

#####

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#####

1.

umsCodeGenerator #####Java#XSLT #####

##	###	##
###	##### Java #####	Bourne #####C #####
Java	#####(#####XSLT ###) ##### XSLT ### #### XSLT ###	
XSLT	mapping definition ##### mapping definition ### mapping definition #####	XSLT ##### Xalan-Java (http://xml.apache.org/xalan-j/) ##### ## XSLT ## (template-interface.html)

#####

1. #####Java #####
2. #####
3. #####
4. mapping definition #####
5. mapping definition #####
6. UMS #####
7. define/ref ###
8. UMS #####define/ref #####
9. mapping definition ##### XSLT #####
10. mapping definition #####
11. mapping definition # Language syntax ###
12. #####

Note:

#####

#####[build#####](#) (tableTools-2006062101.txt)

2. 1. #####Java

Java

#####

```
[#####]
src/txt2clng.tmp1
src/txt2java.tmp1
```

3. 2.

"txt2lang" #####USAGE #####

#####Jakarta-Commons ##### [CLI](http://jakarta.apache.org/commons/cli/)
(http://jakarta.apache.org/commons/cli/) #####

```
[#####]
src/java/jp/jaxa/isas/ums/codeGenerator/GeneratorMain.java
```

4. 3.

#####

"\$TABLETOOLS_TEMP/yyyyMMddHHmmssSSS##(0.0 ## 1.0 ### double #)"

```
[#####]
src/java/jp/jaxa/isas/ums/codeGenerator/WorkDirectory.java
```

5. 4. mapping definition

MSV # Jing #####mapping definition #####
mapping definition
#####

mapping definition	####
XML syntax(C ##)	dat_xml-clng.rng
XML syntax(Java)	dat_xml-java.rng
Language syntax(C ##)	dat_lang.rng
Language syntax(Java)	dat_lang.rng

#####value ### type ##### ## facet #####
[encodengLibrary](#) (umsCodeGenerator_ja.html#encodingLibrary) #####

```
[#####]
src/java/jp/jaxa/isas/ums/codeGenerator/XmlValidator.java
```

#####[value](#) ##### [facet](#) (tableTools-2006102001.txt)

#####

6. 5. mapping definition

mapping definition ##### mapping definition #####

- #####
- ###
- ###

mapping definition ##### ### XSLT ##### #####XSLT
mapping definition

```
[#####]
src/java/jp/jaxa/isas/ums/codeGenerator/XmlEditor.java
```

7. 6. UMS

#####UMS #####4.3. datatypeLibrary #####4.4. value ### type ### #####
#####

##	##
4.3. datatypeLibrary ##	datatypeLibrary ##### data ###value ##### datatypeLibrary ##### datatypeLibrary ##### data ###value ##### datatypeLibrary #####
4.4. value ### type ##	type ##### value ##### token ### type ##### datatypeLibrary #####

```
[#####]
src/xslt/raw/simplify.xsl
```

8. 7. define/ref

umsCodeGenerator #####mapping definition ##### define ### ref
#####

```
[#####]
src/xslt/raw/resolveRef.xsl
```

#####[XML](#) ##### (tableTools-2005070252_xsl)

#####

9. 8. UMS #####define / ref

UMS #####define /ref ##### # mapping definition
#####

mapping definition	####
XML syntax(C ##)	simple_dat_xml-clng.rng
XML syntax(Java)	simple_dat_xml-java.rng
Language syntax(C ##)	simple_dat_lang.rng
Language syntax(Java)	simple_dat_lang.rng

```
[#####]  
src/java/jp/jaxa/isas/ums/codeGenerator/XmlValidator.java
```

10. 9. mapping definition ##### XSLT

10.1. 9.1 ##### XSLT

#####*.ums #####file
#####

mapping definition #####mapping definition # #####
XSLT #####Xalan-Java #####

```
[#####]  
src/java/jp/jaxa/isas/ums/codeGenerator/FileOutputTableCreator.java
```

(tableTools-2005070253_xsl)

10.2. 9.2 ##### XSLT template

#####mapping definition # defineMapping ##### defineMapping
defineMapping #####XSLT #####
defineMapping #####

#####defineMapping ##### XSLT # template #####

```
[#####]  
src/java/jp/jaxa/isas/ums/codeGenerator/VarTypeTableCreatorForClng.java  
src/java/jp/jaxa/isas/ums/codeGenerator/VarTypeTableCreatorForJava.java
```

#####

(tableTools-2005052301_xsl)

10.3. 9.3 XSLT template

XSLT #####

#####XSLT # template #####

"pre_txt2lang.xsl" ## <xsl:template name="varTypeDefinition"/> ##### 9.2 #####
template #####

```
[#####]  
src/java/jp/jaxa/isas/ums/codeGenerator/Generator.java
```

11. 10. mapping definition

[mapping definition](#) (/mappingSchema/mapping_ja.html) ##### UMS

#####

- define #####optional #oneOrMore#zeroOrMore #####
- loop ##### 32 #####
- byte ###list ##### bit #####
- bit ### encode ##### "txt" #####
- method #####"2"#"3"#"4" #####
- umsCodeGenerator #####
- ##### UMS_THREAD # "true" #####
- UMS #####7.1.5. start #####

```
[#####]  
src/xslt/raw/check_mappingdef.xsl  
src/xslt/raw/check.xsl
```

12. 11. mapping definition # Language syntax

9.3 ##### XSLT ##### XML syntax # mapping definition ##Language syntax #####

mapping definition # Language syntax #####mapping definition

```
[#####]  
src/xslt/raw/pre_txt2clng.xsl  
src/xslt/raw/pre_txt2java.xsl
```

#####[XML-language Syntax](#) ##### (tableTools-2005071751.txt)

13. 12.

#####

#####

1. <post:* /> # file #####
2. <post:* /> #### file #####
3. file #####

#####XSLT #####pre##### (tableTools-2006102003.txt)
 ##### (tableTools-2005092908.txt)
 ##### mapping definition ##### (tableTools-2005062552.txt)
 #####tableTools # umsCodeGenerator ##### XSLT template (tableTools-2005062652.txt)

13.1. 12.1 <post:* /> # file

#####

#####	##
txt2clng.xml	####/######C #####
txt2chdr.xml	####/######C #####(#####)
txt2java.xml	####/######JAVA#####

"txt2lang.xml" ##### mapping definition ##### XSLT
 #####(##### "###.xml")#

XSLT # "txt2clng.xml"#"txt2java" #####
 C###JAVA#####
 #### post ##### "txt2lang.xml" ##### XSLT # xsl:include
 #####

```
[#####]
src/xslt/raw/txt2clng.xml
src/xslt/raw/txt2chdr.xml
src/xslt/raw/txt2java.xml
```

13.2. 12.2 <post:* /> #### file

C ### Java #####XSLT #####XSLT
 #####"post" #####

post #####

- #####
- ####/######
- ##/######

#####

#####2#####

###	##
<post:clng/>	##### C## #####
<post:java/>	##### JAVA #####

```
[#####]
src/xslt/m2/secondTransform_clng.xsl
src/xslt/m2/secondTransform_java.xsl
src/xslt/m3/secondTransform_java.xsl
src/xslt/m4/secondTransform_clng.xsl
src/xslt/raw/post_clng.xsl
src/xslt/raw/post_java.xsl
```

#####[post ##### XSLT ##](#) (tableTools-2005070501.txt)

13.3. 12.3 file

9.1 ##### XSLT #####

#####

14. [#####]

umsCodeGenerator ##### "-d" #####/#####

- mapping definition #####
- #####
- #####
- #####

#####[#####](#) (tableTools-2006102701.txt)

15. [#####]

```
#####umsCodeGenerator #####
2006/10/27 ##### 2006/10/27 ##### "false" #####
#####
```

```
[#####]
src/java/jp/jaxa/isas/ums/codeGenerator/GeneratorMain.java
```

#####[#####](#) (tableTools-2006102002.txt)