

no domain decomposition

processor

computational domain

A single green grid representing a computational domain within a processor. The grid is 10 columns wide and 10 rows high, with a thin black border.

domain decomposition

processor 1

computational domain  
of processor 1

virtual boundary

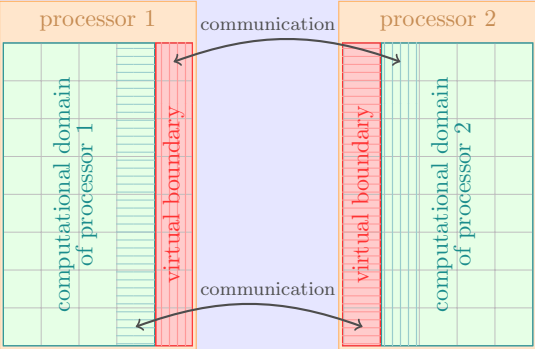
communication

processor 2

virtual boundary

computational domain  
of processor 2

communication

The diagram illustrates domain decomposition across two processors. Processor 1 (left) contains a green grid labeled 'computational domain of processor 1' and a red vertical strip labeled 'virtual boundary'. Processor 2 (right) contains a green grid labeled 'computational domain of processor 2' and a red vertical strip labeled 'virtual boundary'. Two curved arrows labeled 'communication' connect the virtual boundaries of the two processors, indicating data exchange between them.