

Lombok

Version: db71f39c271f1f8124fac96daa68d8b012fbf390

Parents:

0de56b76e6e9ba738232a3eb6c66c16df7346c82

17972d59fa7e2eec6b73ba5da8234f5fa7ac2536

Merge base:

6c1993659cd53f601520209771d116cb94e9b825

lombok/src/core/lombok/eclipse/HandlerLibrary.java

Chunk 1: (concatenarion/import declaration)

```
import lombok.core.AnnotationValues.AnnotationValueDecodeFail;
<<<<<< HEAD
import lombok.core.configuration.ConfigurationKeysLoader;
=====
import lombok.core.BooleanFieldAugment;
>>>>>> 17972d59fa7e2eec6b73ba5da8234f5fa7ac2536
import lombok.core.HandlerPriority;
```

```
import lombok.core.AnnotationValues.AnnotationValueDecodeFail;
import lombok.core.configuration.ConfigurationKeysLoader;
import lombok.core.BooleanFieldAugment;
import lombok.core.HandlerPriority;
```

lombok/src/core/lombok/eclipse/handlers/EclipseHandlerUtil.java

Chunk 2: (combination/import declaration)

```
import lombok.core.AnnotationValues.AnnotationValue;
<<<<<< HEAD
=====
import lombok.core.BooleanFieldAugment;
import lombok.core.ReferenceFieldAugment;
import lombok.core.TransformationsUtil;
>>>>>> 17972d59fa7e2eec6b73ba5da8234f5fa7ac2536
import lombok.core.TypeResolver;
```

```
import lombok.core.AnnotationValues.AnnotationValue;
import lombok.core.BooleanFieldAugment;
import lombok.core.ReferenceFieldAugment;
import lombok.core.TypeResolver;
```

lombok/src/core/lombok/javac/HandlerLibrary.java

Chunk 3: (combination/import declaration)

```
import lombok.core.TypeResolver;
<<<<<< HEAD
import lombok.core.AnnotationValues.AnnotationValueDecodeFail;
import lombok.core.configuration.ConfigurationKeysLoader;
=====
>>>>>> 17972d59fa7e2eec6b73ba5da8234f5fa7ac2536
import lombok.javac.handlers.JavacHandlerUtil;
```

```
import lombok.core.TypeResolver;
import lombok.core.configuration.ConfigurationKeysLoader;
import lombok.javac.handlers.JavacHandlerUtil;
```

lombok/src/core/lombok/javac/handlers/JavacHandlerUtil.java

Chunk42: (combination/import declaration)

```
import lombok.core.AnnotationValues.AnnotationValue;
<<<<<<< HEAD
import lombok.core.handlers.HandlerUtil;
=====
import lombok.core.ReferenceFieldAugment;
import lombok.core.TransformationsUtil;
>>>>>>> 17972d59fa7e2eec6b73ba5da8234f5fa7ac2536
import lombok.core.TypeResolver;
```

```
import lombok.core.AnnotationValues.AnnotationValue;
import lombok.core.ReferenceFieldAugment;
import lombok.core.TypeResolver;
```

Version: f956ba1e337699206052a016da65f4f02ac6825b

Parents:

e5574133363c8b718329e07a73bf161416485da5

fbab1ca77cb8306843e26c5bad91186b34563282

Merge base:

7d51842ca381c491d5dfb44bc76b0cea345e7170

Chunk 5: (new code/method invocation, variable)

```
ClassLiteralAccess loggingType = selfType(owner, source);

<<<<<<< HEAD
    FieldDeclaration fieldDeclaration = createField(framework, source,
loggingType, logFieldName, useStatic);
=====
    FieldDeclaration fieldDeclaration = createField(framework, source,
loggingType, loggerCategory);
>>>>>> fbab1ca77cb8306843e26c5bad91186b34563282
    fieldDeclaration.traverse(new SetGeneratedByVisitor(source),
typeDecl.staticInitializerScope);
```

```
ClassLiteralAccess loggingType = selfType(owner, source);

    FieldDeclaration fieldDeclaration = createField(framework, source,
loggingType, logFieldName, useStatic, loggerTopic);
    fieldDeclaration.traverse(new SetGeneratedByVisitor(source),
typeDecl.staticInitializerScope);
```

Chunk 6: (new code/method signature)

```
}

<<<<<<< HEAD
    private static FieldDeclaration createField(LoggingFramework framework, Annotation
source, ClassLiteralAccess loggingType, String logFieldName, boolean useStatic) {
=====
    public static FieldDeclaration createField(LoggingFramework framework, Annotation
source, ClassLiteralAccess loggingType, String loggerCategory) {
>>>>>> fbab1ca77cb8306843e26c5bad91186b34563282
        int pS = source.sourceStart, pE = source.sourceEnd;
```

```
ClassLiteralAccess loggingType = selfType(owner, source);

    FieldDeclaration fieldDeclaration = createField(framework, source,
loggingType, logFieldName, useStatic, loggerTopic);
    fieldDeclaration.traverse(new SetGeneratedByVisitor(source),
typeDecl.staticInitializerScope);
```

Chunk 7: (combination/method invocation)

```
@Override                                public                                void
handle(AnnotationValues<lombok.extern.apachecommons.CommonsLog> annotation, Annotation
source, EclipseNode annotationNode) {
<<<<<<< HEAD
```

```

        handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_COMMON flag_USAGE,
ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");

        processAnnotation(LoggingFramework.COMMONS,
annotation,
source,
annotationNode);
=====
        processAnnotation(LoggingFramework.COMMONS,
annotation,
source,
annotationNode, annotation.getInstance().topic());
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
    }

```

```

@Override
public void
handle(AnnotationValues<lombok.extern.apachecommons.CommonsLog>
annotation, Annotation
source, EclipseNode annotationNode) {
    handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_COMMON flag_USAGE,
ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");
    processAnnotation(LoggingFramework.COMMONS,
annotation,
source,
annotationNode, annotation.getInstance().topic());
}

```

chunk 8:(combination/method invocation)

```

@Override public void handle(AnnotationValues<lombok.extern.java.Log>
annotation, Annotation source, EclipseNode annotationNode) {
<<<<<<< HEAD
        handleFlagUsage(annotationNode, ConfigurationKeys.LOG_JUL_FLAG_USAGE,
"@java.Log", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");

        processAnnotation(LoggingFramework.JUL,
annotation,
source,
annotationNode);
=====
        processAnnotation(LoggingFramework.JUL,
annotation,
source,
annotationNode, annotation.getInstance().topic());
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
    }

```

```

@Override public void handle(AnnotationValues<lombok.extern.java.Log>
annotation, Annotation source, EclipseNode annotationNode) {
    handleFlagUsage(annotationNode, ConfigurationKeys.LOG_JUL_FLAG_USAGE,
"@java.Log", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");
    processAnnotation(LoggingFramework.JUL,
annotation,
source,
annotationNode, annotation.getInstance().topic());
}

```

src/core/lombok/extern/apachecommons/CommonsLog.java

Chunk 9: (version 2/ annotation element, commentary)

```

public @interface CommonsLog {
<<<<<<< HEAD
}
=====
    /**
    * Sets the category of the constructed Logger. By default, it will use the type
where the annotation is placed.
    */
    String topic() default "";
}

```

```
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
```

```
public @interface CommonsLog {  
    /**  
     * Sets the category of the constructed Logger. By default, it will use the type  
     where the annotation is placed.  
     */  
    String topic() default "";  
}
```

[src/core/lombok/extern/java/Log.java](#)

Chunk 10: (version 2/ annotation element, commentary)

```
public @interface Log {  
<<<<<<< HEAD  
}  
=====
```

```
    /**  
     * Sets the category of the constructed Logger. By default, it will use the type  
     where the annotation is placed.  
     */  
    String topic() default "";  
}  
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
```

```
public @interface Log {  
    /**  
     * Sets the category of the constructed Logger. By default, it will use the type  
     where the annotation is placed.  
     */  
    String topic() default "";  
}
```

[src/core/lombok/extern/log4j/Log4j.java](#)

Chunk 11: (version 2/ annotation element, commentary)

```
public @interface Log4j {  
<<<<<<< HEAD  
}  
=====
```

```
    /**  
     * Sets the category of the constructed Logger. By default, it will use the type  
     where the annotation is placed.  
     */  
    String topic() default "";  
}  
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
```

```
public @interface Log4j {  
    /**  
     * Sets the category of the constructed Logger. By default, it will use the type  
     where the annotation is placed.  
     */  
    String topic() default "";  
}
```

lombok/src/core/lombok/extern/log4j/Log4j2.java

Chunk 12: (version 2/ annotation element, commentary)

```
public @interface Log4j2 {
<<<<<<< HEAD
}
=====
    /**
     * Sets the category of the constructed Logger. By default, it will use the type
     where the annotation is placed.
     */
    String topic() default "";
}
>>>>>>> fbablca77cb8306843e26c5bad91186b34563282
```

```
public @interface Log4j2 {
    /**
     * Sets the category of the constructed Logger. By default, it will use the type
     where the annotation is placed.
     */
    String topic() default "";
}
```

lombok/src/core/lombok/javac/handlers/HandleLog.java

chunk 13: (version 1/ if statement)

```
    }
<<<<<<< HEAD

        if (fieldExists(logFieldName, typeNode) !=
MemberExistsResult.NOT_EXISTS) {
            annotationNode.addWarning("Field '" + logFieldName + "'
already exists.");
=====

            if (fieldExists("log", typeNode) != MemberExistsResult.NOT_EXISTS) {
                annotationNode.addWarning("Field 'log' already exists.");
>>>>>>> fbablca77cb8306843e26c5bad91186b34563282
                return;
            }
        }
    }
    if (fieldExists(logFieldName, typeNode) !=
MemberExistsResult.NOT_EXISTS) {
        annotationNode.addWarning("Field '" + logFieldName + "'
already exists.");
        return;
    }
}
```

```
    }
    if (fieldExists(logFieldName, typeNode) !=
MemberExistsResult.NOT_EXISTS) {
        annotationNode.addWarning("Field '" + logFieldName + "'
already exists.");
        return;
    }
}
```

Chunk 14: (new code/method incocation)

```
        JCFieldAccess loggingType = selfType(typeNode);
<<<<<<< HEAD

        createField(framework, typeNode, loggingType, annotationNode.get(),
logFieldName, useStatic);
=====

        createField(framework, typeNode, loggingType, annotationNode.get(),
loggerCategory);
>>>>>>> fbablca77cb8306843e26c5bad91186b34563282
        break;
    }
}
```

```

        JCFieldAccess loggingType = selfType(typeNode);
        createField(framework, typeNode, loggingType, annotationNode.get(),
logFieldName, useStatic, loggerTopic);
        break;

```

Chunk 15: (new code/method incocation)

```

}

<<<<<<< HEAD
    private static boolean createField(LoggingFramework framework, JavacNode typeNode,
JCFieldAccess loggingType, JCTree source, String logFieldName, boolean useStatic) {
    =====
        public static boolean createField(LoggingFramework framework, JavacNode typeNode,
JCFieldAccess loggingType, JCTree source, String loggerCategory) {
>>>>>>> fbablca77cb8306843e26c5bad91186b34563282
        JavacTreeMaker maker = typeNode.getTreeMaker();

```

```

    }

    private static boolean createField(LoggingFramework framework, JavacNode typeNode,
JCFieldAccess loggingType, JCTree source, String logFieldName, boolean useStatic, String
loggerTopic) {
        JavacTreeMaker maker = typeNode.getTreeMaker();

```

Chunk 16: (combination/method incocation)

```

        @Override                                public                                void
handle(AnnotationValues<lombok.extern.apachecommons.CommonsLog> annotation, JCAAnnotation
ast, JavacNode annotationNode) {
<<<<<<<< HEAD
            handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_COMMONS_FLAG_USAGE,                                "@apachecommons.CommonsLog",
ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");

            processAnnotation(LoggingFramework.COMMONS,                                annotation,
annotationNode);
    =====
            processAnnotation(LoggingFramework.COMMONS,                                annotation,
annotationNode, annotation.getInstance().topic());
>>>>>>> fbablca77cb8306843e26c5bad91186b34563282
    }

```

```

        @Override                                public                                void
handle(AnnotationValues<lombok.extern.apachecommons.CommonsLog> annotation, JCAAnnotation
ast, JavacNode annotationNode) {
            handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_COMMONS_FLAG_USAGE,                                "@apachecommons.CommonsLog",
ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");
            processAnnotation(LoggingFramework.COMMONS,                                annotation,
annotationNode, annotation.getInstance().topic());
    }

```

Chunk 17: (combination/method incocation)

```

        @Override    public    void    handle(AnnotationValues<lombok.extern.java.Log>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
<<<<<<<< HEAD

```



```

        handleFlagUsage(annotationNode, ConfigurationKeys.LOG_JUL_FLAG_USAGE,
"java.Log", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");

        processAnnotation(LoggingFramework.JUL, annotation, annotationNode);
=====
        processAnnotation(LoggingFramework.JUL, annotation, annotationNode,
annotation.getInstance().topic());
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
    }

```

```

    @Override public void handle(AnnotationValues<lombok.extern.java.Log>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
        handleFlagUsage(annotationNode, ConfigurationKeys.LOG_JUL_FLAG_USAGE,
"java.Log", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any @Log");
        processAnnotation(LoggingFramework.JUL, annotation, annotationNode,
annotation.getInstance().topic());
    }

```

Chunk 18: (combination/method incocation)

```

    @Override public void handle(AnnotationValues<lombok.extern.log4j.Log4j>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
<<<<<<< HEAD
        handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_LOG4J_FLAG_USAGE, "@Log4j", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any
@Log");

        processAnnotation(LoggingFramework.LOG4J, annotation,
annotationNode);
=====
        processAnnotation(LoggingFramework.LOG4J, annotation, annotationNode,
annotation.getInstance().topic());
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
    }

```

```

    @Override public void handle(AnnotationValues<lombok.extern.log4j.Log4j>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
        handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_LOG4J_FLAG_USAGE, "@Log4j", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any
@Log");
        processAnnotation(LoggingFramework.LOG4J, annotation, annotationNode,
annotation.getInstance().topic());
    }

```

Chunk 19: (combination/method incocation)

```

    @Override public void handle(AnnotationValues<lombok.extern.log4j.Log4j2>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
<<<<<<< HEAD
        handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_LOG4J2_FLAG_USAGE, "@Log4j2", ConfigurationKeys.LOG_ANY_FLAG_USAGE,
"any @Log");

        processAnnotation(LoggingFramework.LOG4J2, annotation,
annotationNode);
=====
        processAnnotation(LoggingFramework.LOG4J2, annotation,
annotationNode, annotation.getInstance().topic());
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
    }

```

```

        @Override public void handle(AnnotationValues<lombok.extern.log4j.Log4j2>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
            handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_LOG4J2_FLAG_USAGE, "@Log4j2", ConfigurationKeys.LOG_ANY_FLAG_USAGE,
"any @Log");
            processAnnotation(LoggingFramework.LOG4J2, annotation,
annotationNode, annotation.getInstance().topic());
        }

```

Chunk 20: (combination/method incocation)

```

        @Override public void handle(AnnotationValues<lombok.extern.slf4j.Slf4j>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
<<<<<<< HEAD
            handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_SLF4J_FLAG_USAGE, "@Slf4j", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any
@Log");

            processAnnotation(LoggingFramework.SLF4J, annotation,
annotationNode);
=====
            processAnnotation(LoggingFramework.SLF4J, annotation, annotationNode,
annotation.getInstance().topic());
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
        }

```

```

        @Override public void handle(AnnotationValues<lombok.extern.slf4j.Slf4j>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
            handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_SLF4J_FLAG_USAGE, "@Slf4j", ConfigurationKeys.LOG_ANY_FLAG_USAGE, "any
@Log");
            processAnnotation(LoggingFramework.SLF4J, annotation, annotationNode,
annotation.getInstance().topic());
        }

```

Chunk 21: (combination/method incocation)

```

        @Override public void handle(AnnotationValues<lombok.extern.slf4j.XSlf4j>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
<<<<<<< HEAD
            handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_XSLF4J_FLAG_USAGE, "@XSlf4j", ConfigurationKeys.LOG_ANY_FLAG_USAGE,
"any @Log");

            processAnnotation(LoggingFramework.XSLF4J, annotation,
annotationNode);
=====
            processAnnotation(LoggingFramework.XSLF4J, annotation,
annotationNode, annotation.getInstance().topic());
>>>>>> fbablca77cb8306843e26c5bad91186b34563282
        }

```

```

        @Override public void handle(AnnotationValues<lombok.extern.slf4j.XSlf4j>
annotation, JCAAnnotation ast, JavacNode annotationNode) {
            handleFlagUsage(annotationNode,
ConfigurationKeys.LOG_XSLF4J_FLAG_USAGE, "@XSlf4j", ConfigurationKeys.LOG_ANY_FLAG_USAGE,
"any @Log");
            processAnnotation(LoggingFramework.XSLF4J, annotation,
annotationNode, annotation.getInstance().topic());

```

}

Version: 78b2d6919e35887940f9f11b6ae1731245739b83

Parents:

5deb185591904d275cb06eea85c0d739587fc738

83b7e77b0cce6cd5993b17f36164271accdd281c

Merge base:

deed98be16e5099af52d951fc611f86a82a42858

lombok/src/delombok/lombok/delombok/DelombokApp.java

Chunk 22: (combination/annotation, commentary, method invocation, variable)

```
    }

<<<<<<< HEAD
    @SuppressWarnings("resource")
    // The jar file is used for the lifetime of the classLoader, therefore the
lifetime of delombok.
    // Since we only read from it, not closing it should not be a problem.
    final JarFile toolsJarFile = new JarFile(toolsJar);
=====
    @SuppressWarnings({"resource", "all"}) final JarFile toolsJarFile = new
JarFile(toolsJar);
>>>>>>> 83b7e77b0cce6cd5993b17f36164271accdd281c

    ClassLoader loader = new ClassLoader() {
```

```
    }

    // The jar file is used for the lifetime of the classLoader, therefore the
lifetime of delombok.
    // Since we only read from it, not closing it should not be a problem.
    @SuppressWarnings({"resource", "all"}) final JarFile toolsJarFile = new
JarFile(toolsJar);

    ClassLoader loader = new ClassLoader() {
```

Version: 86a635876dd75c4f3a61593491fa2ce53f8444b8

Parents:

7ee868659f4ff3cb286b676d649e8c57e9248d87

72b55dccb18f38b8aefd0ac8e7c2e8bd2dd5c057

Merge base:

deed98be16e5099af52d951fc611f86a82a42858

lombok/src/core/lombok/core/Version.java

Chunk 23: (version 2/commentary, variable)

```
private static final String VERSION = "0.12.1";
<<<<<<< HEAD
private static final String RELEASE_NAME = "Edgy Guinea Pig";
// private static final String RELEASE_NAME = "Angry Butterfly";
=====
private static final String RELEASE_NAME = "Angry Butterfly";
>>>>>>> 72b55dccb18f38b8aefd0ac8e7c2e8bd2dd5c057

private Version() {
```

```
private static final String VERSION = "0.12.1";
private static final String RELEASE_NAME = "Edgy Guinea Pig";

private Version() {
```

lombok/src/core/lombok/javac/handlers/HandleConstructor.java

Chunk 24: (Version 1/method invocation, variable)

```
List<JCAnnotation> nullables = findAnnotations(fieldNode,
TransformationsUtil.NULLABLE_PATTERN);
<<<<<<< HEAD
JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL |
Flags.PARAMETER, nonNulls.appendList(nullables)), field.name, field.vartype, null);
=====
JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL,
nonNulls.appendList(nullables)), fieldName, field.vartype, null);
>>>>>>> 72b55dccb18f38b8aefd0ac8e7c2e8bd2dd5c057
params.append(param);
```

```
List<JCAnnotation> nullables = findAnnotations(fieldNode,
TransformationsUtil.NULLABLE_PATTERN);
JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL |
Flags.PARAMETER, nonNulls.appendList(nullables)), fieldName, field.vartype, null);
params.append(param);
```

Chunk 25: (Version 1/method invocation, variable)

```
List<JCAnnotation> nullables = findAnnotations(fieldNode,
TransformationsUtil.NULLABLE_PATTERN);
<<<<<<< HEAD
JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL |
Flags.PARAMETER, nonNulls.appendList(nullables)), field.name, pType, null);
=====
```

```
        JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL,
nonNulls.appendList(nullables)), fieldName, pType, null);
>>>>>> 72b55dccbl8f38b8aefd0ac8e7c2e8bd2dd5c057
        params.append(param);
```

```
        List<JCAnnotation> nullables = findAnnotations(fieldNode,
TransformationsUtil.NULLABLE_PATTERN);
        JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL |
Flags.PARAMETER, nonNulls.appendList(nullables)), fieldName, pType, null);
        params.append(param);
```

Version: 45697b50816df79475a8bb69dc89ff68747fbfe6

Parents:

4c03e3d220900431085897878d4888bf530b31ec

deed98be16e5099af52d951fc611f86a82a42858

Merge base:

620616bf8a73ea78863a5507aff631799b3a7a2e

[lombok/src/core/lombok/javac/handlers/JavacHandlerUtil.java](#)

Chunk 26: (new code/ method invocation, return statement, variable)

```
JCExpression      npe      =      chainDots(variable,      "java",      "lang",
"NullPointerException");
<<<<<<< HEAD
                JCTree exception = maker.NewClass(null, List.<JCExpression>nil(), npe,
List.<JCExpression>of(maker.Literal(fieldName.toString()), null);
                JCStatement throwStatement = maker.Throw(exception);
                return maker.If(Javac.makeBinary(maker, CTC_EQUAL, maker.Ident(fieldName),
Javac.makeLiteral(maker, CTC_BOT, null)), throwStatement, null);
=====
                JCTree exception = treeMaker.NewClass(null, List.<JCExpression>nil(), npe,
List.<JCExpression>of(treeMaker.Literal(fieldName.toString()), null);
                JCStatement throwStatement = treeMaker.Throw(exception);
                JCBlock throwBlock = treeMaker.Block(0, List.of(throwStatement));
                return treeMaker.If(treeMaker.Binary(CTC_EQUAL, treeMaker.Ident(fieldName),
treeMaker.Literal(CTC_BOT, null)), throwBlock, null);
>>>>>> deed98be16e5099af52d951fc611f86a82a42858
    }
```

```
JCExpression      npe      =      chainDots(variable,      "java",      "lang",
"NullPointerException");
                JCTree exception = maker.NewClass(null, List.<JCExpression>nil(), npe,
List.<JCExpression>of(maker.Literal(fieldName.toString()), null);
                JCStatement throwStatement = maker.Throw(exception);
                JCBlock throwBlock = maker.Block(0, List.of(throwStatement));
                return maker.If(Javac.makeBinary(maker, CTC_EQUAL, maker.Ident(fieldName),
Javac.makeLiteral(maker, CTC_BOT, null)), throwBlock, null);
    }
```

[lombok/src/utils/lombok/javac/CommentCatcher.java](#)

Chunk 27: (new code/if statement, method invocation)

```
Class<?>          parserFactory          =
Class.forName("lombok.javac.java6.CommentCollectingParserFactory");
<<<<<<< HEAD
                parserFactory.getMethod("setInCompiler", JavaCompiler.class,
Context.class, Map.class).invoke(null, compiler, context, commentsMap);
                } else if (JavaCompiler.version().startsWith("1.7") ||
JavaCompiler.version().startsWith("1.8")) {
                Class<?>          parserFactory          =
Class.forName("lombok.javac.java7.CommentCollectingParserFactory");
                parserFactory.getMethod("setInCompiler", JavaCompiler.class,
Context.class, Map.class).invoke(null, compiler, context, commentsMap);
                } else {
                throw new IllegalStateException("No comments parser for
compiler version " + JavaCompiler.version());
```

```

=====
        parserFactory.getMethod("setInCompiler",    JavaCompiler.class,
Context.class, Map.class).invoke(null, compiler, context, commentsMap);
    } else {
        Class<?>                                parserFactory                =
Class.forName("lombok.javac.java7.CommentCollectingParserFactory");
        parserFactory.getMethod("setInCompiler",    JavaCompiler.class,
Context.class, Map.class).invoke(null, compiler, context, commentsMap);
>>>>>> deed98be16e5099af52d951fc611f86a82a42858
    }

```

```

        parserFactory                                =
Class.forName("lombok.javac.java6.CommentCollectingParserFactory");
    } else {
        parserFactory                                =
Class.forName("lombok.javac.java7.CommentCollectingParserFactory");
    }
    parserFactory.getMethod("setInCompiler",        JavaCompiler.class,
Context.class, Map.class).invoke(null, compiler, context, commentsMap);
}

```

[lombok/src/utils/lombok/javac/Javac.java](#)

Chunk 28: (new code/ import declaration)

```

package lombok.javac;

<<<<<<< HEAD
import java.lang.reflect.Method;
import java.util.Objects;
import java.util.regex.Pattern;

import com.sun.tools.javac.main.JavaCompiler;
import com.sun.tools.javac.tree.JCTree.JCBinary;
=====
import java.lang.reflect.Field;
import java.lang.reflect.InvocationTargetException;
import java.lang.reflect.Method;
import java.lang.reflect.Modifier;
import java.util.regex.Matcher;
import java.util.regex.Pattern;

import com.sun.tools.javac.code.TypeTags;
import com.sun.tools.javac.main.JavaCompiler;
import com.sun.tools.javac.tree.JCTree;
import com.sun.tools.javac.tree.JCTree.JCClassDecl;
>>>>>> deed98be16e5099af52d951fc611f86a82a42858
import com.sun.tools.javac.tree.JCTree.JCExpression;

```

```

package lombok.javac;

import java.lang.reflect.Field;
import java.lang.reflect.InvocationTargetException;
import java.lang.reflect.Method;
import java.lang.reflect.Modifier;
import java.util.concurrent.ConcurrentHashMap;
import java.util.concurrent.ConcurrentMap;
import java.util.concurrent.atomic.AtomicInteger;
import java.util.regex.Matcher;
import java.util.regex.Pattern;

```



```

import javax.lang.model.type.NoType;
import javax.lang.model.type.TypeKind;
import javax.lang.model.type.TypeVisitor;

import lombok.Lombok;

import com.sun.tools.javac.code.Type;
import com.sun.tools.javac.main.JavaCompiler;
import com.sun.tools.javac.tree.JCTree;
import com.sun.tools.javac.tree.JCTree.JCBinary;
import com.sun.tools.javac.tree.JCTree.JCClassDecl;
import com.sun.tools.javac.tree.JCTree.JCExpression;

```

Chunk 29: (combination/ import declaration)

```

import com.sun.tools.javac.tree.JCTree.JCLiteral;
<<<<<< HEAD
import com.sun.tools.javac.tree.JCTree.JCPrimitiveTypeTree;
import com.sun.tools.javac.tree.JCTree.JCUnary;
import com.sun.tools.javac.tree.TreeMaker;
=====
import com.sun.tools.javac.tree.JCTree.JCModifiers;
import com.sun.tools.javac.tree.JCTree.JCTypeParameter;
import com.sun.tools.javac.tree.TreeMaker;
import com.sun.tools.javac.util.List;
import com.sun.tools.javac.util.Name;
>>>>>> deed98be16e5099af52d951fc611f86a82a42858

/**

```

```

import com.sun.tools.javac.tree.JCTree.JCLiteral;
import com.sun.tools.javac.tree.JCTree.JCModifiers;
import com.sun.tools.javac.tree.JCTree.JCPrimitiveTypeTree;
import com.sun.tools.javac.tree.JCTree.JCTypeParameter;
import com.sun.tools.javac.tree.JCTree.JCUnary;
import com.sun.tools.javac.tree.TreeMaker;
import com.sun.tools.javac.util.List;
import com.sun.tools.javac.util.Name;

/**

```

Chunk 30: (new code/method declaration, static block, variable)

```

    }

<<<<<< HEAD
    public static JCLiteral makeLiteral(TreeMaker maker, Object ctc, Object argument) {
        try {
            Method createLiteral;
            if (JavaCompiler.version().startsWith("1.8")) {
                createLiteral = TreeMaker.class.getMethod("Literal",
Class.forName("com.sun.tools.javac.code.TypeTag"), Object.class);
            } else {
                createLiteral = TreeMaker.class.getMethod("Literal",
Integer.TYPE, Object.class);
            }
            return (JCLiteral) createLiteral.invoke(maker, ctc, argument);
        } catch (NoSuchMethodException e) {
            throw new RuntimeException(e);
        } catch (IllegalAccessException e) {
            throw new RuntimeException(e);
        }
    }

```

```

        } catch (Exception e) {
            if (e instanceof RuntimeException) throw (RuntimeException) e;
            throw new RuntimeException(e);
        }
    }

    public static JUnary makeUnary(TreeMaker maker, Object ctc, JExpression argument)
    {
        try {
            Method createUnary;
            if (JavaCompiler.version().startsWith("1.8")) {
                createUnary = TreeMaker.class.getMethod("Unary",
Class.forName("com.sun.tools.javac.code.TypeTag"), JExpression.class);
            } else {
                createUnary = TreeMaker.class.getMethod("Unary", Integer.TYPE,
JExpression.class);
            }
            return (JUnary) createUnary.invoke(maker, ctc, argument);
        } catch (NoSuchMethodException e) {
            throw new RuntimeException(e);
        } catch (IllegalAccessException e) {
            throw new RuntimeException(e);
        } catch (Exception e) {
            if (e instanceof RuntimeException) throw (RuntimeException) e;
            throw new RuntimeException(e);
        }
    }

    public static JBinary makeBinary(TreeMaker maker, Object ctc, JExpression
rhsArgument, JExpression lhsArgument) {
        try {
            Method createUnary;
            if (JavaCompiler.version().startsWith("1.8")) {
                createUnary = TreeMaker.class.getMethod("Binary",
Class.forName("com.sun.tools.javac.code.TypeTag"), JExpression.class, JExpression.class);
            } else {
                createUnary = TreeMaker.class.getMethod("Binary",
Integer.TYPE, JExpression.class, JExpression.class);
            }
            return (JBinary) createUnary.invoke(maker, ctc, rhsArgument,
lhsArgument);
        } catch (NoSuchMethodException e) {
            throw new RuntimeException(e);
        } catch (IllegalAccessException e) {
            throw new RuntimeException(e);
        } catch (Exception e) {
            if (e instanceof RuntimeException) throw (RuntimeException) e;
            throw new RuntimeException(e);
        }
    }
}

=====
private static final Field JCTREE_TAG;
private static final Method JCTREE_GETTAG;
static {
    Field f = null;
    try {
        f = JCTree.class.getDeclaredField("tag");
    } catch (NoSuchFieldException e) {}
    JCTREE_TAG = f;
}

```

```

        Method m = null;
        try {
            m = JCTree.class.getDeclaredMethod("getTag");
        } catch (NoSuchMethodException e) {}
        JCTREE_GETTAG = m;
    }

    public static int getTag(JCTree node) {
        if (JCTREE_GETTAG != null) {
            try {
                return (Integer) JCTREE_GETTAG.invoke(node);
            } catch (Exception e) {}
        }
        try {
            return (Integer) JCTREE_TAG.get(node);
        } catch (Exception e) {
            throw new IllegalStateException("Can't get node tag");
        }
    }

    private static Method method;

    public static JCClassDecl ClassDef(TreeMaker maker, JCModifiers mods, Name name,
List<JCTypeParameter> typarams, JCEExpression extending, List<JCEExpression> implementing,
List<JCTree> defs) {
        if (method == null) try {
            method = TreeMaker.class.getDeclaredMethod("ClassDef",
JCModifiers.class, Name.class, List.class, JCEExpression.class, List.class, List.class);
        } catch (NoSuchMethodException ignore) {}
        if (method == null) try {
            method = TreeMaker.class.getDeclaredMethod("ClassDef",
JCModifiers.class, Name.class, List.class, JCTree.class, List.class, List.class);
        } catch (NoSuchMethodException ignore) {}

        if (method == null) throw new IllegalStateException("Lombok bug #20130617-
1310: ClassDef doesn't look like anything we thought it would look like.");
        if (!Modifier.isPublic(method.getModifiers()) && !method.isAccessible()) {
            method.setAccessible(true);
        }

        try {
            return (JCClassDecl) method.invoke(maker, mods, name, typarams,
extending, implementing, defs);
        } catch (InvocationTargetException e) {
            throw sneakyThrow(e.getCause());
        } catch (IllegalAccessException e) {
            throw sneakyThrow(e.getCause());
        }
    }

    private static RuntimeException sneakyThrow(Throwable t) {
        if (t == null) throw new NullPointerException("t");
        Javac.<RuntimeException>sneakyThrow0(t);
        return null;
    }

    @SuppressWarnings("unchecked")
    private static <T extends Throwable> void sneakyThrow0(Throwable t) throws T {
        throw (T)t;
    }
}
>>>>>> deed98be16e5099af52d951fc611f86a82a42858
}

```

```

    }

    public static JCLiteral makeLiteral(TreeMaker maker, Object ctc, Object argument) {
        try {
            return (JCLiteral) createLiteral.invoke(maker, ctc, argument);
        } catch (IllegalAccessException e) {
            throw Lombok.sneakyThrow(e);
        } catch (InvocationTargetException e) {
            throw Lombok.sneakyThrow(e.getCause());
        }
    }

    public static JCUnary makeUnary(TreeMaker maker, Object ctc, JCEExpression argument)
{
        try {
            return (JCUnary) createUnary.invoke(maker, ctc, argument);
        } catch (IllegalAccessException e) {
            throw Lombok.sneakyThrow(e);
        } catch (InvocationTargetException e) {
            throw Lombok.sneakyThrow(e.getCause());
        }
    }

    public static JCBinary makeBinary(TreeMaker maker, Object ctc, JCEExpression
lhsArgument, JCEExpression rhsArgument) {
        try {
            return (JCBinary) createBinary.invoke(maker, ctc, lhsArgument,
rhsArgument);
        } catch (IllegalAccessException e) {
            throw Lombok.sneakyThrow(e);
        } catch (InvocationTargetException e) {
            throw Lombok.sneakyThrow(e.getCause());
        }
    }

    private static final Class<?> JC_VOID_TYPE, JC_NO_TYPE;

    static {
        Class<?> c = null;
        try {
            c = Class.forName("com.sun.tools.javac.code.Type$JCVoidType");
        } catch (Exception ignore) {}
        JC_VOID_TYPE = c;
        c = null;
        try {
            c = Class.forName("com.sun.tools.javac.code.Type$JCNoType");
        } catch (Exception ignore) {}
        JC_NO_TYPE = c;
    }

    public static Type createVoidType(TreeMaker maker, Object tag) {
        if (Javac.getJavaCompilerVersion() < 8) {
            return new JCNoType(((Integer) tag).intValue());
        } else {
            try {
                if (compareCTC(tag, CTC_VOID)) {
                    return (Type) JC_VOID_TYPE.newInstance();
                } else {
                    return (Type) JC_NO_TYPE.newInstance();
                }
            }

```

```

        } catch (IllegalAccessException e) {
            throw Lombok.sneakyThrow(e);
        } catch (InstantiationException e) {
            throw Lombok.sneakyThrow(e);
        }
    }
}

private static class JCNoType extends Type implements NoType {
    public JCNoType(int tag) {
        super(tag, null);
    }

    @Override
    public TypeKind getKind() {
        if (Javac.compareCTC(tag, CTC_VOID)) return TypeKind.VOID;
        if (Javac.compareCTC(tag, CTC_NONE)) return TypeKind.NONE;
        throw new AssertionError("Unexpected tag: " + tag);
    }

    @Override
    public <R, P> R accept(TypeVisitor<R, P> v, P p) {
        return v.visitNoType(this, p);
    }
}

private static final Field JCTREE_TAG, JCLITERAL_TYPETAG,
JCPRIMITIVETYPETREE_TYPETAG;
private static final Method JCTREE_GETTAG;
static {
    Field f = null;
    try {
        f = JCTree.class.getDeclaredField("tag");
    } catch (NoSuchFieldException e) {}
    JCTREE_TAG = f;

    f = null;
    try {
        f = JCLiteral.class.getDeclaredField("typetag");
    } catch (NoSuchFieldException e) {}
    JCLITERAL_TYPETAG = f;

    f = null;
    try {
        f = JCPrimitiveTypeTree.class.getDeclaredField("typetag");
    } catch (NoSuchFieldException e) {}
    JCPRIMITIVETYPETREE_TYPETAG = f;

    Method m = null;
    try {
        m = JCTree.class.getDeclaredMethod("getTag");
    } catch (NoSuchMethodException e) {}
    JCTREE_GETTAG = m;
}

public static Object getTag(JCTree node) {
    if (JCTREE_GETTAG != null) {
        try {
            return JCTREE_GETTAG.invoke(node);
        } catch (Exception e) {}
    }
    try {

```

```

        return JCTREE_TAG.get(node);
    } catch (Exception e) {
        throw new IllegalStateException("Can't get node tag");
    }
}

public static Object getTypeTag(JCLiteral node) {
    try {
        return JCLITERAL_TYPETAG.get(node);
    } catch (Exception e) {
        throw new IllegalStateException("Can't get JCLiteral typetag");
    }
}

public static Object getTypeTag(JCPrimitiveTypeTree node) {
    try {
        return JCPRIMITIVETYPETREE_TYPETAG.get(node);
    } catch (Exception e) {
        throw new IllegalStateException("Can't get JCPrimitiveTypeTree
typetag");
    }
}

private static Method classDef;

public static JCClassDecl ClassDef(TreeMaker maker, JCModifiers mods, Name name,
List<JCTypeParameter> typarams, JCEExpression extending, List<JCEExpression> implementing,
List<JCTree> defs) {
    if (classDef == null) try {
        classDef = TreeMaker.class.getDeclaredMethod("ClassDef",
JCModifiers.class, Name.class, List.class, JCEExpression.class, List.class, List.class);
    } catch (NoSuchMethodException ignore) {}
    if (classDef == null) try {
        classDef = TreeMaker.class.getDeclaredMethod("ClassDef",
JCModifiers.class, Name.class, List.class, JCTree.class, List.class, List.class);
    } catch (NoSuchMethodException ignore) {}

    if (classDef == null) throw new IllegalStateException("Lombok bug #20130617-
1310: ClassDef doesn't look like anything we thought it would look like.");
    if (!Modifier.isPublic(classDef.getModifiers()) && !classDef.isAccessible())
    {
        classDef.setAccessible(true);
    }

    try {
        return (JCClassDecl) classDef.invoke(maker, mods, name, typarams,
extending, implementing, defs);
    } catch (InvocationTargetException e) {
        throw sneakyThrow(e.getCause());
    } catch (IllegalAccessException e) {
        throw sneakyThrow(e.getCause());
    }
}

private static RuntimeException sneakyThrow(Throwable t) {
    if (t == null) throw new NullPointerException("t");
    Javac.<RuntimeException>sneakyThrow0(t);
    return null;
}

@SuppressWarnings("unchecked")
private static <T extends Throwable> void sneakyThrow0(Throwable t) throws T {

```

```
        throw (T)t;
    }
}
```

Version: 87f763a94c87b03da269d110c44e7e750ddf5211

Parents:

eb4cbcd8bbd7bf7784aa229e9b6c5fe0670fa7a5

34055fcdff786c9b809ce1a08c1c9218968ebc7d

Merge base:

1865bd7309b9d1dc743f83ccdbd7204fb0939ecd

[lombok/src/core/lombok/javac/handlers/JavacHandlerUtil.java](#)

Chunk 31: (concatenation/import declaration)

```
import com.sun.tools.javac.tree.JCTree.JCStatement;  
<<<<<< HEAD  
import com.sun.tools.javac.tree.JCTree.JCTypeParameter;  
=====  
import com.sun.tools.javac.tree.JCTree.JCTypeApply;  
>>>>>> 34055fcdff786c9b809ce1a08c1c9218968ebc7d  
import com.sun.tools.javac.tree.JCTree.JCVariableDecl;
```

```
import com.sun.tools.javac.tree.JCTree.JCStatement;  
import com.sun.tools.javac.tree.JCTree.JCTypeParameter;  
import com.sun.tools.javac.tree.JCTree.JCTypeApply;  
import com.sun.tools.javac.tree.JCTree.JCVariableDecl;
```


Version: 19466a5413d0c451b89d0d70a8ba8f5fe0fc98aa

Parents:

e98d226cfb9a4b76b12e38e8ac590fb6c6ebbacc

a264677ffcbd929acef5f6fde4915f4c3117b052

Merge base:

4689d2a9bf79f592690a71e7ad7d25cb38b2344b

lombok/src/core/lombok/javac/handlers/JavacHandlerUtil.java

Chunk 32: (version 2/import declaration)

```
import lombok.Getter;
<<<<<< HEAD
import lombok.core.AnnotationValues;
import lombok.core.TransformationsUtil;
import lombok.core.TypeResolver;
=====
>>>>>> a264677ffcbd929acef5f6fde4915f4c3117b052
import lombok.core.AST.Kind;
```

```
import lombok.Getter;
import lombok.core.AST.Kind;
```

Chunk 33: (new code/import declaration)

```
import lombok.core.AnnotationValues.AnnotationValue;
<<<<<< HEAD
import lombok.experimental.Accessors;
=====
import lombok.core.TypeResolver;
>>>>>> a264677ffcbd929acef5f6fde4915f4c3117b052
import lombok.javac.Javac;
```

```
import lombok.core.AnnotationValues.AnnotationValue;
import lombok.core.TransformationsUtil;
import lombok.core.TypeResolver;
import lombok.experimental.Accessors;
import lombok.javac.Javac;
```

Version: a514af4dcdd87cdae64e87b9d8a8d1a489a8e474

Parents:

aa5d3b8bb2cb2bf068f4b4728a9e765968c673d4

0c927175af39f2b8d66d25b735ee0e5249107286

Merge base:

6ca2a91d6bb7054328a845771af0a4e618002f14

[lombok/src/core/lombok/eclipse/handlers/HandleGetter.java](#)

Chunk 34: (combination/for statement, switch statement)

```
int    modifier    =    toEclipseModifier(level)    |    (field.modifiers    &
ClassFileConstants.AccStatic);

<<<<<<< HEAD
    for (String altName : toAllGetterNames(fieldNode, isBoolean)) {
        switch (methodExists(altName, fieldNode, false)) {
=====
    for (String altName : TransformationsUtil.toAllGetterNames(fieldName,
isBoolean)) {
        switch (methodExists(altName, fieldNode, false, 0)) {
>>>>>> 0c927175af39f2b8d66d25b735ee0e5249107286
        case EXISTS_BY_LOMBOK:
```

```
int    modifier    =    toEclipseModifier(level)    |    (field.modifiers    &
ClassFileConstants.AccStatic);

    for (String altName : toAllGetterNames(fieldNode, isBoolean)) {
        switch (methodExists(altName, fieldNode, false, 0)) {
        case EXISTS_BY_LOMBOK:
```

[lombok/src/core/lombok/eclipse/handlers/HandleSetter.java](#)

Chunk 35: (combination/for statement, switch statement)

```
int    modifier    =    toEclipseModifier(level)    |    (field.modifiers    &
ClassFileConstants.AccStatic);

<<<<<<< HEAD
    for (String altName : toAllSetterNames(fieldNode, isBoolean)) {
        switch (methodExists(altName, fieldNode, false)) {
=====
    for (String altName : TransformationsUtil.toAllSetterNames(new
String(field.name), isBoolean)) {
        switch (methodExists(altName, fieldNode, false, 1)) {
>>>>>> 0c927175af39f2b8d66d25b735ee0e5249107286
        case EXISTS_BY_LOMBOK:
```

```
int    modifier    =    toEclipseModifier(level)    |    (field.modifiers    &
ClassFileConstants.AccStatic);

    for (String altName : toAllSetterNames(fieldNode, isBoolean)) {
        switch (methodExists(altName, fieldNode, false, 1)) {
        case EXISTS_BY_LOMBOK:
```

[lombok/src/core/lombok/javac/handlers/HandleGetter.java](#)

Chunk 36: (combination/for statement, if statement, switch statement)

```
String methodName = toGetterName(fieldNode);

<<<<<<< HEAD
    if (methodName == null) {
        source.addWarning("Not generating getter for this field: It does not
fit your @Accessors prefix list.");
        return;
    }

    for (String altName : toAllGetterNames(fieldNode)) {
        switch (methodExists(altName, fieldNode, false)) {
=====
        for (String altName : toAllGetterNames(fieldDecl)) {
            switch (methodExists(altName, fieldNode, false, 0)) {
>>>>>>> 0c927175af39f2b8d66d25b735ee0e5249107286
                case EXISTS_BY_LOMBOK:
```

```
String methodName = toGetterName(fieldNode);

    if (methodName == null) {
        source.addWarning("Not generating getter for this field: It does not
fit your @Accessors prefix list.");
        return;
    }

    for (String altName : toAllGetterNames(fieldNode)) {
        switch (methodExists(altName, fieldNode, false, 0)) {
            case EXISTS_BY_LOMBOK:
```

[lombok/src/core/lombok/javac/handlers/HandleSetter.java](#)

Chunk 37: (combination/for statement, if statement, switch statement)

```
String methodName = toSetterName(fieldNode);

<<<<<<< HEAD
    if (methodName == null) {
        source.addWarning("Not generating setter for this field: It does not
fit your @Accessors prefix list.");
        return;
    }

    for (String altName : toAllSetterNames(fieldNode)) {
        switch (methodExists(altName, fieldNode, false)) {
=====
    for (String altName : toAllSetterNames(fieldDecl)) {
        switch (methodExists(altName, fieldNode, false, 1)) {
>>>>>>> 0c927175af39f2b8d66d25b735ee0e5249107286
            case EXISTS_BY_LOMBOK:
```

```
String methodName = toSetterName(fieldNode);

    if (methodName == null) {
        source.addWarning("Not generating setter for this field: It does not
fit your @Accessors prefix list.");
        return;
```

```
    }  
  
    for (String altName : toAllSetterNames(fieldNode)) {  
        switch (methodExists(altName, fieldNode, false, 1)) {  
            case EXISTS_BY_LOMBOK:
```

Version: 3796efe82e73fe60a15c0fd1a827dd417dfbcb57

Parents:

302761816eb1e58c77cedb73040ed2967208d1fa

bf354e3b5ced16913726afc8247b1dd0321c9d62

Merge base:

6c9b3d54de988665b64a0114cac5c20059e4af2a

[lombok/src/eclipseAgent/lombok/eclipse/agent/EclipsePatcher.java](#)

Chunk 38: (version 2/ commentary, method invocation)

```
private static void patchExtractInterface(ScriptManager sm) {
<<<<<<< HEAD
=====
        /* Fix sourceEnding for generated nodes to avoid null pointer */
        sm.addScript(ScriptBuilder.wrapMethodCall()
            .target(new
MethodTarget("org.eclipse.jdt.internal.compiler.SourceElementNotifier",
"notifySourceElementRequestor",                                "void",
"org.eclipse.jdt.internal.compiler.ast.AbstractMethodDeclaration",
"org.eclipse.jdt.internal.compiler.ast.TypeDeclaration",
"org.eclipse.jdt.internal.compiler.ast.ImportReference"))
            .methodToWrap(new
Hook("org.eclipse.jdt.internal.compiler.util.HashtableOfObjectToInt",    "get",    "int",
"java.lang.Object"))
            .wrapMethod(new        Hook("lombok.eclipse.agent.PatchFixes",
"getSourceEndFixed", "int", "int", "org.eclipse.jdt.internal.compiler.ast.ASTNode"))
            .requestExtra(StackRequest.PARAM1)
            .transplant().build());

        /* Make sure the generated source element is found instead of the annotation
*/
        sm.addScript(ScriptBuilder.wrapMethodCall()
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.refactoring.structure.ExtractInterfaceProcesso
r", "createMethodDeclaration", "void",

            "org.eclipse.jdt.internal.corext.refactoring.structure.CompilationUnitRewrite",
            "org.eclipse.jdt.core.dom.rewrite.ASTRewrite",
            "org.eclipse.jdt.core.dom.AbstractTypeDeclaration",
            "org.eclipse.jdt.core.dom.MethodDeclaration"
            ))
            .methodToWrap(new    Hook("org.eclipse.jface.text.IDocument",    "get",
"java.lang.String", "int", "int"))
            .wrapMethod(new        Hook("lombok.eclipse.agent.PatchFixes",
"getRealMethodDeclarationSource",    "java.lang.String",    "java.lang.String",
"org.eclipse.jdt.core.dom.MethodDeclaration"))
            .requestExtra(StackRequest.PARAM4)
            .build());

>>>>>> bf354e3b5ced16913726afc8247b1dd0321c9d62
        /* get real generated node in stead of a random one generated by the
annotation */
```

```
private static void patchExtractInterface(ScriptManager sm) {
    /* Fix sourceEnding for generated nodes to avoid null pointer */
    sm.addScript(ScriptBuilder.wrapMethodCall()
```

```

        .target(new
MethodTarget("org.eclipse.jdt.internal.compiler.SourceElementNotifier",
"notifySourceElementRequestor",                                "void",
"org.eclipse.jdt.internal.compiler.ast.AbstractMethodDeclaration",
"org.eclipse.jdt.internal.compiler.ast.TypeDeclaration",
"org.eclipse.jdt.internal.compiler.ast.ImportReference"))
        .methodToWrap(new
Hook("org.eclipse.jdt.internal.compiler.util.HashtableOfObjectToInt",    "get",    "int",
"java.lang.Object"))
        .wrapMethod(new      Hook("lombok.eclipse.agent.PatchFixes",
"getSourceEndFixed", "int", "int", "org.eclipse.jdt.internal.compiler.ast.ASTNode"))
        .requestExtra(StackRequest.PARAM1)
        .transplant().build());

/* Make sure the generated source element is found instead of the annotation
*/

sm.addScript(ScriptBuilder.wrapMethodCall()
        .target(new
MethodTarget("org.eclipse.jdt.internal.corext.refactoring.structure.ExtractInterfaceProcesso
r", "createMethodDeclaration", "void",

        "org.eclipse.jdt.internal.corext.refactoring.structure.CompilationUnitRewrite",
        "org.eclipse.jdt.core.dom.rewrite.ASTRewrite",
        "org.eclipse.jdt.core.dom.AbstractTypeDeclaration",
        "org.eclipse.jdt.core.dom.MethodDeclaration"
        ))
        .methodToWrap(new      Hook("org.eclipse.jface.text.IDocument",    "get",
"java.lang.String", "int", "int"))
        .wrapMethod(new      Hook("lombok.eclipse.agent.PatchFixes",
"getRealMethodDeclarationSource",    "java.lang.String",    "java.lang.String",
"org.eclipse.jdt.core.dom.MethodDeclaration"))
        .requestExtra(StackRequest.PARAM4)
        .build());

/* get real generated node in stead of a random one generated by the
annotation */

```

Chunk 39: (version 2/commentary)

```

        .build());

<<<<<<< HEAD
=====
/* Do not add @Override's for generated methods */

/* Do not add @Override's for generated methods */
>>>>>>> bf354e3b5ced16913726afc8247b1dd0321c9d62
sm.addScript(ScriptBuilder.exitEarly())

```

```

        .build());

/* Do not add @Override's for generated methods */
sm.addScript(ScriptBuilder.exitEarly())

```

Chunk 40: (version 2/ commentary, method invocation)

```

        .build());

<<<<<<< HEAD
=====
/* Do not add comments for generated methods */
sm.addScript(ScriptBuilder.exitEarly())

```

```

                .target(new
MethodTarget("org.eclipse.jdt.internal.corext.refactoring.structure.ExtractInterfaceProcesso
r", "createMethodComment"))
                .decisionMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.ASTNode"))
                .request(StackRequest.PARAM2)
                .build());

>>>>>> bf354e3b5ced16913726afc8247b1dd0321c9d62
    }

```

```

                .build());

        /* Do not add comments for generated methods */
        sm.addScript(ScriptBuilder.exitEarly()
                .target(new
MethodTarget("org.eclipse.jdt.internal.corext.refactoring.structure.ExtractInterfaceProcesso
r", "createMethodComment"))
                .decisionMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.ASTNode"))
                .request(StackRequest.PARAM2)
                .build());

```

[lombok/src/eclipseAgent/lombok/eclipse/agent/PatchFixes.java](#)

chunk 41: (version 2/import declaration)

```

import org.eclipse.jdt.core.IMethod;
<<<<<< HEAD
import org.eclipse.jdt.core.JavaModelException;
import org.eclipse.jdt.core.dom.AbstractTypeDeclaration;
=====
import org.eclipse.jdt.core.IType;
import org.eclipse.jdt.core.JavaModelException;
>>>>>> bf354e3b5ced16913726afc8247b1dd0321c9d62
import org.eclipse.jdt.core.dom.MethodDeclaration;

```

```

import org.eclipse.jdt.core.IMethod;
import org.eclipse.jdt.core.IType;
import org.eclipse.jdt.core.JavaModelException;
import org.eclipse.jdt.core.dom.MethodDeclaration;

```

Chunk 42: (version 2/commentary, for statement, if statement, method signature, variable, while statement)

```

    }

<<<<<< HEAD
//
    lombok.eclipse.agent.PatchFixes.getRealMethodDeclarationNode(Lorg/eclipse/jdt/core/I
Method;Lorg/eclipse/jdt/core/dom/CompilationUnit;)Lorg/eclipse/jdt/core/dom/MethodDeclaratio
n;
    public          static          org.eclipse.jdt.core.dom.MethodDeclaration
getRealMethodDeclarationNode(org.eclipse.jdt.core.IMethod          sourceMethod,
org.eclipse.jdt.core.dom.CompilationUnit cuUnit) throws JavaModelException {
        MethodDeclaration          methodDeclarationNode          =
ASTNodeSearchUtil.getMethodDeclarationNode(sourceMethod, cuUnit);
        if (isGenerated(methodDeclarationNode)) {
            String typeName = sourceMethod.getTypeRoot().getElementName();

```

```

        String methodName = sourceMethod.getElementName();
        for (Object type : cuUnit.types()) {
            org.eclipse.jdt.core.dom.AbstractTypeDeclaration
typeDeclaration = (AbstractTypeDeclaration) type;
            if ((typeDeclaration.getName() + ".java").equals(typeName)) {
                for (Object declaration :
typeDeclaration.bodyDeclarations()) {
                    if (declaration instanceof
org.eclipse.jdt.core.dom.MethodDeclaration) {

                        org.eclipse.jdt.core.dom.MethodDeclaration methodDeclaration =
(org.eclipse.jdt.core.dom.MethodDeclaration) declaration;
                        if
(methodDeclaration.getName().toString().equals(methodName)) {
                            return methodDeclaration;
                        }
                    }
                }
            }
        }
    }

    =====
    public static org.eclipse.jdt.core.dom.MethodDeclaration
getRealMethodDeclarationNode(org.eclipse.jdt.core.IMethod sourceMethod,
org.eclipse.jdt.core.dom.CompilationUnit cuUnit) throws JavaModelException {
        MethodDeclaration methodDeclarationNode =
ASTNodeSearchUtil.getMethodDeclarationNode(sourceMethod, cuUnit);
        if (isGenerated(methodDeclarationNode)) {
            IType declaringType = sourceMethod.getDeclaringType();
            Stack<IType> typeStack = new Stack<IType>();
            while (declaringType != null) {
                typeStack.push(declaringType);
                declaringType = declaringType.getDeclaringType();
            }

            IType rootType = typeStack.pop();
            org.eclipse.jdt.core.dom.AbstractTypeDeclaration typeDeclaration =
findTypeDeclaration(rootType, cuUnit.types());
            while (!typeStack.isEmpty() && typeDeclaration != null) {
                typeDeclaration = findTypeDeclaration(typeStack.pop(),
typeDeclaration.bodyDeclarations());
            }

            if (typeStack.isEmpty() && typeDeclaration != null) {
                String methodName = sourceMethod.getElementName();
                for (Object declaration : typeDeclaration.bodyDeclarations())
                {
                    if (declaration instanceof
org.eclipse.jdt.core.dom.MethodDeclaration) {
                        org.eclipse.jdt.core.dom.MethodDeclaration
methodDeclaration = (org.eclipse.jdt.core.dom.MethodDeclaration) declaration;
                        if
(methodDeclaration.getName().toString().equals(methodName)) {
                            return methodDeclaration;
                        }
                    }
                }
            }
        }
    }
}

```

```

    }

    public static org.eclipse.jdt.core.dom.MethodDeclaration
getRealMethodDeclarationNode(org.eclipse.jdt.core.IMethod sourceMethod,
org.eclipse.jdt.core.dom.CompilationUnit cuUnit) throws JavaModelException {
        MethodDeclaration methodDeclarationNode =
ASTNodeSearchUtil.getMethodDeclarationNode(sourceMethod, cuUnit);
        if (isGenerated(methodDeclarationNode)) {

```



```

        IType declaringType = sourceMethod.getDeclaringType();
        Stack<IType> typeStack = new Stack<IType>();
        while (declaringType != null) {
            typeStack.push(declaringType);
            declaringType = declaringType.getDeclaringType();
        }

        IType rootType = typeStack.pop();
        org.eclipse.jdt.core.dom.AbstractTypeDeclaration typeDeclaration =
findTypeDeclaration(rootType, cuUnit.types());
        while (!typeStack.isEmpty() && typeDeclaration != null) {
            typeDeclaration = findTypeDeclaration(typeStack.pop(),
typeDeclaration.bodyDeclarations());
        }

        if (typeStack.isEmpty() && typeDeclaration != null) {
            String methodName = sourceMethod.getElementName();
            for (Object declaration : typeDeclaration.bodyDeclarations())
            {
                if (declaration instanceof
org.eclipse.jdt.core.dom.MethodDeclaration) {
                    org.eclipse.jdt.core.dom.MethodDeclaration
methodDeclaration = (org.eclipse.jdt.core.dom.MethodDeclaration) declaration;
                    if
(methodDeclaration.getName().toString().equals(methodName)) {
                        return methodDeclaration;
                    }
                }
            }
        }
    }

```

Chunk 43: (version 2/method declaration)

```

    }

<<<<<<< HEAD
=====
    private          static          org.eclipse.jdt.core.dom.AbstractTypeDeclaration
findTypeDeclaration(IType searchType, List<?> nodes) {
        for (Object object : nodes) {
            if (object instanceof
org.eclipse.jdt.core.dom.AbstractTypeDeclaration) {
                org.eclipse.jdt.core.dom.AbstractTypeDeclaration
typeDeclaration = (org.eclipse.jdt.core.dom.AbstractTypeDeclaration) object;
                if
(typeDeclaration.getName().toString().equals(searchType.getElementName()))
                    return typeDeclaration;
            }
        }
        return null;
    }

>>>>>>> bf354e3b5ced16913726afc8247b1dd0321c9d62
    public          static          int          getSourceEndFixed(int          sourceEnd,
org.eclipse.jdt.internal.compiler.ast.ASTNode node) throws Exception {

```

```

    }

    private          static          org.eclipse.jdt.core.dom.AbstractTypeDeclaration
findTypeDeclaration(IType searchType, List<?> nodes) {
        for (Object object : nodes) {
            if (object instanceof
org.eclipse.jdt.core.dom.AbstractTypeDeclaration) {

```

```

        org.eclipse.jdt.core.dom.AbstractTypeDeclaration
typeDeclaration = (org.eclipse.jdt.core.dom.AbstractTypeDeclaration) object;
        if
(typeDeclaration.getName().toString().equals(searchType.getElementName()))
            return typeDeclaration;
        }
    }
    return null;
}

    public        static        int        getSourceEndFixed(int        sourceEnd,
org.eclipse.jdt.internal.compiler.ast.ASTNode node) throws Exception {

```

Version: a5c7d134c168f6f9e9ab6203cb54b1030057c790

Parents:

aaf3101393d4f87ea8e256ba35a5b5374e6a0161

4e831b05ec08399795d27c343b6324b5b6de3443

Merge base:

ef820d8d5ab76c6db8335201da3c7ab9de7cb56a

[lombok/src/eclipseAgent/lombok/eclipse/agent/PatchFixes.java](#)

Chunk 44: (version 1/commentary, method declaration)

```
    }

<<<<<<< HEAD
    /* Very practical implementation, but works for getter and setter even with type
    parameters */
    public static java.lang.String getRealMethodDeclarationSource(java.lang.String
original, org.eclipse.jdt.core.dom.MethodDeclaration declaration) {
        if(isGenerated(declaration)) {
            String returnType = declaration.getReturnType2().toString();
            String params = "";
            for (Object object : declaration.parameters()) {
                org.eclipse.jdt.core.dom.ASTNode parameter =
((org.eclipse.jdt.core.dom.ASTNode)object);
                params += ","+parameter.toString();
            }
            return returnType + "?" + params.isEmpty() ? "" :
"+declaration.getName().getFullyQualifiedName()+" "+(params.isEmpty() ? "" :
params.substring(1))+");";
        }
        return original;
    }

    public static int getSourceEndFixed(int sourceEnd,
org.eclipse.jdt.internal.compiler.ast.ASTNode node) throws Exception {
        if (sourceEnd == -1) {
            org.eclipse.jdt.internal.compiler.ast.ASTNode object =
(org.eclipse.jdt.internal.compiler.ast.ASTNode)node.getClass().getField("$generatedBy").get(
node);
            if (object != null) {
                return object.sourceEnd;
            }
        }
        return sourceEnd;
    }

=====
>>>>>>> 4e831b05ec08399795d27c343b6324b5b6de3443
    public static int fixRetrieveStartingCatchPosition(int original, int start) {
```

```
    }

    /* Very practical implementation, but works for getter and setter even with type
    parameters */
    public static java.lang.String getRealMethodDeclarationSource(java.lang.String
original, org.eclipse.jdt.core.dom.MethodDeclaration declaration) {
        if(isGenerated(declaration)) {
```

```

        String returnType = declaration.getReturnType2().toString();
        String params = "";
        for (Object object : declaration.parameters()) {
            org.eclipse.jdt.core.dom.ASTNode parameter =
((org.eclipse.jdt.core.dom.ASTNode) object);
            params += "," + parameter.toString();
        }
        return returnType + " " +
"+declaration.getName().getFullyQualifiedName()+" "+(params.isEmpty() ? "" :
params.substring(1))+"";
    }
    return original;
}

    public static int getSourceEndFixed(int sourceEnd,
org.eclipse.jdt.internal.compiler.ast.ASTNode node) throws Exception {
        if (sourceEnd == -1) {
            org.eclipse.jdt.internal.compiler.ast.ASTNode object =
(org.eclipse.jdt.internal.compiler.ast.ASTNode) node.getClass().getField("$generatedBy").get(
node);
            if (object != null) {
                return object.sourceEnd;
            }
        }
        return sourceEnd;
    }

    public static int fixRetrieveStartingCatchPosition(int original, int start) {

```

Version: aaf3101393d4f87ea8e256ba35a5b5374e6a0161

Parents:

6d6a191c67827b626c67ddfbce071c17be58723b

53ce4f61788ab62263d9e267b947303973d11a7f

Merge base:

ef820d8d5ab76c6db8335201da3c7ab9de7cb56a

[lombok/src/eclipseAgent/lombok/eclipse/agent/PatchFixes.java](#)

Chunk 45: (version 2/ commentary, method declaration)

```
    }

<<<<<<< HEAD
=====
    /* Very practical implementation, but works for getter and setter even with type
    parameters */
    public static java.lang.String getRealMethodDeclarationSource(java.lang.String
original, org.eclipse.jdt.core.dom.MethodDeclaration declaration) {
        if(isGenerated(declaration)) {
            String returnType = declaration.getReturnType2().toString();
            String params = "";
            for (Object object : declaration.parameters()) {
                org.eclipse.jdt.core.dom.ASTNode parameter =
((org.eclipse.jdt.core.dom.ASTNode)object);
                params += ","+parameter.toString();
            }
            return returnType + " " + params.substring(1) + " : ";
        }
        return original;
    }

    public static int getSourceEndFixed(int sourceEnd,
org.eclipse.jdt.internal.compiler.ast.ASTNode node) throws Exception {
        if (sourceEnd == -1) {
            org.eclipse.jdt.internal.compiler.ast.ASTNode object =
(org.eclipse.jdt.internal.compiler.ast.ASTNode)node.getClass().getField("$generatedBy").get(
node);
            if (object != null) {
                return object.sourceEnd;
            }
        }
        return sourceEnd;
    }

>>>>>>> 53ce4f61788ab62263d9e267b947303973d11a7f
    public static int fixRetrieveStartingCatchPosition(int original, int start) {
```

```
    }

    /* Very practical implementation, but works for getter and setter even with type
    parameters */
    public static java.lang.String getRealMethodDeclarationSource(java.lang.String
original, org.eclipse.jdt.core.dom.MethodDeclaration declaration) {
        if(isGenerated(declaration)) {
```

```

        String returnType = declaration.getReturnType2().toString();
        String params = "";
        for (Object object : declaration.parameters()) {
            org.eclipse.jdt.core.dom.ASTNode parameter =
((org.eclipse.jdt.core.dom.ASTNode) object);
            params += "," + parameter.toString();
        }
        return returnType + " "
"+declaration.getName().getFullyQualifiedName()+" "+(params.isEmpty() ? "" :
params.substring(1))+"";
    }
    return original;
}

    public static int getSourceEndFixed(int sourceEnd,
org.eclipse.jdt.internal.compiler.ast.ASTNode node) throws Exception {
        if (sourceEnd == -1) {
            org.eclipse.jdt.internal.compiler.ast.ASTNode object =
(org.eclipse.jdt.internal.compiler.ast.ASTNode) node.getClass().getField("$generatedBy").get(
node);
            if (object != null) {
                return object.sourceEnd;
            }
        }
        return sourceEnd;
    }

    public static int fixRetrieveStartingCatchPosition(int original, int start) {

```

Version: dc92425f85d2f2dd187b688ff6d218d3c8e657b6

Parents:

1cdd42ac10c128765d3ff642d808c00eab6a1782

5cc928f471f3875f141ab1ee737cfe2613e9cdd6

Merge base:

9433db4ecd1a525541581a73161ababee0c352c

lombok/src/eclipseAgent/lombok/eclipse/agent/EclipsePatcher.java

Chunk 46: (version 1/method declaration)

```
    }
<<<<<<< HEAD

    private static void patchDisableLombokForCodeFormatterAndCleanup (ScriptManager sm) {
        sm.addScript (ScriptBuilder.setSymbolDuringMethodCall ()
            .target (new
MethodTarget ("org.eclipse.jdt.internal.formatter.DefaultCodeFormatter",
"formatCompilationUnit"))
            .callToWrap (new
Hook ("org.eclipse.jdt.internal.core.util.CodeSnippetParsingUtil",      "parseCompilationUnit",
"org.eclipse.jdt.internal.compiler.ast.CompilationUnitDeclaration",    "char[]",
"java.util.Map", "boolean"))
            .symbol ("lombok.disable")
            .build ());

        sm.addScript (ScriptBuilder.exitEarly ()
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.DoStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.EnhancedForStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.ForStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.IfStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.WhileStatement"))
            .decisionMethod (new      Hook ("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
            .request (StackRequest.PARAM1)
            .valueMethod (new      Hook ("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
            .build ());
    }

    private static void patchListRewriteHandleGeneratedMethods (ScriptManager sm) {
        sm.addScript (ScriptBuilder.replaceMethodCall ()
            .target (new
MethodTarget ("org.eclipse.jdt.internal.core.dom.rewrite.ASTRewriteAnalyzer$ListRewriter",
"rewriteList"))
            .methodToReplace (new
Hook ("org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent",      "getChildren",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]"))
```

```

        .replacementMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"listRewriteHandleGeneratedMethods",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent"))
        .build());
    }

=====

>>>>>> 5cc928f471f3875f141ab1ee737cfe2613e9cdd6
    private static void patchDomAstReparseIssues(ScriptManager sm) {

```

```

    }

    private static void patchDisableLombokForCodeFormatterAndCleanup(ScriptManager sm) {
        sm.addScript(ScriptBuilder.setSymbolDuringMethodCall()
            .target(new
MethodTarget("org.eclipse.jdt.internal.formatter.DefaultCodeFormatter",
"formatCompilationUnit"))
            .callToWrap(new
Hook("org.eclipse.jdt.internal.core.util.CodeSnippetParsingUtil", "parseCompilationUnit",
"org.eclipse.jdt.internal.compiler.ast.CompilationUnitDeclaration", "char[]",
"java.util.Map", "boolean"))
            .symbol("lombok.disable")
            .build());

        sm.addScript(ScriptBuilder.exitEarly()
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.DoStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.EnhancedForStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.ForStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.IfStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.WhileStatement"))
            .decisionMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
            .request(StackRequest.PARAM1)
            .valueMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
            .build());
    }

    private static void patchListRewriteHandleGeneratedMethods(ScriptManager sm) {
        sm.addScript(ScriptBuilder.replaceMethodCall()
            .target(new
MethodTarget("org.eclipse.jdt.internal.core.dom.rewrite.ASTRewriteAnalyzer$ListRewriter",
"rewriteList"))
            .methodToReplace(new
Hook("org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent", "getChildren",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]"))
            .replacementMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"listRewriteHandleGeneratedMethods",

```



```
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]",  
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent"))  
        .build();  
}  
  
private static void patchDomAstReparseIssues(ScriptManager sm) {
```

Version: 1cdd42ac10c128765d3ff642d808c00eab6a1782

Parents:

f3253a73c29c393bb572e05c992afa22b4de4748

b43cd3509311e25b64a559cd7dd02d11a45d9f0e

Merge base:

9433db4ecdf1a525541581a73161ababee0c352c

lombok/src/eclipseAgent/lombok/eclipse/agent/EclipsePatcher.java

Chunk 47: (concatenation/method invocation)

```

                                patchFixSourceTypeConverter (sm) ;
<<<<<<< HEAD
                                patchDisableLombokForCodeFormatterAndCleanup (sm) ;
=====
                                patchListRewriteHandleGeneratedMethods (sm) ;
>>>>>>> b43cd3509311e25b64a559cd7dd02d11a45d9f0e
                                } else {
```

```

                                patchFixSourceTypeConverter (sm) ;
                                patchDisableLombokForCodeFormatterAndCleanup (sm) ;
                                patchListRewriteHandleGeneratedMethods (sm) ;
                                } else {
```

Chunk 48: (concatenation/method declaration)

```

    }

<<<<<<< HEAD
    private static void patchDisableLombokForCodeFormatterAndCleanup (ScriptManager sm) {
        sm.addScript (ScriptBuilder.setSymbolDuringMethodCall ()
            .target (new
MethodTarget ("org.eclipse.jdt.internal.formatter.DefaultCodeFormatter",
"formatCompilationUnit"))
            .callToWrap (new
Hook ("org.eclipse.jdt.internal.core.util.CodeSnippetParsingUtil",      "parseCompilationUnit",
"org.eclipse.jdt.internal.compiler.ast.CompilationUnitDeclaration",    "char[]",
"java.util.Map", "boolean"))
            .symbol ("lombok.disable")
            .build ()) ;

        sm.addScript (ScriptBuilder.exitEarly ()
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.DoStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.EnhancedForStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.ForStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.IfStatement"))
            .target (new
MethodTarget ("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.WhileStatement"))
```

```

        .decisionMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
        .request(StackRequest.PARAM1)
        .valueMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
        .build());
    }

=====
    private static void patchListRewriteHandleGeneratedMethods(ScriptManager sm) {
        sm.addScript(ScriptBuilder.replaceMethodCall()
            .target(new
MethodTarget("org.eclipse.jdt.internal.core.dom.rewrite.ASTRewriteAnalyzer$ListRewriter",
"rewriteList"))
            .methodToReplace(new
Hook("org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent", "getChildren",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]"))
            .replacementMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"listRewriteHandleGeneratedMethods",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent")))
        .build());
    }
>>>>>> b43cd3509311e25b64a559cd7dd02d11a45d9f0e

    private static void patchDomAstReparseIssues(ScriptManager sm) {

```

```

    }

    private static void patchDisableLombokForCodeFormatterAndCleanup(ScriptManager sm) {
        sm.addScript(ScriptBuilder.setSymbolDuringMethodCall()
            .target(new
MethodTarget("org.eclipse.jdt.internal.formatter.DefaultCodeFormatter",
"formatCompilationUnit"))
            .callToWrap(new
Hook("org.eclipse.jdt.internal.core.util.CodeSnippetParsingUtil", "parseCompilationUnit",
"org.eclipse.jdt.internal.compiler.ast.CompilationUnitDeclaration", "char[]",
"java.util.Map", "boolean"))
            .symbol("lombok.disable")
            .build());

        sm.addScript(ScriptBuilder.exitEarly()
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.DoStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.EnhancedForStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.ForStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.IfStatement"))
            .target(new
MethodTarget("org.eclipse.jdt.internal.corext.fix.ControlStatementsFix$ControlStatementFinde
r", "visit", "boolean", "org.eclipse.jdt.core.dom.WhileStatement"))
            .decisionMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
            .request(StackRequest.PARAM1)

```

```

        .valueMethod(new Hook("lombok.eclipse.agent.PatchFixes",
"isGenerated", "boolean", "org.eclipse.jdt.core.dom.Statement"))
        .build());
    }

    private static void patchListRewriteHandleGeneratedMethods (ScriptManager sm) {
        sm.addScript (ScriptBuilder.replaceMethodCall()
            .target (new
MethodTarget ("org.eclipse.jdt.internal.core.dom.rewrite.ASTRewriteAnalyzer$ListRewriter",
"rewriteList"))
            .methodToReplace (new
Hook ("org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent", "getChildren",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]"))
            .replacementMethod (new Hook ("lombok.eclipse.agent.PatchFixes",
"listRewriteHandleGeneratedMethods",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent[]",
"org.eclipse.jdt.internal.core.dom.rewrite.RewriteEvent"))
            .build());
    }

    private static void patchDomAstReparseIssues (ScriptManager sm) {

```

Version: ddf54dcfaea71e50ae32b45785b8624b9137843b

Parents:

1c323332493148f0aaa936e668e1b0da5d09c8be

eae3e45ae7dd965cc642d7f03b833574e974fc1b

Merge base:

c8774389e7cb73e494267af3a87f70c7497b220a

[lombok/src/core/lombok/javac/handlers/HandleGetter.java](#)

Chunk 49: (concatenation/ commentary, method declaration, method invocation, static block, variable)

```
    }

<<<<<<< HEAD
    private List<JCStatement> createSimpleGetterBody(TreeMaker treeMaker, JavacNode
field) {
        return List.<JCStatement>of(treeMaker.Return(createFieldAccessor(treeMaker,
field, FieldAccess.ALWAYS_FIELD)));
    }

    private static final String AR = "java.util.concurrent.atomic.AtomicReference";
    private static final List<JCEExpression> NIL_EXPRESSION = List.nil();

    private static final java.util.Map<Integer, String> TYPE_MAP;
    static {
        Map<Integer, String> m = new HashMap<Integer, String>();
        m.put(TypeTags.INT, "java.lang.Integer");
        m.put(TypeTags.DOUBLE, "java.lang.Double");
        m.put(TypeTags.FLOAT, "java.lang.Float");
        m.put(TypeTags.SHORT, "java.lang.Short");
        m.put(TypeTags.BYTE, "java.lang.Byte");
        m.put(TypeTags.LONG, "java.lang.Long");
        m.put(TypeTags.BOOLEAN, "java.lang.Boolean");
        m.put(TypeTags.CHAR, "java.lang.Character");
        TYPE_MAP = Collections.unmodifiableMap(m);
    }

    private List<JCStatement> createLazyGetterBody(TreeMaker maker, JavacNode fieldNode)
{
    /*
        java.util.concurrent.atomic.AtomicReference<ValueType> value =
this.fieldName.get();
        if (value == null) {
            synchronized (this.fieldName) {
                value = this.fieldName.get();
                if (value == null) {
                    value =
new java.util.concurrent.atomic.AtomicReference<ValueType>(new ValueType());
                    this.fieldName.set(value);
                }
            }
        }
        return value.get();
    */

    List<JCStatement> statements = List.nil();
```

```

        JCVariableDecl field = (JCVariableDecl) fieldNode.get();
        field.type = null;
        if (field.vartype instanceof JCPrimitiveTypeTree) {
            String boxed =
TYPE_MAP.get(((JCPrimitiveTypeTree)field.vartype).typetag);
            if (boxed != null) {
                field.vartype = chainDotsString(maker, fieldNode, boxed);
            }
        }

        Name valueName = fieldNode.toName("value");

        /*      java.util.concurrent.atomic.AtomicReference<ValueType>      value      =
this.fieldName.get(); */ {
            JCTypeApply valueVarType = maker.TypeApply(chainDotsString(maker,
fieldNode, AR), List.of(copyType(maker, field)));
            statements = statements.append(maker.VarDef(maker.Modifiers(0),
valueName, valueVarType, callGet(fieldNode, createFieldAccessor(maker, fieldNode,
FieldAccess.ALWAYS_FIELD))));
        }

        /* if (value == null) { */ {
            JCSynchronized synchronizedStatement;
            /* synchronized (this.fieldName) { */ {
                List<JCStatement> synchronizedStatements = List.nil();
                /* value = this.fieldName.get(); */ {
                    JCEXpressionStatement newAssign =
maker.Exec(maker.Assign(maker.Ident(valueName),
createFieldAccessor(maker, fieldNode, FieldAccess.ALWAYS_FIELD))));
                    synchronizedStatements
synchronizedStatements.append(newAssign);
                }

                /* if (value == null) { */ {
                    List<JCStatement> innerIfStatements = List.nil();
                    /*      value      =      new
java.util.concurrent.atomic.AtomicReference<ValueType>(new ValueType()); */ {
                        JCTypeApply valueVarType =
maker.TypeApply(chainDotsString(maker, fieldNode, AR), List.of(copyType(maker, field)));

                        JCNewClass newInstance = maker.NewClass(null,
NIL_EXPRESSION, valueVarType, List.<JCEXpression>of(field.init), null);

                        JCStatement statement =
maker.Exec(maker.Assign(maker.Ident(valueName), newInstance));
                        innerIfStatements
innerIfStatements.append(statement);
                    }
                    /* this.fieldName.set(value); */ {
                        JCStatement statement = callSet(fieldNode,
createFieldAccessor(maker, fieldNode, FieldAccess.ALWAYS_FIELD), maker.Ident(valueName));
                        innerIfStatements
innerIfStatements.append(statement);
                    }

                    JCBinary isNull = maker.Binary(JCTree.EQ,
maker.Ident(valueName), maker.Literal(TypeTags.BOT, null));
                    JCIf ifStatement = maker.If(isNull, maker.Block(0,
innerIfStatements), null);

                    synchronizedStatements
synchronizedStatements.append(ifStatement);

```

```

    }

    synchronizedStatement =
maker.Synchronized(createFieldAccessor(maker, fieldNode, FieldAccess.ALWAYS_FIELD),
maker.Block(0, synchronizedStatements));
    }

    JCBinary isNull = maker.Binary(JCTree.EQ, maker.Ident(valueName),
maker.Literal(TypeTags.BOT, null));
    JCIf ifStatement = maker.If(isNull, maker.Block(0,
List.<JCStatement>of(synchronizedStatement)), null);
    statements = statements.append(ifStatement);
    }
    /* return value.get(); */
    statements = statements.append(maker.Return(callGet(fieldNode,
maker.Ident(valueName))));

    // update the field type and init last

    /* private final
java.util.concurrent.atomic.AtomicReference<java.util.concurrent.atomic.AtomicReference<Valu
eType>
fieldNode = new
java.util.concurrent.atomic.AtomicReference<java.util.concurrent.atomic.AtomicReference<Valu
eType>>(); */ {
        field.vartype = maker.TypeApply(chainDotsString(maker, fieldNode,
AR), List.<JCExpression>of(maker.TypeApply(chainDotsString(maker, fieldNode, AR),
List.of(copyType(maker, field)))));
        field.init = maker.NewClass(null, NIL_EXPRESSION, copyType(maker,
field), NIL_EXPRESSION, null);
    }

    return statements;
}

private JCMethoInvocation callGet(JavacNode source, JCExpression receiver) {
    TreeMaker maker = source.getTreeMaker();
    return maker.Apply(NIL_EXPRESSION, maker.Select(receiver,
source.toName("get")), NIL_EXPRESSION);
}

private JCStatement callSet(JavacNode source, JCExpression receiver, JCExpression
value) {
    TreeMaker maker = source.getTreeMaker();
    return maker.Exec(maker.Apply(NIL_EXPRESSION, maker.Select(receiver,
source.toName("set")), List.<JCExpression>of(value)));
}

private JCExpression copyType(TreeMaker treeMaker, JCVariableDecl fieldNode) {
    return fieldNode.type != null ? treeMaker.Type(fieldNode.type) :
fieldNode.vartype;
}
=====
@Override public boolean isResolutionBased() {
    return false;
}
>>>>>> eae3e45ae7dd965cc642d7f03b833574e974fc1b
}

```

```

}

private List<JCStatement> createSimpleGetterBody(TreeMaker treeMaker, JavacNode
field) {

```

```

        return List.<JCStatement>of(treeMaker.Return(createFieldAccessor(treeMaker,
field, FieldAccess.ALWAYS_FIELD)));
    }

    private static final String AR = "java.util.concurrent.atomic.AtomicReference";
    private static final List<JCEExpression> NIL_EXPRESSION = List.nil();

    private static final java.util.Map<Integer, String> TYPE_MAP;
    static {
        Map<Integer, String> m = new HashMap<Integer, String>();
        m.put(TypeTags.INT, "java.lang.Integer");
        m.put(TypeTags.DOUBLE, "java.lang.Double");
        m.put(TypeTags.FLOAT, "java.lang.Float");
        m.put(TypeTags.SHORT, "java.lang.Short");
        m.put(TypeTags.BYTE, "java.lang.Byte");
        m.put(TypeTags.LONG, "java.lang.Long");
        m.put(TypeTags.BOOLEAN, "java.lang.Boolean");
        m.put(TypeTags.CHAR, "java.lang.Character");
        TYPE_MAP = Collections.unmodifiableMap(m);
    }

    private List<JCStatement> createLazyGetterBody(TreeMaker maker, JavacNode fieldNode)
    {
        /*
        java.util.concurrent.atomic.AtomicReference<ValueType> value =
this.fieldName.get();
        if (value == null) {
            synchronized (this.fieldName) {
                value = this.fieldName.get();
                if (value == null) {
                    value =
new java.util.concurrent.atomic.AtomicReference<ValueType>(new ValueType());
                    this.fieldName.set(value);
                }
            }
        }
        return value.get();
        */

        List<JCStatement> statements = List.nil();

        JCVariableDecl field = (JCVariableDecl) fieldNode.get();
        field.type = null;
        if (field.vartype instanceof JCPriimitiveTypeTree) {
            String boxed =
TYPE_MAP.get(((JCPriimitiveTypeTree) field.vartype).typetag);
            if (boxed != null) {
                field.vartype = chainDotsString(maker, fieldNode, boxed);
            }
        }

        Name valueName = fieldNode.toName("value");

        /*
        java.util.concurrent.atomic.AtomicReference<ValueType> value =
this.fieldName.get();*/ {
            JCTypeApply valueVarType = maker.TypeApply(chainDotsString(maker,
fieldNode, AR), List.of(copyType(maker, field)));
            statements = statements.append(maker.VarDef(maker.Modifiers(0),
valueName, valueVarType, callGet(fieldNode, createFieldAccessor(maker, fieldNode,
FieldAccess.ALWAYS_FIELD))));
        }
    }

```



```

        /* if (value == null) { */ {
            JCSynchronized synchronizedStatement;
            /* synchronized (this.fieldName) { */ {
                List<JCStatement> synchronizedStatements = List.nil();
                /* value = this.fieldName.get(); */ {
                    JCEXpressionStatement      newAssign      =
maker.Exec(maker.Assign(maker.Ident(valueName),          callGet(fieldNode,
createFieldAccessor(maker, fieldNode, FieldAccess.ALWAYS_FIELD))));
                    synchronizedStatements      =
synchronizedStatements.append(newAssign);
                }

                /* if (value == null) { */ {
                    List<JCStatement> innerIfStatements = List.nil();
                    /* value = new
java.util.concurrent.atomic.AtomicReference<ValueType>(new ValueType()); */ {
                        JCTypeApply      valueVarType      =
maker.TypeApply(chainDotsString(maker, fieldNode, AR), List.of(copyType(maker, field)));
                        JCNewClass newInstance = maker.NewClass(null,
NIL_EXPRESSION, valueVarType, List.<JCEXpression>of(field.init), null);
                        JCStatement      statement      =
maker.Exec(maker.Assign(maker.Ident(valueName), newInstance));
                        innerIfStatements      =
innerIfStatements.append(statement);
                    }
                    /* this.fieldName.set(value); */ {
                        JCStatement      statement      = callSet(fieldNode,
createFieldAccessor(maker, fieldNode, FieldAccess.ALWAYS_FIELD), maker.Ident(valueName));
                        innerIfStatements      =
innerIfStatements.append(statement);
                    }

                    JCBinary      isNull      = maker.Binary(JCTree.EQ,
maker.Ident(valueName), maker.Literal(TypeTags.BOT, null));
                    JCIf ifStatement = maker.If(isNull, maker.Block(0,
innerIfStatements), null);
                    synchronizedStatements      =
synchronizedStatements.append(ifStatement);
                }

                synchronizedStatement      =
maker.Synchronized(createFieldAccessor(maker, fieldNode, FieldAccess.ALWAYS_FIELD),
maker.Block(0, synchronizedStatements));
            }

            JCBinary isNull = maker.Binary(JCTree.EQ, maker.Ident(valueName),
maker.Literal(TypeTags.BOT, null));
            JCIf ifStatement = maker.If(isNull, maker.Block(0,
List.<JCStatement>of(synchronizedStatement)), null);
            statements = statements.append(ifStatement);
        }
        /* return value.get(); */
        statements      = statements.append(maker.Return(callGet(fieldNode,
maker.Ident(valueName))));

        // update the field type and init last

        /* private final
java.util.concurrent.atomic.AtomicReference<java.util.concurrent.atomic.AtomicReference<Valu
eType>
fieldName
=
new

```

```

java.util.concurrent.atomic.AtomicReference<java.util.concurrent.atomic.AtomicReference<Value
eType>>()); */ {
    field.vartype = maker.TypeApply(chainDotsString(maker, fieldNode,
AR), List.<JCEExpression>of(maker.TypeApply(chainDotsString(maker, fieldNode, AR),
List.of(copyType(maker, field)))));
    field.init = maker.NewClass(null, NIL_EXPRESSION, copyType(maker,
field), NIL_EXPRESSION, null);
    }

    return statements;
}

private JCMethodInvocation callGet(JavacNode source, JCEExpression receiver) {
    TreeMaker maker = source.getTreeMaker();
    return maker.Apply(NIL_EXPRESSION, maker.Select(receiver,
source.toName("get")), NIL_EXPRESSION);
}

private JCStatement callSet(JavacNode source, JCEExpression receiver, JCEExpression
value) {
    TreeMaker maker = source.getTreeMaker();
    return maker.Exec(maker.Apply(NIL_EXPRESSION, maker.Select(receiver,
source.toName("set")), List.<JCEExpression>of(value)));
}

private JCEExpression copyType(TreeMaker treeMaker, JCVariableDecl fieldNode) {
    return fieldNode.type != null ? treeMaker.Type(fieldNode.type) :
fieldNode.vartype;
}

@Override public boolean isResolutionBased() {
    return false;
}

```

Version: 3d4b27d6d288ecb418a2a1a09ed43cae90ec548e

Parents:

fe7f0db2fce7b4c80853b9aed100908ff1f55f40

57de0c3f6636181541a7712e8d506828420c13d1

Merge base:

98d8a9f63b3183005174abb7691a1692347b9a2e

[lombok/eclipse/handlers/EclipseHandlerUtil.java](#)

Chunk 50: (concatenation/ method declaration, variable)

```
    }

<<<<<<< HEAD
    private static final Annotation[] EMPTY_ANNOTATION_ARRAY = new Annotation[0];
    static Annotation[] getAndRemoveAnnotationParameter(Annotation annotation, String
annotationName) {

        List<Annotation> result = new ArrayList<Annotation>();
        if (annotation instanceof NormalAnnotation) {
            NormalAnnotation normalAnnotation = (NormalAnnotation)annotation;
            MemberValuePair[] memberValuePairs =
normalAnnotation.memberValuePairs;
            List<MemberValuePair> pairs = new ArrayList<MemberValuePair>();
            if (memberValuePairs != null) for (MemberValuePair memberValuePair :
memberValuePairs) {
                if (annotationName.equals(new String(memberValuePair.name))) {
                    Expression value = memberValuePair.value;
                    if (value instanceof ArrayInitializer) {
                        ArrayInitializer array = (ArrayInitializer)
value;
                        for(Expression expression : array.expressions)
{
                            if (expression instanceof Annotation) {

                                result.add((Annotation)expression);
                                    }
                                }
                            }
                        else if (value instanceof Annotation) {
                            result.add((Annotation)value);
                        }
                        continue;
                    }
                pairs.add(memberValuePair);
            }

            if (!result.isEmpty()) {
                normalAnnotation.memberValuePairs = pairs.isEmpty() ? null :
pairs.toArray(new MemberValuePair[0]);
                return result.toArray(EMPTY_ANNOTATION_ARRAY);
            }

            return EMPTY_ANNOTATION_ARRAY;
        }

    }

=====
```

```

        static NameReference createNameReference(String name, Annotation source) {
            int pS = source.sourceStart, pE = source.sourceEnd;
            long p = (long)pS << 32 | pE;

            char[][] nameTokens = fromQualified_name(name);
            long[] pos = new long[nameTokens.length];
            Arrays.fill(pos, p);

            QualifiedNameReference nameReference = new QualifiedNameReference(nameTokens,
pos, pS, pE);
            nameReference.statementEnd = pE;

            Eclipse.setGeneratedBy(nameReference, source);
            return nameReference;
        }
>>>>>> 57de0c3f6636181541a7712e8d506828420c13d1
    }

```

```

    }

    private static final Annotation[] EMPTY_ANNOTATION_ARRAY = new Annotation[0];
    static Annotation[] getAndRemoveAnnotationParameter(Annotation annotation, String
annotationName) {

        List<Annotation> result = new ArrayList<Annotation>();
        if (annotation instanceof NormalAnnotation) {
            NormalAnnotation normalAnnotation = (NormalAnnotation)annotation;
            MemberValuePair[] memberValuePairs =
normalAnnotation.memberValuePairs;
            List<MemberValuePair> pairs = new ArrayList<MemberValuePair>();
            if (memberValuePairs != null) for (MemberValuePair memberValuePair :
memberValuePairs) {
                if (annotationName.equals(new String(memberValuePair.name))) {
                    Expression value = memberValuePair.value;
                    if (value instanceof ArrayInitializer) {
                        ArrayInitializer array = (ArrayInitializer)
value;
                        for(Expression expression : array.expressions)
{
                            if (expression instanceof Annotation) {

                                result.add((Annotation)expression);
                            }
                        }
                    }
                    else if (value instanceof Annotation) {
                        result.add((Annotation)value);
                    }
                    continue;
                }
                pairs.add(memberValuePair);
            }

            if (!result.isEmpty()) {
                normalAnnotation.memberValuePairs = pairs.isEmpty() ? null :
pairs.toArray(new MemberValuePair[0]);
                return result.toArray(EMPTY_ANNOTATION_ARRAY);
            }
        }

        return EMPTY_ANNOTATION_ARRAY;
    }

```

```
    }

    static NameReference createNameReference(String name, Annotation source) {
        int pS = source.sourceStart, pE = source.sourceEnd;
        long p = (long)pS << 32 | pE;

        char[][] nameTokens = fromQualified_name(name);
        long[] pos = new long[nameTokens.length];
        Arrays.fill(pos, p);

        QualifiedNameReference nameReference = new QualifiedNameReference(nameTokens,
pos, pS, pE);
        nameReference.statementEnd = pE;

        Eclipse.setGeneratedBy(nameReference, source);
        return nameReference;
    }
}
```

Version: c88ae3af7432513987eafaf13c178baa77cb0667

Parents:

0951ea38fe11189cdc4c2778fdad9e9e3ad6a6ae

16f992c5adea8ed8ad183d27c247901d61b0635d

Merge base:

98d8a9f63b3183005174abb7691a1692347b9a2e

lombok/javac/handlers/HandleCleanup.java

Chunk 51: (version 2/commentary)

```
/*
<<<<<<< HEAD
 * Copyright © 2009-2010 Reinier Zwitterloot and Roel Spilker.
=====
 * Copyright © 2009-2010 Reinier Zwitterloot, Roel Spilker and Robbert Jan Grootjans.
>>>>>>> 16f992c5adea8ed8ad183d27c247901d61b0635d
 *
```

```
/*
 * Copyright © 2009-2010 Reinier Zwitterloot, Roel Spilker and Robbert Jan Grootjans.
 *
```

Version: 4e152f2f1485f904feb45ae614236d4aa4b6edc9

Parents:

0221e460b2e648b142284c6c462d5798f33a3ff7

fe0da3f53f1e88b704e21463cc5fea3d998e394a

Merge base:

2bdc1210d7a26df8b69563f0de22524398ba9bfd

[lombok/src/lombok/eclipse/handlers/HandleData.java](#)

Chunk 52: (combination/if statement, method invocation, variable)

```
long fieldPos = (((long)field.sourceStart) << 32) | field.sourceEnd;
<<<<<<< HEAD
args.add(new Argument(field.name, fieldPos, copyType(field.type),
Modifier.FINAL));
=====
Argument argument = new Argument(field.name, fieldPos,
copyType(field.type), 0);
Annotation[] nonNulls = findAnnotations(field, NON_NULL_PATTERN);
Annotation[] nullables = findAnnotations(field, NULLABLE_PATTERN);
if (nonNulls.length != 0) nullChecks.add(generateNullCheck(field));
Annotation[] copiedAnnotations = copyAnnotations(nonNulls,
nullables);
if (copiedAnnotations.length != 0) argument.annotations =
copiedAnnotations;
args.add(argument);
>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
}
```

```
long fieldPos = (((long)field.sourceStart) << 32) | field.sourceEnd;
Argument argument = new Argument(field.name, fieldPos,
copyType(field.type), Modifier.FINAL);
Annotation[] nonNulls = findAnnotations(field, NON_NULL_PATTERN);
Annotation[] nullables = findAnnotations(field, NULLABLE_PATTERN);
if (nonNulls.length != 0) nullChecks.add(generateNullCheck(field));
Annotation[] copiedAnnotations = copyAnnotations(nonNulls,
nullables);
if (copiedAnnotations.length != 0) argument.annotations =
copiedAnnotations;
args.add(argument);
}
```

Chunk 53: (combination/if statement, method invocation, variable)

```
assigns.add(new SingleNameReference(field.name, fieldPos));
<<<<<<< HEAD
args.add(new Argument(field.name, fieldPos, copyType(field.type),
Modifier.FINAL));
=====
Argument argument = new Argument(field.name, fieldPos,
copyType(field.type), 0);
Annotation[] copiedAnnotations = copyAnnotations(
findAnnotations(field, NON_NULL_PATTERN),
findAnnotations(field, NULLABLE_PATTERN));
if (copiedAnnotations.length != 0) argument.annotations =
copiedAnnotations;
```

```

        args.add(new Argument(field.name, fieldPos, copyType(field.type),
0));
>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
    }

```

```

        assigns.add(new SingleNameReference(field.name, fieldPos));

        Argument argument = new Argument(field.name, fieldPos,
copyType(field.type), 0);
        Annotation[] copiedAnnotations = copyAnnotations(
            findAnnotations(field, NON_NULL_PATTERN),
findAnnotations(field, NULLABLE_PATTERN));
        if (copiedAnnotations.length != 0) argument.annotations =
copiedAnnotations;
        args.add(new Argument(field.name, fieldPos, copyType(field.type),
Modifier.FINAL));
    }

```

[lombok/src/lombok/eclipse/handlers/HandleEqualsAndHashCode.java](#)

Chunk 54: (version 1/if statement, method invocation)

```

    }

<<<<<<< HEAD
        if ( !isDirectDescendentOfObject && !callSuper && implicit ) {
            errorNode.addWarning("Generating equals/hashCode implementation but
without a call to superclass, even though this class does not extend java.lang.Object. If
this is intentional, add '@EqualsAndHashCode(callSuper=false)' to your type.");
=====
            if ( !isDirectDescendantOfObject && !callSuper ) {
                errorNode.addWarning("Generating equals/hashCode implementation but
without a call to superclass, even though this class does not extend java.lang.Object.");
>>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
            }

```

```

    }

        if ( !isDirectDescendantOfObject && !callSuper && implicit ) {
            errorNode.addWarning("Generating equals/hashCode implementation but
without a call to superclass, even though this class does not extend java.lang.Object. If
this is intentional, add '@EqualsAndHashCode(callSuper=false)' to your type.");
        }

```

[lombok/src/lombok/eclipse/handlers/HandleSetter.java](#)

Chunk 55: (version 1/method invocation, variable)

```

        method.annotations = null;
<<<<<<< HEAD
        Argument param = new Argument(field.name, pos, Eclipse.copyType(field.type),
Modifier.FINAL);
=====
        Argument param = new Argument(field.name, pos, copyType(field.type), 0);
>>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
        method.arguments = new Argument[] { param };

```

```

        method.annotations = null;

```



```

        Argument param = new Argument(field.name, pos, copyType(field.type),
Modifier.FINAL);
        method.arguments = new Argument[] { param };

```

lombok/src/lombok/javac/handlers/HandleData.java

Chunk 56: (combination/method invocation, variable)

```

        JCVariableDecl field = (JCVariableDecl) fieldNode.get();
<<<<<<< HEAD
        JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL),
field.name, field.vartype, null);
=====

        List<JCAnnotation> nonNulls = findAnnotations(fieldNode,
NON_NULL_PATTERN);
        List<JCAnnotation> nullables = findAnnotations(fieldNode,
NULLABLE_PATTERN);
        JCVariableDecl param = maker.VarDef(maker.Modifiers(0,
nonNulls.appendList(nullables)), field.name, field.vartype, null);

>>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
        params = params.append(param);

```

```

        for ( Node fieldNode : fields ) {
            JCVariableDecl field = (JCVariableDecl) fieldNode.get();
            List<JCAnnotation> nonNulls = findAnnotations(fieldNode,
NON_NULL_PATTERN);
            List<JCAnnotation> nullables = findAnnotations(fieldNode,
NULLABLE_PATTERN);
            JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL,
nonNulls.appendList(nullables)), field.name, field.vartype, null);
            params = params.append(param);

```

Chunk 57: (version 2/method invocation, variable)

```

        } else pType = field.vartype;
<<<<<<< HEAD
        JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL),
field.name, pType, null);
=====

        List<JCAnnotation> nonNulls = findAnnotations(fieldNode,
NON_NULL_PATTERN);
        List<JCAnnotation> nullables = findAnnotations(fieldNode,
NULLABLE_PATTERN);
        JCVariableDecl param = maker.VarDef(maker.Modifiers(0,
nonNulls.appendList(nullables)), field.name, pType, null);
>>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
        params = params.append(param);

```

```

        } else pType = field.vartype;
        List<JCAnnotation> nonNulls = findAnnotations(fieldNode,
NON_NULL_PATTERN);
        List<JCAnnotation> nullables = findAnnotations(fieldNode,
NULLABLE_PATTERN);
        JCVariableDecl param = maker.VarDef(maker.Modifiers(Flags.FINAL,
nonNulls.appendList(nullables)), field.name, pType, null);
        params = params.append(param);

```

lombok/src/lombok/javac/handlers/HandleEqualsAndHashCode.java

Chunk 58: (version 1/ if statement, method invocation)

```
    }

<<<<<<< HEAD
    if ( !isDirectDescendentOfObject && !callSuper && implicit ) {
        errorNode.addWarning("Generating equals/hashCode implementation but
without a call to superclass, even though this class does not extend java.lang.Object. If
this is intentional, add '@EqualsAndHashCode(callSuper=false)' to your type.");
        =====
        if ( !isDirectDescendantOfObject && !callSuper ) {
            errorNode.addWarning("Generating equals/hashCode implementation but
without a call to superclass, even though this class does not extend java.lang.Object.");
>>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
    }
}
```

```
    }

    if ( !isDirectDescendantOfObject && !callSuper && implicit ) {
        errorNode.addWarning("Generating equals/hashCode implementation but
without a call to superclass, even though this class does not extend java.lang.Object. If
this is intentional, add '@EqualsAndHashCode(callSuper=false)' to your type.");
    }
}
```

lombok/src/lombok/javac/handlers/HandleSetter.java

Chunk 59: (new code/method invocation, variable)

```
    Name methodName = field.toName(toSetterName(fieldDecl));

<<<<<<< HEAD
    JCVariableDecl param = treeMaker.VarDef(treeMaker.Modifiers(Flags.FINAL),
fieldDecl.name, fieldDecl.vartype, null);
    =====
    JCVariableDecl param = treeMaker.VarDef(treeMaker.Modifiers(0,
nonNulls.appendList(nullables)), fieldDecl.name, fieldDecl.vartype, null);
>>>>>>> fe0da3f53f1e88b704e21463cc5fea3d998e394a
    JCEExpression methodType = treeMaker.Type(field.getSymbolTable().voidType);
}
```

```
    Name methodName = field.toName(toSetterName(fieldDecl));
    JCVariableDecl param = treeMaker.VarDef(treeMaker.Modifiers(Flags.FINAL,
nonNulls.appendList(nullables)), fieldDecl.name, fieldDecl.vartype, null);
    JCEExpression methodType = treeMaker.Type(field.getSymbolTable().voidType);
}
```