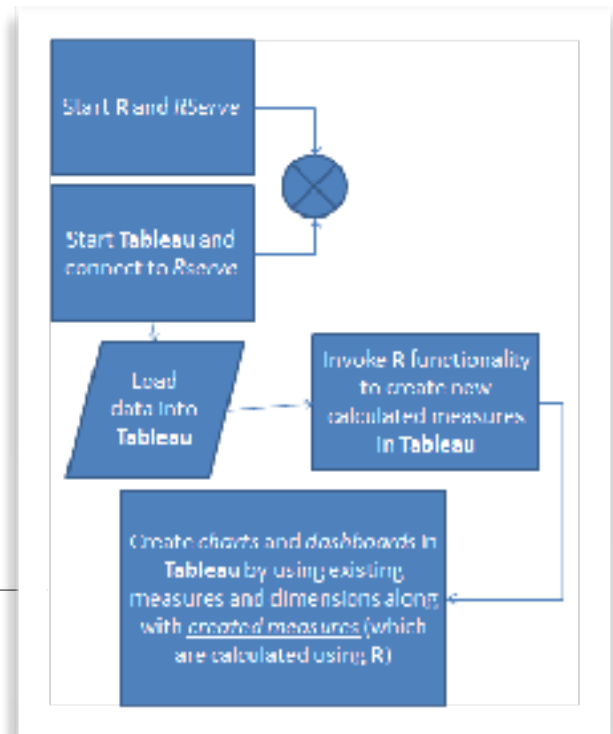


R/Tableau Integration

R within Tableau

- Need **Rserve**
 - Rserve is the R server.
 - Rserve runs in the background and is used by Tableau to run R scripts and then put the returned values back into Tableau data sets.
- Currently, **Tableau Online and Tableau Public do not support R**, so the R statistical capabilities will not be available through these services.

Process Overview



Rserve Install & Setup Instructions

1. Download and Install R.
2. Download and Install Rserve.

You will need to install an Rserve for Tableau to connect. After installing, in the RStudio console, enter the following commands:

```
library(Rserve)
```

```
Rserve(args="--no-save")
```

Here is a list of the available (mostly optional) args for Rserve:

Those are `R` arguments and documented in the R documentation as well as in `--help`:

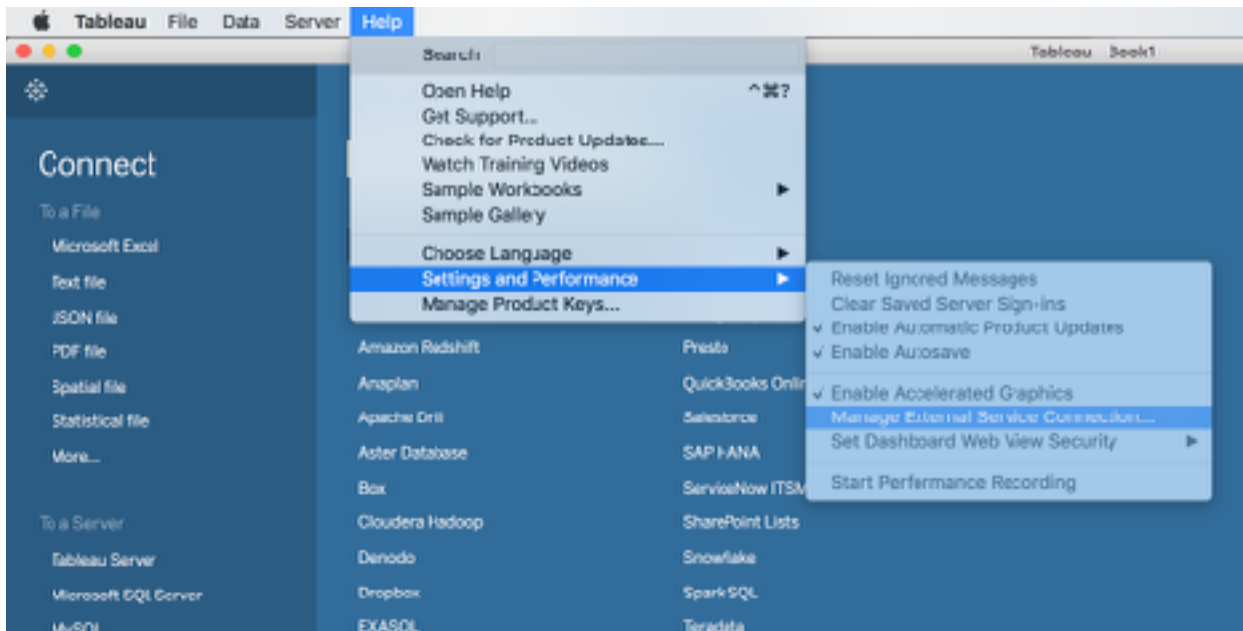
```
$ R --help
[...]
```

<code>--save</code>	Do save workspace at the end of the session
<code>--no-save</code>	Don't save it
<code>--no-environ</code>	Don't read the site and user environment files
<code>--no-site-file</code>	Don't read the site-wide Rprofile
<code>--no-init-file</code>	Don't read the user R profile
<code>--restore</code>	Do restore previously saved objects at startup
<code>--no-restore-data</code>	Don't restore previously saved objects
<code>--no-restore-history</code>	Don't restore the R history file
<code>--no-restore</code>	Don't restore anything
<code>--vanilla</code>	Combine --no-save, --no-restore, --no-site-file, --no-init-file and --no-environ

3. Connect Tableau to the R Server.

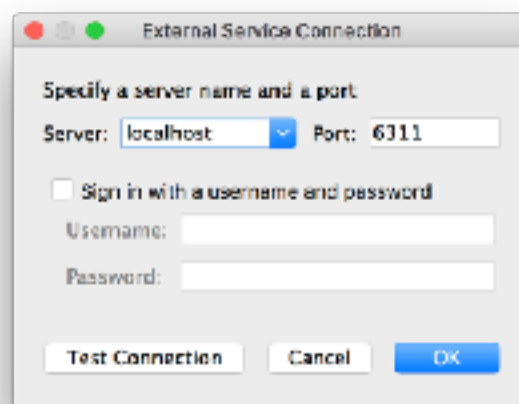
Once Rserve is installed, open Tableau Desktop and follow the steps below or watch this video on how to integrate R and Tableau.

- a. Go to the Help menu and select “Manage External Service Connection”.



- b. Use drop down menu to select “Localhost”. Check the port is set to the Rserve default of “6311”.

- c. Click on the “Test Connection” button to make sure everything runs smoothly. You should see a successful message. Click OK to close.



Start using the R scripts in Tableau.

Now you will be able to create new calculated fields in Tableau Desktop that utilize the SCRIPT_* functions to make R functional calls.

- Tableau has 4 built in functions for using R. They return the data type in their name.
 - **SCRIPT_REAL**
 - **SCRIPT_STR**
 - **SCRIPT_INT**
 - **SCRIPT_BOOL**