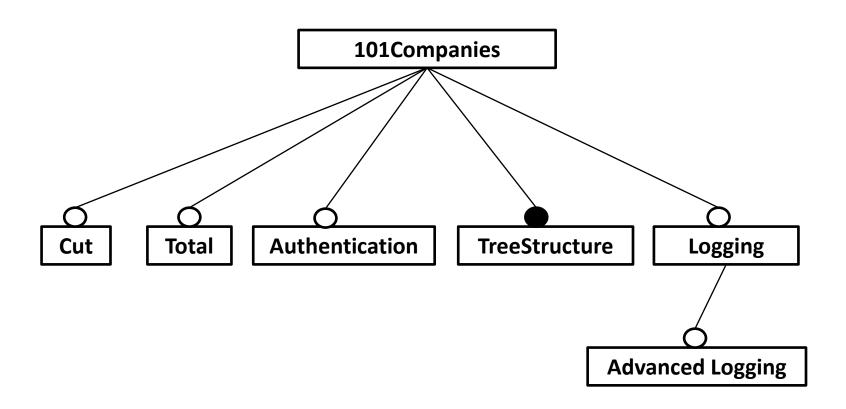# 101Companies
The software product line

Feature model

Getting Grails

- Make sure you have JDK installed
- Go to http://grails.org/download and grab the latest zip
- Extract zip to your preferred location
- Set GRAILS_HOME to that location
- Add $GRAILS_HOME/bin to environment

Generating new products

Three phases:

- Phase 1: prepare the source project folder
- Phase 2: run Hephaestus-code tool*
- Phase 3: run the generated product

* Hephaestus-code is currently available for windows.

Phase 1 - Preparing the source project

- In the 101Companies folder rename grails-app, web-app and WEB-INF folders to grailsapp, webapp and WEBINF respectively
- Inside grailsapp\views\company, grailsapp\views\department and grailsapp\views\employee rename the _form.gsp to form.gsp

Phase 2 – Executing the Hephaestus

Inside 101Companies\hephaestus folder, choose the product configuration between some of the existing instance models or create a new xml file following the same pattern of the existing instance models and save

```xml
<feature name="Companies" type="NONE" id="Companies">

<feature name="treeStructure" type="NONE" id="treeStructure"></feature>
<feature name="cut" type="NONE" id="cut"></feature>
<feature name="total" type="NONE" id="total"></feature>

</feature>
```

Open the project.properties file

- Set the path to where this folder is located in your computer in all fields

- Set the instance-model field to the instance you have chosen

- Set the target-dir field to the directory where the project will be generated

```
name=101Companies
feature-model=C:\101companies-grails\101Companies\hephaestus\featureModel.xml
configuration-model=C:\101companies-grails\101Companies\hephaestus\ck.xml
instance-model=C:\101companies-grails\101Companies\hephaestus\instanceModelComplete.xml
component-model=C:\101companies-grails\101Companies\hephaestus\componentModel.txt
source-dir=C:\101companies-grails\101Companies\
target-dir=C:\101companies-grails\101Companies\hephaestus\generated\complete\
```

Warning!

If you choose a target directory where a product has already been generated, clean the folder before generating a new product

In your command line

- Go to hephaestus folder
- Run `VMCODE.exe`
- Type `project.properties` and hit enter
- When the program asks to generate the product, type y and hit enter
- If no warnings appears, the product was generated with success

Phase 3 – Run the generated product

- In the 101Companies folder rename grailsapp, webapp and WEBINF folders to grails-app, web-app and WEB-INF respectively

- Inside grailsapp\views\company, grailsapp\views\department and grailsapp\views\employee rename the form.gsp to _form.gsp

In your command line

Go to the generated product directory type
`grails run-app` and hit enter