

# Fork and Join

The Fork Vertices are used to split an incoming transition into two or more transitions terminating on the orthogonal target vertices (i.e., vertices in different regions of the composite state). The segments going out of a Fork Vertex must not have guards or triggers.

The Join Vertices are used to merge several transitions emanating from the source vertices in different orthogonal regions. The transitions entering a Join Vertex cannot have guards or triggers.

1. A Join Vertex must have at least two incoming Transitions and exactly one outgoing Transition.
2. A Fork Vertex must have at least two outgoing Transitions and exactly one incoming Transition.

## Related pages

- [Activity diagram](#)
- [Interaction Overview diagram](#)
- [State Machine diagram](#)
- [Protocol State Machine diagram](#)
- [UML elements](#)
- [Specification Window](#)