

Introduce the [JListView](#) component in [JComponentPack 1.1.0](#)

June 16, 2008

If you want to implements the Windows explorer like feature in Java swing application, the [JListView](#) component meets your requirements exactly.

The [JListView](#) component support the 5 different view modes: small icon, large icon, list, thumbnails, details, all these view mode can change on the fly, the methods "[JListView.setViewMode](#)" can change the view mode of [JListView](#) component.

The [JListView](#) component have the MVC design concept, a simple [TableModel](#) can be provided for it's data, a simple [CellProvider](#) such [IconProvider](#) can be provided for it's icon. Should write a [DefaultCellRenderer](#) subclass for its renderer and [DefaultCellEditor](#) subclass for it's editor. The article "[Introduce Cell Renderer](#)" introduce why using the [DefaultCellRenderer](#).

The [JListView](#) component use a [ListSelectionModel](#) as it's selection model, you can change the selection model's mode, it support single selection, single interval selection, multiple interval selection, you can use the following methods to get the selected values:

```
JListView.getSelectedValue\(\); // get the lead selection value  
JListView.getSelectedValues\(\); // get all selected values
```

The [JListView](#) component provides several methods for it's editing:

```
JListView.isEditing\(\); // determines whether the JListView is being edited.  
JListView.cancelEditing\(\); // cancel current editing  
JListView.stopEditing\(\); // stop the current editing and apply the editing value  
JListView.startEditingAtIndex\(\); // start the editing at the specified index  
JListview.getEditingInex\(\); // get the current editing object's index
```

The [com.zfjava.swing.model](#) and [com.zfjava.swing.cell](#) package have the [FileTableModel](#) and [FileProvider](#), it support the directory list and file icon directly, the following code can create a explorer like GUI:

```
JListView listView = new JListView();  
listView.setListData(new FileTableModel(new File(System.getProperty("user.home"))));  
listView.setCellRenderer(new FileCellRenderer());  
listView.setCellEditor(new FileCellEditor());
```

The [JListView](#) component also support row sorting, the [TableModel](#) you provided for [JListView](#) only need implements the [ColumnSorter](#) interface, it can support the row sorting automatically, we want to improve this area after upgrade the JRE version to 1.6.

The [JListView](#) component provides several important client property:

“[JListView.rowSelectionAllowed](#)” allow the full row can be selected

“[JListView.showVerticalLines](#)” shows the vertical lines in details view mode.

“[JListView.showHorizontalLines](#)” shows the horizontal lines in details view mode.

“[JListView.backgroundImage](#)” sets the background image for [JListView](#) component.

For details, you can view the [JListView](#) JavaDoc API documentation.

The [JListView](#) also support the Drag and Drop, but in [JComponentPack 1.1.0](#) and early version, implements this feature has trick and tips:

```
// get JTable and JList
BasicListViewUI ui = (BasicListViewUI)listView.getUI();
JTable table = ui.getTable();
JList list = ui.getList();
table.setDragEnabled(true);
list.setDragEnabled(true);
TransferHandler th = new TransferHandler() {
    public int getSourceActions(JComponent c) {
        return COPY;
    }
    protected Transferable createTransferable(JComponent c) {
        // just a test
        Object o = listView.getSelectedValue();
        if(o != null) {
            return new StringSelection(o.toString());
        }
        return null;
    }
};
table.setTransferHandler(th);
list.setTransferHandler(th);
```

In the upcoming version [JComponentPack 1.2.0](#), we have improved this area, so in the new version, implements the drag and drop feature is very simple:

```
listView.setDragEnabled(true);
TransferHandler th = new TransferHandler() {
    public int getSourceActions(JComponent c) {
        return COPY;
    }
    protected Transferable createTransferable(JComponent c) {
        // just a test
```



```
Object o = listView.getSelectedValue();
if(o != null) {
return new StringSelection(o.toString());
}
return null;
}
};
listView.setTransferHandler(th);
```