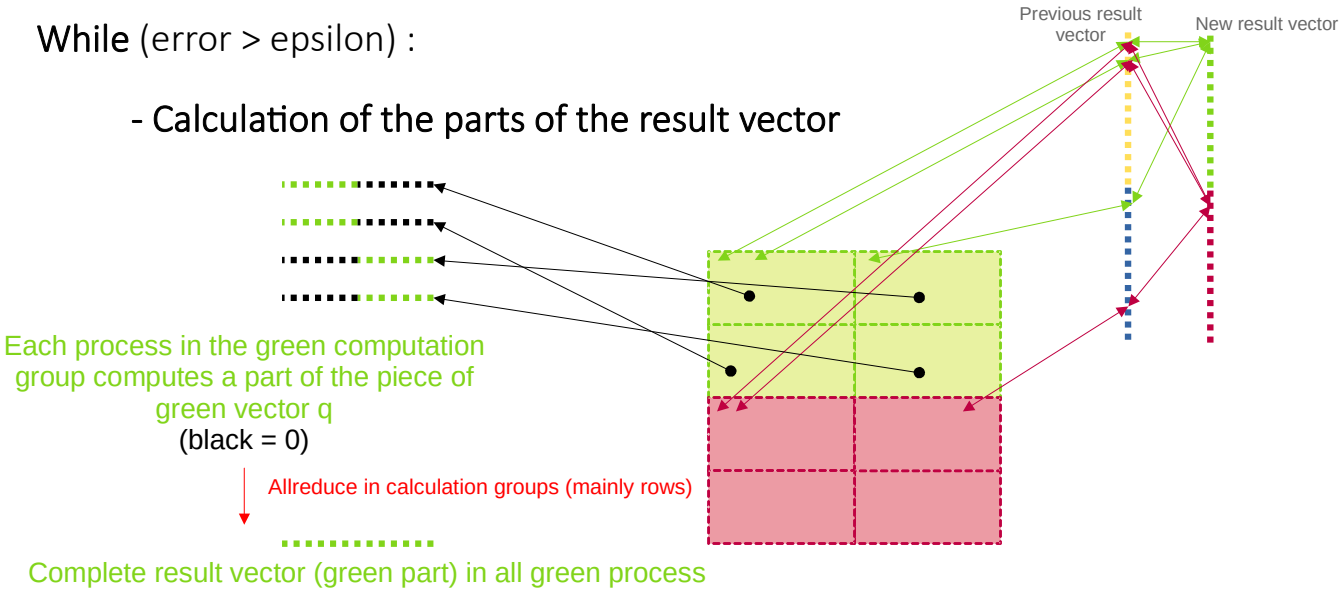
Summary of the PageRank algorithm (performed with non-normalized A^T)

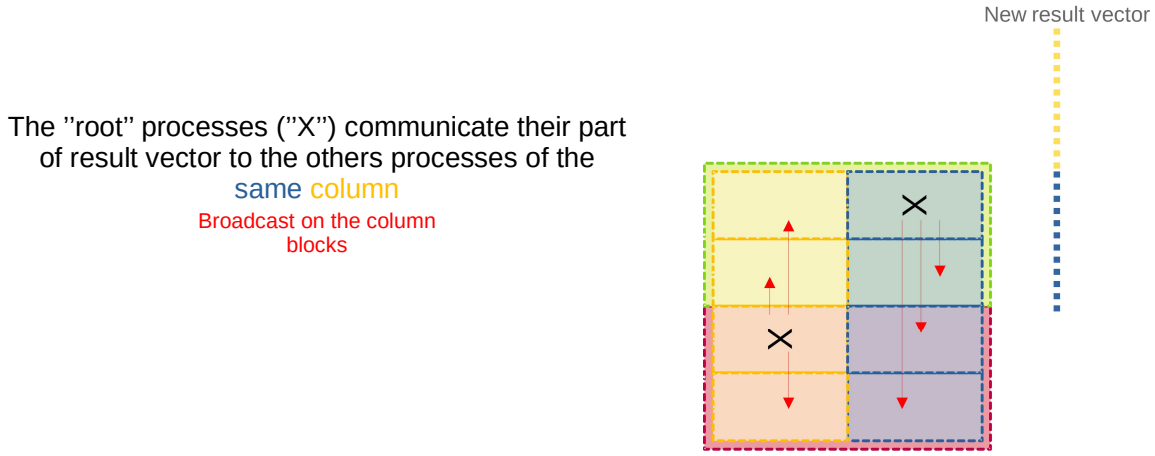
Step by step

While (error > epsilon) :

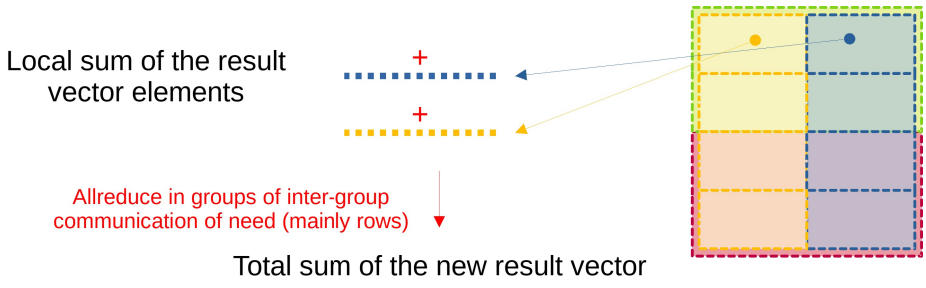
- Calculation of the parts of the result vector



- Communication of the new parts of result vector to the processes that need them (need groups), for the next iteration



- Normalization of the new result vector (need the total sum)



Dividing each element of the new result vector by the total sum

- Calculation of the error (new vector - old vector)

Local sum of elements of new vector – old vector

Allreduce in groups of inter-group communication of need (mainly rows)

Error = total sum

EndWhile