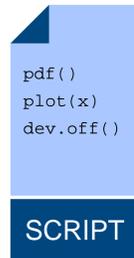
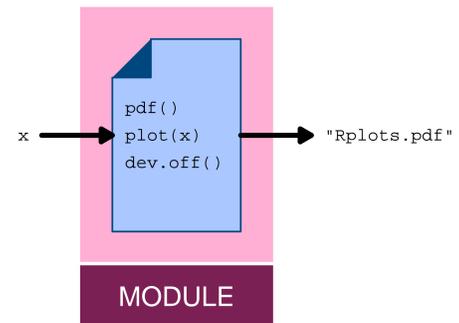


SCRIPTS



MODULES

```
module("m", language = "R",
  inputs = list(
    moduleInput("x", internalVessel("x"))),
  sources = list(
    moduleSource(fileVessel("script.R"))),
  outputs = list(
    moduleOutput("Rplot",
      fileVessel("Rplots.pdf"))))
```



CONDUIT

The **conduit** package for R provides a system for combining R **SCRIPTS**.

A script is first embedded within a **MODULE** wrapper, which defines the inputs required by the script and the outputs that the script produces.

Modules are then combined into **PIPELINES** by specifying connections ("pipes") from the outputs of one module to the inputs of another module.

The **conduit GLUE SYSTEM** runs a pipeline by executing the scripts within the modules and passing results from one module to the next.

The architecture of the package is designed to maximise the independence of scripts, modules, and pipelines so that, for example, the author of a script can be distinct from the author of a module, who can in turn be distinct from the author of a pipeline.

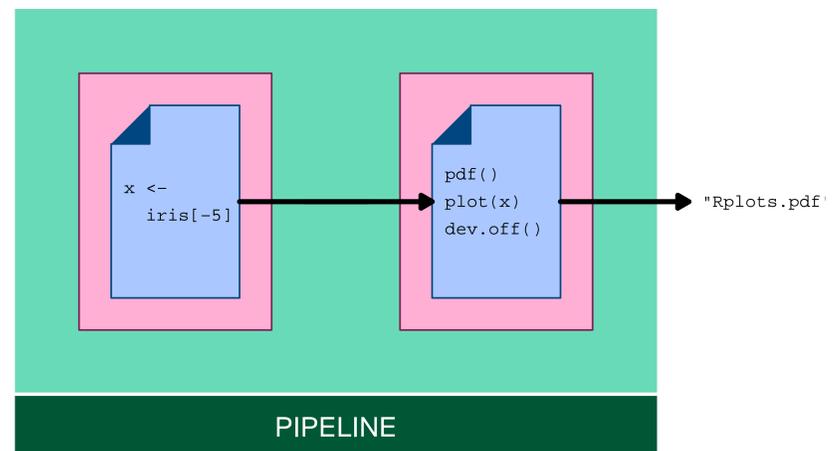
Importantly, the author of a script can have no knowledge of **conduit**, so that scripts written originally for one purpose can be repurposed and reused via the **conduit** package.

Furthermore, modules can be created to wrap scripts in other languages, such as Python.

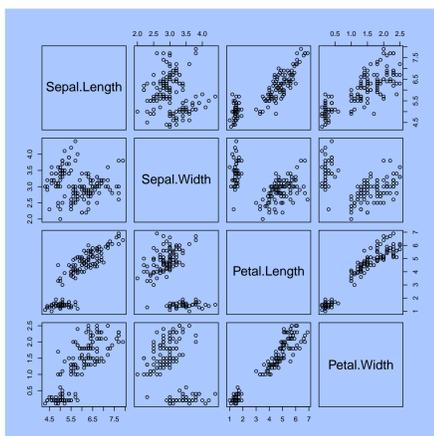
The motivation for the package is to support greater use of public data sets by facilitating and encouraging the creation, reuse, and recombination of small scripts that perform simple tasks.

PIPELINES

```
pipeline("p",
  modules = list(m1, m2),
  pipes = list(pipe("m1", "x", "m2", "x")))
```



OUTPUTS



GLUE SYSTEM

```
> p1 <- loadPipeline("p1", "pipeline.xml")
> runPipeline(p1)

$m2
$m2$Rplot
$m2$Rplot$name
[1] "Rplot"

$m2$Rplot$type
[1] "fileVessel"

$m2$Rplot$object
[1] "/tmp/RtmpVHD4wt/pipelines/p1/modules/m2/Rplots.pdf"
```

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conduit github page
<https://github.com/anhinton/conduit>