Code Generation

Summary

The eGovFrame’s IDE provides the following Gode Generation feature.

Template-based Code Gen

This tool enables creating eGovFrame-compliant CRUD programs based on pre-defined templates, or easily editing configuration/property files.

Model-based Code Gen

This tool enables creating eGovFrame-compliant Java codes based on class diagrams.

Description

The eGovFrame IDE’s Code Generation provides the following features.

|  |  |
| --- | --- |
| Architect | Application program design model and prototype |
| Developer | Source code development and rapid testing |
| Maintainer | Use of standard templates for readability and maintenance with high reliability |

Manual

Template-based Code Gen

Auto-generating CRUD programs

Auto-configuration

Adding custom templates

Model-based Code Gen

Auto code generation based on the IDE’s UML class diagrams

Auto code generation using XMI files

Export the IDE’s UML class diagrams as XMI files

Updating the Code Generation

In order to use the Code Generation, the eGovFrame IDE needs to be downloaded or updated from the portal.

1. Updating via eGovFrame Perspective

eGovFrame provides an update method as below.

1. Choose eGovFrame > Configuration > Customize Development Tool from the eGovFrame main menu. (See <Figure 1>)

2. Check the eGovFrame CodeGen and the eGovFrame CodeGen Template checkboxes, and click Next. (See <Figure 2>)

|  |  |
| --- | --- |
| 설계자 | 응용 프로그램 설계 모형 집중과 Prototype을 통해 위험 예방 가능 |
| 개발자 | Source C ode 개발 집중과 빠른 테스트 수행 가능 |
| 유지보수자 | 표준 템플릿 형태로 높은 이해 제공, 신뢰성 높은 유지보수 가능 |

<Figure 1> Menu

<Figure 2> Install CodeGen

2. Updating via URL

The updating procedure via URL is as follows.

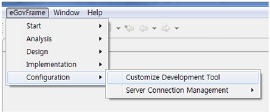
1. Choose Help > Install New Software from the Eclipse menu. (See <Figure 3>)

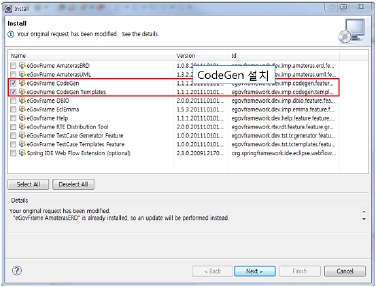
2. In the Work with text field, enter http://www.egovframe.go.kr/update

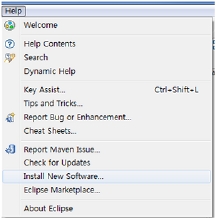
[http://www.egovframe.go.kr/update]

3. Expand the sub-options under the URL, check the eGovFrame CodeGen and the eGovFrame CodeGen Templates checkboxes, and click Next. (See <Figure 4>)

<Figure 3> Install New Software







<Figure 4> Updating via URL

Notes

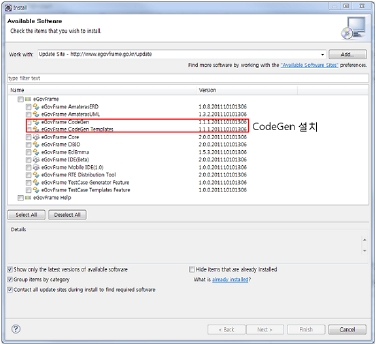
In order to upgrade the Code Generation from the existing IDE, ensure that the encoding option is set to UTF-8. You need to enter the following line into the eclipse.ini file.

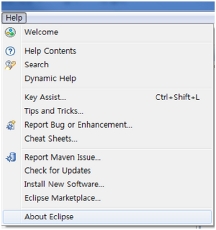
-Dfile.encoding=UTF-8

Model Based Code Generation feature uses Eclipse UML 2.0 library by default.

Once you update the CodeGen plug-in and then the IDE, the said library gets updated automatically as well. If it still does not work properly, check if Eclipse UML 2.0 was installed properly. How to check Eclipse UML 2.0 installation is as below.

<Figure 5> Help > About Eclipse Platform from the menu





<Figure 6> Click the Plug-in Detail button

<Figure 7> Confirm Eclipse UML 2.0 from the list of plug-ins

If you cannot find the plug-in from the list, you need to manually update the plug-in.

Helios Update Site > Models and Model Development > UML 2 End-User Features

Helios Update Site > Models and Model Development > UML 2 Extender SDK



