

Pause complex port domain type propagation for Simscape blocks

For Simscape blocks, port domain type propagation is the process that computes port domain types of all linked connection ports. In complex models where propagation can take longer to complete, the Simulink editor is locked for editing. Starting in R2023a, you can suspend propagation and resume editing the model by clicking the Pause button on the status bar.

For more information, see [Port Domain Type Propagation: Speed up editing complex models](#) (Simscape).

Port Domain Type Propagation: Speed up editing complex models

When you add connection lines in a block diagram, port domain type propagation computes the port domain type of all linked connection ports in a model. For example, if you add a line between a connection port of a subsystem and a Capacitor block, the Simulink editor resolves this line as an electrical connection. In complex models, where port domain type propagation might take longer to complete, the Simulink editor is locked for editing. Starting in R2023a, a Pause button on the status bar allows you to suspend the ongoing propagation and unlock the editor.

Clicking Pause causes the following behavior:

- Port domain type propagation is terminated, and resolved ports hold the correct port domain type and direction. Some percentage of ports might have an unresolved port domain type or direction. If you click Update Model from the Modeling tab or simulate the model at this time, propagation continues for the unresolved ports.
- The editor is unlocked for use.
- If you continue building your model, any subsequent complex propagation is terminated and is accompanied by a message indicating incomplete propagation.
- A Resume button appears on the status bar.

Clicking Resume causes the following behavior:

- Port domain types are computed for all ports affected since the last pause operation, including any complex propagation initiated after clicking Pause.
- The Resume button is removed from the status bar.