



The Privacy Related Meta Model

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The Privacy Related Meta Model



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Where we stand

- ▶ We have an implementation for a model suggester based on GDPR standards;
- ▶ We have an implementation for retraining our suggester after the user has made changes to its results.



What we need

- ▶ A coupled model, to associate to every evaluated ecore, which contains the evaluation results.



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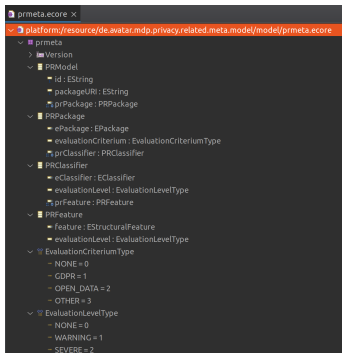
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The PR Meta Model





The PR Meta Model

- ▶ The `PRModel` contains a list of `PRPackage`;
- ▶ Every different evaluation (based on different criteria) should trigger the creation of a new `PRPackage`
- ▶ Every `PR` model counterpart has a reference to the actual model element, plus additional info on the evaluation result.



The PR Meta Model

I built a service that is responsible of operations on the PRModel

```
@ProviderType
public interface PRMetaModelService {

    List<PRModel> getPRModelByNsURI(String... modelNsURIs);

    void savePRModel(PRModel prModel);

    PRModel createPRModel(EvaluationSummary evaluationSummary, EPackage
        ePackage);
}
```



The PR Meta Model

In the Vaadin UI now, we have a **Show** view which displays the content of an **EPackage**, together with appropriate warnings, based on the selected evaluation criteria.

The screenshot shows a web application interface for 'DATA IN MOTION'. The main view is titled 'Show'. On the left, there is a sidebar with options: Search, Upload, Evaluate, and Show (which is selected). The main content area has a search bar with the text 'person'. Below the search bar, there is a table with the following data:

Name	No. URI	Inspect
person	http://avatar.de/mo/person/1.0	

Below the table, there is a section titled 'Select the criteria:' with a dropdown menu showing 'GDPR'. Below this, there is a table titled 'StructuredFeatures' with the following data:

Name	EType	Cardinality
id	EDString	0..1
cc	EDString	0..1
st	EDString	1..1
state	EDString	0..1
street	EDString	0..1
zip	EDString	0..1

A tooltip is visible over the 'st' row, stating: 'Potential risk element based on the selected criteria.'



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Next Steps

- ▶ When a model is registered we could in principle automatically evaluate it using all the implemented evaluation criteria we have (so far only GDPR);
- ▶ In such a way the PRModel is immediately created and stored and then every time we need the model, we can load its PRModel counterpart instead;
- ▶ Additional next steps have to be discussed.



Conclusion



Useful Links

OSGi Working Group

Working Group: www.osgi.org

WG Blog: www.osgi.org/blog

Twitter: [@osgiwg](https://twitter.com/osgiwg)

Bndtools: bndtools.org

Data In Motion

Web: www.datainmotion.com

Blog: datainmotion.com/blog

Twitter: [@motion_data](https://twitter.com/motion_data)

Jürgen Albert

Email: j.albert@data-in-motion.biz

Mark Hoffmann

Email:
m.hoffmann@data-in-motion.biz