



链滴

MyBatis MySQL Oracle 分页插件

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```
<p>MyBatis 的 MySQL、Oracle 分页插件，使用相同的分页接口。</p>
<p>&nbsp;</p>
<pre>/**
 * 分页对象.
 *
 * @author <a href="mailto:DL88250@gmail.com">Liang Ding</a>
 * @version 1.0.1.0, Oct 6, 2012
 */
public final class Page implements Serializable {

    /**
     * 默认的序列化版本 id.
     */
    private static final long serialVersionUID = 1L;
    /**
     * 分页查询开始记录位置.
     */
    private int          begin;
    /**
     * 分页查看下结束位置.
     */
    private int          end;
    /**
     * 每页显示记录数.
     */
    private int          length      = 20;
    /**
     * 查询结果总记录数.
     */
    private int          totalRecords;
    /**
     * 当前页码.
     */
    private int          pageNo;
    /**
     * 总共页数.
     */
    private int          pageCount;

    public Page() {
    }

    /**
     * 构造函数.
     *
     * @param begin
     * @param length
     */
    public Page(int begin, int length) {
        this.begin = begin;
        this.length = length;
        this.end = this.begin + this.length;
    }
}
```

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    this.pageNo = (int) Math.floor((this.begin * 1.0d) / this.length) + 1;
}

/**
 * @param begin
 * @param length
 * @param count
 */
public Page(int begin, int length, int totalRecords) {
    this(begin, length);
    this.totalRecords = totalRecords;
}

/**
 * 设置页数，自动计算数据范围.
 *
 * @param pageNo
 */
public Page(int pageNo) {
    this.pageNo = pageNo;
    pageNo = pageNo > 0 ? pageNo : 1;
    this.begin = this.length * (pageNo - 1);
    this.end = this.length * pageNo;
}

/**
 * @return the begin
 */
public int getBegin() {
    return begin;
}

/**
 * @return the end
 */
public int getEnd() {
    return end;
}

/**
 * @param end
 *      the end to set
 */
public void setEnd(int end) {
    this.end = end;
}

/**
 * @param begin
 *      the begin to set
 */
public void setBegin(int begin) {
    this.begin = begin;
    if (this.length != 0) {
```

```
        this.pageNo = (int) Math.floor((this.begin * 1.0d) / this.length) + 1;
    }
}

/**
 * @return the length
 */
public int getLength() {
    return length;
}

/**
 * @param length
 *      the length to set
 */
public void setLength(int length) {
    this.length = length;
    if (this.begin != 0) {
        this.pageNo = (int) Math.floor((this.begin * 1.0d) / this.length) + 1;
    }
}

/**
 * @return the totalRecords
 */
public int getTotalRecords() {
    return totalRecords;
}

/**
 * @param totalRecords
 *      the totalRecords to set
 */
public void setTotalRecords(int totalRecords) {
    this.totalRecords = totalRecords;
    this.pageCount = (int) Math.floor((this.totalRecords * 1.0d) / this.length);
    if (this.totalRecords % this.length != 0) {
        this.pageCount++;
    }
}

/**
 * @return the pageNo
 */
public int getPageNo() {
    return pageNo;
}

/**
 * @param pageNo
 *      the pageNo to set
 */
public void setPageNo(int pageNo) {
    this.pageNo = pageNo;
```

```

pageNo = pageNo > 0 ? pageNo : 1;
this.begin = this.length * (pageNo - 1);
this.end = this.length * pageNo;
}

/**
 * @return the pageCount
 */
public int getPageCount() {
    if (pageCount == 0) {
        return 1;
    }
    return pageCount;
}

/**
 * @param pageCount
 *      the pageCount to set
 */
public void setPageCount(int pageCount) {
    this.pageCount = pageCount;
}

@Override
public String toString() {
    final StringBuilder builder = new StringBuilder("begin=").append(begin).append
("end=").append(end).append("length=").append(length).append("totalRe
ords=").append("totalRecords").append("pageNo=").append(pageNo).append("pa
geCount=").append(pageCount);

    return builder.toString();
}

}</pre>

<p>&nbsp;</p>
<pre>/*
 * Oracle 分页生成插件。
 *
 * @author <a href="mailto:DL88250@gmail.com">Liang Ding</a>
 * @version 1.0.0.0, May 31, 2012
 */
public class OraclePaginationPlugin extends PluginAdapter {

@Override
public boolean modelExampleClassGenerated(TopLevelClass topLevelClass,
    IntrospectedTable introspectedTable) {
    // add field, getter, setter for limit clause
    addPage(topLevelClass, introspectedTable, "page");
    return super.modelExampleClassGenerated(topLevelClass, introspectedTable);
}

```

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}

@Override
public boolean sqlMapDocumentGenerated(Document document, IntrospectedTable introspectedTable) {
    XmlElement parentElement = document.getRootElement();

    // 产生分页语句前半部分
    XmlElement paginationPrefixElement = new XmlElement("sql");
    paginationPrefixElement.addAttribute(new Attribute("id", "OracleDialectPrefix"));
    XmlElement pageStart = new XmlElement("if");
    pageStart.addAttribute(new Attribute("test", "page != null"));
    pageStart.addElement(new TextElement(
        "select * from ( select row_.*, rownum rownum_ from ("));
    paginationPrefixElement.addElement(pageStart);
    parentElement.addElement(paginationPrefixElement);

    // 产生分页语句后半部分
    XmlElement paginationSuffixElement = new XmlElement("sql");
    paginationSuffixElement.addAttribute(new Attribute("id", "OracleDialectSuffix"));
    XmlElement pageEnd = new XmlElement("if");
    pageEnd.addAttribute(new Attribute("test", "page != null"));
    pageEnd
        .addElement(new TextElement(
            "row_ where rownum <= #{page.end} ) where rownum_ > #{page.begin} ]"));
    paginationSuffixElement.addElement(pageEnd);
    parentElement.addElement(paginationSuffixElement);

    return super.sqlMapDocumentGenerated(document, introspectedTable);
}

@Override
public boolean sqlMapSelectByExampleWithoutBLOBsElementGenerated(XmlElement element
    IntrospectedTable introspectedTable) {

    XmlElement pageStart = new XmlElement("include"); //NON-NLS-1$;
    pageStart.addAttribute(new Attribute("refid", "OracleDialectPrefix"));
    element.getElements().add(0, pageStart);

    XmlElement isNotNullElement = new XmlElement("include"); //NON-NLS-1$;
    isNotNullElement.addAttribute(new Attribute("refid", "OracleDialectSuffix"));
    element.getElements().add(isNotNullElement);

    return super.sqlMapUpdateByExampleWithoutBLOBsElementGenerated(element, introspectedTable);
}

```

```

/**
 * @param topLevelClass
 * @param introspectedTable
 * @param name
 */
private void addPage(TopLevelClass topLevelClass, IntrospectedTable introspectedTable,
    String name) {
    topLevelClass.addImportedType(new FullyQualifiedJavaType(
        "com.yuanxin.framework.mybatis.Page"));
    CommentGenerator commentGenerator = context.getCommentGenerator();
    Field field = new Field();
    field.setVisibility(JavaVisibility.PROTECTED);
    field.setType(new FullyQualifiedJavaType("com.yuanxin.framework.mybatis.Page"));
    field.setName(name);
    commentGenerator.addFieldComment(field, introspectedTable);
    topLevelClass.addField(field);
    char c = name.charAt(0);
    String camel = Character.toUpperCase(c) + name.substring(1);
    Method method = new Method();
    method.setVisibility(JavaVisibility.PUBLIC);
    method.setName("set" + camel);
    method.addParameter(new Parameter(new FullyQualifiedJavaType(
        "com.yuanxin.framework.mybatis.Page"), name));
    method.addBodyLine("this." + name + "=" + name + ";");
    commentGenerator.addGeneralMethodComment(method, introspectedTable);
    topLevelClass.addMethod(method);
    method = new Method();
    method.setVisibility(JavaVisibility.PUBLIC);
    method.setReturnType(new FullyQualifiedJavaType("com.yuanxin.framework.mybatis
Page"));
    method.setName("get" + camel);
    method.addBodyLine("return " + name + ";");
    commentGenerator.addGeneralMethodComment(method, introspectedTable);
    topLevelClass.addMethod(method);
}

/**
 * This plugin is always valid - no properties are required
 */
@Override
public boolean validate(List<String> warnings) {
    return true;
}

}</pre>

<p>&nbsp;</p>
<pre>/*
 * MySQL 分页生成插件。
 *
 * @author <a href="mailto:DL88250@gmail.com">Liang Ding</a>
 * @version 1.0.0.1, Oct 10, 2012

```

```

*/
public final class MySQLPaginationPlugin extends PluginAdapter {

    @Override
    public boolean modelExampleClassGenerated(TopLevelClass topLevelClass,
        IntrospectedTable introspectedTable) {
        // add field, getter, setter for limit clause
        addPage(topLevelClass, introspectedTable, "page");
        return super.modelExampleClassGenerated(topLevelClass, introspectedTable);
    }

    @Override
    public boolean sqlMapSelectByExampleWithoutBLOBSElementGenerated(XmlElement element

        IntrospectedTable introspectedTable) {
        XmlElement page = new XmlElement("if");
        page.addAttribute(new Attribute("test", "page != null"));
        page.addElement(new TextElement("limit #{page.begin}, #{page.length}"));
        element.addElement(page);

        return super.sqlMapUpdateByExampleWithoutBLOBSElementGenerated(element, introspec
edTable);
    }

    /**
     * @param topLevelClass
     * @param introspectedTable
     * @param name
     */
    private void addPage(TopLevelClass topLevelClass, IntrospectedTable introspectedTable,
        String name) {
        topLevelClass.addImportedType(new FullyQualifiedJavaType(
            "com.yuanxin.framework.mybatis.Page"));
        CommentGenerator commentGenerator = context.getCommentGenerator();
        Field field = new Field();
        field.setVisibility(JavaVisibility.PROTECTED);
        field.setType(new FullyQualifiedJavaType("com.yuanxin.framework.mybatis.Page&qu
t;));
        field.setName(name);
        commentGenerator.addFieldComment(field, introspectedTable);
        topLevelClass.addField(field);
        char c = name.charAt(0);
        String camel = Character.toUpperCase(c) + name.substring(1);
        Method method = new Method();
        method.setVisibility(JavaVisibility.PUBLIC);
        method.setName("set" + camel);
        method.addParameter(new Parameter(new FullyQualifiedJavaType(
            "com.yuanxin.framework.mybatis.Page"), name));
        method.addBodyLine("this." + name + "= " + name + ";");
        commentGenerator.addGeneralMethodComment(method, introspectedTable);
        topLevelClass.addMethod(method);
        method = new Method();
    }
}

```

```
method.setVisibility(JavaVisibility.PUBLIC);
method.setReturnType(new FullyQualifiedJavaType("com.yuanxin.framework.mybatis
Page"));
method.setName("get" + camel);
method.addBodyLine("return " + name + ";");
commentGenerator.addGeneralMethodComment(method, introspectedTable);
topLevelClass.addMethod(method);
}

/**
 * This plugin is always valid - no properties are required
 */
public boolean validate(List<String> warnings) {
    return true;
}
} </pre>
```

<p>&nbsp</p>

使用时在 generatorConfig.xml 中配置对应的插件即可，最终，在生成的 Criteria 中就会存在 Page 字段，用于设置分页。</p>

<p>&nbsp</p>