Enable an external R IDE

Previously, you had to use the R script editor in **Power BI Desktop** to create and run R scripts. With this release, you can launch your external R IDE from **Power BI Desktop** and have your data automatically imported and displayed in the R IDE. From there, you can modify the script in that external R IDE, then paste it back into **Power BI Desktop** to create Power BI visuals and reports.

Beginning with the September 2016 release of **Power BI Desktop** (version 2.39.4526.362), you can specify which R IDE you would like to use, and have it launch automatically from within **Power BI Desktop**.

Requirements

To use this feature, you need to install an **R IDE** on your local computer. **Power BI Desktop** does not include, deploy, or install the R engine, so you must separately install **R** on your local computer. You can choose which R IDE to use, with the following options:

* You can install your favorite R IDE, many of which are available for free, such as the [Revolution Open download page](https://mran.revolutionanalytics.com/download/), and the [CRAN Repository](https://cran.r-project.org/bin/windows/base/).
* **Power BI Desktop** also supports [R Studio](https://www.rstudio.com/) and **Visual Studio 2015** with [*R Tools for Visual Studio*](https://beta.visualstudio.com/vs/rtvs/) editors.
* You can also install a different R IDE and have **Power BI Desktop** launch that **R IDE** by doing one of the following:
  + You can associate **.R** files with the external IDE you want **Power BI Desktop** to launch.
  + You can specify the .exe that **Power BI Desktop** should launch by selecting *Other* from the **R Script Options** section of the **Options** dialog. You can bring up the **Options** dialog by going to **File > Options and settings > Options**.

If you have multiple R IDEs installed, you can specify which will be launched by selecting it from the *Detected R IDEs* drop-down in the **Options** dialog.

By default, **Power BI Desktop** will launch **R Studio** as the external R IDE if it's installed on your local computer; if **R Studio** is not installed and you have **Visual Studio 2015** with **R Tools for Visual Studio**, that will be launched instead. If neither of those R IDEs is installed, the application associated with **.R** files is launched.

And if no **.R** file association exists, it's possible to specify a path to a custom IDE in the *Browse to your preferred R IDE* section of the **Options** dialog. You can also launch a different R IDE by selecting the **Settings** gear icon beside the **Launch R IDE** arrow icon, in **Power BI Desktop**.

Launch an R IDE from Power BI Desktop

To launch an R IDE from **Power BI Desktop**, take the following steps:

1. Load data into **Power BI Desktop**.
2. Select some fields from the **Fields** pane that you want to work with. If you haven't enabled script visuals yet, you'll be prompted to do so.
3. When script visuals are enabled, you can select an R visual from the **Visualizations** pane, which creates a blank R visual that's ready to display the results of your script. The **R script editor** pane also appears.
4. Now you can select the fields you want to use in your R script. When you select a field, the **R script editor** field automatically creates script code based on the field or fields you select. You can either create (or paste) your R script directly in the **R script editor** pane, or you can leave it empty.

Note

The default aggregation type for R visuals is *do not summarize*.

1. You can now launch your R IDE directly from **Power BI Desktop**. Select the **Launch R IDE** button, found on the right side of the **R script editor** title bar, as shown below.
2. Your specified R IDE is launched by Power BI Desktop, as shown in the following image (in this image, **RStudio** is the default R IDE).

Note

**Power BI Desktop** adds the first three lines of the script so it can import your data from **Power BI Desktop** once you run the script.

1. Any script you created in the **R script editor pane** of **Power BI Desktop** appears starting in line 4 in your R IDE. At this point, you can create your R script in the R IDE. Once your R script is complete in your R IDE, you need to copy and paste it back into the **R script editor** pane in **Power BI Desktop**, *excluding* the first three lines of the script that **Power BI Desktop** automatically generated. Do not copy the first three lines of script back into **Power BI Desktop**, those lines were only used to import your data to your R IDE from **Power BI Desktop**.

Known limitations

Launching an R IDE directly from Power BI Desktop has a few limitations:

* Automatically exporting your script from your R IDE into **Power BI Desktop** is not supported.
* **R Client** editor (RGui.exe) is not supported, because the editor itself does not support opening files.