Parallel random number generators in R

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Is there an implementation of the Mersenne-Twister and Wichmann-Hill parallel random number generators in R? I'm using the `parallel` package, but it seems that there is just the implementation of the L'Ecuyer parallel random number generator.

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asked Jan 3, 2015 at 20:47

Egodym
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1 Answer

1

The default random number generator in R is Mersenne-Twister. You can change between them using

```
setRNG('Wichmann-Hill')
setRNG('default')#or setRNG('Mersenne-Twister')
```

If you want to generate numbers in parallel, you can use the `foreach` package.

```
require(foreach)
require(doParallel)
c1 <- makeCluster(2)
registerDoParallel(c1)
generateRandom <- function(rng='default',n) {
  setRNG(rng)
  runif(n)
}
result = foreach(i = 1:2,rng = c('default','Wichmann-Hill'), .combine = 'c')
%dopar%
  generateRandom(rng,1e7)
stopCluster(c1)
```

This example generates 20 million random numbers from a U(0,1) distribution, with each half

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