Chapter 1

Magritte: Meta-data at Work

Many applications consist of a large number of input dialogs and reports that need to be built, displayed and validated manually. Often these dialogs remain static after the development phase and cannot be changed unless a new development effort occurs. For certain kinds of application domains such as small-businesses, changing business plans, modifying workflows, etc. it usually boils down to minor modifications to domain objects and behavior, for example new fields have to be added, configured differently, rearranged or removed. Performing such tasks is tedious.

Magritte is a meta-data description framework. With Magritte you describe your domain objects and among other things you can get Seaside components and their associated validation for free. Moreover Magritte is self-described, enabling the automatic generation of meta-editors which can be adapted for building end-user customization of application.

In this chapter we describe Magritte, its design and how to customize it. Now be warned, Magritte is a framework supporting meta-data description. As any framework, mastering it takes times. It is not a scaffolding engine, therefore Magritte may imply some extra complexity and you have to understand when you want to pay for such complexity.

1.1   Magritte by Example

In this section we present the key principles. With such a knowledge you can get 80% of the power of Magritte without knowing all its possible customizations. The key idea behind Magritte is the following: given one object with a set of values, and a description of this information, we create tools that can treat such an information. For example automatically

create Seaside components. Figure 1.1 shows that a conference, ESUG'12, instance of the class Conference, is described by a description object. A program (database query, generic ui, seaside component builder) will interpret the value of the instance by using its descriptions.
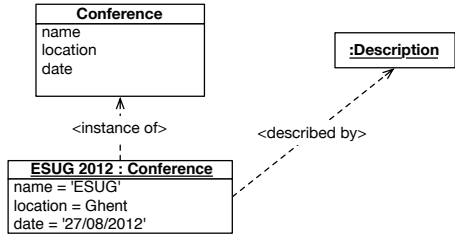

Figure 1.1: An object is described by a description in addition to be defined by its class.

Loading Magritte 30