

Software Verification

Ant, CruiseControl

Τ3

200711453 류진렬

200711477 황진수

200711428 박기성

201360220황 민

200312489 유현덕

Contents

Continuous Integration



CruiseControl

Connect with SVN

Continuous Integration

Continuous Integration





Benefit of CI

Minimizes number of integration bugs

If you build and test your software once an hour, no problem is more than an hour old.

- Improves team work
- Delivers latest best build product
- Make deployable software(.jar) whenever, wherever.
- Reduces the overall development cost by:
 - making it easier to find and fix problems
 - provides valuable and timely information, letting the development be managed more tightly.

Elements of Successful CI

- Maintain solitary Source Repository
- Automated Build Process
- Include Test process in Build Process
- Short Time interval of Build Process
- <u>Make Latest-build-result easily accessible</u>
- <u>Good Visibility(현 빌드 상황을 쉽게 알도록 하라.)</u>



What is Ant?

- Open source build tool.
- Specialized in Java project build.
- Use XML to build.
- Java-based tool for build, test, and deploy

(from small project to big project)

Advantages of Ant

- Ant build file is acceptable in other environment.
- Call javac Compiler when source file changed.
- Perform various tasks(operation command, Unit

<u>Test)</u>

Very fast

- 1. Package Explorer -> [New] [File]
- 2. Create build.xml file

🔵 Java - JDT	Fest/	/src/MainFrame.java - Eclipse SDK	1000		the set of the second set	al and the		2	3
File Edit	Sou	rce Refactor Navigate Search	n Project Run	Wind	w Help				
11 - 11		🖻 🔌 🕸 🕶 💽 🕶 💁 📲	8 G • 😂 🔗	•] (? ↗ □ ¶ [加 + 刊 + ♥ ↓ → +] ≝	Quick Access	- i i i i i i i i i i i i i i i i i i i	🎝 Ja	va
Package	Exp	Iorer 🛛 📄 😫 🏹 New Go Into Open in New Window	• • •	ainFra ப ச ச	mejava 🕄 Map.java I Signal.java private ILabel iLabel9 = null; null; Java Project null; Project null; Package null;		- E		• • • • •
⊳ ⊳ ≥		Open Type Hierarchy Show In Copy	F4 Alt+Shift+W ► Ctrl+C	6 6 6 6 6	Class null; Interface null; Enum null;				
		Paste Delete	Ctrl+V Delete) 43 49 61	Source Folder null; Java Working Set Folder p = rull;				
		Build Path Source Refactor	► Alt+Shift+S Alt+Shift+T		File own = null; Untitled Text File eft = null; JUnit Test Case ight = null;				
	2	Import Export			Other Ctrl+N null;				
	⁶	Refresh Close Project Assign Working Sets Run As Debug As Team Compare With Restore from Local History Configure Properties	F5		<pre>class WaitTimeTask extends TimerTask implements Runnable { public void run() { if(tMap.Waiting.size() != 0) { long sum = 0; long average = 0; for (int i=0;i<tmap.waiting.size();i++) (tmap.waiting.size()*60).="" +="Long.parseLong((String)" av<="" average="sum" sum="" td="" tmap.waiting.get(i));="" {="" }=""><td></td><td>×</td><td></td><td></td></tmap.waiting.size();i++)></pre>		×		
IDTect	_			1					
JUTESL									

💱 A 漢 🔮 🖡 🔺 🧭 📑 📶 🛛 오후 9:48

Type the build.xml [Run As] - [2 And Build...]

Java - JDTest/build.xml - Eclipse SDK		
File Edit Navigate Search Project Run Window H	lelp	
📫 • 🖫 🖷 🖆 🕅 🎋 • 💽 • 🏊 • 🖶 🎯 • 1	🧏 🔗 ▾ [증] ⊿ 🗉 🔟 ▼ 🖗 ▼ 🏷 🗢 ▼ → ▼ 🗃	Quick Access 🔛 🛱 🛃 Java
Package Explorer ☆ Package Explorer ☆ JDTest JDTest JD Test JD Cerjava JD (default package) JD (default package) JD MainFrame.java	MainFramejava Map.java Signal.java Build.xml S xml version="1.0" encoding="euc-kn"? e </td 2013. 3. 31. 2 + 3:17:54 JS	
▷	<pre></pre>	₽ ₽ ₩
	← Open With → ✓ ✓ Open With ✓ ✓ Show In Alt+Shift+W Show In Alt+Shift+W Cut Ctrl+X Copy Ctrl+C Cate Cit+C Paste Ctrl+V Quick Fix Ctrl+1 Shift Right	
	 	d Alt+Shift+X, Q d ools Configurations
	Preferences 15 : 28	· ●人道 ◎ [●] · @ 1 07051

1. Select all targets, [Apply] -> [Run]

Edit Configuration						
Edit configuration and launch. Run an Ant build file.						
Name: JDTest build.xml	argets 😽 Classpath 🖘 Properties	➡ JRE To Environment				
Name Image: Constraint of the second seco	Description					
 4 out of 4 selected Sort targets Hide internal targets not selected for Target execution order: default, compile, prepare, jar 	or execution	► <u>Q</u> rder				
?		Apply Revert Run Close				

Build Process of Ant – build.xml



Check the result file in the location.

-	15	a de la	×	- de		×
S → Work	cspace ► JDTest ► result		▼ 47	result 검색		Q
구성 ▼ 🎒 열기 ▼	공유 대상 ▼ 굽기 새 폴더				-	•
☆ 즐겨찾기	이름	수정한 날짜	유형	크기		
🚺 다운로드	Cal.class	2013-03-31 오후	CLASS 파일	1KB		
🔜 바탕 화면	Car.class	2013-03-31 오후	CLASS 파일	9KB		
🗐 최근 위치	MainFrame\$1.class	2013-03-31 오후	CLASS 파일	3KB		
詞 라이브러리	MainFrame\$2.class	2013-03-31 오후	CLASS 파일	2KB		
21 😒	MainFrame\$3.class	2013-03-31 오후	CLASS 파일	2KB		
	MainFrame\$4.class	2013-03-31 오후	CLASS 파일	1KB		
🥽 라이브러리	MainFrame\$5.class	2013-03-31 오후	CLASS 파일	1KB		
📑 문서	MainFrame\$changeSignal.class	2013-03-31 오후	CLASS 파일	2KB		
🔚 비디오	MainFrame\$makeCarTask.class	2013-03-31 오후	CLASS 파일	1KB		
🔛 사진	MainFrame\$MyTimerTask.class	2013-03-31 오후	CLASS 파일	1KB		
🚽 음악	MainFrame.class	2013-03-31 오후	CLASS 파일	10KB		
	Map.class	2013-03-31 오후	CLASS 파일	3KB		
📣 홈 그룹	🔳 sample.jar	2013-03-31 오후	Executable Jar File	16KB		
	Signal.class	2013-03-31 오후	CLASS 파일	2KB		
▮룆 컴퓨터						
🏭 로컬 디스크 (C:)						
Recovery (D:)						
HP_TOOLS (E:)						
💼 네트의크						
· · · · · · · · · · · · · · · · · · ·						
sample.jar	수성한 날짜: 2013-03-31 오후 9:56 ar File ㅋ기: 15.8KB					
	만든 날짜: 2013-03-31 오후 4:10					

How to use Ant? – in Cmd

Unzip the file in C folder.



How to use Ant? – in Cmd

Add environment variable

시스템 속성	X
컴퓨터 이름 하드웨어 고급 시스템 보호 원격	
환경 변수	<u> </u>
시스템 변수 편집	×
변수 이름(N): Path	
변수 값(V): #:%JAVA_HOME%\#bin;%ANT_HOME%\#b	in
확인 취소	
시스템 변수(S)	
변수 값	^
NUMBER_OF_PR.,, 1 OS Windows NT	
Path C:\#app\JS\#product\#11,2,0\#dbhome PATHEXT COM: EXE: BAT: CMD: VBS: VBE:.IS:	-
새로 만들기(W) 편집(I) 삭제(L)	
<u>확인</u> 취소	

How to use Ant? - in Cmd

Create the build.xml in project folder

				×
Correction of the second secon	ntrol-bin-2.8.4 🕨 projects 🕨 JDTest 🕨	▼ 🍫 JDTest 검색	Ŷ	۶
구성 🔻 🛄 열기 🔻	새 폴더		i= • 🔳	0
☆ 즐겨찾기	이름	수정한 날짜	유형	크기 📩
🐌 다운로드	🐌 .settings	2013-03-31 오후	파일 폴더	
🌉 바탕 화면	🌗 bin	2013-03-31 오후	파일 폴더	
週 최근 위치	퉬 result	2013-03-31 오후	파일 폴더	
	퉬 src	2013-03-31 오후	파일 폴더	
詞 라이브러리	📄 .classpath	2013-03-17 오후	CLASSPATH 파일	=
📑 문서	project	2013-03-17 오후	PROJECT 파일	
🚼 비디오	📄 build.xml	2013-03-31 오후	XML 파일	
🔛 사진	Cal.class	2013-03-31 오후	CLASS 파일	
🚽 음악	Car.class	2013-03-31 오후	CLASS 파일	
	MainFrame\$1.class	2013-03-31 오후	CLASS 파일	
輚 홈 그룹	MainFrame\$2.class	2013-03-31 오후	CLASS 파일	
	MainFrame\$3.class	2013-03-31 오후	CLASS 파일	
1 컴퓨터	MainFrame\$4.class	2013-03-31 오후	CLASS 파일	
	MainFrame\$5.class	2013-03-31 오후	CLASS 파일	
📬 네트워크	MainFrame\$changeSignal.class	2013-03-31 오후	CLASS 파일	-
	•			•
build.xml 수정 XML 파일	성한 날짜: 2013-03-31 오후 5:05 만든 날짜: 2 크기: 1.38KB	013-03-31 오후 5:00		

Check the result in console window



How to use Ant? – in Cmd

Move the project location, input ant command and check the result

```
23
C:₩Windows₩system32₩cmd.exe
C:\c-sandbox\cruisecontrol-bin-2.8.4\projects\JDTest>ant
Buildfile: C:\cc-sandbox\cruisecontrol-bin-2.8.4\projects\JDTest\build.xml
prepare -
compile:
            [javac] C:\comparent C:\compare
warning: 'includeantruntime' was not set, defaulting to build.sysclasspath=last;
  set to false for repeatable builds
            [javac] Compiling 4 source files to C:\coloredcesandbox\cruisecontrol-bin-2.8.4\pr
ojects₩JDTest₩result
            [javac] C:\comparent cruisecontrol-bin-2.8.4\projects\JDTest\src\Map.java:6
6: error: cannot find symbol
           [.javac]
                                                                    return ab;
           [.javac]
                                                                    variable ab
           [.javac]
                                       symbol:
                                       location: class Map
           [.javac]
            [javac] Note: C:₩cc-sandbox₩cruisecontrol-bin-2.8.4₩projects₩JDTest₩src₩Map.
java uses unchecked or unsafe operations.
            [javac] Note: Recompile with -Xlint:unchecked for details.
          [javac] 1 error
BUILD FAILED
C:\c_sandbox\cuisecontrol-bin-2.8.4\projects\JDTest\build.xml:32: Compile fail
ed; see the compiler error output for details.
Total time: 4 seconds
C:\cc-sandbox\cruisecontrol-bin-2.8.4\projects\JDTest>_
                                                                                                                                                                                                                                       -
```

Use JUnit with Ant – build.xml

1. Define another build target to compile Test Source File.(in build.xml)

<target name="compile-tests" depends="compile"> <javac srcdir="\${test.dir}" destdir="\${build.test.dir}"> <classpath refid="project.classpath" /> </javac> </target> Test.dir의 테스트 소스 파일을 컴파일해서 결과 클래스 파일들을 build.test.dir 디렉터리에 저장한다.

2. Define another build target to execute all JUnit Test automatically.(in build.xml)

```
<target name="test" depends="compile-tests"> Test 실행 전에 테스트 코드를
<junit haltonfailure="true"> 먼저 컴파일하라는 정의
<classpath refid="project.classpath" />
<formatter type="brief" usefile="false" />
<batchtest> Test 결과를 화면에만 출력한다는 정의
<fileset dir="${build.test.dir}"
include="**/*Test.class" /> Test Suite를 생성
</batchtest>
<sysproperty key="doc.dir" value="${doc.dir}" />
<sysproperty key="index.dir" value="${index.dir}" />
<sysproperty key="index.dir" value="${index.dir}" />
</junit>
```

If build result is successful, it means test has been successful too.

Why we should use Ant?

- Complementary cooperation with IDE
- Good Performance in ordered Tasks.
- Specialized in JAVA language

(compared to Make)

CruiseControl

What is CruiseControl?



Cruise Control of the car -> The function which maintains the car's speed steadily.

Similarly in CTIP environment, it maintains the integrated project steadily.

What is CruiseControl?

Java-based framework for a continuous build

<u>process</u>

- Easily extensible:
 - Configuration easily extended by custom plugins
 - Well defined interfaces for version control systems, build tools and publishers
- Provide detailed view of current & previous builds
- Use XML (config.XML)

What advantages of CruiseControl?

Automated build process

- 1. regularly compile, support Continuous Integration.
- 2. regularly test, find problems.

Find code problem easily

Ex) 60분마다 한번씩 빌드 수행시 실패했을 경우, 그 60 분 동안 바뀐 부분만 살펴
 보면 되므로 문제를 더 쉽게 찾을 수 있다.

It report the result

- Mailing reporting
- Dashbord & JSP reporting

Reduce project cost(time, human resource)

• So improve the productivity and efficiency.

Automated Build Process

As I said, We can use Ant to build some files, If we use Ant with CruiseControl, we can make Automated Build process



How to install CruiseControl?

Unzip the CruiseControl binary release - it includes ant

					x
중 ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥	∃ (C:) → cc-sandbox → cruisecontrol-bin-2.8.4	4 🗸	← cruisecontrol-b	<i>in-2.8.4 검색</i>	Q
구성 ▼ 공유 대상 ▼	새 폴더			:== ▼	?
☆ 즐겨찾기	이름	수정한 날짜	유형	크기	
🐌 다운로드	퉬 apache-ant-1.7.0	2013-03-30 오후	파일 폴더		
📃 바탕 화면	퉬 artifacts	2013-03-30 오후	파일 폴더		
🗐 최근 위치	퉬 etc	2013-03-30 오후	파일 폴더		
	\mu lib	2013-03-30 오후	파일 폴더		
詞 라이브러리	🎳 logs	2013-03-31 오후	파일 폴더		
📑 문서	🌗 projects	2013-03-31 오후	파일 폴더		
🛃 비디오	퉬 webapps	2013-03-30 오후	파일 폴더		
🔛 사진	📋 config.xml	2013-03-31 오후	XML 파일	2KB	
🚽 음악	📋 config_backup.xml	2010-09-15 오후	XML 파일	2KB	
	connectfour.ser	2013-03-31 오후	SER 파일	1KB	
🖳 컴퓨터	🚳 cruisecontrol.bat	2010-09-15 오후	Windows 배치 파일	4KB	
	Cruisecontrol.log	2013-03-31 오후	텍스트 문서	521KB	
📬 네트워크	cruisecontrol.sh	2010-09-15 오후	SH 파일	4KB	
	📋 dashboard-config.xml	2010-09-15 오후	XML 파일	3KB	
	JDTest.ser	2013-03-31 오후	SER 파일	1KB	
	README.txt	2010-09-15 오후	텍스트 문서	1KB	
	📄 velocity.log	2013-03-31 오후	텍스트 문서	6KB	
17개 항목					

How to install CruiseControl?

Place the project files in project folder

					x
Corestand Co	oox ► cruisecontrol-bin-2.8.4 ► projects	-	◆ projects 검색		٩
구성 🔻 🔀 열기	공유 대상 ▼ 새 폴더				0
☆ 즐겨찾기	이름	수정한 날짜	유형	크기	
🐌 다운로드	鷆 connectfour	2013-03-31 오후	파일 폴더		
🌉 바탕 화면	길 JDTest	2013-03-31 오후	파일 폴더		
🗐 최근 위치					
1 라이버러리					
📓 다이드다다					
비디오					
🔛 사진					
👌 음악					
• • • • • • •					
□률 김슈덕					
👊 네트워크					
-					
1개 항목을 선	!택했습니다.				

🦳 config.xml - 메모장	- 0	x
파일(E) 편집(E) 서식(O) 보기(V) 도움말(H)		
<cruisecontrol> <project buildafterfailed="true" name="JDTest"></project></cruisecontrol>		*
<listeners> <currentbuildstatuslistener file="logs/\${project.name}/status.txt"></currentbuildstatuslistener> </listeners>		
<bootstrappers> <antbootstrapper anthome="apache-ant-1.7.0" buildfile="projects/\${project.name}/build.xml"></antbootstrapper> </bootstrappers>		
<modificationset quietperiod="30"> <!-- touch any file in connectfour project to trigger a build--> <filesystem folder="projects/\${project.name}"></filesystem> </modificationset>		
<schedule interval="300"> <ant anthome="apache-ant-1.7.0" buildfile="projects/\${project.name}/build.xml"></ant> </schedule>		
<log> <merge_dir="projects \${project.name}="" target="" test-results"=""></merge_dir="projects> </log>		
<pre><publishers></publishers></pre>		
 		~

🧾 config.xml - 메모장	
파일(E) 편집(E) 서식(O) 보기(V) 도움말(H)	
<cruisecontrol> <project buildafterfailed="true" name="JDTest"></project></cruisecontrol>	<pre><project name=""> indentified project name</project></pre>
<listeners> <currentbuildstatuslistener file="logs/\${proj
</listeners></td><td>ct.name}/status.txt"></currentbuildstatuslistener></listeners>	
<bootstrappers> <antbootstrapper anthome="apache-ant-1.7.0" b<br=""></antbootstrapper></bootstrappers>	uildfile="projects/\${project.name}/build.xml"/>
<modificationset quietperiod="30"> <!-- touch any file in connectfour project to<br--><filesystem ,<br="" folder="projects/\${project.name}"></filesystem></modificationset>	trigger a build> />
<schedule interval="300"> <ant anthome="apache-ant-1.7.0" buildfile="pro
</schedule></td><td>ojects/\${project.name}/build.xml"></ant></schedule>	
<log> <merge dir="projects/\${project.name}/target/t
</log></td><td>est-results"></merge></log>	
<publishers> <htmlemail mailhost="localhost" returnaddress:<br="">buildresultsurl="http://localhost:8080/cruisecontrol/buil <map address="js880808@na
<always address=" alias="manager" manager"=""></map> <failure address="manager" reportwhenfixed<br=""></failure></htmlemail> </publishers>	="js880808@lycos.co.kr" defaultsuffix="@lycos.co.kr" dresults/JDTest" logdir="logs/JDTest"> ver.com" /> d="true" />
 	*

🦲 config.xml - 메모장	
파일(E) 편집(E) 서식(Q) 보기(V) 도움말(H) <cruisecontrol> <project buildafterfailed="true" name="JDTest"> W <listeners> <currentbuildstatuslistener file="logs/\${project
</listeners></td><td>bootstrappers>wake up CruiseControl to check
hether there are changed files or not.
직장에 출근할 때 찍는 타임카드 같은 정도)
ct.name}/status.txt"></currentbuildstatuslistener></listeners></project></cruisecontrol>	
<bootstrappers> <antbootstrapper anthome="apache-ant-1.7.0" bu<br=""></antbootstrapper></bootstrappers>	ildfile="projects/\${project.name}/build.xml"/>
<pre><modificationset quietperiod="30"> <!-- touch any file in connectfour project to f <filesystem folder="projects/\${project.name}"/: </modificationset--></modificationset></pre>	trigger a build> >
<schedule interval="300"> <ant anthome="apache-ant-1.7.0" buildfile="pro.
</schedule></td><td>jects/\${project.name}/build.xml"></ant></schedule>	
<log> <merge dir="projects/\${project.name}/target/te:
</log></td><td>st-results"></merge></log>	
<publishers> <htmlemail mailhost="localhost" returnaddress="<br">buildresultsurl="http://localhost:8080/cruisecontrol/build <map address="js880808@nave
<always address=" alias="manager" manager"=""></map> <failure address="manager" reportwhenfixed<br=""></failure></htmlemail> </publishers>	"js880808@lycos.co.kr" defaultsuffix="@lycos.co.kr" results/JDTest" logdir="logs/JDTest"> er.com" /> ="true" />
 	-

📋 config.xml - 메모장
파일(E) 편집(E) 서식(Q) 보기(V) 도움말(H)
<cruisecontrol> <project buildafterfailed="true" name="JDTest"></project></cruisecontrol>
<listeners> <currentbuildstatuslistener file="logs/\${project.name}/status.txt"></currentbuildstatuslistener> </listeners>
<pre><bootstrappers></bootstrappers></pre>
<pre><modificationset quietperiod="30"></modificationset></pre>
<schedule interval="300"> <ant anthome="apache-ant-1.7.0" buildfile="projects/\${project.name}/build.xml"></ant> </schedule>
<log> <merge_dir="projects \${project.name}="" target="" test-results"=""></merge_dir="projects> </log>
<pre><publishers></publishers></pre>



🖳 config.xml - 메모장	
파일(E) 편집(E) 서식(Q) 보기(V) 도움말(H)	
<project buildafterfailed="true" name="JDTest"></project>	*
<listeners> <currentbuildstatuslistener file="logs/\${project.name}/status.txt"></currentbuildstatuslistener> </listeners>	
<bootstrappers> <antbootstrapper anthome="apache-ant-1.7.0" buildfile="projects/\${project.name}/build.xml"></antbootstrapper> </bootstrappers>	
<modificationset quietperiod="30"> <!-- touch any file in connectfour project to trigger a build--> <filesystem folder="projects/\${project.name}"></filesystem> </modificationset>	
<schedule interval="300"> <ant anthome="apache-ant-1.7.0" buildfile="projects/\${project.name}/build.xml"></ant> </schedule>	
<log> <merge dir="projects/\${project.name}/target/test-results"></merge> <log> save the log file v </log></log>	vhenever exec
<pre><publishers></publishers></pre>	r"
 	~

j config.xml - 메모장	x
파일(E) 편집(E) 서식(Q) 보기(V) 도움말(H)	
<project buildafterfailed="true" name="JDTest"></project>	^
<listeners> <currentbuildstatuslistener file="logs/\${project.name}/status.txt"></currentbuildstatuslistener> </listeners>	
<bootstrappers> <antbootstrapper anthome="apache-ant-1.7.0" buildfile="projects/\${project.name}/build.xml"></antbootstrapper> </bootstrappers>	
<modificationset quietperiod="30"> <!-- touch any file in connectfour project to trigger a build--> <filesystem folder="projects/\${project.name}"></filesystem> </modificationset>	
<schedule interval="300"> <ant anthome="apache-ant-1.7.0" buildfile="projects/\${project.name}/build.xml"></ant> </schedule>	
<log> <merge_dir="projects \${project.name}="" target="" test-results"=""></merge_dir="projects> </log>	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	as
<pre></pre>	ng an

How to use CruiseControl?

Run the CruiseControl.bat

Windows 7 - VMware Workstation					ΞΣ	3
C:#Windows#system32#cmd.exe	Γ				22	ľ
4#lib#xercesImpl-2.8.0.jar;C:Wcc-sandbox#cruisecontrol-bin-2.8.4#lib#xml-apis-2.	스크 (C:) ▶ cc-sandbox ▶ cru	iisecontrol-bin-2.8.4 ► -	← cruisecontrol-bin-	-2.8.4 검색	Q	
8.0.jar;C:\c-sandbox\cruisecontrol-bin-2.8.4\lib\xmlrpc-2.0.1.jar;C:\crussecontbox	에 포하 ▼ 고은 대사 ▼	새 폭더		8== • F		ł
<pre>\verticecontrol-bin-2.8.4\verticecontrol1.3.4.0.jar;C:</pre>						
bin=2.8.4WlibWxstream=1.2.2.jar;C:WProgram FilesWJavaWjdk1.7.0_17WlibWtools.jar; :C:Wea=aaadbayWaywiaaaantwal=bin=2.8.4W	이름	수정한 날짜	유형	크기		ľ
[cc]3월-31 22:37:26 Main - CruiseControl Version 2.8.4 Compiled on Sept	apache-ant-170	2013-03-30 오흐	파잌 폭더			
ember 15 2010 1952	artifacts	2013-03-30 Q =	파이 포더			
[cc]3월-31 22:37:26 LConfigManager- reading settings from config file [C:₩cc-san	and acts	2013-03-30 2 +	피아 포다			
dbox₩cruisecontrol-bin-2.8.4₩config.xml]		2013-03-30 오루	파일 물다			
LCC13 뀰-31 22:37:28 trolController- projectName = LJDlest] [cc13 원-31 22:37:28 LConfigManagen- using settings from config file [C:Hcc-sandb		2013-03-30 오후	파일 폴너			
ox#cruisecontrol-bin-2.8.4#config.xml]	logs logs	2013-03-31 오후	파일 폴더			I
[cc]3월-31 22:37:29 Project - Project JDTest starting	projects	2013-03-31 오후	파일 폴더			
[cc]3월-31 22:37:29 Project - Project JDTest: idle	webapps	2013-03-30 오후	파일 폴더			
[cc]3월-31 22:37:29 Project - Project JDTest started	config.xml	2013-03-31 오후	XML 파일	2KB		
Lccl3 겯-31 22:37:29 Project - Project JDIest: next Dulld in 5 minutes	config_backup.xml	2010-09-15 오후	XML 파일	2KB		
ild	connectfour.ser	2013-03-31 오후	SER 파일	1KB		
[cc]3월-31 22:37:32 ontrollerAgent- Starting HttpAdaptor with CC-Stylesheets	Cruisecontrol.bat	2010-09-15 오후	Windows 배치 파일	4KB		
[cc]3월-31 22:37:32 ontrollerAgent- starting httpAdaptor	Cruisecontrol log	2013-03-31 오흐	텍스트 문서	521KB		
[cc]3월-31 22:37:32 ontrollerAgent- starting rmiRegistry [co]2원-21 22:29:29 optmollerAgent- starting connectorServer		2010-09-15 오흐	의프트 문의 SH 파일	4KB		
2013-03-31 22:38:42.868::INFO: Logging to STDERR via org.mortbay.log.StdErrLog	dashboard-config yml	2010-00-15 0 5		3KB		
2013-03-31 22:38:43.896::INFO: jetty-6.1.11		2010-03-13 王平		1 KD		I
·		2013-03-51 오루	3대사로 모나	IKD		
	README.txt	2010-09-15 오루	텍스트 문서	IKB		
	velocity.log	2013-03-31 오후	텍스트 문서	6KB		
Press C						
						I
						2
			🦻 A 漢 🕐 🍹 🔺	🛱 जा। 🖄	ā 10:38	
						-

How to use CruiseControl?

Check the result in log file



How to use CruiseControl?

Check the result in dashboard (<u>http://localhost:8080/dashboard</u> Check this result from other computers.(using the network)

🖉 http://localhost:8080/dashboard/project/list/all/JDTest - Windows Internet Explorer		
O ♥ Mttp://localhost.8080/dashboard/project/list/all/JDTest	👻 🗟 🍫 🗙 🖸 Bing	• م
☆ 즐겨찾기 👍 💽 추천 사이트 ▼ 🖉 웹 조각 갤러리 ▼		
M http://localhost:8080/dashboard/project/list/all/	🚵 🔻 🔝 👻 🚍 🗮 🛪 페이지(원 🗸 위	산전(S)▼ 도구(O)▼ @▼
Dashboard Server : 192.168.6.129	(C cri	uisecontrol.
Dashboard Builds		Administration
JDTest – All builds		=
about 2 hours ago build.22 Download log		
about 2 hours ago build.21 Download log		
about 2 hours ago build.20 Download log		
about 2 hours ago build.19 Download log		
about 3 hours ago build.18 Download log		
about 3 hours ago build.17 Download log		÷
	📢 로컬 인트라넷 보호 모드: 해제	🖓 🔻 🔍 100% 🔻 🖉

Check the brief status of build in (<u>http://localhost:8080/</u>cruiscontrol/index

	0. 544		0	<i>•</i>	<i>•</i>		<i>(</i>				
http://localhost:8080/cruisecontrol/index	D-⊠CX	🥝 2009 3	🙆 Continu	🥝 2009 3	2009 4	D Ant Ch	실 CruiseC	🖹 testing	🖹 cruiseco	財 Tearn_O	📙 Cruis × 🛛 🕅
x NAVER 🔽 네이버 🔽 Q	🔶 🔼 사전 📘 🍸	🖢 북마크 🖳 🕯	깹처 📋메모	🖸 보내기 🎾	◙ 퀵패스						더보기+
x 찾기:	이전 다믐	📝 옵션 🔻									
c cruisecontrol.											

Jin-PC [13. 3. 31 오후 11:41]

Project	Status (since)	Last failure	Last successful	Label	
<u>connectfour</u>	waiting (오후 11:39)		오후 4:57	build.1	Build
RSS					

\${build.version} \${build.versic

Click the project name, and you can see Stage page

Contract 8080/c	nternet Explorer		
☆ 즐겨찾기 │ ☆ ○ 추천 사이트 ▼ ∦	∬웹 조각 갤러리 ▼		
📕 CruiseControl Build Results		🛅 🔻 🔂 🔻 🖃 🖶 🕷 페이지(P) 🔻 안전	(5) ▼ 도구(0) ▼ 🕢 ▼
C cruisecontrol.		\${build.vers	sion} \${build.version.info}
Status Page	Build Results Test Results	s XML Log File Metrics Config Control Panel	
JDTest -	BUILD COMPLETE - build 23		
	Date of build:	2013-03-31T13:48:13	
	Time to build:	7 seconds	
vaiting for next 🔺	Last changed:	2013-03-31T13:47:43 Volu con Lico	divorco mo
ime to build	Last log entry:		
013-03-	Build Artifacts		E
31T13:48:31 ·	Dana / Valado		
Latest Build	Errors/Warnings: (3)		
Latest build			
2013/03/31 22:48:13 (build.23)	C:\cc-sandbox\cruisecontrol-bin-2.8.4\projects\JDTest\build.xml:32: warning: 'incluo Note: C:\cc-sandbox\cruisecontrol-bin-2.8.4\projects\JDTest\src\Map.java uses un Note: Decompile with \Lifti unchecked for details	deantruntime' was not set, defaulting to build.sysclasspath=last; set to false for repeatable builds checked or unsafe operations.	
2013/03/31 20:48:48			
(build.22)	Unit Tests: (0)		
2013/03/31 20:42:28	No Tests Run		
(build.21)	This project doesn't have any tests		
2013/03/31 20:36:04 (build.20)			
2013/03/31 20:36:04 (build.20) 2013/03/31 20:30:14	Modifications since last successful build: (15)		
2013/03/31 20:36:04 (build.20) 2013/03/31 20:30:14 (build.19)	Modifications since last successful build: (15) change User projects/JDTest/result/sample.jar	2013-03-31T13:47:43	
2013/03/31 20:36:04 (build.20) 2013/03/31 20:30:14 (build.19) 2013/03/21 19:57:35	Modifications since last successful build: (15) change User projects/UDTest/vesult/sample.jar change User projects/UDTest/vesult/Cal.class	2013-03-31T13:47:43 2013-03-31T13:47:42	
2013/03/31 20:36:04 (build.20) 2013/03/31 20:30:14 (build.19) 2013/03/31 19:57:35 (build.18)	Modifications since last successful build: (15) change User projects/UDTest/result/sample.jar change User projects/UDTest/result/Cal.class change User projects/UDTest/result/MainFrame\$1.class	2013-03-31T13:47:43 2013-03-31T13:47:42 2013-03-31T13:47:42	
2013/03/31 20:36:04 (build.20) 2013/03/31 20:30:14 (build.19) 2013/03/31 19:57:35 (build.18)	Modifications since last successful build: (15) change User projects/UDTest/result/Sample.jar change User projects/UDTest/result/Cal.class change User projects/UDTest/result/Cal.class change User projects/UDTest/result/MainFrame\$1.class change User projects/UDTest/result/MainFrame\$2.class	2013-03-31T13:47:43 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42	
2013/03/31 20:36:04 (build.20) 2013/03/31 20:30:14 (build.19) 2013/03/31 19:57:35 (build.18) 2013/03/31 19:29:59 (build.19)	Modifications since last successful build: (15) change User projects/UDTest/result/Sample.jar change User projects/UDTest/result/Cal.class change User projects/UDTest/result/MainFrame\$1.class change User projects/UDTest/result/MainFrame\$1.class change User projects/UDTest/result/MainFrame\$2.class change User projects/UDTest/result/MainFrame\$2.class	2013-03-31T13:47:43 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42	
2013/03/31 20:36:04 (build.20) 2013/03/31 20:30:14 (build.19) 2013/03/31 19:57:35 (build.18) 2013/03/31 19:29:59 (build.17)	Modifications since last successful build: (15) change User projects/UDTest/result/Sample.jar change User projects/UDTest/result/AainFrame\$1.class change User projects/UDTest/result/MainFrame\$1.class change User projects/UDTest/result/MainFrame\$2.class change User projects/UDTest/result/MainFrame\$3.class change User projects/UDTest/result/MainFrame\$3.class	2013-03-31T13:47:43 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42 2013-03-31T13:47:42	

Current build information

Check the Test Result in TestResult Tab

	Build Results	Test Results	XML Log File	Metrics	Config	Control Panel	
Name						Status	Time
.net.sourceforge.cruisecontrol.samp	leproject.connectfou	r.CellTest					
testConstructo	r					Success	0.016

.net.sourceforge.cruisecontrol.sampleproject.connectfour.PlayingStandTest		
testFourConnected	Success	0.016
testFourConnectedHorizontally	Success	0.000
testFourConnectedDiagonally	Success	0.000
testStandControlsTurns	Success	0.000
testFullColumn	Success	0.000
testNonExistentColumn	Success	0.000
testNoWinner	Success	0.016
testDow nw ardDiagonalWins	Success	0.000
testWinningPlacement	Success	0.000
testNoWinningPlacementBeforeGameOver	Success	0.031

Check the XML log in XML Log File Tab

With Proceedings 20	88 ····									
http://localhost:8080/c	ruisecontrol/logs/conne 🔎) - 🛛 C X 🛛	🥌 2009 3 🧔 Conti	nu <i>(</i> 2009 3	<i>i</i> 2009 4 💕 .	Ant 다 🥝 Cruise	C 睂 testing	🖹 cruiseco 🔢) Team_O 🚺	📕 local × 🛛 🏠 🖒
NAVER 🔽 네이버	- Q ♦	🔼 사전 🛛 숮	북마크 🖳 캡처 📋 메	모 🛛 🔁 보내기 🔎	퀵패스					더보기+ 로
찾기:		이전 다음 🗍	🍠 옵션 🔻							
xml version="1.0" encodir</td <td>1a="UTF-8"?></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1a="UTF-8"?>									
cruisecontrol>										
<modifications></modifications>										
- <info></info>										
<pre><pre>cproperty value="co cproperty value="20"</pre></pre>	nnectfour" name="p	projectname	e"/> ild"/>							
<property value="20<br"><property value="20">"20</property></property>	051209000000 na	me="lastsu	ccessfulbuild"/>							
<property value="12"></property>	2/09/2005 12:21:0	3" name="bi	uilddate"/>							
<property value="20"></property>)051209122103" na	me="cctime	estamp"/>							
<property ,<="" name="label" td="" value="but the second secon</td><td>uild.0"><td>/></td><td>• •</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></property>	/>	• •								
<property <="" name="interval" td="" value="30</td><td>)0"><td>/></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></property>	/>									
<property <="" name="lastbuild</td><td>successful" td="" value="tri</td><td>ue"><td>/></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></property>	/>									
<property nam<="" td="" value="C:</td><td>\pdj\src\cruisecon</td><td>trol\target</td><td>\webtest\cruise</td><td>control-bin-2.4.</td><td>0-dev\logs\co</td><td>onnectfour"><td>e="logdir"/></td><td></td><td></td><td></td></property>	e="logdir"/>									
<property <="" name="logfile" td="" value="log
disfat</td><td>g20051209122103L</td><td>Lbuild.0.xm</td><td>I"><td>></td><td></td><td></td><td></td><td></td><td></td><td></td></property>	>									
<	-"~									
- < message priority="	debua">									
Adding</td><td>g reference: ant.Prope</td><td>ertyHelper]];</td><td>></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></message></td><td></td><td>,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>- <message priority=""</p></td><td>debug"></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td><![CDATA[Detect</td><td>ted Java version: 1.4</td><td>in: C:\pdj\ja</td><td>va\j2sdk1.4.2_09\</td><td>jre										
- <message <="" p="" priority=""></message>	debug">									
Detect</td><td>ted OS: Windows XPJ</td><td>1></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></message></td><td>debug"></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>a reference: ant Comr</td><td>nonentHelper</td><td>r										
	g references and comp	ponentireipei	-11×							
- < message priority="	debug">									
Settin</td><td>g ro project property:</td><td>ant.version</td><td>-> Apache Ant ver</td><td>sion 1.6.5 compi</td><td>led on June 2 20</td><td>05										
 <message priority=" </td><td>debug"></message>	label -> bui	Id olls								
	g to project property.	label -> bui	10.0]]>							
- <message priority="</td><td>debua"></message>										
<![CDATA[Settin</td> <td>a ro project property:</td> <td>cclastgoodb</td> <td>uildtimestamp -> 2</td> <td>0051209000000</td> <td>)11></td> <td></td> <td></td> <td></td> <td></td> <td></td>	a ro project property:	cclastgoodb	uildtimestamp -> 2	0051209000000)11>					
					_					
- <message p="" priority<=""></message>	cruisecontrol-bin-2.8.4.zip	다운로드가 완료	로되었습니다.			열기(O) 🔻	폴더 열기(P)	다운로드 보기(V)) ×	
CDATA[Set</td <td></td>										

Check the success and fail status of build in Matric Tab





Check and change the config.xml codes in Config Tab

C cruisecontrol.		\${build
Status Page	Reload from server Save to server	Ready for Alpha-level testing
waiting for next time to build since 2013-03-31T14:39:41 progress: 2013-03- 31T14:39:41 next Latest Build 2013/03/31 16:57:30 (build.1) 2005/12/09 12:21:03 (build.0) RSS	 Listeners Bootstrappers antbootstrapperi Add bootstrapper: antbootstrapper Add bootstrapper: antbootstrapper Add	antbootstrapper Configuration useQuiet: keepGoing: tempFile: useLogger: saveLogDir: progressLoggerLib: antWorkingDir: buildFile: projects/\${project.name}/build.xml antScript:

Connect with SVN (Server)

Server PC – set the repository with SVN and execute the SVN You need to make sure that repository location is the same with build location.



Connect with SVN (Client) – checkIn

ClientPC – We installed turtoisSVN tool. It connects the SVN server more easily for the client users. Click Import.

] chat			2012	1 -02	오루	파일 폴더
📗 client		열기(0)		9-18	오루	파일 폴더
] com		새 창에서 열기(N)		2-15	오전	파일 폴더
] comm		알송 재생목록에 추가(G)		2-15	오전	파일 폴더
] ftp		알송으로 재생(F)		D-10) 오전	파일 폴더
🖺 gi	\square	알집으로 압축하기(L)		2-16) 오후	파일 폴더
퉬 im	Q	"chat.zip" 으로 압축하기(Q)		8-21	오루	파일 폴더
퉬 minic.ta		곳으 대상(H)	+	2-16) 오루	파일 폴더
퉬 new		om 11000		1-17	오루	파일 폴더
📗 newtest	2	SVN Checkout		2-15	• হিস	파익 폭더
📗 Term	-	TortoiseSVN	•	<u>R</u>	Repo-br	rowser
퉬 test	s	공유 폴더 동기화	+	B	Export	
鷆 thread		이전 버전 목원(U)				
📔 tic		라이브러리에 포함M		ſ	Create r	epository here
.bash hi				a	Import	
		Addbe Drive CS4	,			

Connect with SVN (Client)

Type the server ip address to connect server. And input username, password.

S C:\Cygwin\home\Jin\chat - Import - TortoiseSVN		X		
URL of repository:	C:\Cygwi	n\home\Jin\c	hat - Import - TortoiseSVN	
Import message Recent messages	Command	Import C: Wrzyg	<svn: 121.130.128.33:3690=""> 694c58eb-2da5-ff41-b04a-6f2fa5638b2c Requests a username and a password Username: admin Password: •••••</svn:>	
Include ignored files ✓ Enable Auto-Properties OK Cancel) Help		<u>OK</u> Cancel	OK Cancel

Connect with SVN (Client)

CheckIn completed. It is important that connect SVN repository location with build location.

Action	Path	Mime type 🔶
Adding	C:\cygwin\home\Jin\comm\Parser.y	
Adding	C:\cygwin\home\Jin\comm\Lexer.h	
Adding	C:\cygwin\home\Jin\comm\ucodei	application/octet-st <mark>ream</mark>
Adding	C:\cygwin\home\Jin\comm\Lexer.l	
Adding	C:\cygwin\home\Jin\comm\simplefactorial.mc	
Adding	C:₩cygwin₩home₩Jin₩comm₩Makefile	
Adding	C:\cygwin\home\Jin\comm\Ast.h	
Adding	C:\cygwin\home\Jin\comm\UcodeMaker	application/octet-s <mark>tream</mark>
Completed	At revision: 2	-
77 Bytes tra	ansferred in 0 minute(s) and 5 second(s)	The second second

References

http://www.sereform.com/?m=20090302 http://www.sereform.com/?p=279 http://www.sereform.com/?tag=continuous-integration http://cruisecontrol.sourceforge.net/main/configxml.html http://www.coderanch.com/t/446303/tools/Setting-Cruise-Control-SVN-Ant http://martinfowler.com/articles/continuousIntegration.html#Practices **OfContinuousIntegration** http://cafe.naver.com/junes81/3248 http://blog.naver.com/turbo1117/30085254440 http://ant.apache.org/manual/ http://cruisecontrol.sourceforge.net/ http://blog.naver.com/PostView.nhn?blogId=magtao&logNo=1010982 3605 http://allting.egloos.com/1845643 도서

실용주의 프로그래머를 위한 프로젝트 자동화