Display Connectors

Draw lines linking two elements on a display, with endpoints snapped to connection points on shapes or symbols.

Version 10.1.5+

Connectors are polyline elements with both endpoints registered to a host element. When you move a host shape or symbol, the connector endpoints follow. When you delete a host, the paired connector is removed.

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Connector Tool

The **Connector** button on the Drawing toolbar starts the Connector Tool. Click the first endpoint on a shape or symbol, then click the second endpoint. A polyline is drawn between the two points with both ends registered as a connection.

Snap targets include:

- Shape edges on Rectangle, Ellipse, and Path elements with **Allow Connections** enabled.
- Node UID elements inside a symbol. Symbol authors mark terminal points using a Node UID naming convention.

Behavioral Changes in 10.1.5

The Connector Tool has three behavioral changes in FrameworX 10.1.5 that simplify authoring and prevent malformed connectors:

- **Auto-finalize on second click.** The connector finalizes as soon as the second endpoint is clicked. No additional confirmation step is required — the polyline is committed to the display and both host references are registered immediately.
- **No loose-start connectors.** Every connector must have both endpoints bound to a host element. The tool will not commit a connector with a free (unbound) endpoint — partial connectors are discarded when the gesture ends without a valid second target.
- **Endpoint thumbs visible under the Selection Tool.** Selecting a connector with the Selection Tool reveals endpoint thumbs at each host registration. Drag a thumb to re-target the endpoint to a different host; the new host reference is registered and the old one is released.

Allow Connections Property

Select a shape on a display. In the Shape config panel, a **Connections** group contains the **Allow Connections** checkbox. Checking the box marks the shape as a connector target.

The checkbox is available for Rectangle, Ellipse, and Path. Polylines and gridlines are not eligible.

When enabled, the shape carries a GUID and an `IsConnector=true` attached property in the display XAML. Unchecking the box on a shape with active connections opens a confirmation dialog. Choosing **Yes** removes the connections and clears the IsConnector flag.

Working with Connected Elements

Action	Behavior
Move a connected shape	Connector endpoints follow the shape.
Delete a connected element	The paired connector is removed automatically.
Copy and paste connected shapes	Pasted shapes receive new GUIDs. Connections between the pasted shapes are preserved. Connections to shapes outside the selection are dropped.
Drag a connector endpoint	The endpoint snaps to the new target and the connection is re-validated.
Undo a connector edit	The previous connection state is restored.
Delete a connector	Both host references are cleaned up on both sides of the link.

Upgrading Solutions

Solutions with connectors created in earlier FrameworX versions open in 10.1.5 with connector behavior active. No manual migration step is required.

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