



## Advanced Java: Swing and JavaBeans

---

Length: Three days

Level: Advanced

---

### **DESCRIPTION**

The Swing package, a major part of the Java Foundation Class (JFC), is a development kit that simplifies the task of creating graphical components from the more simple ones, such as menus, labels, and buttons, to the more sophisticated ones, such as trees, tabbed panes, images, and tool tips.

JavaBeans are portable and reusable software components that help you make modular applications. The main strengths of this technology are its cross-platform capabilities and security features provided by Java.

Together, Swing and JavaBeans allow you to create graphic-based applets and applications that are both user-friendly and easy to develop, deploy, and maintain.

---

## OBJECTIVES

Upon completion of the course, participants will be able to:

- Identify major Swing innovations and major programming differences between AWT and Swing.
  - Describe the Model-View-Controller (MVC) architecture of Swing components.
  - Display information using sophisticated Swing components.
  - Use appropriate layout managers to build complex user interfaces.
  - Centralize menu and toolbar event handling.
  - Provide a flexible user interface using a pluggable look-and-feel.
  - Use icons, tool tips, and internal frames to develop dynamic applications.
  - Use internationalization features.
  - Use drag and drop, cut and paste, and undo-redo to make their applications user-friendly.
  - Describe the JavaBeans architecture
  - Define and use JavaBeans properties
  - Make JavaBeans persistent
  - Deploy JavaBeans using JAR files
  - Use introspection to define and use JavaBeans features
- 

## TOPICS

- AWT, JFC and Swing
  - Model-View-Controller (MVC) architecture
  - Events, event listeners, and event adapters
  - Swing components
  - Layout managers
  - Frames
  - Look and feel
  - Internationalization
  - Drag and drop
  - Cut and paste
  - Undo and redo
  - JavaBeans Architecture
  - JavaBeans Properties
  - JavaBeans Persistence and Serialization
  - JavaBeans Deployment and JAR files
  - Introspection
-

## **AUDIENCE**

- Software Developers
- 

## **PREREQUISITES**

- Good understanding of Java fundamentals
- Some Java programming experience