
XML SOURCE EDITOR ENHANCEMENT SPEC

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1. Overview

1.1 Requirement and features

By leverage WTP StructrudedTextEditor, BIRT provides an advance XML source editor to help user editing the design file at source level.

The features include:

- **Source highlighting**
- **Formatting**
- **Outline of source**
- **Context menu actions**

1.2 Packaging issues

1.2.1 *org.eclipse.birt.report.designer.ui.editor.xml*

The advanced XML editor will provide by a separate plug-in. The simple text editor, which provides with BIRT 2.1.x, is still exiting as the default xml source editor. Only ALL-IN-ONE version of BIRT includes this plug-in as advanced XML source editing feature.

1.2.2 RCP packaging

The RCP version of BIRT will not include the advanced XML source editor plug-in.

2. XML source Editor enhancement

2.1 Integrate with WTP's StructuredTextEditor

Leverage by WTP's StructuredEditor, user get a full functional editor to edit the report designer file. All the features are build-in features of WTP StructuredTextEditor. We list some here for demonstration. We really don't contribute any more fetures.

Features include:

Code highlighting.

Formatting by action.

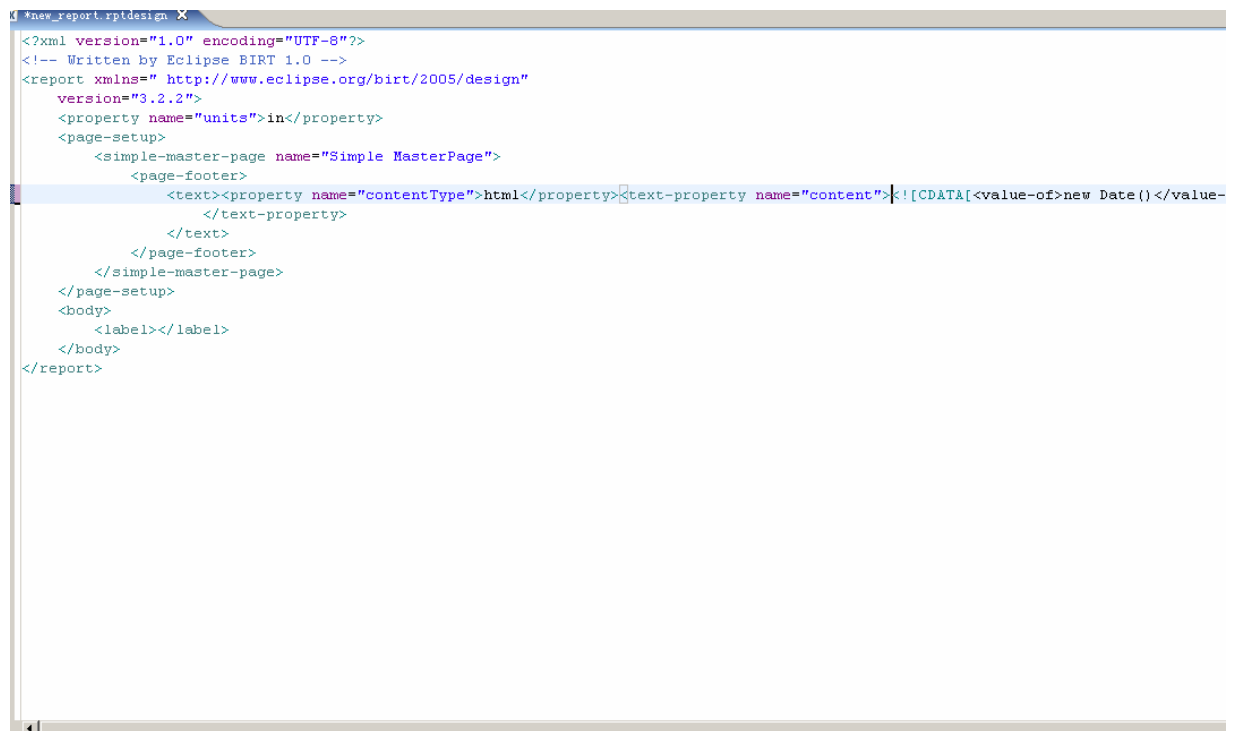
Others.

2.1.1 User case 1: highlighting of design file.



Figure 2.1.1.1 Highlighting

2.1.2 User case 2: Formatting



The screenshot shows an Eclipse IDE window titled "new_report1.rptdesign". The editor contains XML code for a report design. The code is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Written by Eclipse BIRT 1.0 -->
<report xmlns="http://www.eclipse.org/birt/2005/design"
version="3.2.2">
  <property name="units">in</property>
  <page-setup>
    <simple-master-page name="Simple MasterPage">
      <page-footer>
        <text><property name="contentType">html</property><text-property name="content">![CDATA[<value-of>new Date()</value-
        </text-property>
        </text>
      </page-footer>
    </simple-master-page>
  </page-setup>
  <body>
    <label></label>
  </body>
</report>
```

The code is syntactically incorrect. It starts with a standard XML declaration and a comment. The root element is `<report>` with an `xmlns` attribute and a `version` attribute. Inside `<report>`, there is a `<property>` element, a `<page-setup>` element containing a `<simple-master-page>` element, and a `<body>` element containing a `<label>` element. The `<simple-master-page>` element has a `<page-footer>` element containing a `<text>` element. The `<text>` element contains a `<property>` element and a `<text-property>` element. The `<property>` element has a `name` attribute and a text value. The `<text-property>` element has a `name` attribute and a text value. The text value of the `<text-property>` element is `![CDATA[<value-of>new Date()</value-`, which is not a valid XML value. The code ends with `</report>`.

Figure 2.1.2.1 Bad formed source

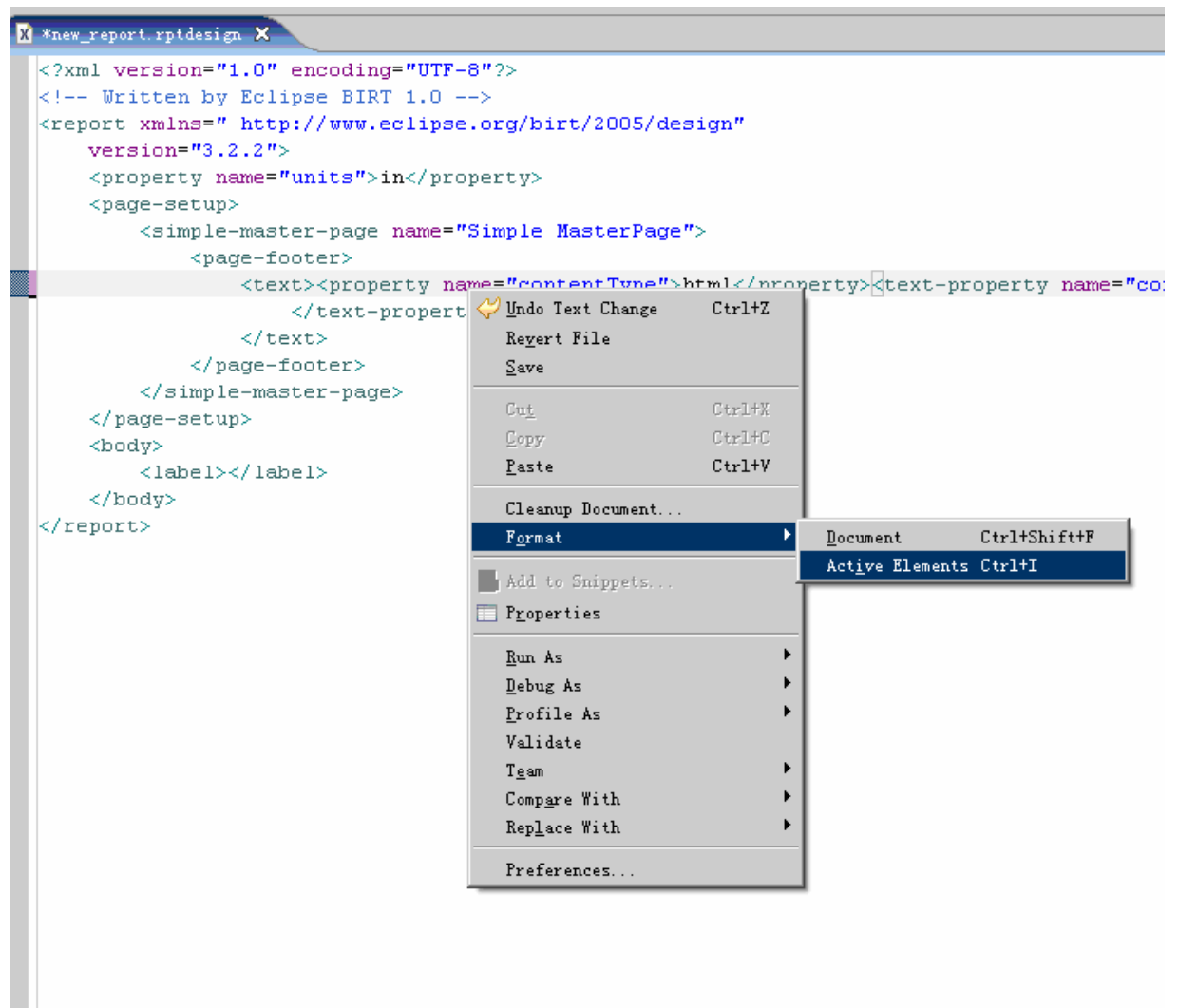
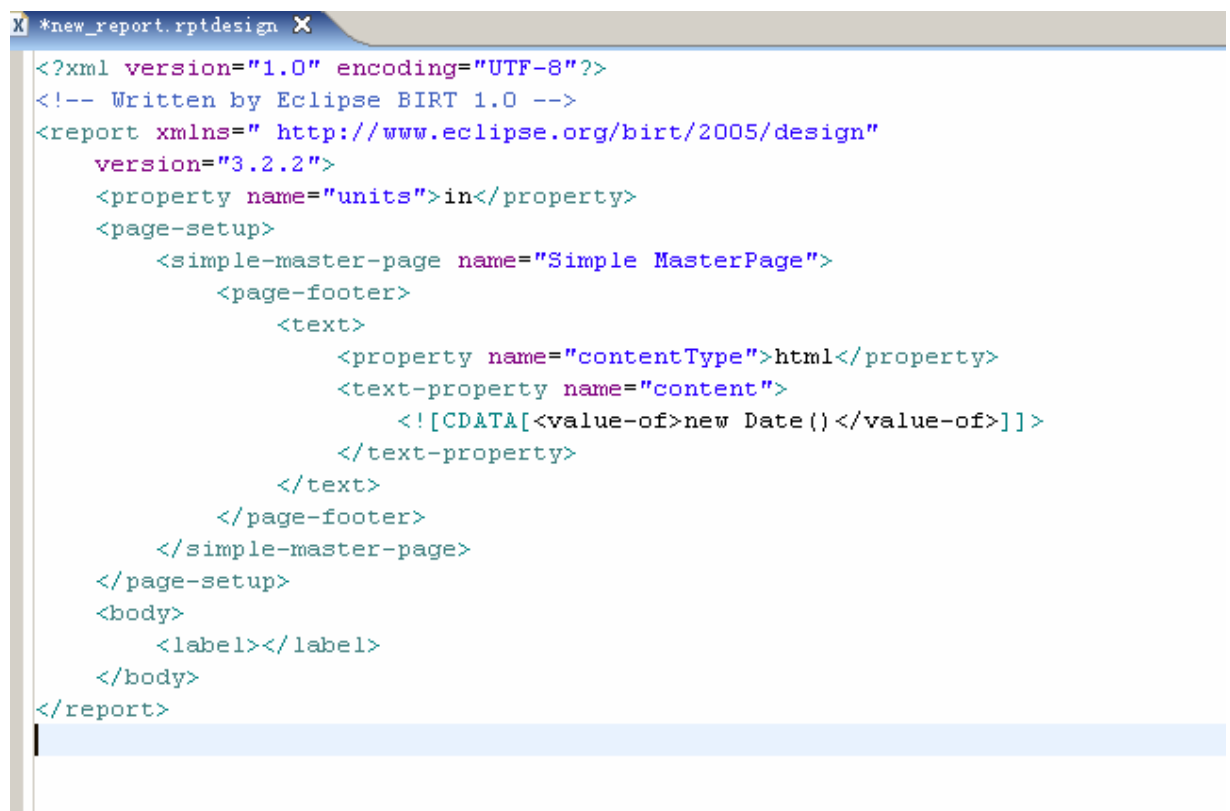


Figure 2.1.2.2 Select format action



```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Written by Eclipse BIRT 1.0 -->
<report xmlns=" http://www.eclipse.org/birt/2005/design"
version="3.2.2">
  <property name="units">in</property>
  <page-setup>
    <simple-master-page name="Simple MasterPage">
      <page-footer>
        <text>
          <property name="contentType">html</property>
          <text-property name="content">
            <![CDATA[<value-of>new Date() </value-of>]]>
          </text-property>
        </text>
      </page-footer>
    </simple-master-page>
  </page-setup>
  <body>
    <label></label>
  </body>
</report>
```

Figure 2.1.2.3 Formatted source

3. Outline view enhancement

3.1 Full feature of XML source outline view.

We plan to leverage the WTP's code to support outline view of XML source. The outline view provides the features as:

1. Switch between outline of source and outline of report structure.
2. Select synchronization between outline and editor.
3. Insert, Edit, Delete, undo, redo and others actions

3.1.1 Use case 1: switch between report design outline view and JavaScript outline view.

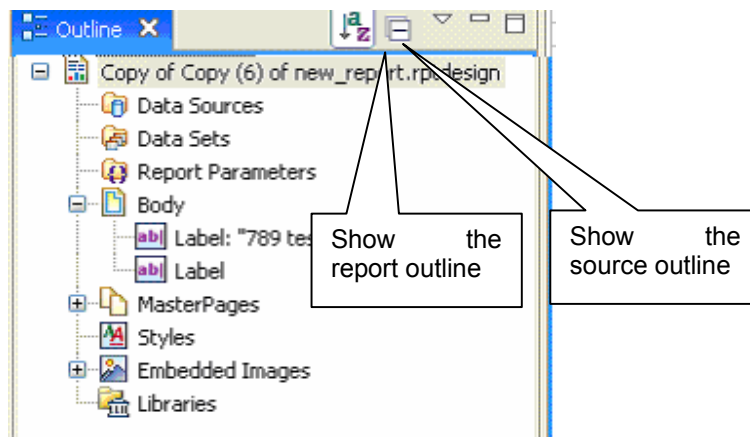


Figure 3.1.1.1 Show the outline view of report design by default.

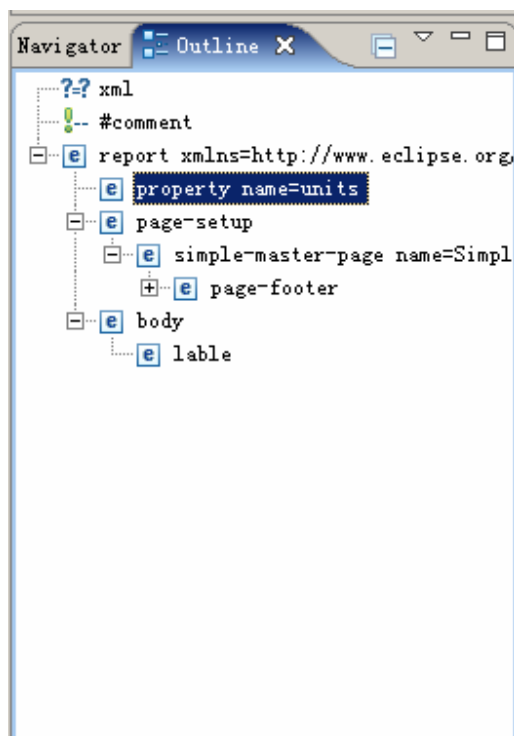


Figure 3.1.1.2 Switch to outline of source file by clicking on toolbar.

3.1.2 Use case 2: Selection synchronization

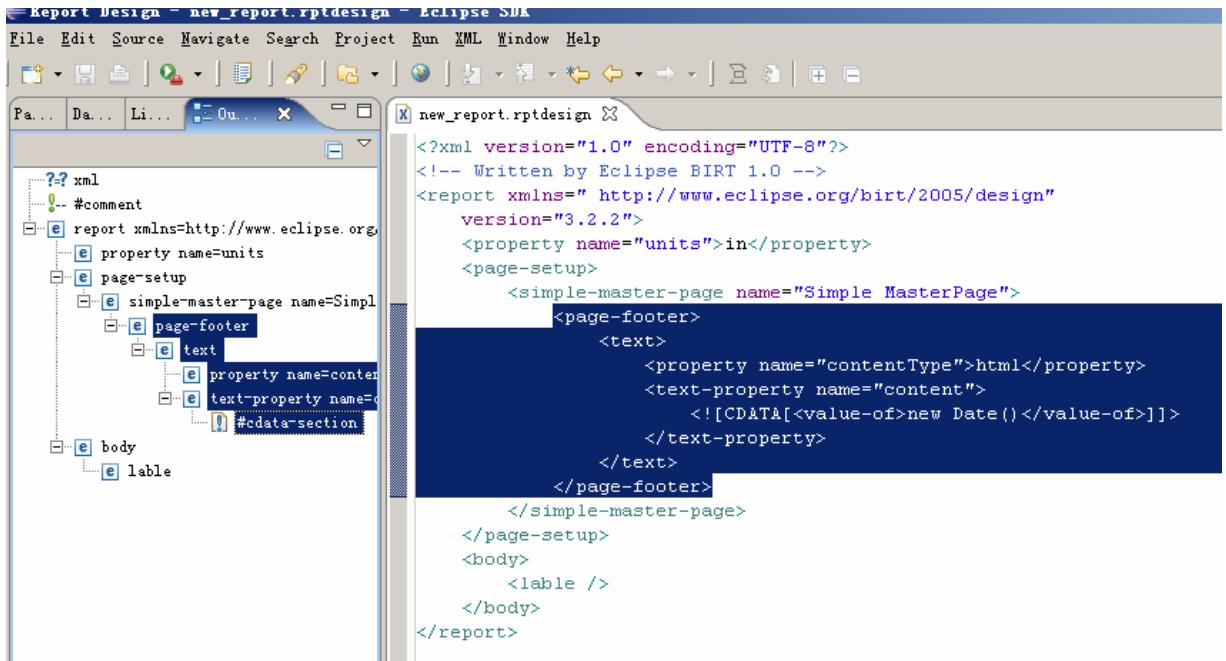
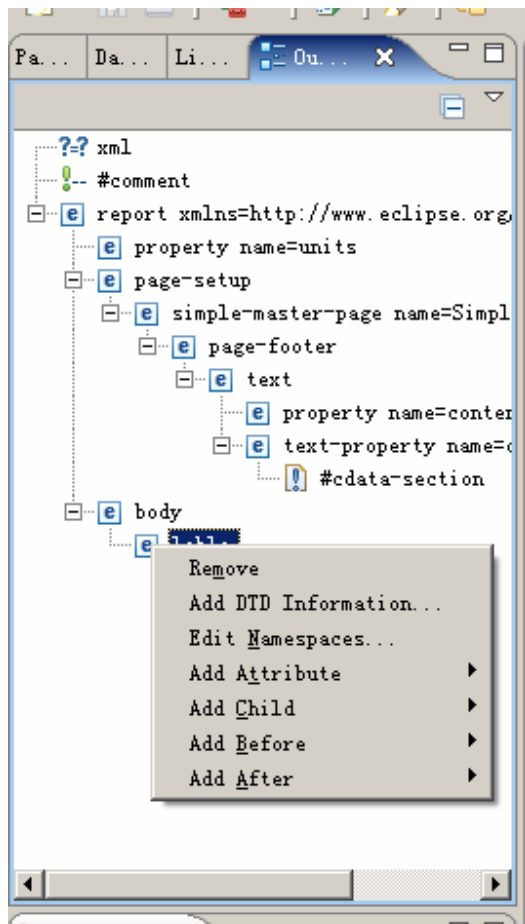


Figure 3.1.2.1 Synchronize the selection between outline view and JavaScript editor

3.1.3 Use case 2: Actions on outline



4. Appendix

4.1 Icon list

- TBD: The action icon of switch to report design outline
- ♦ TBD: The action icon of switch to XML source outline