chem-bla-ics

Bioclipse-Oscar4 - Text mining in Bioclipse

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Keywords
Oscar, Bioclipse, Beilstein

Abstract
Almost a year ago I started a position with Peter Murray-Rust to work on Oscar for three months (see this overview of results; a paper by the full Oscar team (Sam, David, Dan, Lezan) is pending, and I'm really happy to have been able to contribute bits to the project). Since then, I have had little time :(That's how it goes, with post-hopping, unfortunately. One thing I did do after that, was write a Bioclipse plugin.

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I was asked recently via LinkedIn if I was planning a Bioclipse-Oscar plugin, and I realized that I forgot to blog about it. So, here goes. The `oscar` manager I implemented follows the Oscar API , and these methods are available: `extractText()`, `findNamedEntities()`, `findResolvedNamedEntities()`.

When I wrote the plugin, I also uploaded an example workflow to MyExperiment. The code is:

```
// Demo showing the Oscar text mining functionality
// in Bioclipse
var html = bioclipse.download(
  "http://dx.doi.org/10.3762/bjoc.6.133",
  "text/html"
)
var text = oscar.extractText(html);
// the next step may take some time, while
// initializing the Oscar software for the
// first time
var mols = oscar.findResolvedNamedEntities(text);
var file = "/Oscar Demo/extractedMols.sdf";
cdk.saveSDFile(file, mols);
ui.open(file);
```

The code will extract chemical entities, and open a molecules table in Bioclipse:

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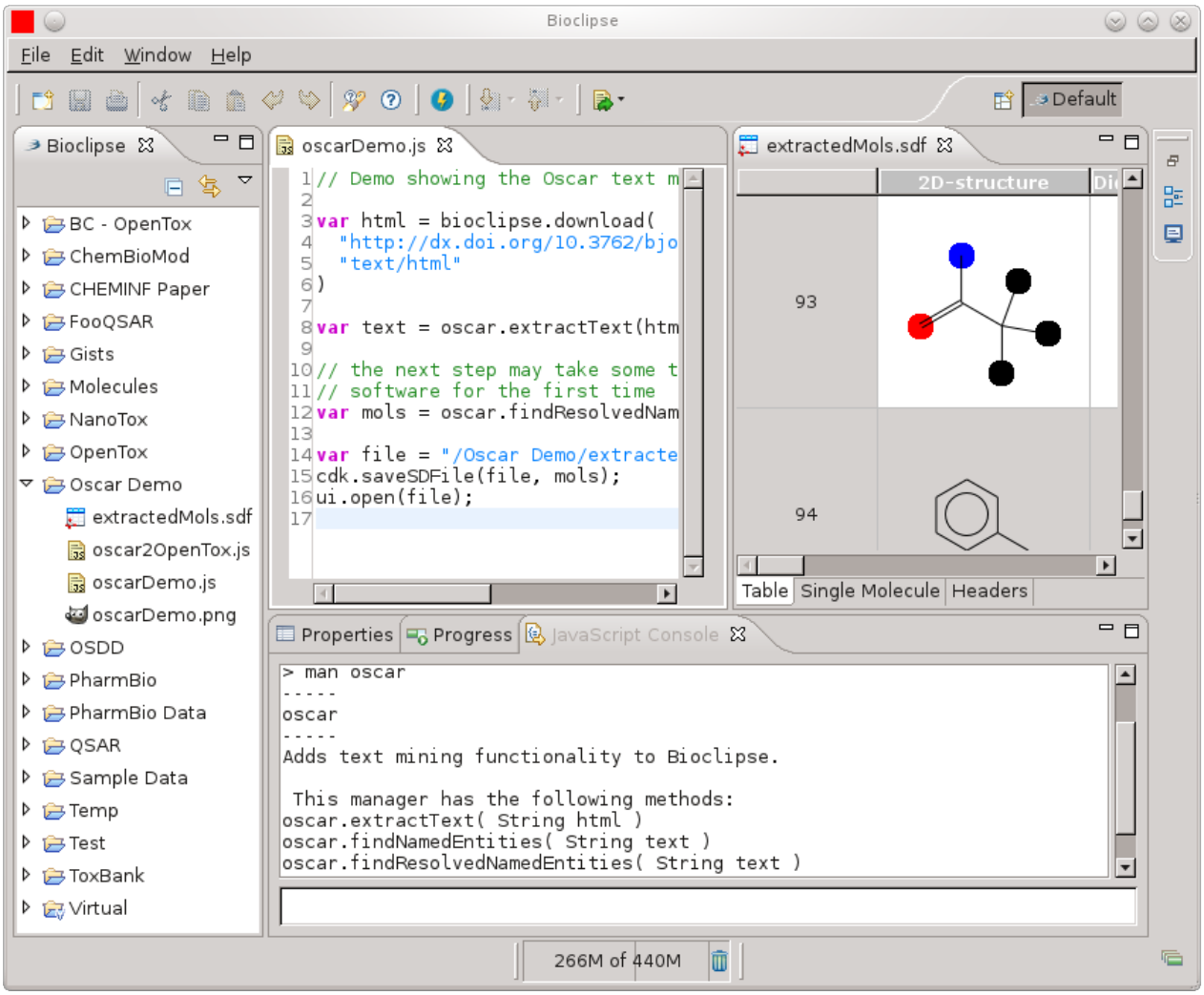
Bioclipse
File Edit Window Help
Default
Bioclipse
BC - OpenTox
ChemBioMod
CHEMINF Paper
FooQSAR
Gists
Molecules
NanoTox
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Oscar Demo
extractedMols.sdf
oscar2OpenTox.js
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PharmBio Data
QSAR
Sample Data
Temp
Test
ToxBank
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oscarDemo.js
1 // Demo showing the Oscar text m
2
3 var html = bioclipse.download(
4 "http://dx.doi.org/10.3762/bjo
5 "text/html"
6)
7
8 var text = oscar.extractText(htm
9
10 // the next step may take some t
11 // software for the first time
12 var mols = oscar.findResolvedNam
13
14 var file = "/Oscar Demo/extracte
15 cdk.saveSDFile(file, mols);
16 ui.open(file);
17
extractedMols.sdf
2D-structure
93
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Table Single Molecule Headers
Properties Progress JavaScript Console
> man oscar
-----
oscar

Adds text mining functionality to Bioclipse.
This manager has the following methods:
oscar.extractText(String html)
oscar.findNamedEntities(String text)
oscar.findResolvedNamedEntities(String text)
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