

# Grafische Editoren mit GMF entwickeln

Robert Wloch (itemis AG)

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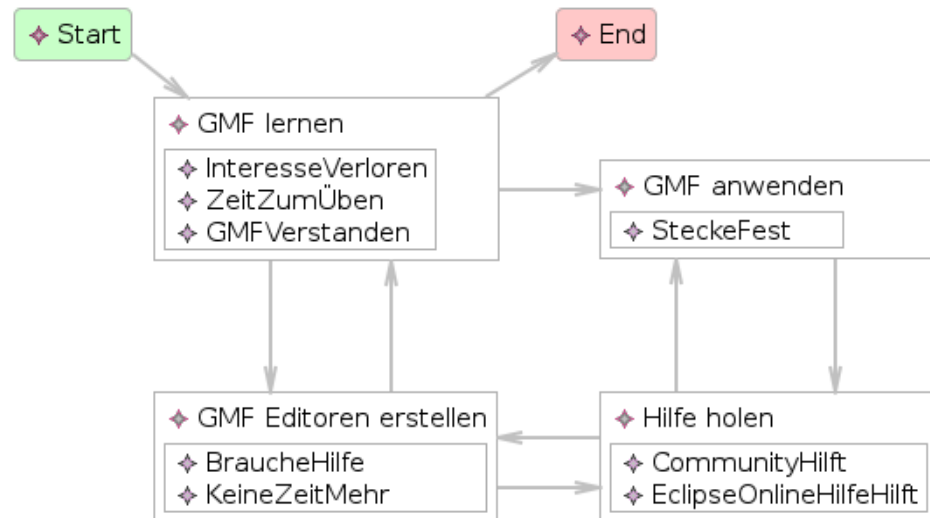
## Über mich

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  - Blog: <http://blogs.itemis.de/wloch/>



## Agenda/Übersicht

- (1) Bausteine
  - (1) EMF
  - (2) GEF
  - (3) GMF
- (2) Einstiegshilfen / Links
- (3) Beispiele
  - (1) Workflow
  - (2) Reverse Engineered GMF Editor
- (4) Fragen / Diskussion

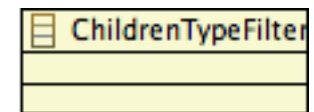
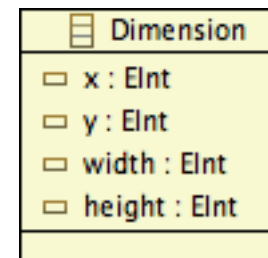


## Bausteine::Eclipse Modeling Framework (EMF)

- <http://help.eclipse.org/ganymede/index.jsp> → EMF Developer Guide → Programmer's Guide
  - „EMF Framework Programmer's Guide“ bietet guten Einstieg in EMF

- Erstellen von **.ecore** Modellen mittels:

- Baueditor (unübersichtlich)
- XML Schema Definition (Texteditor)
- UML Modellierungstools (z. B. MagicDraw)

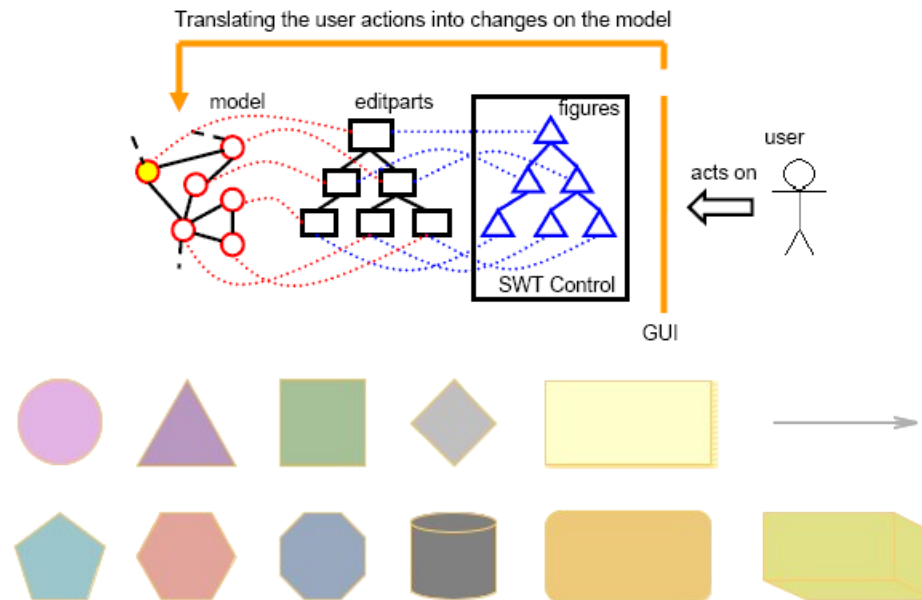


- Basis zur Codegenerierung ist das EMF GenModel

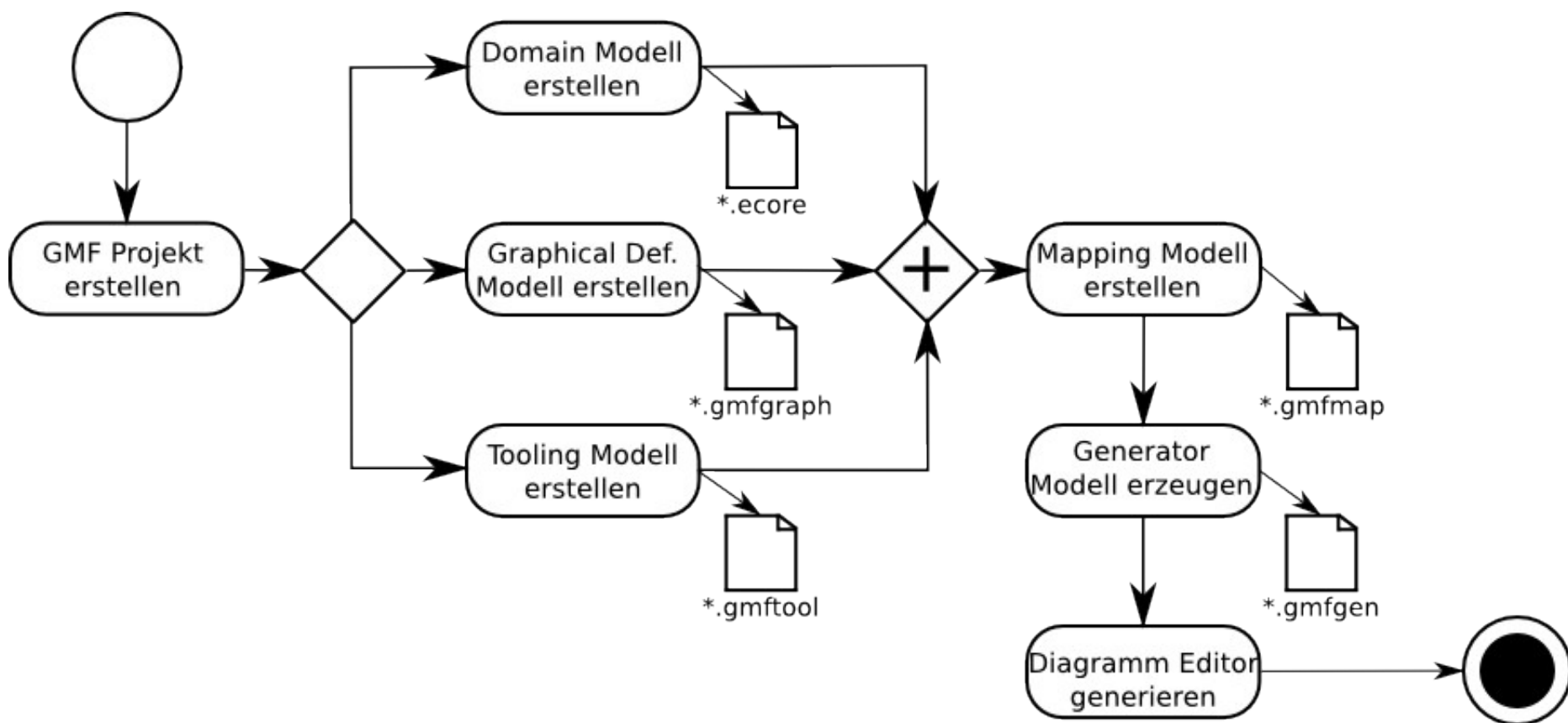
- File→New→Other→Eclipse Modeling Framework→EMF Model

# Bausteine::Graphical Editing Framework (GEF)

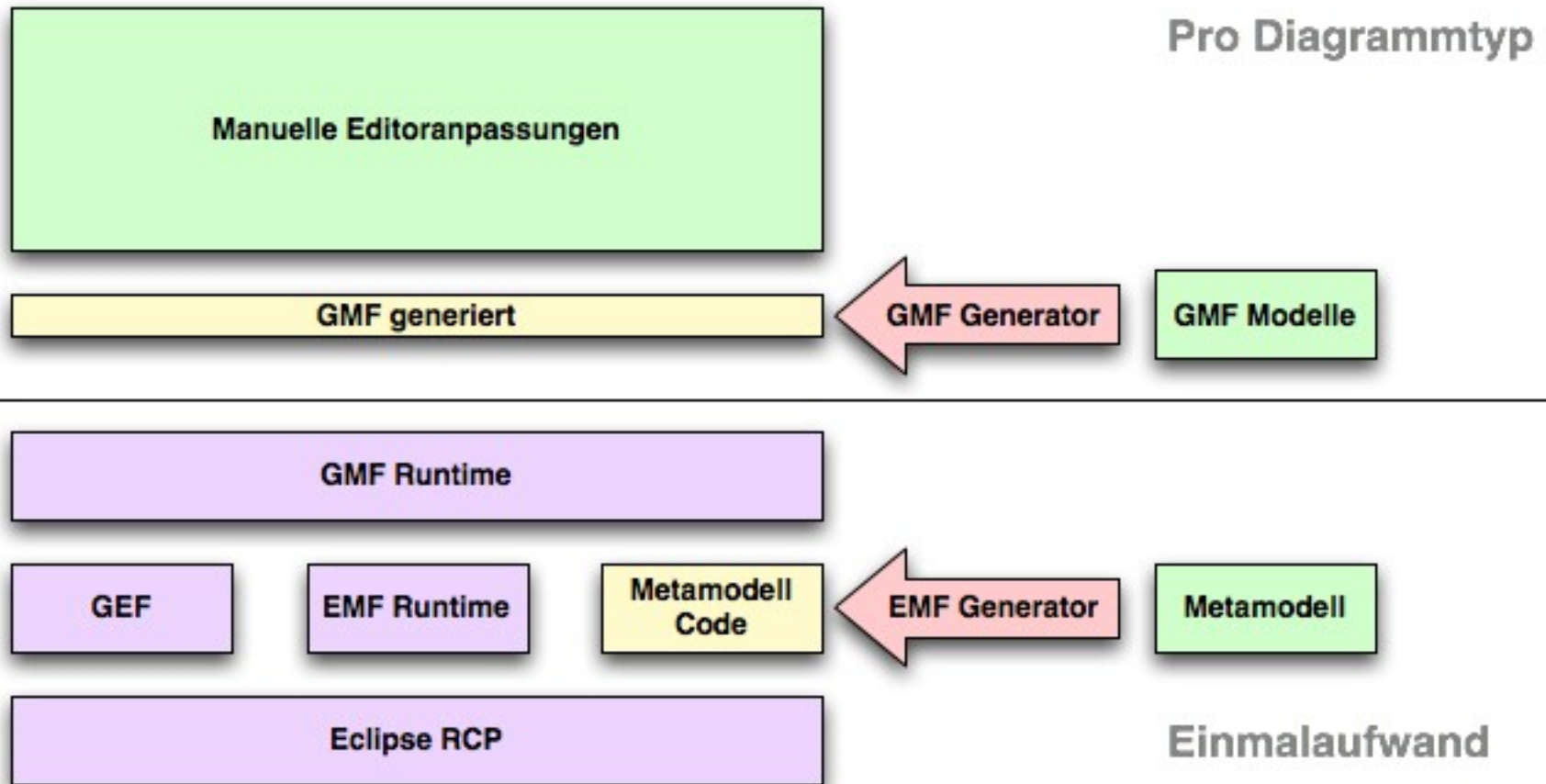
- <http://help.eclipse.org/ganymede/index.jsp> → GEF and Draw2d Plug-in Developer Guide → Programmer's Guide → [Draw2d|GEF]
- <http://wiki.eclipse.org/GEF> → [GEF Description|GEF Description2]



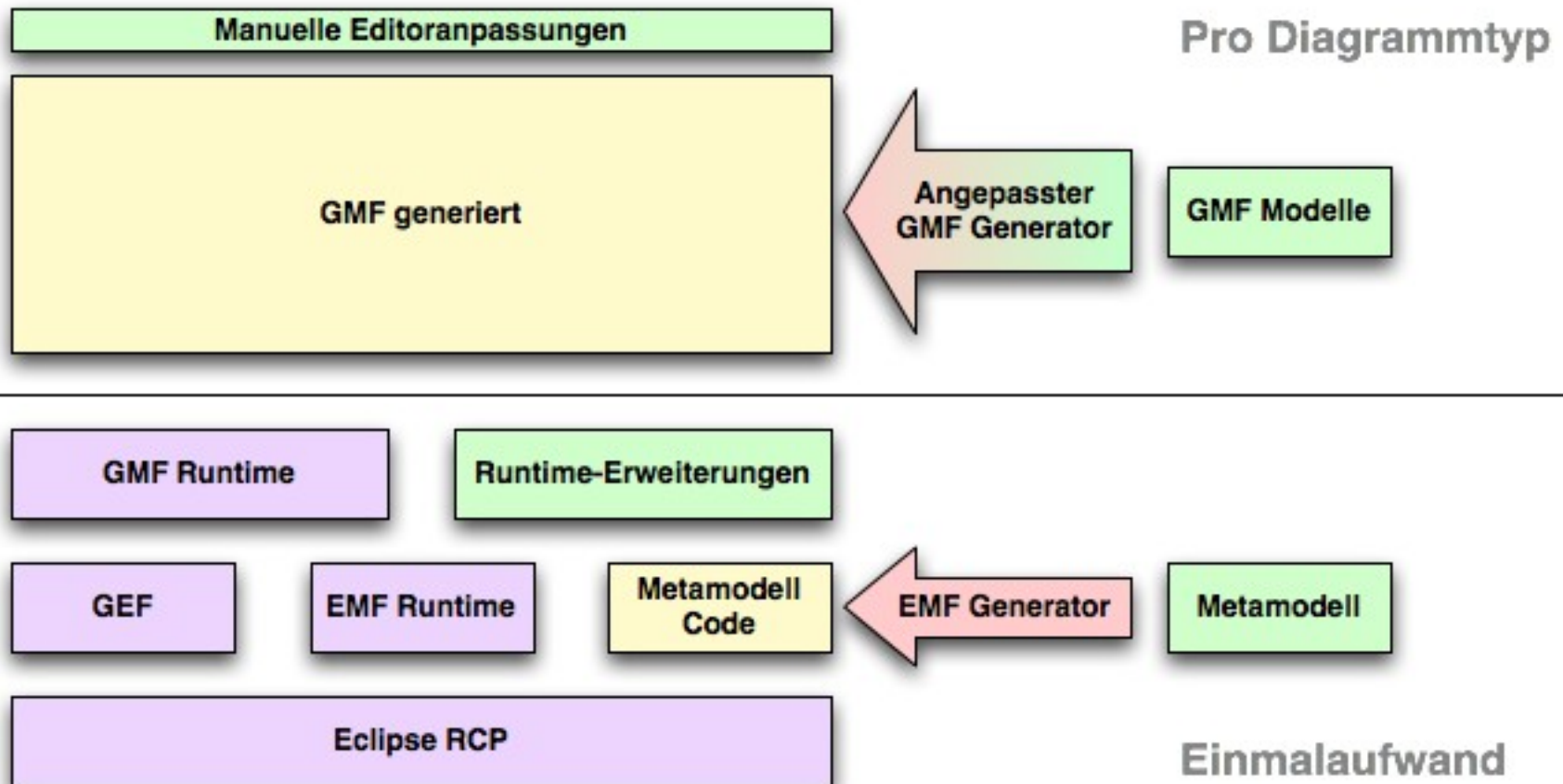
## Bausteine::GMF



## Bausteine::GMF für Anfänger



## Bausteine::GMF für Experten

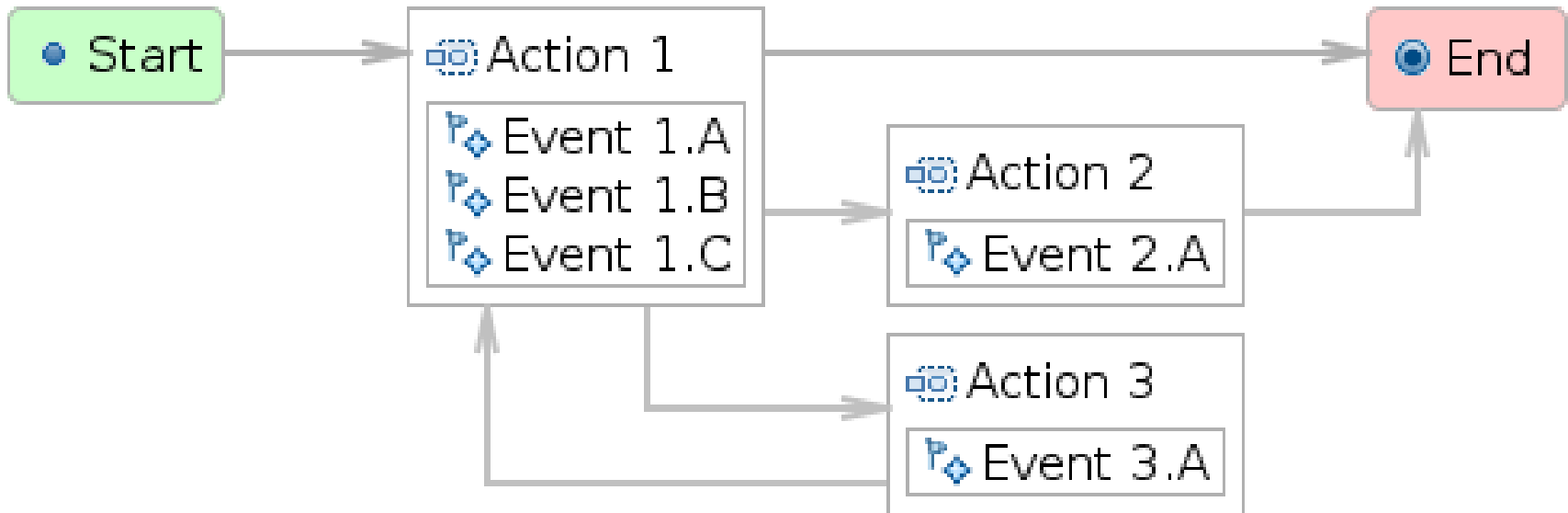




## Einstiegshilfen / Links

- <http://help.eclipse.org/ganymede/index.jsp> →
  - EMF Developer Guide → Programmer's Guide → EMF Framework Programmer's Guide
  - GEF and Draw2d Plug-in Developer Guide → Programmer's Guide → [Draw2d|GEF]
  - GMF Developer Guide → Programmer's Guide → Runtime
  - GMF Developer Guide → Tutorials → [Tooling|Runtime]
- [http://wiki.eclipse.org/\[EMF|GEF|GMF\]](http://wiki.eclipse.org/[EMF|GEF|GMF])
- Newsgroups ([http://www.eclipse.org/newsgroups/index\\_all.php](http://www.eclipse.org/newsgroups/index_all.php)):
  - EMF:       news.eclipse.tools.emf
  - GEF:       news.eclipse.tools.gef
  - GMF:       news.eclipse.modeling.gmf

## Beispiele::Workflow



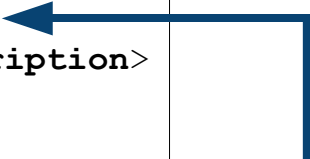
## Beispiele::Reverse Engineered GMF Editor

```
<?xml version="1.0" encoding="UTF-8"?>
<world name="Middle Earth" type="XYGrid">
  <description>A small fantasy world.</description>

  <location land="ocean">
    <position name="x" value="0"/>
    <position name="y" value="0"/>
  </location>

  <location land="forest">
    <position name="x" value="0"/>
    <position name="y" value="1"/>
  </location>

  <location land="mountain">
    <position name="x" value="0"/>
    <position name="y" value="2"/>
  </location>
</world>
```

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- Wurzelement ergänzen um
    - `xmi:version="2.0"`
    - `xmlns:xmi="http://www.omg.org/XMI"`
    - `xmlns="myNameSpace"`

**Vielen Dank  
für Ihre Aufmerksamkeit!**