

# Interactive Whiteboard — Build Readiness Checklist

Pressure-test a shared-canvas build for a virtual classroom before you ship: the sync model, transport, the two-channel split, persistence and export, and accessibility.

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## A. Data model & sync

- The board is a document of shapes, synced — never a streamed image of the canvas
- A sync model is chosen on purpose: central last-writer-wins, OT, or a CRDT (Yjs)
- CRDT is used only where offline or peer-to-peer editing is a real requirement

## B. Transport

- A WebSocket to a central server carries the authoritative document
- A WebRTC data channel is added only after measured latency hurts the lesson

## C. Document vs awareness channels

- Shapes travel on a reliable, ordered, persisted document channel
- Cursors and presence travel on a high-frequency ephemeral channel — never stored

## D. Persistence & export

- Snapshots are saved during class so a refresh or reconnect restores the board
- The board exports to SVG / PNG / PDF and attaches to the class record

## E. Accessibility & instructor controls

- Rendering favours SVG over canvas; WCAG 2.1 AA: text alternatives, keyboard, contrast
- The instructor can clear, lock, undo, and grant or revoke per-learner draw rights