EMF Simple Object Notation (ESON), generic DSL syntax (instead XMI)
Xtext-based impl, BUT no *.xtext grammar - just your *.ecore (*.xcore)
EFactory (old name)

yes, *like* OMG HUTN
or say Google’s *Protocol Buffers Text Format* (but w.o. references)
or... few others like this.
HOW ?
grammar EFactory with org.eclipse.xtext.common.Terminals

Factory: root=NewObject
NewObject: eClass=[ecore::EClass|QualifiedName] (name=ID)? "{" (features += Feature)* "}"  
Feature: eFeature=[ecore::EStructuralFeature] "=" (value=Value)?

Value: MultiValue | Attribute | =>Containment | =>Reference
MultiValue: "[" (values += Value)* "]"
Reference: value = [ecore::EObject|QualifiedName]
Containment: value = NewObject;
Attribute: (StringAttribute | ... )
1. Create new/sync existing EObjects from the NewObjects (on load) but also ongoing for changes during editing of DSL!
2. Create new/sync existing NewObjects from EObjects (on save) but also ongoing for changes during editing of EObjects e.g. by some EMF Editor or programmatic access.

If you’re interested in looking under the hood:
1. `EFactoryDerivedStateComputer` implements `IDerivedStateComputer`
   ○ `ModelBuilder`
   ○ The (real) EObjects are “bulk re-created”
2. `EFactoryAdapter` extends `EContentAdapter`
   ○ `FactoryBuilder`
   ○ The NewObjects (DSL) are updated fine grained!
     (There is actually some duplication here, due to history; to clean-up, some time.)

but... how? - EFactory syncs two models!
It works - so what next?

1. org.eclipse.emf.eson (Bug #425671)
2. resource.getContents().get(1) vs. get(0) problem
3. Perf? E.g. Xtext Index Builder optimization
4. Syntax: Custom DataTypes support
5. Syntax: Optional Contained Types?
6. Content assist bug (@helpwanted)
7. JSON bi-di sync idea…
8. your-issue-here!
9. your-pull-request-here!!
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Priority</th>
<th>Created By</th>
<th>Created Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Custom Data Type parsing and serialization support</td>
<td>medium</td>
<td>vorburger</td>
<td>13 hours ago</td>
</tr>
<tr>
<td>2</td>
<td>Optional Contained Types (&quot;inference&quot;) - complicated because of ambiguity?</td>
<td>enhancement, low</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>3</td>
<td>Content assist improvements</td>
<td>enhancement, medium</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>4</td>
<td>Syntax Highlighting</td>
<td>high</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>5</td>
<td>Formatter</td>
<td>high</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>6</td>
<td>XFactory - Efactory for Java Beans (Xbase/Xtend)</td>
<td>enhancement, low</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>7</td>
<td>Standalone lib (Mavenized), easy API, and example</td>
<td>enhancement, low</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>8</td>
<td>Examples (incl. usual Wizard)</td>
<td>medium</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>9</td>
<td>Outline view</td>
<td>enhancement, high</td>
<td>vorburger</td>
<td>14 hours ago</td>
</tr>
<tr>
<td>10</td>
<td>Travis should only deploy to repository if on master</td>
<td>build</td>
<td>vorburger</td>
<td>20 days ago</td>
</tr>
<tr>
<td>11</td>
<td>Grammar fix for RULE_INT antlr error message</td>
<td></td>
<td>yann-andenmatten</td>
<td>4 months ago</td>
</tr>
</tbody>
</table>
Evaluate This Session

1. Sign-in: www.eclipsecon.org

2. Select session from schedule

3. Evaluate: +1 0 -1
EFactory

EFactory is a generic textual modeling language for EMF models. EF Factory is an alternative to the standard tree-based EMF editors. EF Factory is a generic EMF editor that provides all the advantages of a textual language. EF Factory can be used to instantiate any EMF based model including Ecore itself. Models defined using EF Factory integrate seamlessly into existing environments by being compatible on EMF resource level. For example, it is possible to reference an Ecore model that is defined using EF Factory from an Ecore model that is defined using a graphical Ecore editor.

Update site: http://sebastianbenz.de/efactory/releases/
So what’s new, actually?

1. State sync, two-way!!
2. Xtext Index compat.
3. Xcore compat. work
4. EPackage can now be from hosted plugins OR from workspace
5. The use'd EPackage real ref. instead String
6. Code base clean-up
7. Xtext version upgrade
8. Tycho CI Build & live p2 site with TravisCI.
9. Stability improvements
10. Bug Fixes
Tree UI
efactory

EFactory, clone of https://code.google.com/a/eclipselabs.org/p/efactory/, more e.g. on first blog http://blog2.vorburger.ch/2013/06/efactory-il-xobjects-ehutn.html, and introductory screen cast http://www.youtube.com/watch?v=ToUWqIRHkHY

How to Install?

- Eclipse Help > Install New Software... Add... new Repository Location http://www.vorburger.ch/efactory-repository/

How to Develop?

- get an Eclipse Dev IDE with PDE & modeling (Xtext)
- import all projects in this repository into Eclipse
- Window > Preferences > Plug-In Development > Target Platform: Switch to EFFactory as active target definition (from com.googlecode.efactory.target/com.googlecode.efactory.target.target)

Continuous Integration

see https://travis-ci.org/vorburger/efactory build passing
EFactory Form

```java
use testmodel.a

TestModel Michael {
    singleRequired = SingleRequired {}
    attributeTest = [ AttributeTestContainer {
        oneBool = true
        manyBool = [ true true ]
        oneInt = 1
        oneInteger = 1
        manyInt = [ 1 2 3 ]
        oneDouble = 1.1
        manyDouble = [ 1.1 2.2 3.3 ]
        oneEnum = :Sample2
        manyEnum = [ :Sample :Sample2 ]
        oneBigDecimal = 1.0 // 23798234.239492934800923642
        manyBigDecimal = [ 1.1 ]
        oneShort = 4
        manyShorts = [ 1 2 ]
        oneBigInteger = 1 // 23098234567890987654321
        manyBigInteger = [ 1 2 ]
        oneDate = 09.11.1979
        manyDates = [ 09.11.1979 00.10.0068 ]
    } ]
    children=[Child{}]
}
```
EFactoy II (Xobjects? eHUTN?), clone of https://code.google.com/a/eclipselabs.org/p/efactory/. — Edit

206 commits, 5 branches, 2 releases, 2 contributors

branch: master, efactory/

Fixed working Maven build for now

vorburger authored 2 days ago

latest commit a72ed4bc22

.settings

M2E Tycho connector thing stuff (caused by Project Import) 2 months ago

com.googlecode.efactory.fe...

Changed http://code.google.com/p/efactory/ to 2 days ago

com.googlecode.efactory.he...

added myself to Vendor :) for consistency with the core and ui plugin 14 days ago

com.googlecode.efactory.re...

fixing wrong outputDirectory for github:site-maven-plugin 2 months ago

com.googlecode.efactory.tar...

FIXED Could not find 20 days ago

com.googlecode.efactory.te...

Changed http://code.google.com/p/efactory/ to 2 days ago

com.googlecode.efactory.te...

Fixed working Maven build for new 2 days ago

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com.googlecode.efactory.te...

Fixed working Maven build for new 2 days ago

FIXED WIP all content assist tests finally green again now! What a mess 22 days ago
By day, product manager for Design Studio product line at TEMENOS, The Banking Software Company. DS products are Eclipse-based IDEs supporting implementations of Triple’A Plus & T24 core and private wealth management banking packages.

By night, occasionally a hacker for Mifos humanitarian OSS Microfinance (GSoC Google Summer of Code mentor), Scratch/LEGO WeDo/Mindstorms with kids (YouTube channel!), AngularJS UI POCs, ...