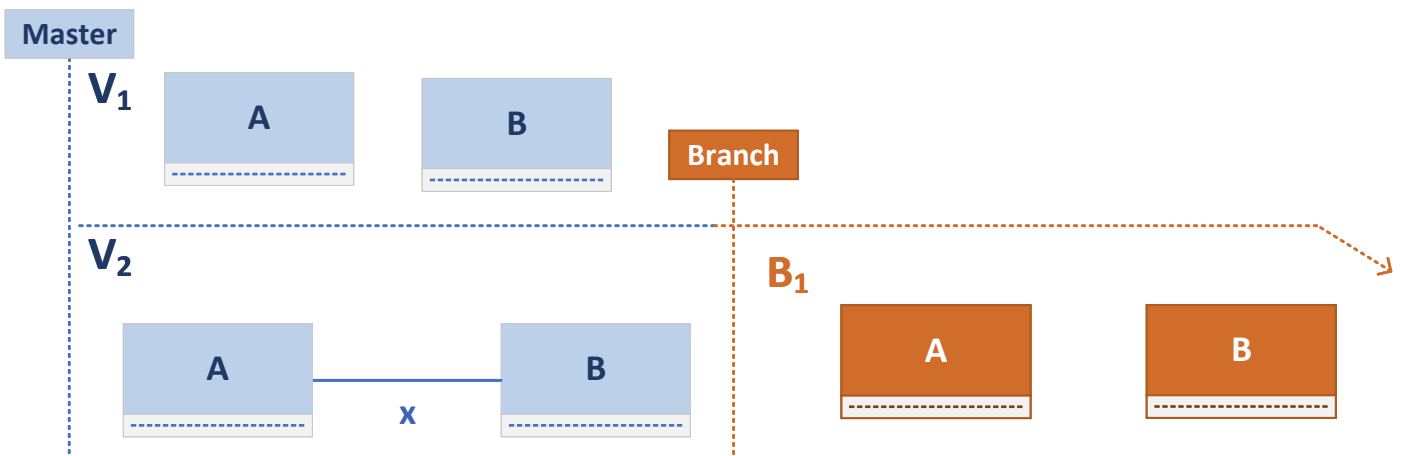
(4) Add New Reference

Versioning

Description: A new association is added between two classes in the master branch.

Description: A new branch is created on version 1.

Branching



Original Version (V_1):	Two unconnected classes A and B	Association x connects two classes A and B.	**:Current Version (V_2)**
Working Version (V_2):	Association x is added between A and B	Association x is deleted between A and B	**:Working Branch Version (B_1)**
Expected change operations:	ADD → association(x)	DELETE → association(x), BRANCH(1)	**:Reversed Change Operations**
Expected Toward Versioning:	Association x connects two classes A and B.	Two unconnected classes A and B	**:Expected Reverse Versioning**
Expected Backward Versioning:	Two unconnected classes A and B	Versions V_2 and B_1 are accessible for modifications.	**:Development lines**

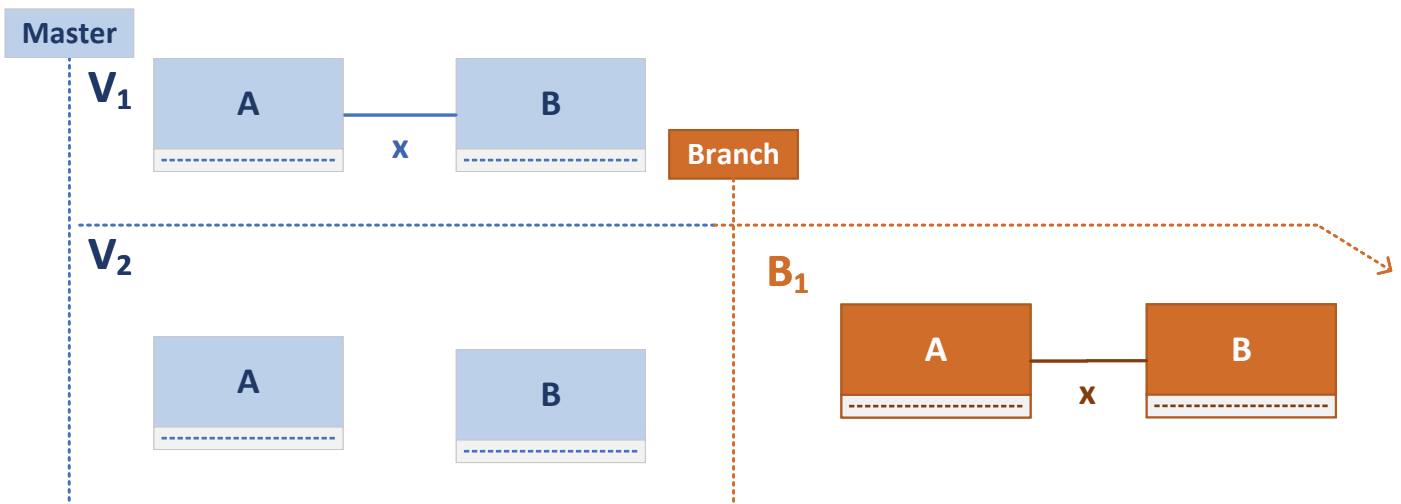
(5) Delete a Reference

Versioning

Description: An association between two classes is deleted in the master branch.

Description: A new branch is created on version 1.

Branching



Original Version (V_1):	Two classes A and B are connected with association x.	Two unconnected classes A and B.	**:Current Version (V_2)**
Working Version (V_2):	Deletion of a association x	Association x is added between A and B	**:Working Branch Version (B_1)**
Expected change operations:	DELETE → association(x)	ADD → association(x), BRANCH(1)	**:Reversed Change Operations**
Expected Toward Versioning:	Including two unconnected classes A and B.	Two classes A and B are connected with association x.	**:Expected Reverse Versioning**
Expected Backward Versioning:	Two classes A and B are connected with association x.	Versions V_2 and B_1 are accessible for modifications.	**:Development lines**

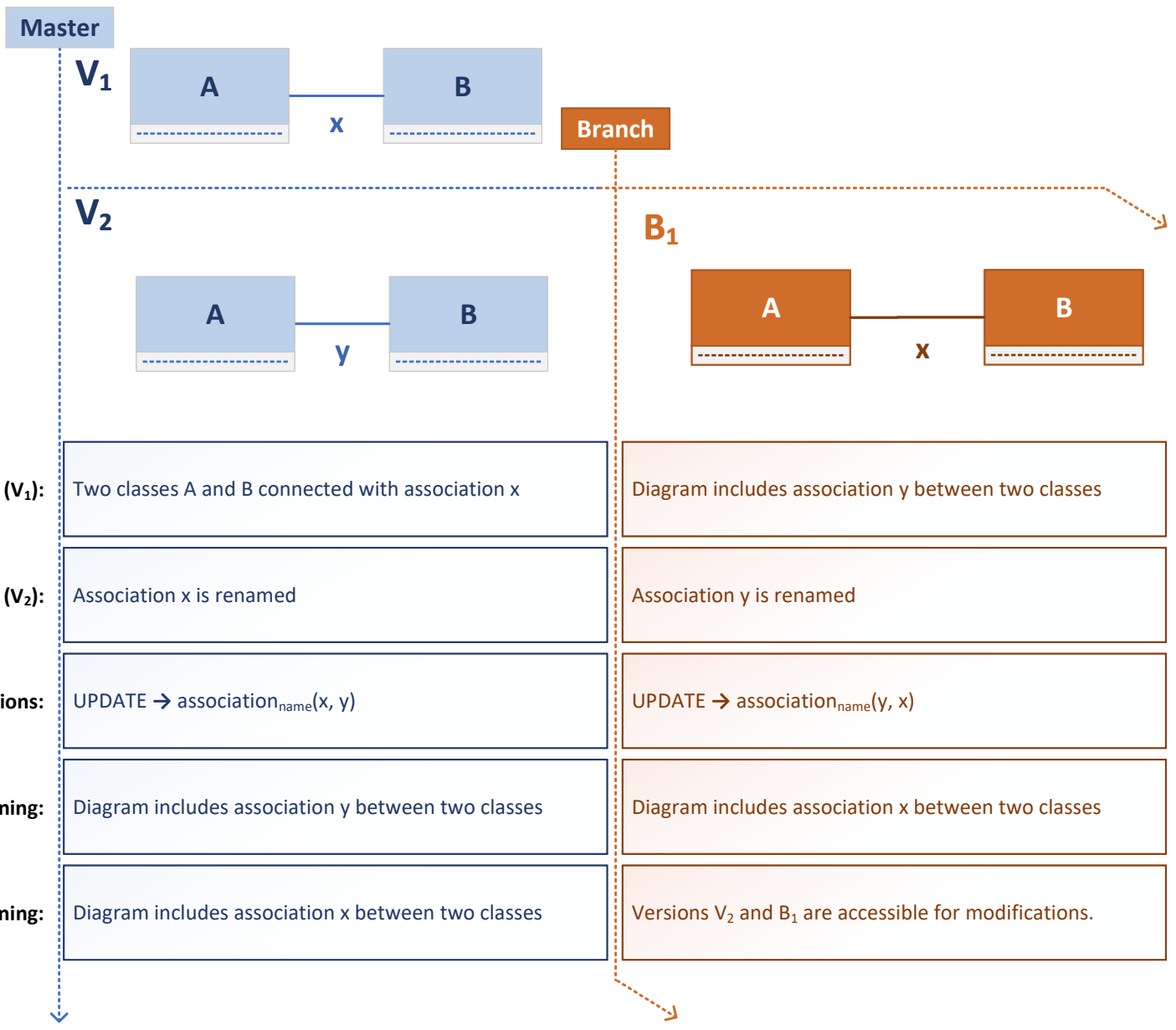
(6) Update a Reference

Versioning

Description: A property of an association is changed in the master branch.

Description: A new branch is created on version 1.

Branching



Original Version (V_1):	Two classes A and B connected with association x	Diagram includes association y between two classes	**:Current Version (V_2)**
Working Version (V_2):	Association x is renamed	Association y is renamed	**:Working Branch Version (B_1)**
Expected change operations:	UPDATE → $association_{name}(x, y)$	UPDATE → $association_{name}(y, x)$	**:Reversed Change Operations**
Expected Toward Versioning:	Diagram includes association y between two classes	Diagram includes association x between two classes	**:Expected Reverse Versioning**
Expected Backward Versioning:	Diagram includes association x between two classes	Versions V_2 and B_1 are accessible for modifications.	**:Development lines**