

# Copying elements and symbols

You can copy model elements and symbols either to another location in the same project or to another project. This must be done in the same session.

There are two modes of making copies:

- Deep copying (with new data)
- Shallow copying (with reused data)

## Related pages

- [Session management](#)
- [Checking element editing permissions](#)

## Example #1: Copying an element

```
Element element = ...; // An element to copy/paste.
Element parent = ...; // A parent to which the element has to be
pasted: either the same project or another project.
Project project = ...;
SessionManager sessionManager = SessionManager.getInstance();
sessionManager.createSession(project, "Clone");

// A 3rd parameter indicates whether an element name uniqueness should
be preserved in the parent.
CopyPasting.copyPasteElement(element, parent, true);

sessionManager.closeSession(project);
```

## Example #2: Copying multiple elements and symbols

```
List elements = ...; // Elements to copy/paste.
List views = ...; // Symbols to copy/paste.
Element parent = ...; // A parent to which elements should be pasted:
either the same project or another project.
BaseElement symbolParent = ...; // A parent to which symbols should be
pasted.
Project project = ...;
SessionManager sessionManager = SessionManager.getInstance();
sessionManager.createSession(project, "Clone");

// A 4th parameter indicates whether deep or shallow copy is applied.
// A 5th parameter indicates whether an element name uniqueness should
be preserved in the parent.
List baseElements = CopyPasting.copyPasteElements(views, parent,
symbolParent, true, true);

sessionManager.closeSession(project);
```



You can find the code examples in `<program installation directory>\openapi\examples\copypaste`