

SpaDES sample modules

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This is an example of a ‘module group’ (parent module) containing several child modules:

- caribouMovement
- randomLandscapes
- fireSpread

Module groups make loading multiple modules easier: only the name of the module group needs to be specified in the `simInit` call, which will then initialize the simulation with the child modules.

```
library(SpaDES.core)
library(SpaDES.tools)

outputDir <- file.path(tempdir(), "simOutputs")
times <- list(start = 0.0, end = 20.0)
parameters <- list(
  .globals = list(stackName = "landscape", burnStats = "nPixelsBurned"),
  .progress = list(NA),
  caribouMovement = list(N = 100L, moveInterval = 1, torus = TRUE,
    .plotInitialTime = 1.01, .plotInterval = 1),
  fireSpread = list(nFires = 10L, spreadprob = 0.225, its = 1e6,
    persistprob = 0, returnInterval = 10, startTime = 0,
    .plotInitialTime = 0.1, .plotInterval = 10),
  randomLandscapes = list(nx = 100L, ny = 100L, inRAM = TRUE)
)
modules <- list("SpaDES_sampleModules")
objects <- list()
paths <- list(modulePath = system.file("sampleModules", package = "SpaDES.core"),
  outputPath = outputDir)

mySim <- simInit(times = times, params = parameters, modules = modules,
  objects = objects, paths = paths)

modules(mySim) # note the child modules are initialized

times(mySim) # See timeunits for each module and overall model timeunit

## Run model
dev() # to open a new plot device for faster plotting
spades(mySim)
```