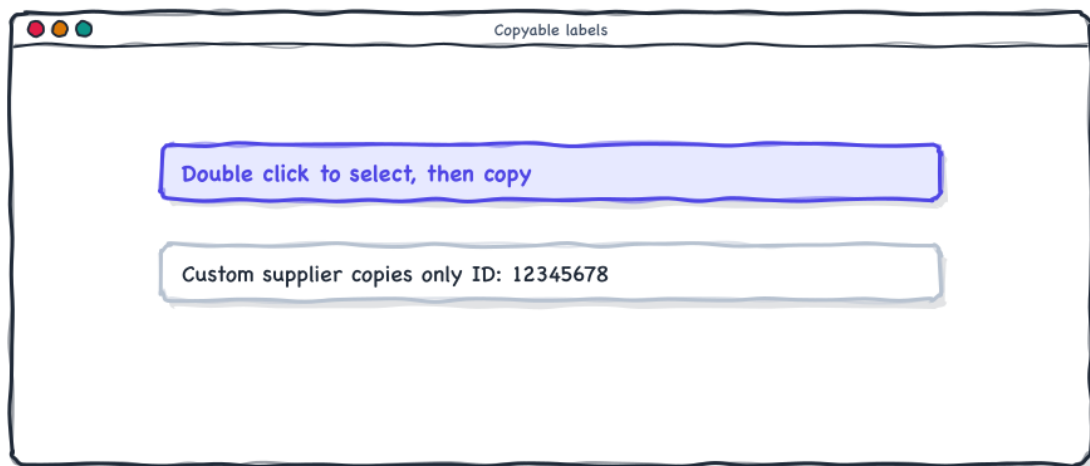


EnhancedLabel

Developer Manual

GemsFX • com.dlsc.gemsfx • JavaFX Custom Controls



EnhancedLabel makes ordinary labels selectable and copyable.

EnhancedLabel extends JavaFX Label with whole-label selection and clipboard copying. Double-click selects the label, shortcut+C copies the configured content supplier, and the context menu exposes a localized copy action.

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1. Introduction

EnhancedLabel is a **Label** subclass. It keeps normal **Label** text/graphic APIs and adds selection, copy shortcut, context-menu copying and a supplier for custom clipboard content.

1.1 Key features

- Double-click selects the entire label.
- Shortcut+C copies while the label has focus.
- Context-menu request selects the label and shows a copy item.
- `copyContentSupplier` can copy a different value than displayed text.
- `onCopyAction` can replace the default copy behaviour.
- Losing focus clears selected state.

1.2 Maven dependency

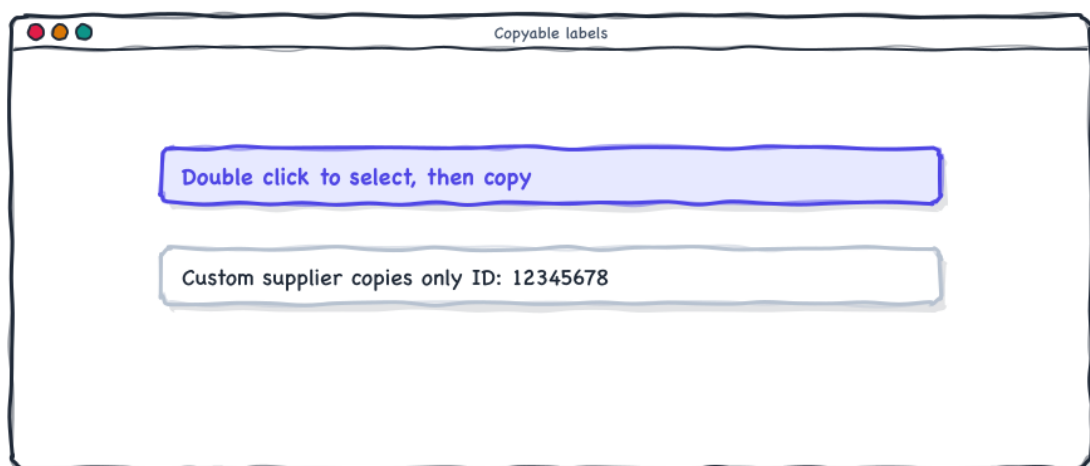
```
<dependency>
  <groupId>com.dlsc.gemsfx</groupId>
  <artifactId>gemsfx</artifactId>
  <version>4.4.1</version>
</dependency>
```

GemsFX controls live in module `com.dlsc.gemsfx`.

2. Getting started

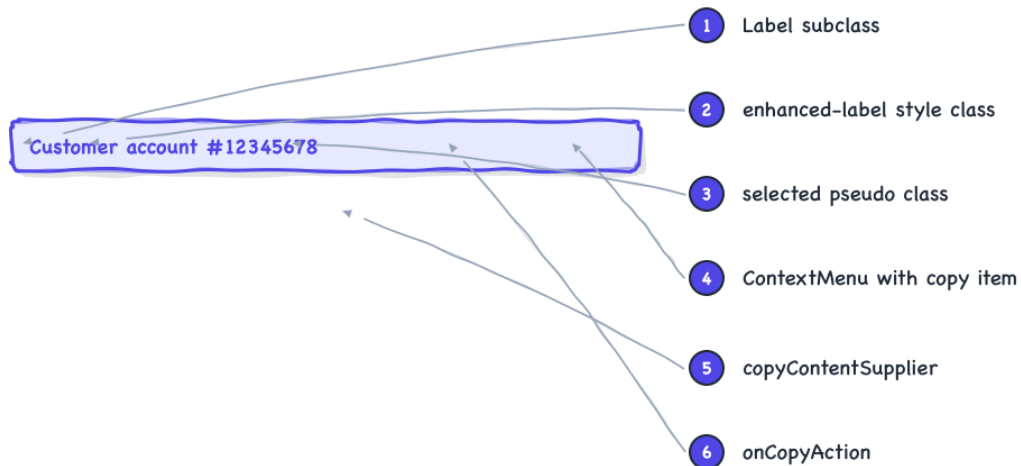
```
EnhancedLabel label = new EnhancedLabel("Customer account #12345678");
label.setCopyContentSupplier(() -> "12345678");
label.setCopyMenuItemText("Copy ID");
```

A label that displays a sentence but copies only the ID.



EnhancedLabel selected and unselected examples.

3. Anatomy



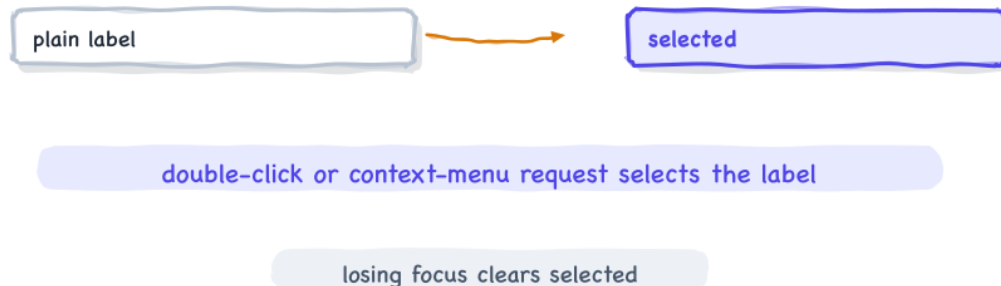
The properties and hooks added by EnhancedLabel.

Part	Description
Label base class	All normal Label text and graphic properties remain available.
selected property	Whole-label selection state.
ContextMenu	Contains one copy MenuItem.
copyContentSupplier	Defines clipboard content.
onCopyAction	Allows custom copy handling.

4. Control API

Property	Type	Default	Description
selected	BooleanProperty	false	True when the whole label is selected; drives :selected pseudo class.
copyMenuItemText	StringProperty	Copy text	Text of the context-menu item.
copyContentSupplier	ObjectProperty<Supplier<String>>	this::getText	String placed on the clipboard by default copy action.
onCopyAction	ObjectProperty<EventHandler<ActionEvent>>	copyText handler	Action invoked by the context-menu item; default copies supplier content.

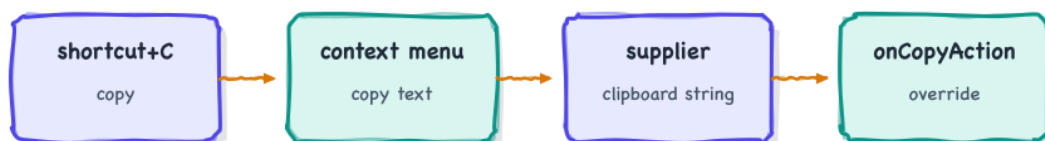
5. Interaction behaviour



Double-click selection and focus clearing.

- The control is focus traversable.
- Double-click with primary mouse button sets selected true.
- When selected and not focused, it requests focus.
- When focus is lost, selected becomes false.
- Context-menu request also sets selected true.

6. Clipboard flow



Copy shortcut, menu action and supplier flow.

The default copy action writes `copyContentSupplier.get()` to the system clipboard. Set `onCopyAction` to intercept or replace that behaviour.

7. Styling



`.enhanced-label:selected` uses accent background and white text

The selected pseudo class is the main styling hook.

Style class / pseudo class	Description
<code>.enhanced-label</code>	Root style class added by <code>init()</code> .
<code>:selected</code>	Pseudo class when selected is true; CSS uses accent background and white text.

```
.enhanced-label:selected {  
    -fx-background-color: -fx-accent;  
    -fx-text-fill: white;  
}
```

Default selected styling from `enhanced-label.css`.

8. Localization

Key	English default
<code>context.copy-text</code>	Copy text

9. Accessibility

EnhancedLabel sets `AccessibleRole.TEXT`. It inherits Label text semantics and adds keyboard copy support.

10. Recipes

10.1 Copy hidden identifier

```
label.setCopyContentSupplier(() -> customer.getId());  
label.setCopyMenuItemText("Copy customer ID");
```

10.2 Observe selection

```
toggle.selectedProperty().bindBidirectional(label.selectedProperty());
```

10.3 Custom copy action

```
label.setOnCopyAction(evt -> {  
    logCopy(label.getText());  
    evt.consume();  
});
```

10.4 Checklist

- 1 Use EnhancedLabel when the whole label is copied as one unit.
- 2 Use TextView for arbitrary range selection inside multiline text.
- 3 Set a supplier when displayed text differs from clipboard text.
- 4 Keep selected styling accessible against the accent color.

11. See also

- Demo app: EnhancedLabelApp. Run with `mvn javafx:run -f gemsfx-demo/pom.xml -Dmain.class=com.dlsc.gemsfx.demo.EnhancedLabelApp`.
- Related control: `TextView` for range-based text selection.
- API docs: <https://dlsc-software-consulting-gmbh.github.io/GemsFX/api/>