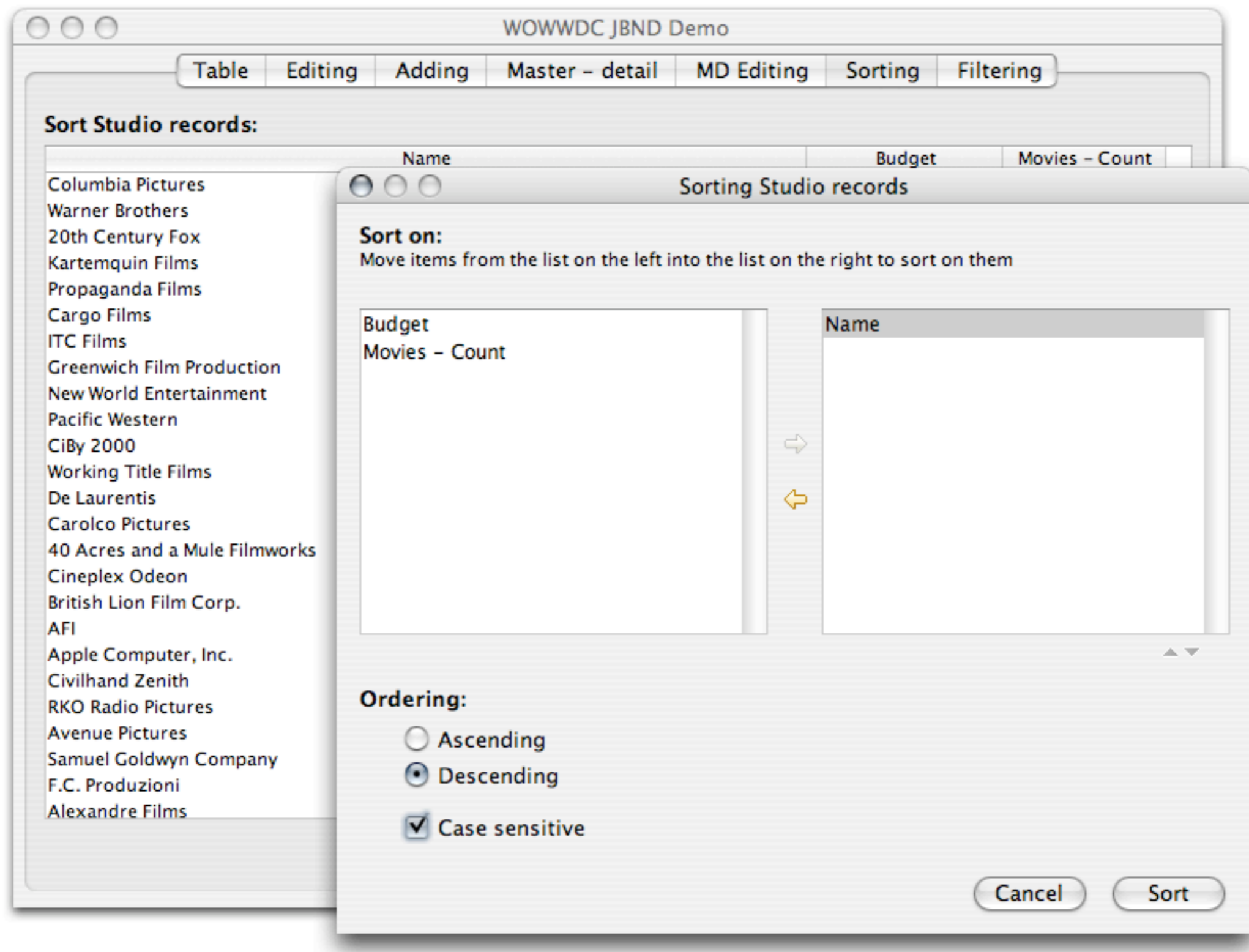
Batch viewing / editing...



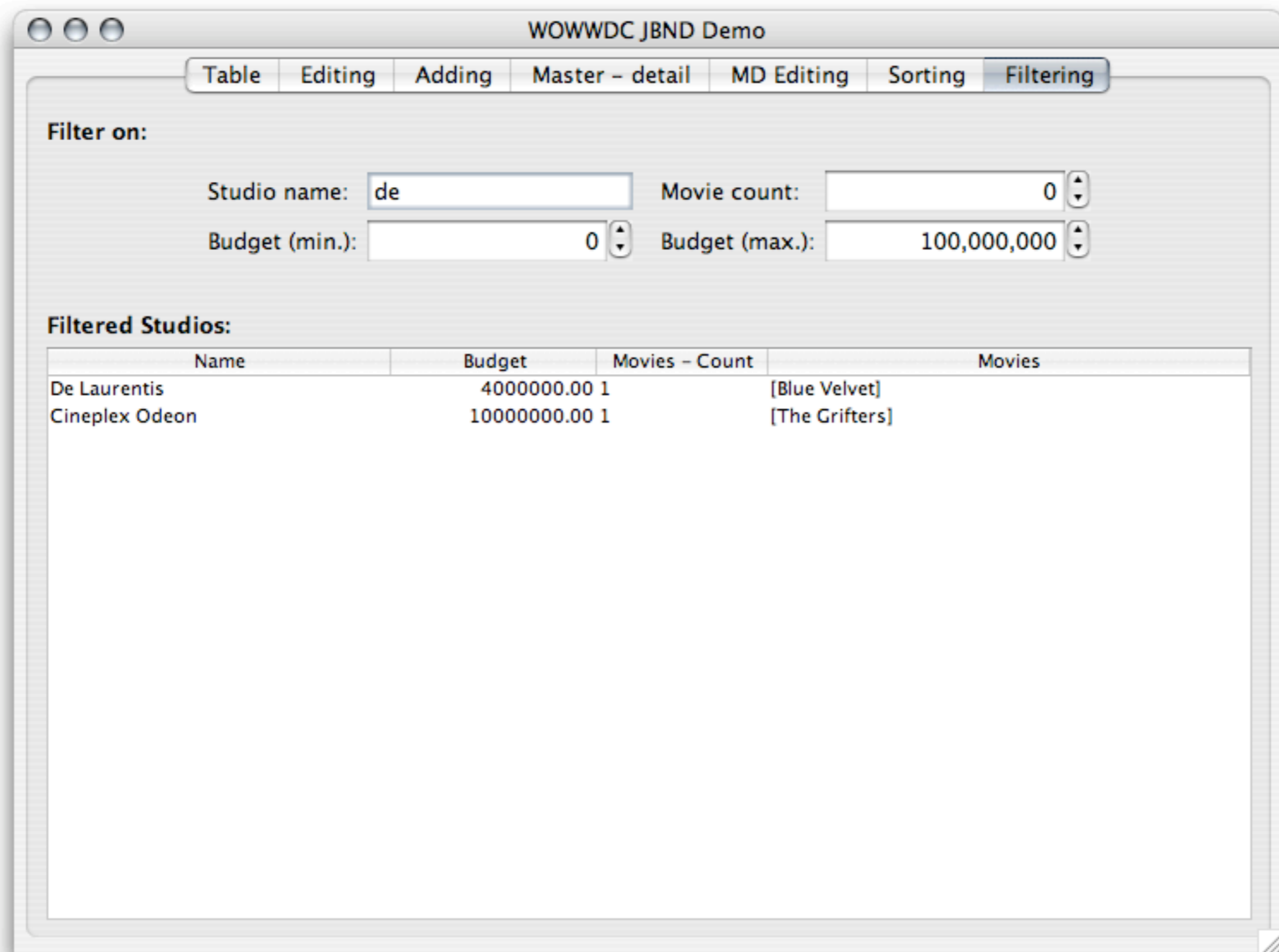
Master-detail viewing...



... and editing...

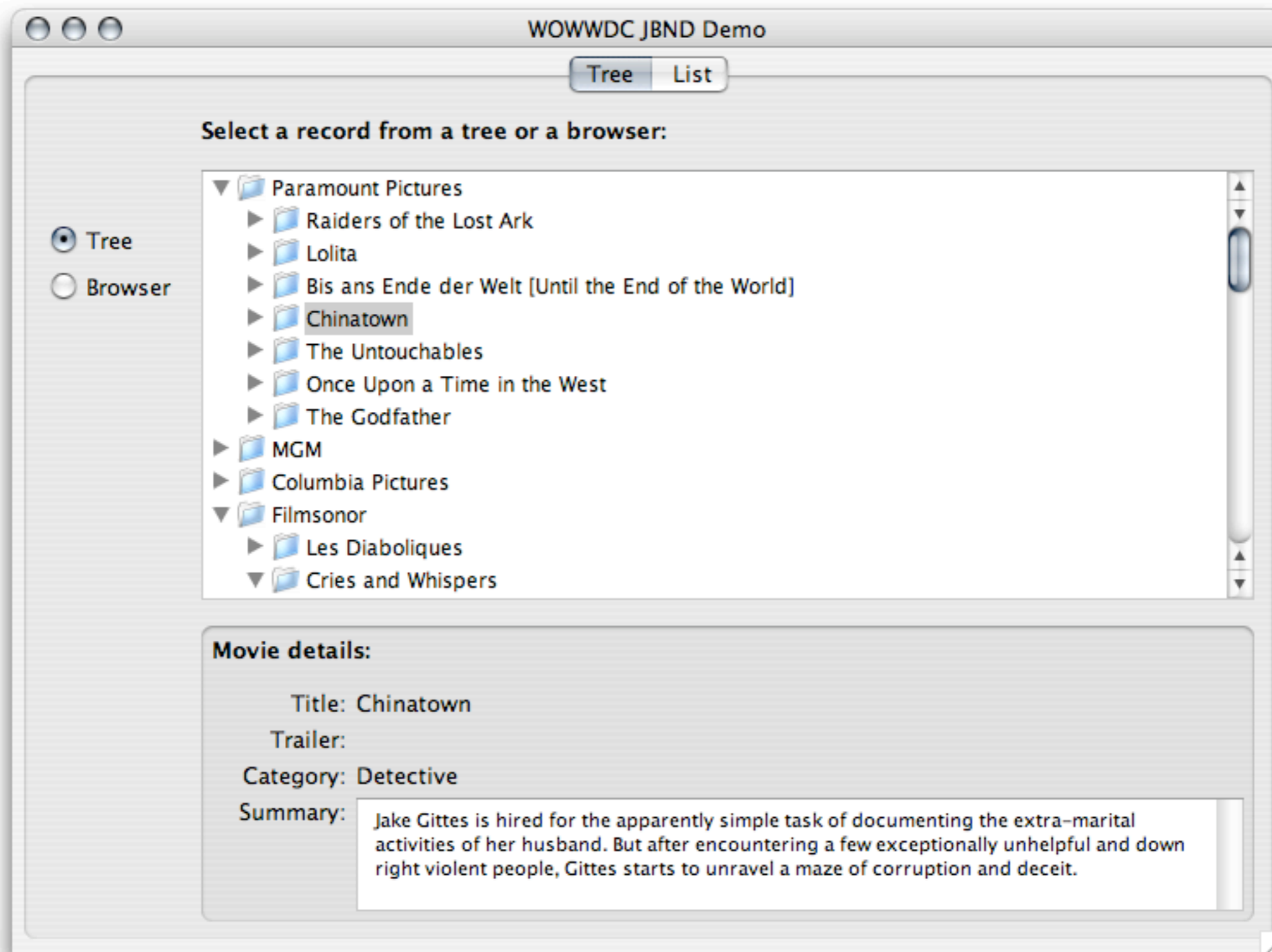


Easy sorting...

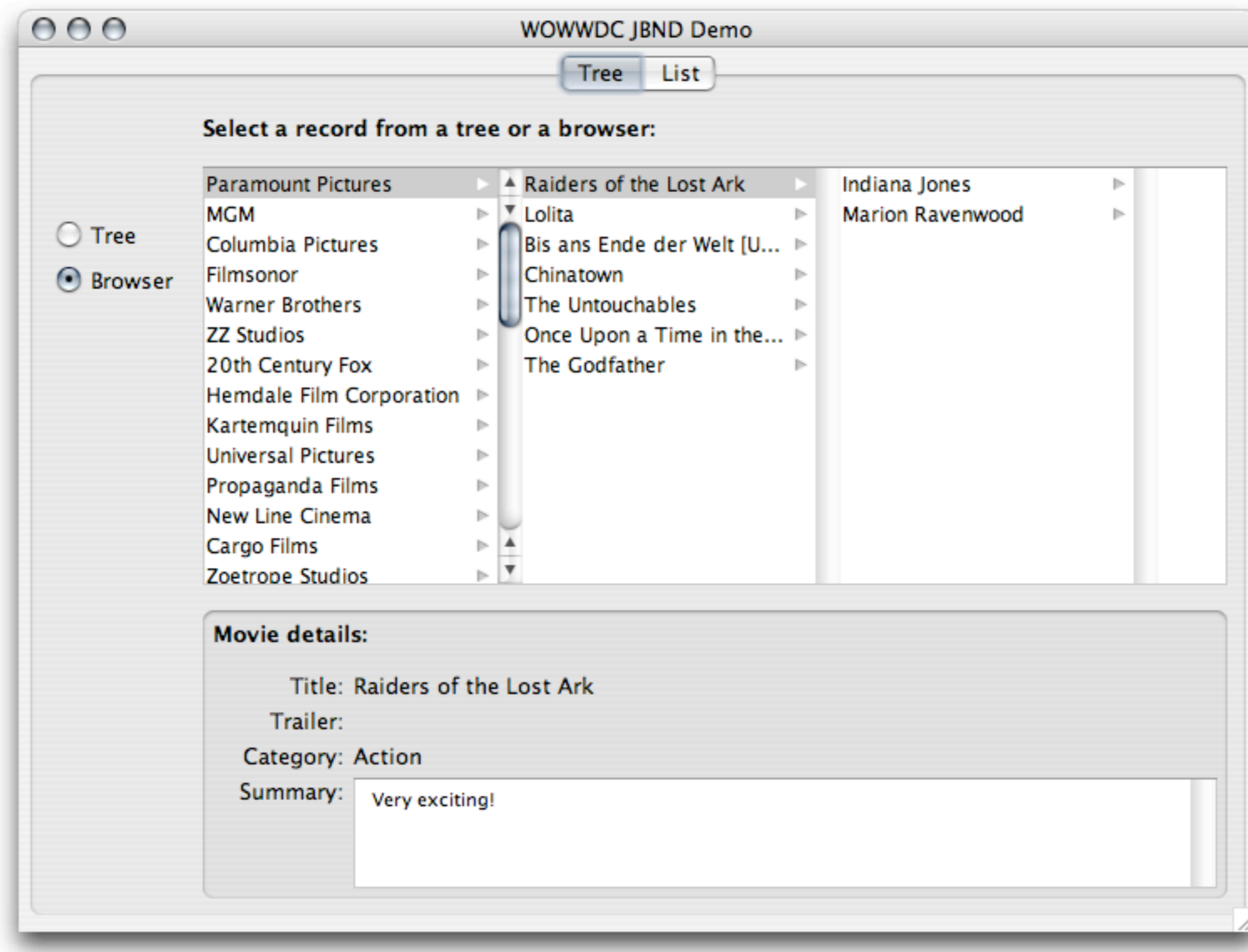


...dynamic filtering.

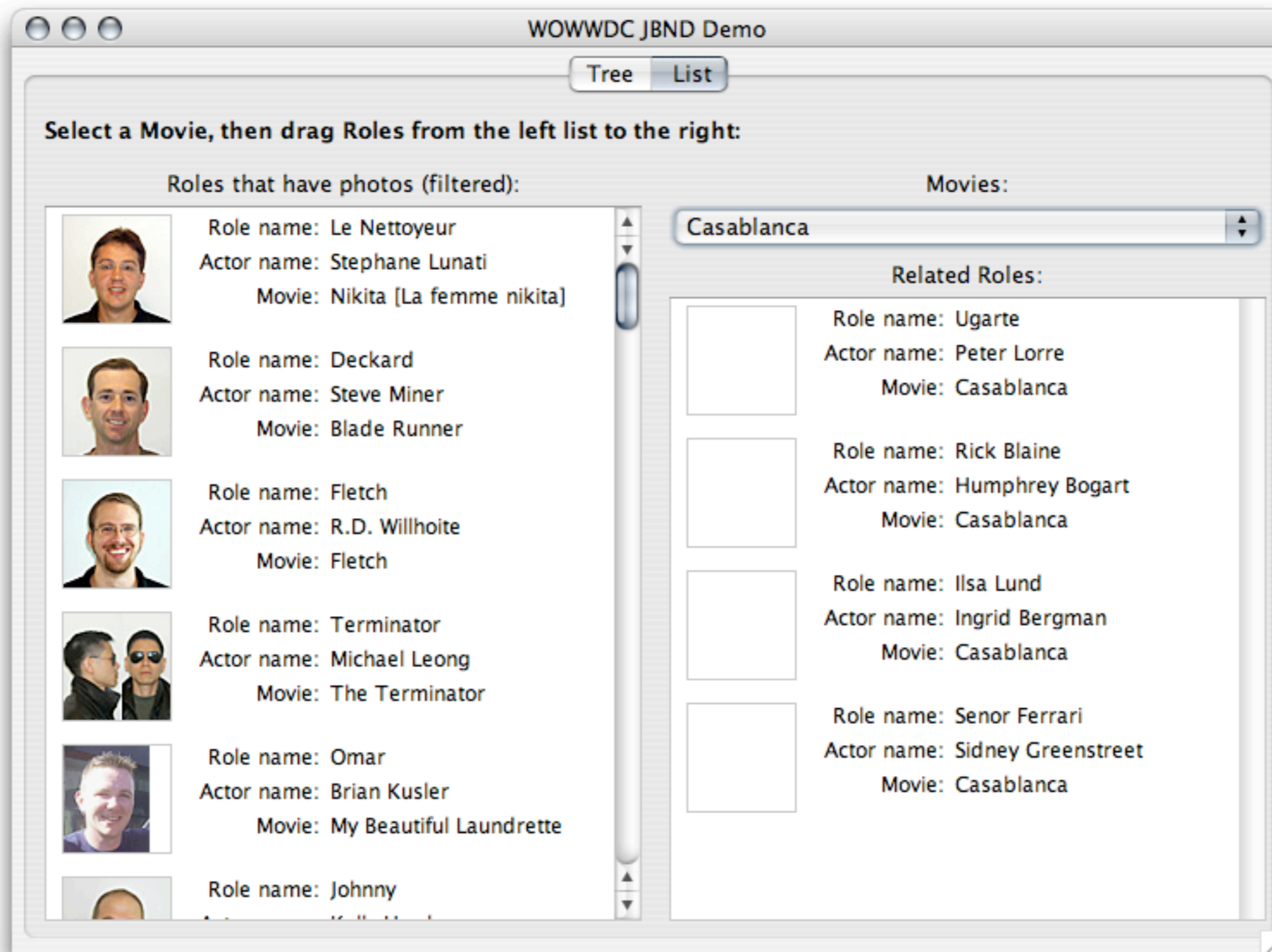
A few cute possibilities...



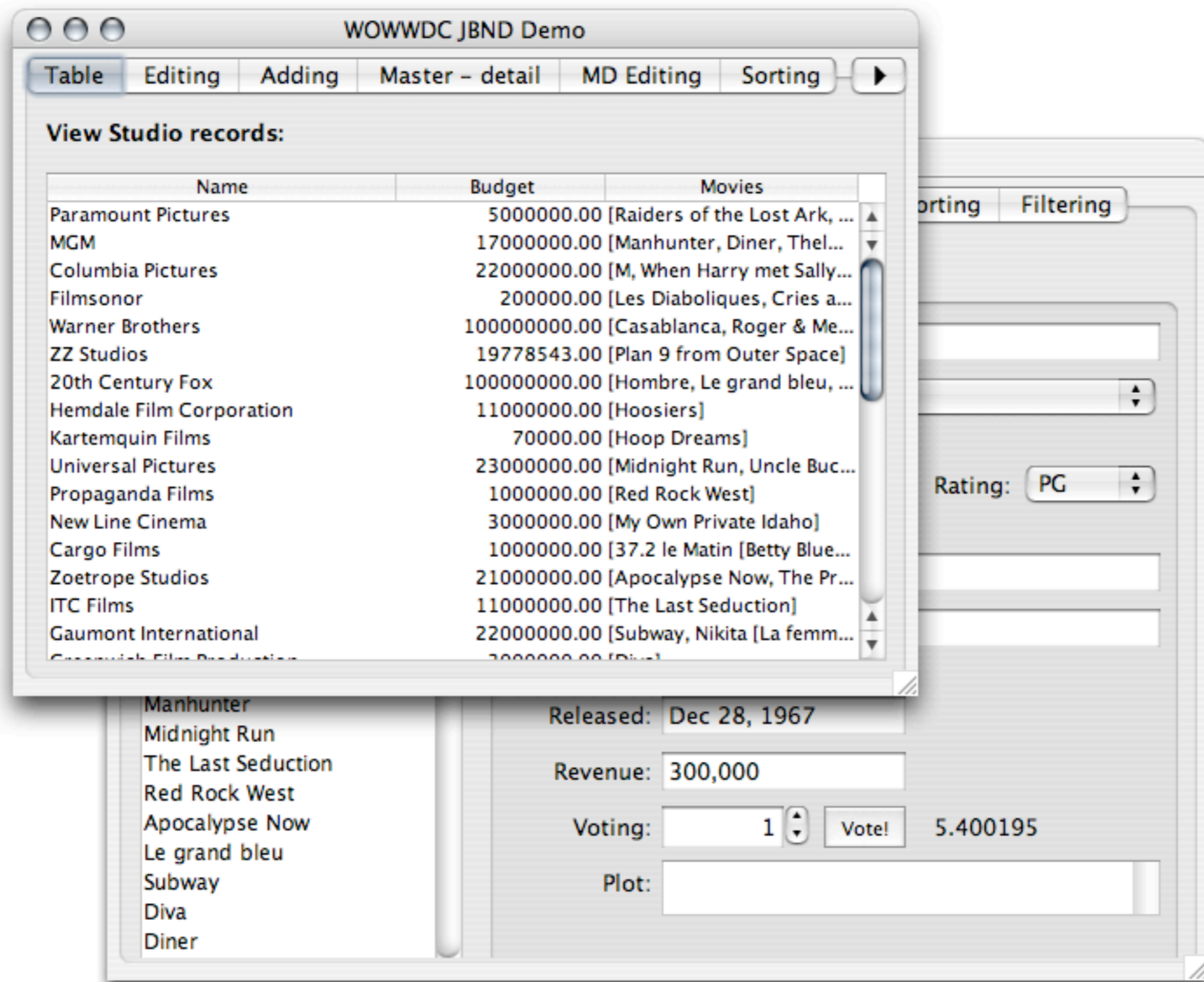
Trees...



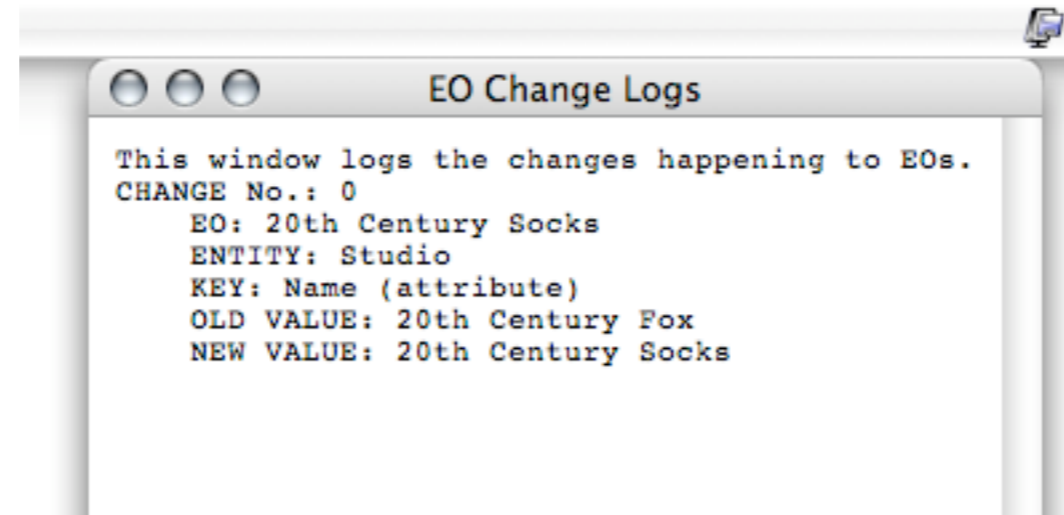
...and browsers...



Pretty drag'n'drop lists...



Multiple views in sync...



Change notification...

**And even more can be
done...**

**And even more can be
done...**

Cool, no?

Where to go from here?

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- This keynote is just an intro to the WOWODC JavaClient session, come!
- Many community resources on WebObjects
- The WebObjects development mailing list
- JBND

Learning resources:

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- WOCCommunity:
<http://www.wocommunity.org>
- Wiki documentation:
<http://en.wikibooks.org/wiki/Programming:WebObjects>
- Apple's WebObjects developer mailing list:
<http://lists.apple.com/mailman/listinfo/webobjects-dev>
- WebObjects JavaClient the 3rd way tutorial:
http://web.mac.com/flor385/eSwamp/software/wojc_tutorial.html

JBND

JBND

- Specialized library for WebObjects Java Client
- Made for Swing - WebObjects databinding
- Example app was made with it in 3 days
- Open source
- Plenty of documentation and example code
- <http://web.mac.com/flor385/JBND/>

Credits:

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Florijan Stamenkovic:
JBND, example app, keynote

The WebObjects community:
everything one could ask for..

This is not the end...

This is not the end...

...but the beginning!

Subliminal message below:

WebObjects Java Client
is the best thing since
warm water, you WANT
to use it!!!