The Rattle Package: Quick Start Guide

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1   Introduction

Rattle (Williams, 2011) is a package written in R providing a graphical user interface to very many other R packages that provide functionality for data mining.

This quick start guide is under development. See https://rattle.togaware.com for extensive documentation

2   Requirements

Rattle depends on over 40 other R packages and a couple of other software applications/libraries that are independent of R. The first thing to ensure is that you have installed the GTK+ libraries and the GGobi application. This is operating system dependent and full installation instructions are available from https://rattle.togaware.com/.

Only a couple of R packages are dependencies for Rattle. Most are suggestions, but without them functionality is quite limited. At a minimum it is useful to ensure you have the RGtk2 package installed. Others that you might like to install include: ada, arules, doBy, ellipse, fBasics, fpc, gplots, Hmisc, kernlab, mice, party, playwith, pmml, randomForest, reshape, rggobi, RGtk2, ROCR, RODBC, and rpart.

The packages will usually be installed with the following command:

```
> install.packages("rattle", dependencies=c("Depends", "Suggests"))
```

The latest beta version of rattle is available from https://rattle.togaware.com/:

```
> install.packages("rattle", repos="https://rattle.togaware.com", type="source")
```

3   First Steps

Start up rattle:

```
> library(rattle)
> rattle()
```

4   Sipmle Scenario: Build a Couple of Models

1. Click Execute

2. Click Yes (load the sample weather dataset)

3. Click the Model tab

4. Click Execute (to build a decision tree)

5. Click Draw to display the decision tree (loads other packages as required)

6. Click the Forest radio button

7. Click Execute (to build a random forest - loads packages as required)

8. Click the Evaluate tab

9. Click the Risk radio button (installs packages as required)

10. Click Execute to display two Risk (Cummulative) performance plots

11. Click the Log tab

12. Click the Export button to save script to file weather_script.R to home folder

   Now exit from R (and rattle) and start R up again.

```
> source("~/weather_script.R")
```

   This will rerun everything that was done in the GUI session but purely as a script.

5   References

Williams, G. J. (2009). *Rattle: A Data Mining GUI for R.* The R Journal, 1(2), 45-55. URL: https://journal.r-project.org/archive/2009-2/RJournal_2009-2_Williams.pdf.

Williams, G. J. (2011). *Data Mining with Rattle and R: The Art of Excavating Data for Knowledge Discovery.* Use R! series. Springer. https://bit.ly/rattle_data_mining.