Scripting with R in high-performance computing: An Example using littler

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High-Performance Computing with R often involves distributed computing. Here, the MPI toolkit is a popular choice, as it is well supported in R by the `Rmpi` and `snow` packages. In addition, resource and and queue managers like slurm help in allocating and managing computational jobs across compute nodes and clusters.

In order to actually to execute tasks, we can take advantage of a scripting frontend to R such as `r` (from the `littler` package) or `Rscript`. By discussing a stylized yet complete example, we will provide details about how to organise a task for R by showing how to take advantage of automated execution across a number of compute nodes while being able to monitor and control its resource allocation.