# 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.

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

### 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>)

Start	+		
Analysis			
Design			
Implementation	-		
Configuration		Customize Development Tool	
	_	Server Connection Management	

<Figure 1> Menu

(i) your original request has been modified. See the detail	li.		9	
Name	Varian 1.0.8 Coder 1.1.1 Control 1.1.1 Control 1.1.2 Coder 1.1.1 Control 1.3.2 Coder 1.1.2 Coder 1.1.2 Coder 1.1.2 Control 1.1.2 Co	네 Gen 설치 sgovframework sgovframework sgovframework sgovframework sgovframework sgovframework org apringframe	Apularip a material end fe which a material with the which codependents of devices and better the devices and better the devices and better the devices and better the the of the test of the the of the test of the the set to be test of the material the set of the material the set of the material the set of the set of the set of the material the set of the set of the set of the set of the set of the set of the s	
Select All Deselect All Details rear original request has been modified "eGov/name AmateriaCPIC" is already installed, so an upd	late will be performed instea	d.		an cul

<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>)

Help	P	
3	Welcome	
1	Help Contents	
92	Search	
	Dynamic Help	
	Key Assist	Ctrl=Shift+L
	Tips and Tricks	
1	Report Bug or Enhancement	
	Cheat Sheets	
8	Report Maven Issue	
	Check for Updates	
	Install New Software	
	Eclipse Marketplace	
	About Eclipse	

<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

nstalled	Software Installation History	Features Flug-Ins Configuration		
Sign	Provider	Plug-in Name	Version	Plug-in Id ^
¥1	Eclipse Web Tools Platform	Web service Axis Consumpti	1.0.406.v2010	org.eclipse.jst.ws.axis
	Eclipse.org	Web Plug-in	11.404.v2011	org.eclipse.jst.j2ee.we
81	Eclipse Web Tools Platform	Web Capabilities	1.0.100.v2010	org.eclipse.wtp.web.c
	Eclipse.org	Views	3.5.1.M20110	org.eclipse.ui.views
	Eclipse Web Tools Platform	Validation Framework UI	12.204.v2010	org.eclipse.wst.valida
Q =	Eclipse Web Tools Platform	Validation Framework	12.202.v2011	org.eclipse.wst.valida
	Eclipse Packaging Project	Usage Data UI Plug-in	13.1.R201102	org.eclipse.epp.usage
21	Eclipse.org	Usage Data Recording Plug-in	13.1.R201102	org.eclipse.epp.usage
21	Eclipse.org	Usage Data Gathering Plug-in	131.R201102	org.eclipse.epp.usage
	Eclipse.org - Equinox	Update site repository adapte	1.0.201.R36x_v	org.eclipse.equinox.p
¥.5	Eclipse.org	Universal Welcome	3.2.402.r36_v2	org.eclipse.ui.intro.ur
	Eclipse Modeling Project	UML2 UML Kesources	3.1.1.V201008	org.eclipse.umiz.um
	Eclipse Modeling Project	UML2 UML Model	3.1.2.v201010	org.eclipse.uml2.uml
	Eclipse Modeling Project	UML2 UML Edit Support	310/201005	org eclipse um/2 um/
91	Eclipse Modeling Project	UML2 Common Edit Support	1.5.0.v201005	org.eclipse.uml2.com
<b>Q</b> =	Eclipse Modeling Project	UNL2 Common	15.0.v201005	org.eclipse.uml2.com
321	Project Amateras	UML Plugin	132	net java.amateras.um
33	Project Amateras	UML Java Generator Plug-In	132	net.java.amateras.um
	Eclipse.org	UI Plug-In	1.0.0.v201006	org.eclipse.jst.jsf.face
3		UI	2.0.0.2011101	egovframework.dev.ii
Q E	Eclipse.org	UDD(4)	2.0.5.v200805	org.uddi4j
0.0	Eclipse.org	Text Editor Framework	3.6.1.r361_v20	org.eclipse.ui.workbe
Q =	Eclipse.org	Text	3.5.0.v201006	org.eclipse.text
<b>\$</b> 5	Eclipse.org	Team Support UI	3.5.102.R36x_v	org.eclipse.team.ui
( <b>9</b> .2)	Eclipse.org	Team Support Core	3.5.101.R36x_v	org.eclipse.team.core
	Eclipse.org	TCP/IP Monitor	1.0.406.v2011	org.eclipse.wst intern
<b>8</b> 1	Eclipse TM Project	Target Management Termina	3.0.102.R32X_V	org.eclipse.tm.termin
	Eclipse TM Project	Target Management Termina	2.1.2.R32x_v20	org.eclipse.tm.termin
91	Eclipse ora + DSDP	Target Management Termina	2 0 101 2009	ora ecliase tra termin *
•		III		F

<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	İ
Helios Update Site > Models and Model Development > UML 2 Extender SDK	i.