### **Summary**

This document introduces the eGov framework Standard Development Environment.

#### **Description**

The Standard Development Environment provides the lightweight development environment that only contains core skills,

as well as the integrated development environment that combines both core and optional skills.

#### **Lightweight Development Environment**

The lightweight version of the development environment provides minimal set of development features that can be used for the rapid development. On top of the lightweight development environment users can customize in additional features to suit their needs.

#### **Component Diagram**



# Following tools are the essential features of Implementation Tool and Test tool for developers:

SourceCode Editor, IDE, Common Component, Customize Development Tool, UML Editor, Code

Generation, Code Inspection, Server Connection Management, Unit Test, Test Automation. Light-weight development environment contains these features.

Composition

Composition				
Skill	Software	Description		
SourceCode Editor	Eclipse	Java-based IDE		
UML Editor	AmaterasUML	Eclipse plug-in for drawing UML Class Diagrams and UML Sequence Diagrams		
IDE	eGovFrame IDE	Provides the Eclipse-based Perspective, Menu, New Project Wizard and New Template Wizard for developing the eGovFrame applications		
Common Component	eGovFrame IDE	Installation wizard for 219 web common components		

Server Connection Management	eGovFrame IDE	A skill that facilitates the server connection management by the Eclipse tool
Customize Development Tool	eGovFrame IDE	Tool to choose optional skills needed for project development
Code Generation	eGovFrame IDE	Template-based Code Gen and Model-based Code Gen, the core skills on the Standard Development Environment
Code Inspection	PMD, FindBugs	Source code error
Unit Test	JUnit	detectorUnit test framework included in Eclipse 3.6 (JUnit 3.8.2, JUnit 4.8.1)
Test Automation		Auto-run developer's test cases & test suites, and auto-generates reports

## **Integrated Development Environment**

The Integrated Development Environment includes all the core and optional skills that developers will need for projects.



IDE includes essential and optional features for developers along with mobile IDE.

Organization

Skill	Software	Description
SourceCode Editor	Eclipse	Java-based IDE
UML Editor	AmaterasUML	An Eclipse plug-in for drawing UML Class Diagrams and UML Sequence Diagrams
ERD Editor	AmaterasERD	Editor for ER physical model composition in IDE setting
IDE	eGovFrame IDE	Provides the Eclipse-based Perpective, Menu, New Project Wizard and New Template Wizard for developing the eGovFrame applications
Common ComponentCustomize Development Tool	eGovFrame IDE	Installation wizard for 219 web common components
Server Connection Management	eGovFrame IDE	Tool to choose core skills needed for project development
Mobile IDE	eGovFrame IDE	Eclipse tool for server connection management

Mobile Common Component	eGovFrame mIDE	Eclipse-based Perspective, Menu, Mobile Standard source-code generation wizard, Mobile site template generation wizard and etc are provided for developer convenience.
Mobile Code Verification	eGovFrame mIDE	Provides an installation wizard for bulletin boards, events management, online polling and new mobile common components among established 219 web common components,
Add Plug-In	eGovFrame mIDE	Validates web standard compliance for mobile project source codes
Code Generation	eGovFrame mIDE	Tool to choose optional skills for mobile projects
Code Inspection	eGovFrame CodeGen	Template-based Code Gen and Model-based Code Gen, the core skills on the Standard Development Environment
DBIO Editor	PMD, FindBugs	Source code error detector
RTE Distribution	eGovFrame DBIO	Editor for providing a method of standardized access to the database
WebFlow Editor	eGovFrame RTE Distribution	Runtime Environment Distribution tool
Help	Spring WebFlow	Provides skills for validating and editing a Spring WebFlow configuration file
Unit Test	eGovFrame Help	Provides the Help Comment for using eGovFrame
Test Automation	JUnit	Unit test framework basically included in Eclipse 3.6 (JUnit 3.8.2, JUnit 4.8.1)
Test Coverage		Auto-runs developer's test cases and test suites, and then auto-generates the reports
TestCase Generation	EclEmma	Provides test case coverage analysis and generates the reports
	eGovFrame TestCase Generator	Provides samples of code blocks for per-architecture-tier test case template generation, and per-scenario test cases

#### Manual

Download the IDE (http://www.egovframe.go.kr [http://www.egovframe.go.kr]), choose a directory to unzip the archive file, and run Eclipse.

To customize your development environment, set Perspective to eGovFrame, open eGovFrame Integrated Menu > Configuration > Customize Development Tool, and choose desired options.

Additional tech support is available on Q&A board on the portal.