



 **EGF Exercices – Factory Component–UC1**  
**EGF 0.2.4**

**Benoît Langlois – Thales/EPM**

## Understanding how to develop factory components with EGF

### Correction of the exercices

- ▶ Download the `org.eclipse.egf.usecase.fc.uc1-egf0.2.4.zip` file on the [EGF wiki](#)

### Prerequisite

- ▶ Installation of `egf 0.2.4`
- ▶ Understanding how to create factory components is explained in the « Eclipse Help/EGF section/Tutorials »

## Problem Statement

- ▶ 1. Writing a Java Task with one parameter, named *value*, which displays:  
« Hello [value]! »
- ▶ The default value of *value* is « World »
- ▶ 2. Writing a factory component which calls the Java Task 1) without value for  
« value », 2) with a value for « value »

## Learning

- ▶ Creation of factory component and Java Task

## Difficulty

- ▶ 1/5

## Correction

- ▶ FC\_UC1\_1\_FCAndTask.fcore

### Problem Statement

- ▶ 1. Writing a factory component FC1 with one contract. This contract is used to invoke the Java task of the exercice 1.
- ▶ 2. Writing a factory component FC2 which calls FC1 and provides the value to FC1.

### Learning

- ▶ Factory component contract

### Difficulty

- ▶ 1/5

### Correction

- ▶ FC\_UC1\_2\_FCWithContracts.fcore

## Problem Statement

- ▶ 1. Writing a PricerComputation Java task which computes an amount from a quantity and a price
- ▶ 2. Writing a PricerDisplay Java task which displays a quantity, a price and an amount
- ▶ 3. Writing a factory component which calls PricerComputation and PricerDisplay to compute and display an amount from a quantity and a price

## Learning

- ▶ Factory component contract I / Out mode

## Difficulty

- ▶ 2/5

## Correction

- ▶ FC\_UC1\_3\_FCPricer.fcore
- ▶ The correction presents 1) a solution with the task invocation, and 2) a solution with intermediary factory components only to understand In and out passing mode between factory components and tasks