



# R Functions in Alteryx :: CHEAT SHEET

## R Tool Inputs and Outputs

**read.Alteryx("#1", mode = "data.frame")**  
Stream in a connected data input to the R Tool. Options for mode include "data.frame" or "list".

**read.Alteryx.First("#1", 5000, mode = "data.frame")**  
Stream in values in chunks by adding a number of records argument. Replace First with Next to get the next chunk of records.

**write.Alteryx(OutputObject, 1)**  
Writes data out of R Tool to one of five anchors.

## Reading and Writing R Objects

**the.obj <- vector(mode="list", length=2)**  
**the.obj[[1]] <- c(model.name)**  
**the.obj[[2]] <- list(the.model)**  
**names(the.obj) <- c("Name", "Object")**  
Convert model object to writeable format.

**unserializeObject(as.character(model\_df\$Object))**  
Convert model object back to R format.

## Writing out Plots

**WHR <- graphWHR(inches = "True", in.w = 4, in.h = 4, resolution = "2x", print.high = FALSE)**  
Function that creates an object that can define parameters of AlteryxGraph.

**AlteryxGraph(1, width = WHR [1], height = WHR[2], res = WHR[3], pointsize = 9)**  
Creates a plot in one of five output anchors. Plot code immediately following this function will be written out to the specified anchor.

**invisible(dev.off())**  
Closes the plot windows created by R.

## Messages

**AlteryxProgress(0.25)**  
Set Script Completion Progress in 25% increments.

**AlteryxMessage("message", msg.costs\$INFO, priority.consts\$LOW)**  
Write messages to the results window. Options for msg.costs are INFO, WARNING, FIELD\_CONVERSION ERROR, or ERROR. Options for priority.consts are LOW MEDIUM, or HIGH.

**stop.Alteryx("message")**  
Stop running R code with an error message.

## Which Version of R is Alteryx Using?

**R.Version()\$version.string**  
Returns the current R version in use.

Alteryx Version	R Version
10.6	3.2.3
11.0 - 2018.1	3.3.2
≥2018.2	3.4.4

## Interface Tools & Environmental Variables

**%VariableType.<VariableName>%**  
The syntax for accessing environmental variables in the R Tool, where **VariableType** is the Type of variable, and **<VariableName>** is the specific Name of the variable.

Variable	Variable Type
Interface Tool	Question
Engine Variable	Engine
User Variable	User

## Metadata

**if(AlteryxFullUpdate)**  
Determines if Alteryx is refreshing, which allows metadata to update. Can be used with an ifelse statement to run MetaInfo functions during refresh.

**read.AlteryxMetaInfo("#1")**  
Stream in connected input's metadata.

**write.AlteryxAddFieldMetaInfo(1, name = "Column", fieldType = "String", size = 15, source = "RTool", description = "fieldInfo")**  
Streams out metadata from a single column to the specified output anchor.

**write.AlteryxGraphMetaInfo(1)**  
Streams out graph metadata from R Tool to the specified anchor.

## Installing Packages

**install.packages("pkg", repos = "http://cran.rstudio.com")**  
When installing with the R Tool, be sure to specify the repository option, or the install will fail.

## Developing R Code for Alteryx

**https://github.com/alteryx/jeeves**  
This package can be used to assist with development of code intended for use in Alteryx.

**install.packages("jeeves", repos = 'http://alteryx.github.io/jeeves')**  
Install the package binary from github.

**devtools::install\_github("alteryx/jeeves")**  
Build the package from source.