

# Installation, Customization and Operation Guide

## **Setting Up EZ-R Stats for Windows**

# EZ-R Stats for Windows Installation, Customization and Operation Guide

|  |           |
|--|-----------|
| <b>INSTALLATION .....</b>                | <b>2</b>  |
| DOUBLE CLICK “EZSWSETUP.EXE” .....       | 2         |
| LICENSE AGREEMENT .....                  | 3         |
| INFORMATION BEFORE THE INSTALL .....     | 4         |
| INSTALLATION DIRECTORY .....             | 5         |
| SELECT COMPONENTS .....                  | 6         |
| SHORTCUTS .....                          | 7         |
| READY TO INSTALL FILES .....             | 8         |
| COPY FILES AND UPDATE THE REGISTRY ..... | 9         |
| FINISHED COPYING FILES .....             | 10        |
| POST INSTALLATION TASKS .....            | 11        |
| SETTING THE PROGRAM PATH .....           | 12        |
| SET THE SYSTEM PATH .....                | 13        |
| UPDATE THE PATH .....                    | 14        |
| READ ME FILE .....                       | 15        |
| EZ-R STATS START UP WINDOW .....         | 16        |
| CLICK “OPEN” TOOLBAR .....               | 17        |
| SCRIPT FOR BENFORD3 .....                | 18        |
| VIEW SUMMARY RESULTS OF PROCESSING ..... | 19        |
| <b>CUSTOMIZATION .....</b>               | <b>20</b> |
| REGISTRY ENTRIES .....                   | 20        |
| SCRIPT BASIC CUSTOMIZATION .....         | 22        |
| DIRECTORIES USED DURING PROCESSING ..... | 23        |
| <b>OPERATION.....</b>                    | <b>23</b> |
| WINDOWS INTERFACE .....                  | 23        |
| EXPLORER INTERFACE.....                  | 25        |

## EZ-R Stats for Windows Installation, Customization and Operation Guide

### Installation

EZ-R Stats can be installed by downloading the installation file named “EZSWsetup.exe” from <http://www.ezrstats.com/download.htm>. Double click the “exe” installation file for a guided process to install the product. The product requires approximately 190 MB of disk space. The installation process also includes a process for uninstalling the product. The installation process places registry entries under /Software/EZS/EZSW.

The steps are as follows (screen shots follow):

1. Overview of the installation process
2. Display license agreement
3. Installation process (copy files, update registry)
4. Post-Install process, consisting of three parts:
  - a. Readme
  - b. Update program path
  - c. Start the EZSW program

### ***Double Click “EZSWsetup.exe”***

When you double click the setup routine, an initial “splash” screen will be displayed to inform you that you are installing EZ-R Stats for Windows.

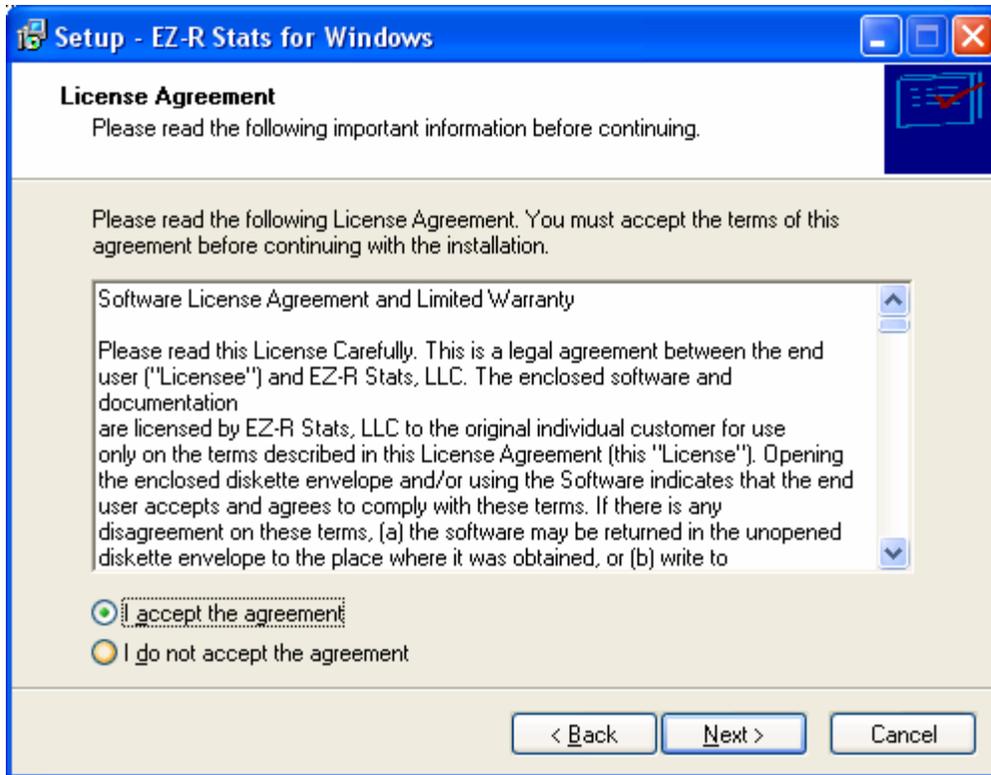
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***License Agreement***

The license agreement is then displayed.

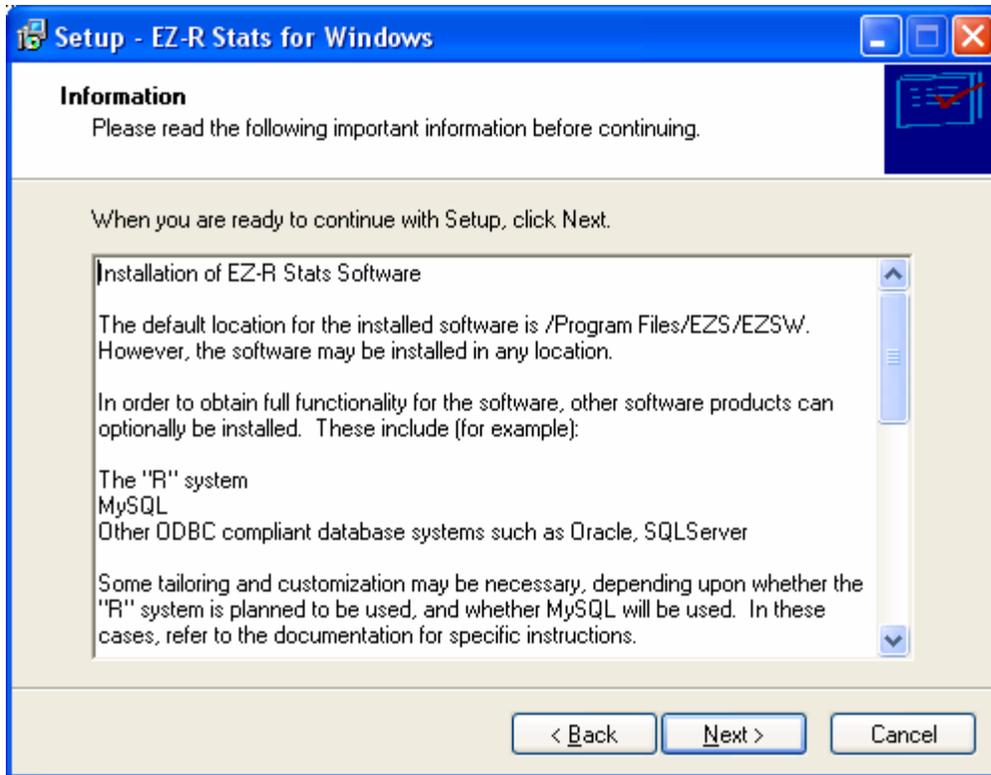
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Information before the install***

Before you install the software, an information screen is displayed to inform you that in order to obtain full functionality, certain other software may need to be installed. (None of this software is available from EZ-R Stats, nor is EZ-R Stats associated with any of these companies. Generally this software is available at nominal, or no charge.)

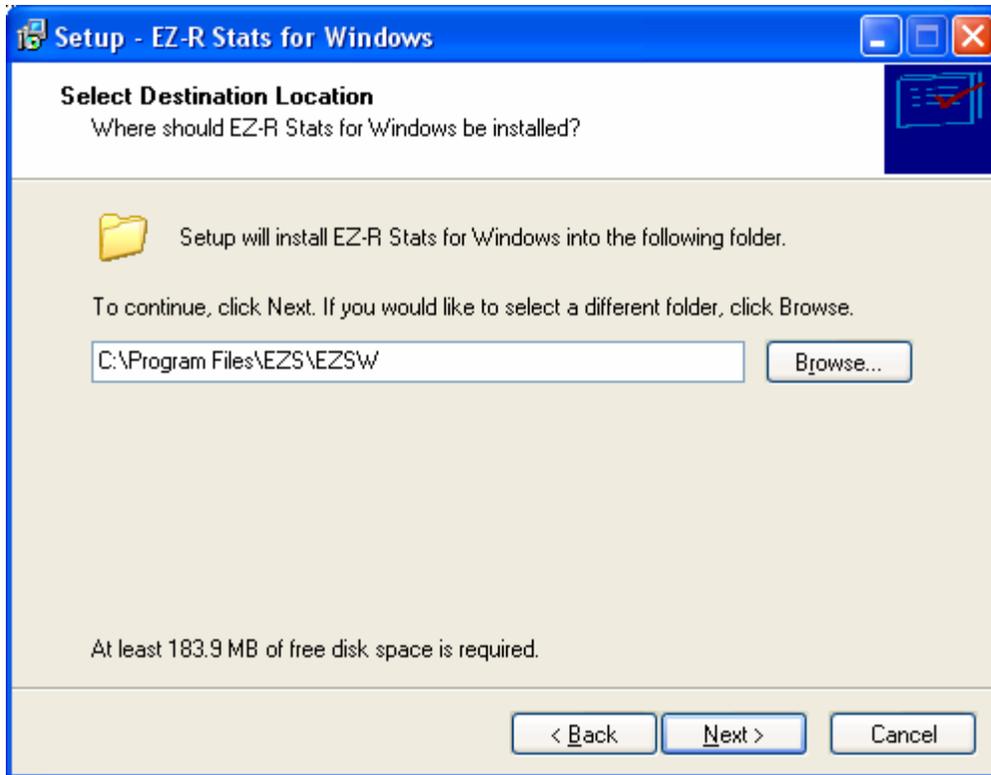
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Installation Directory***

The software may be installed in any directory, although it is best to install the software in its own directory, in order to simplify operation and keep track of files, etc.

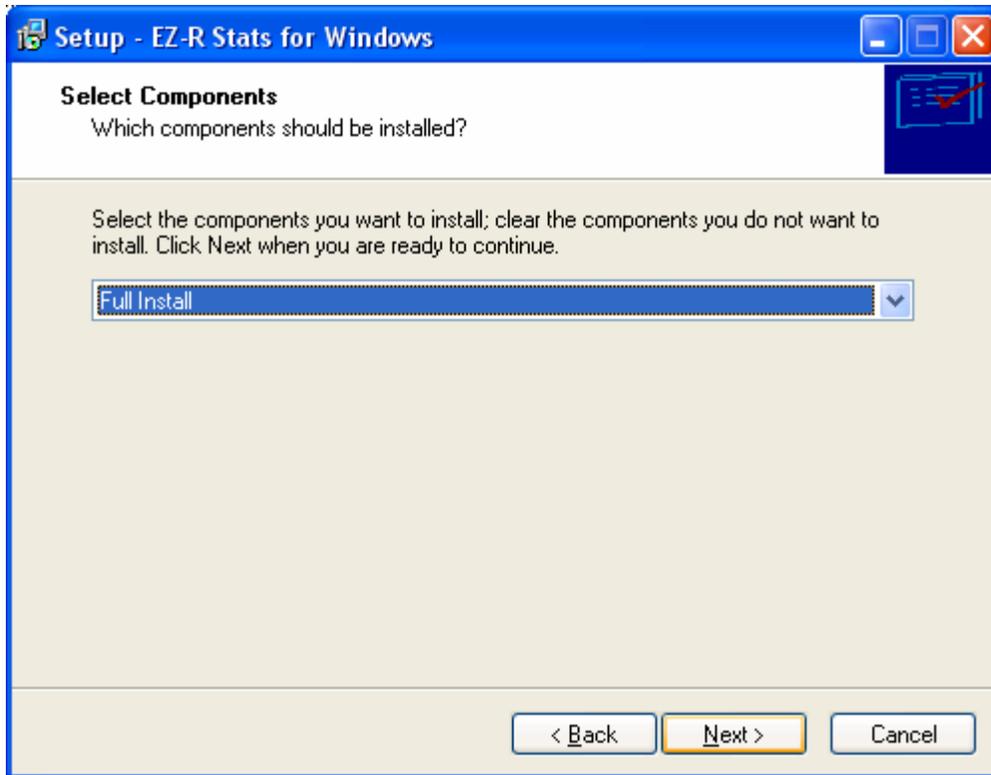
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Select Components***

Generally, a “full install” should be selected, otherwise the example data files and databases will not be available for review and use as templates.

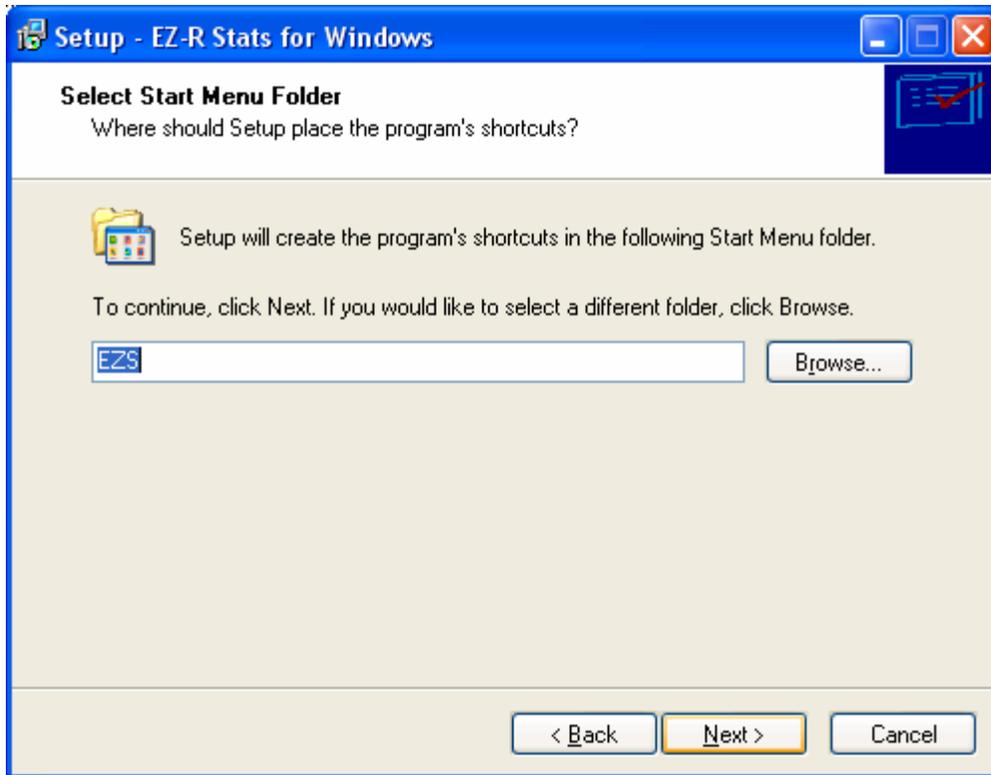
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### **Shortcuts**

You can store the short cuts in any folder, however, the default value (Start Menu folder) is generally sufficient.

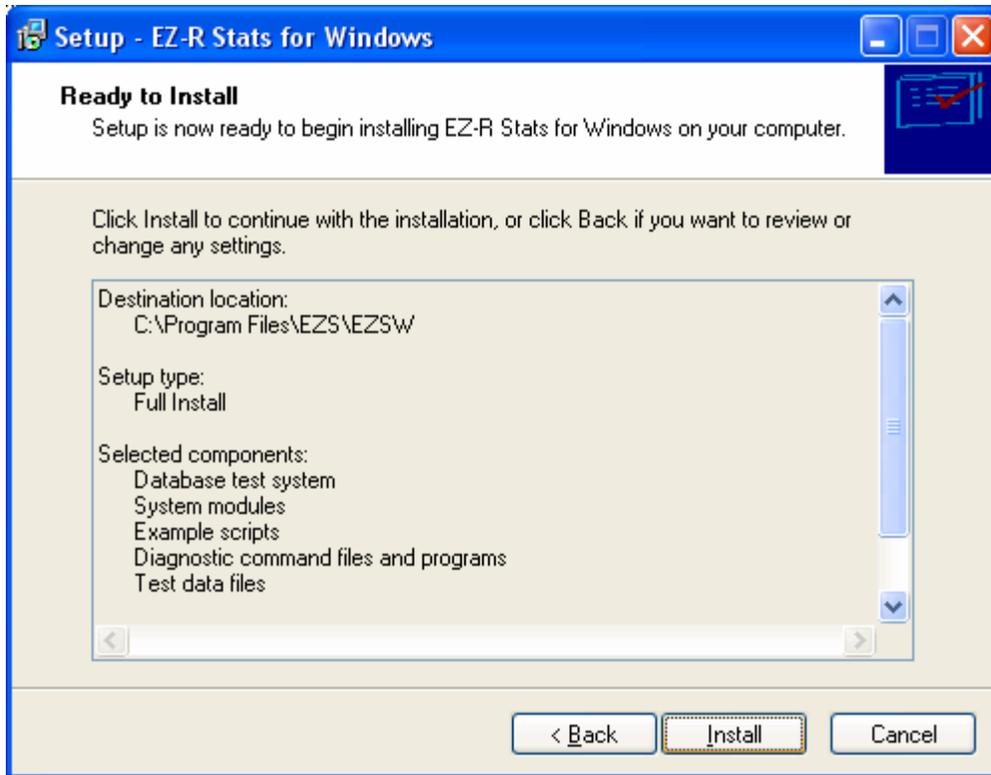
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Ready to Install Files***

The system informs you it is now ready to install files and update the registry entries. If you do not wish to install the program, select cancel. Note that the system has an “uninstall” feature so that the software can be removed in the future, if no longer needed.

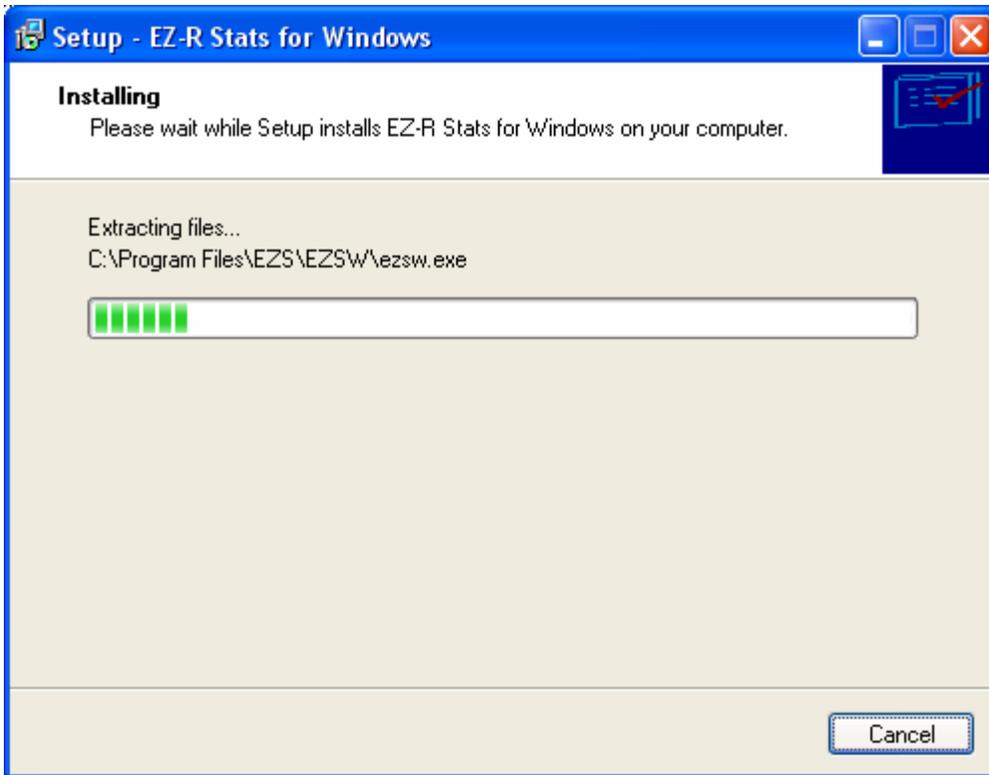
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Copy files and update the registry***

At this point the system will copy files and update the registry as needed. The process normally takes 1 – 3 minutes, assuming that a full installation is performed.

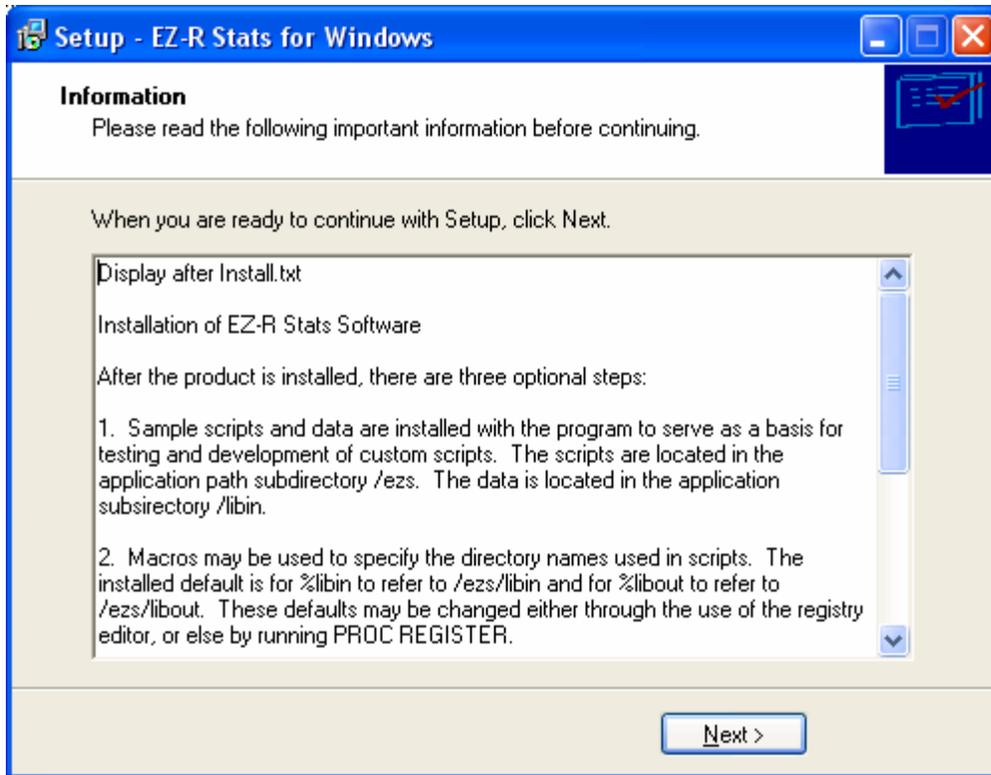
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Finished Copying Files***

Once the system has copied all the needed files, some additional information is displayed.

## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Post Installation Tasks***

After installation, there are three tasks which can be performed, if the corresponding check box has been selected:

1. Set the program path environment variable
2. View the Read Me file
3. Start the Program

EZ-R Stats does not copy the needed system DLL's into a system directory, instead these are stored in a separate folder. The EZ-R Stats program will not run without these DLL's. Therefore, the program path must be updated to include the directory where the EZ-R Stats DLL's are stored.

The second and third programs are optional (view readme and start the program) and do not need to be performed.

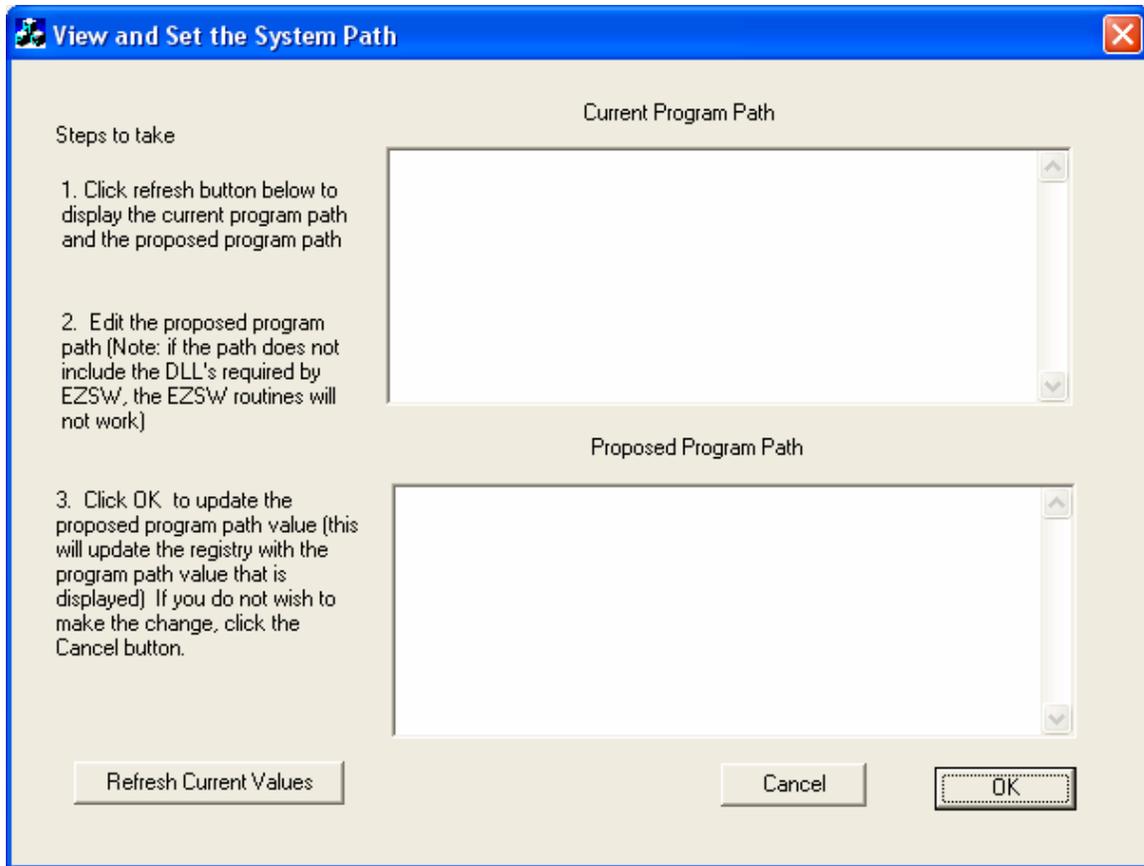
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Setting the Program Path***

A program is provided (SetPath.exe) to set the program path to include the EZ-R Stats DLL's. The screens below illustrate how this is done. Initially a blank screen is displayed. The steps to take are shown in the window. The first step is to click the "refresh" button in order to display the current path and the proposed path.

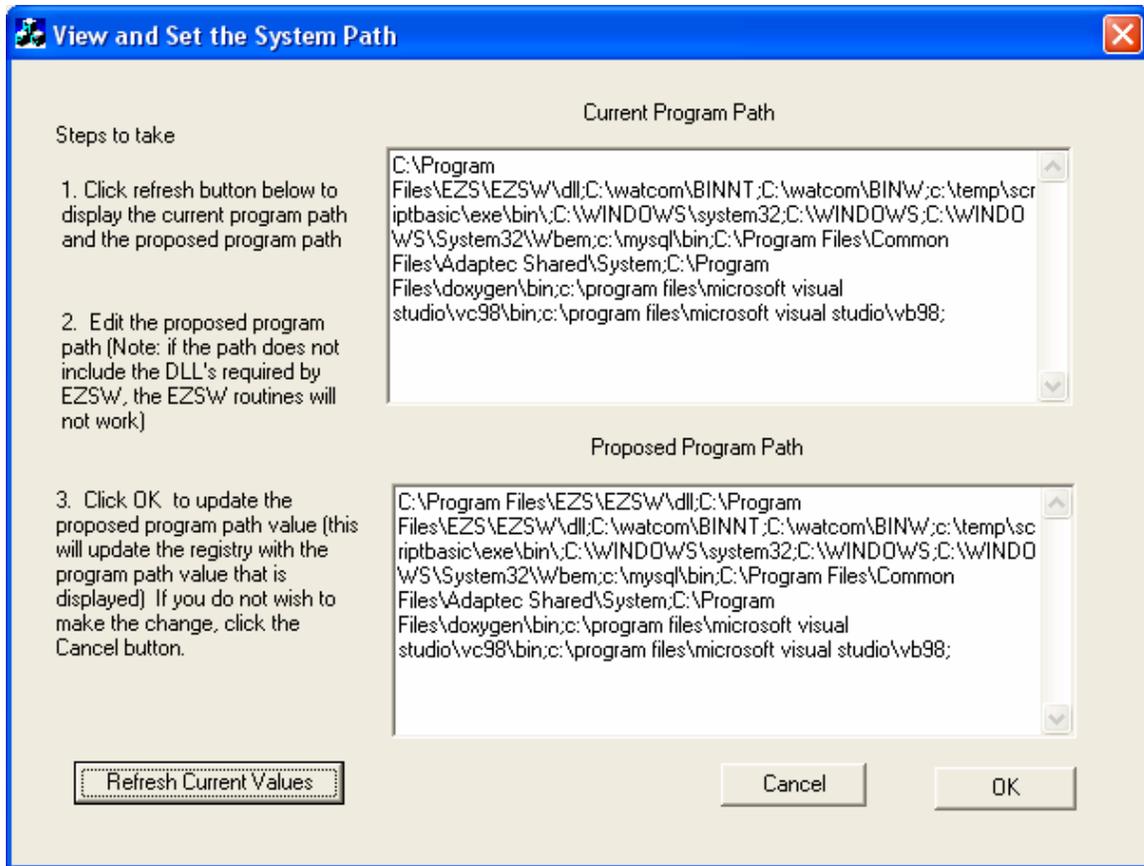
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Set the System Path***

The proposed program path is displayed and may be edited before clicking the OK button. Note that the proposed path is the same as the existing path, but with the EZ-R Stats DLL's placed in front of the other paths.

## EZ-R Stats for Windows Installation, Customization and Operation Guide

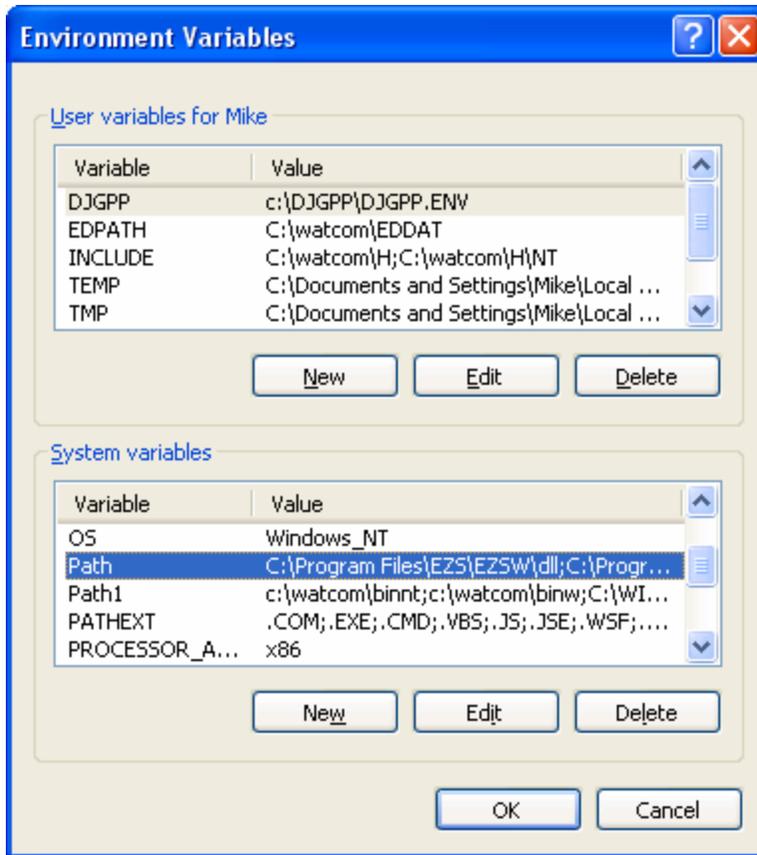


### ***Update the Path***

Clicking the “OK” button should update the path and display a message that it was done. If the path could not be updated, then an error message will be displayed. In this case, you must manually update the program path in order to have the system function. This can be done using the control panel:

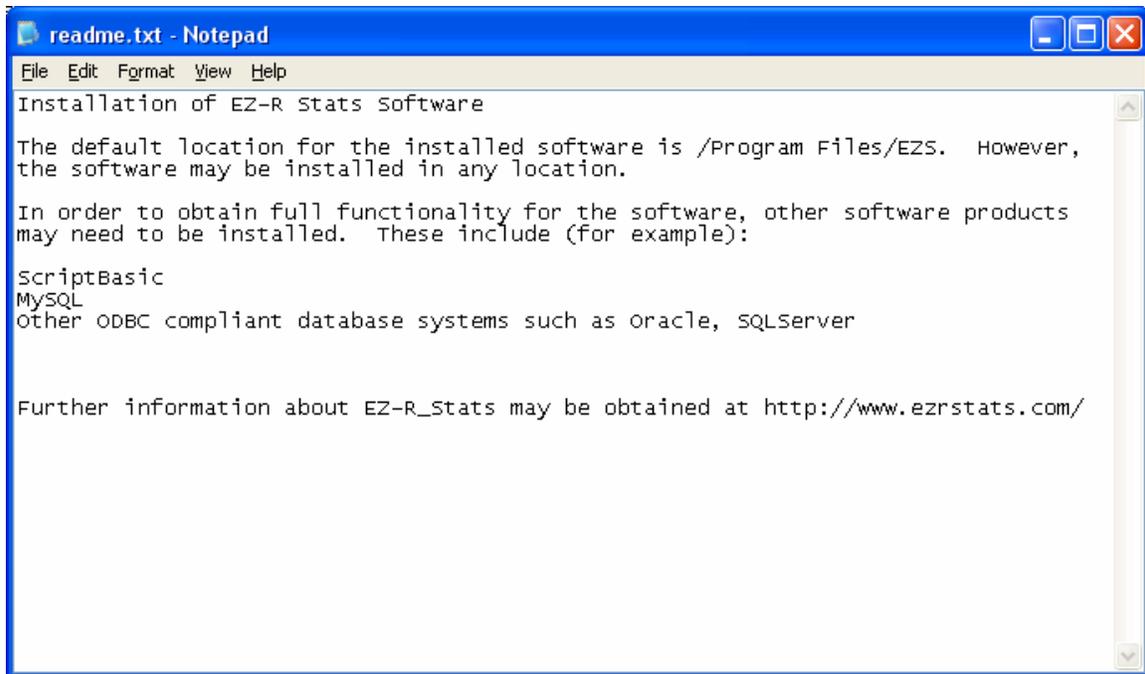
System | Advanced | Environment variables | Path | Edit:

## EZ-R Stats for Windows Installation, Customization and Operation Guide



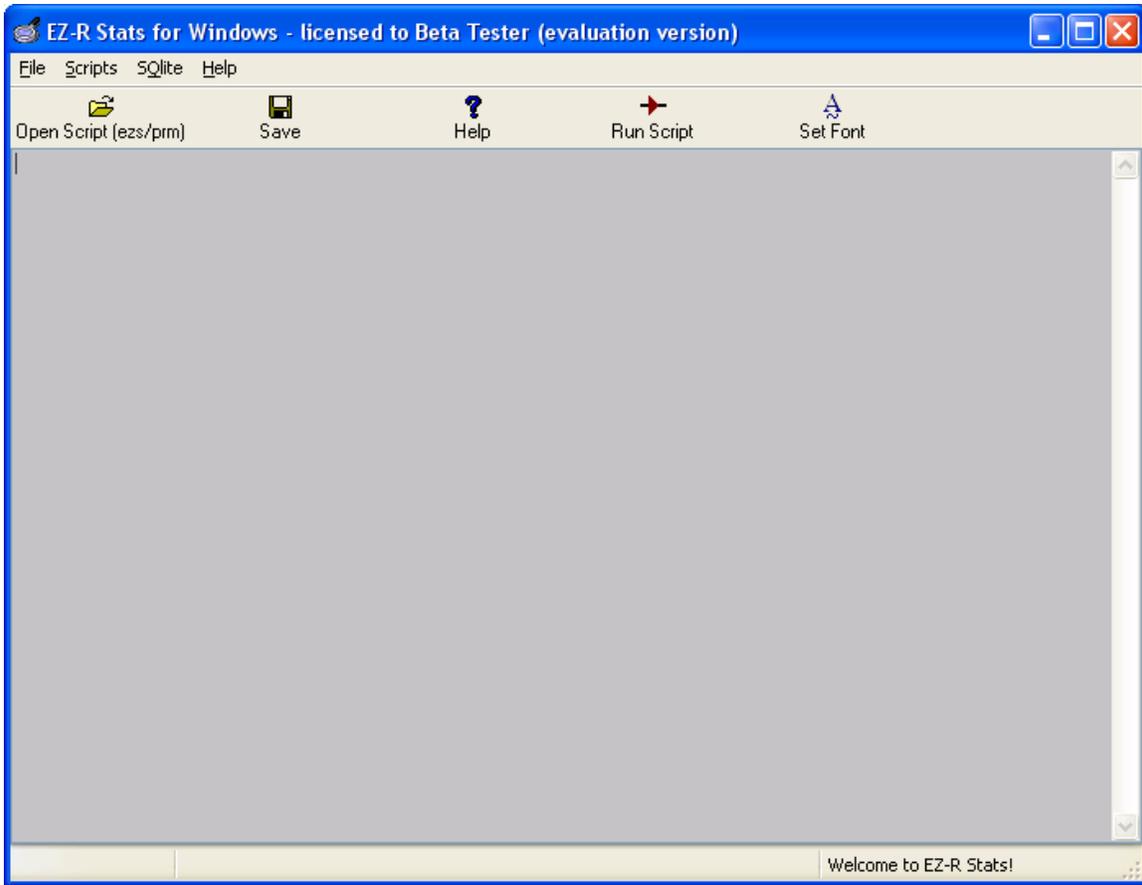
### **Read Me File**

## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***EZ-R Stats Start Up Window***

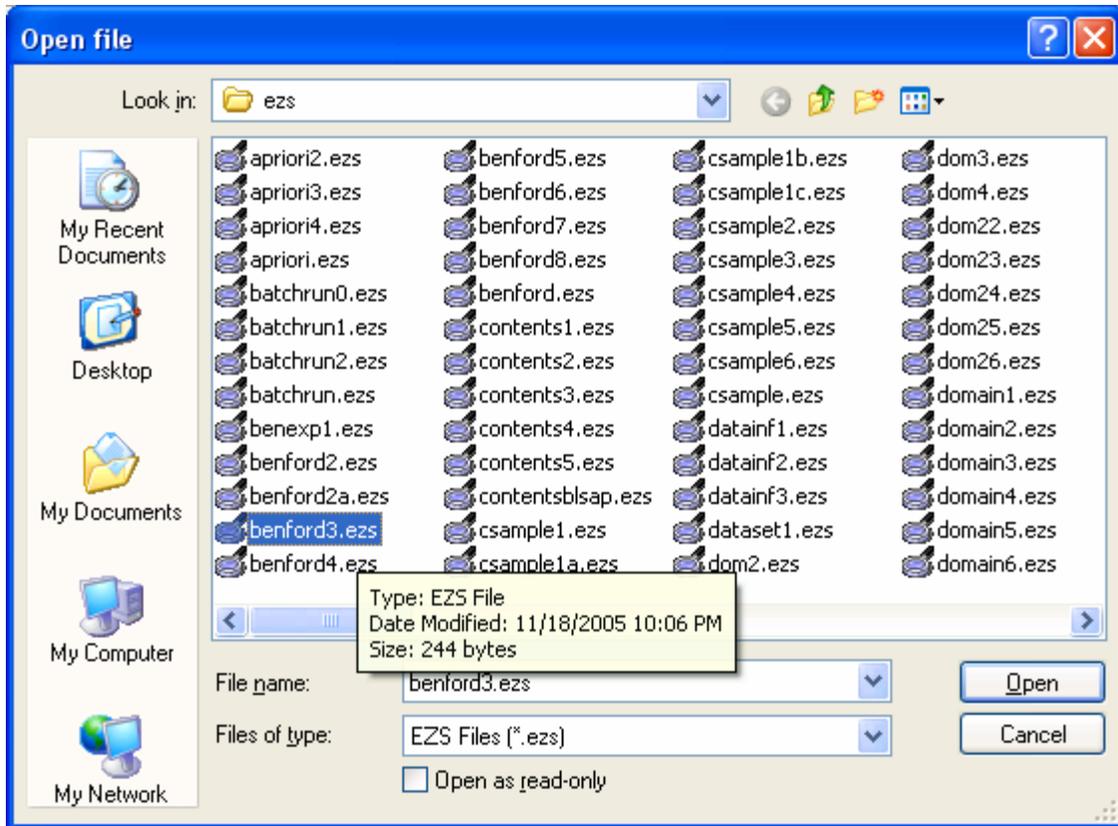
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Click “Open” ToolBar***

For illustration, we will select the script named “Benford3.ezs”. This will run a benford analysis on series data download from the Bureau of labor Statistics (just for the purpose of illustration).

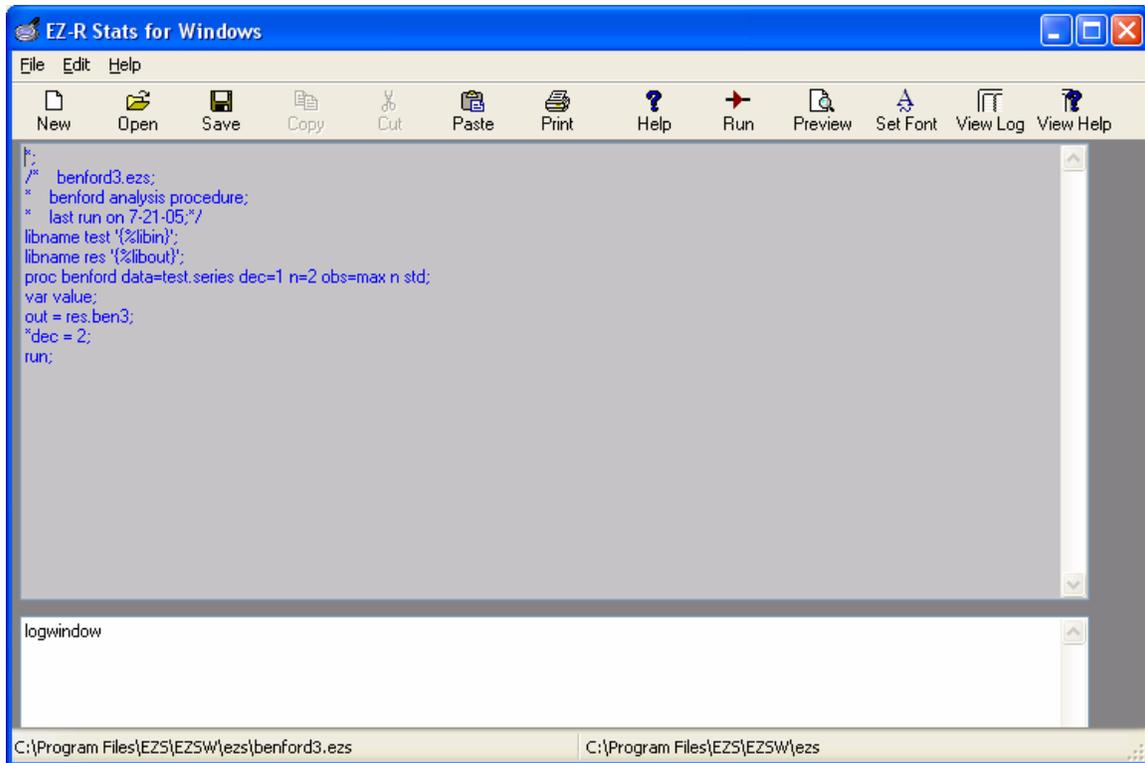
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***Script for Benford3***

Click the “Run” toolbar to process the script....

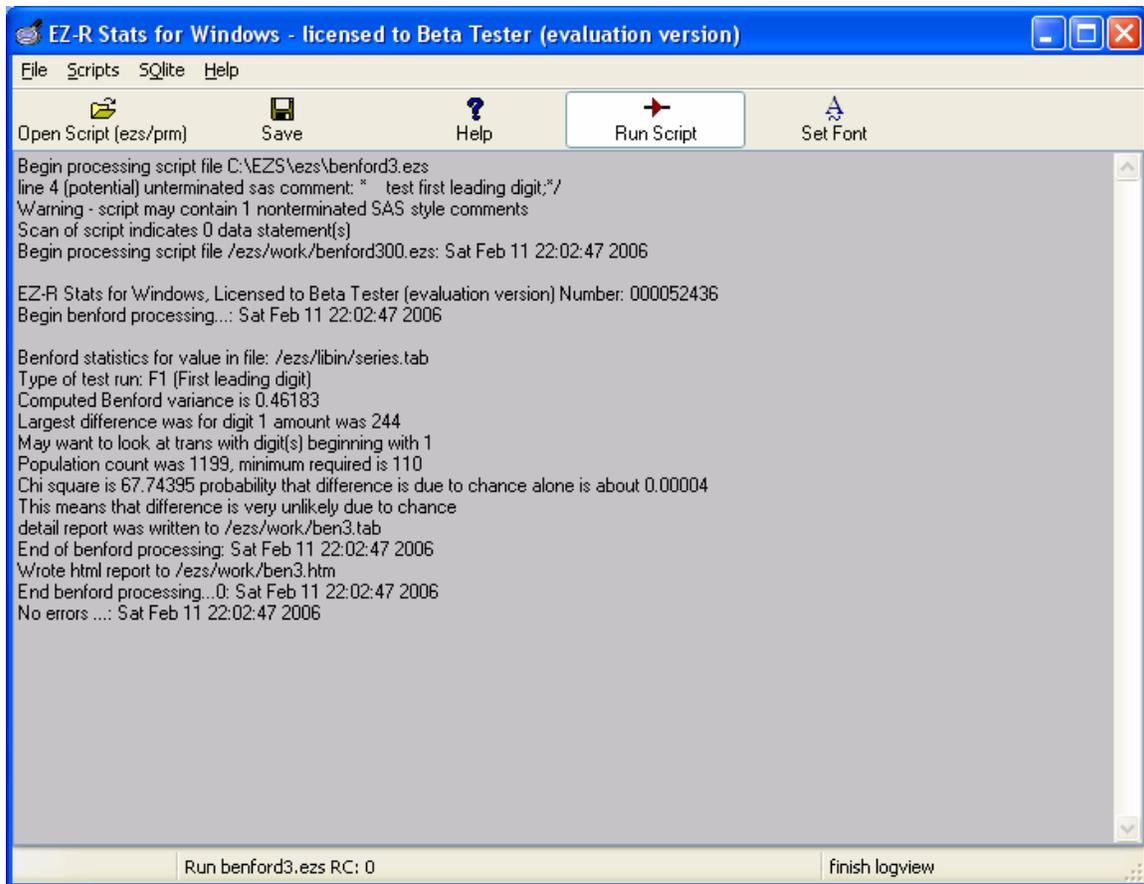
## EZ-R Stats for Windows Installation, Customization and Operation Guide



### ***View summary results of processing***

Once the processing has been performed, the results of the processing will immediately be displayed. For the Benford analysis selected above, the following output will be displayed.

## EZ-R Stats for Windows Installation, Customization and Operation Guide



### Customization

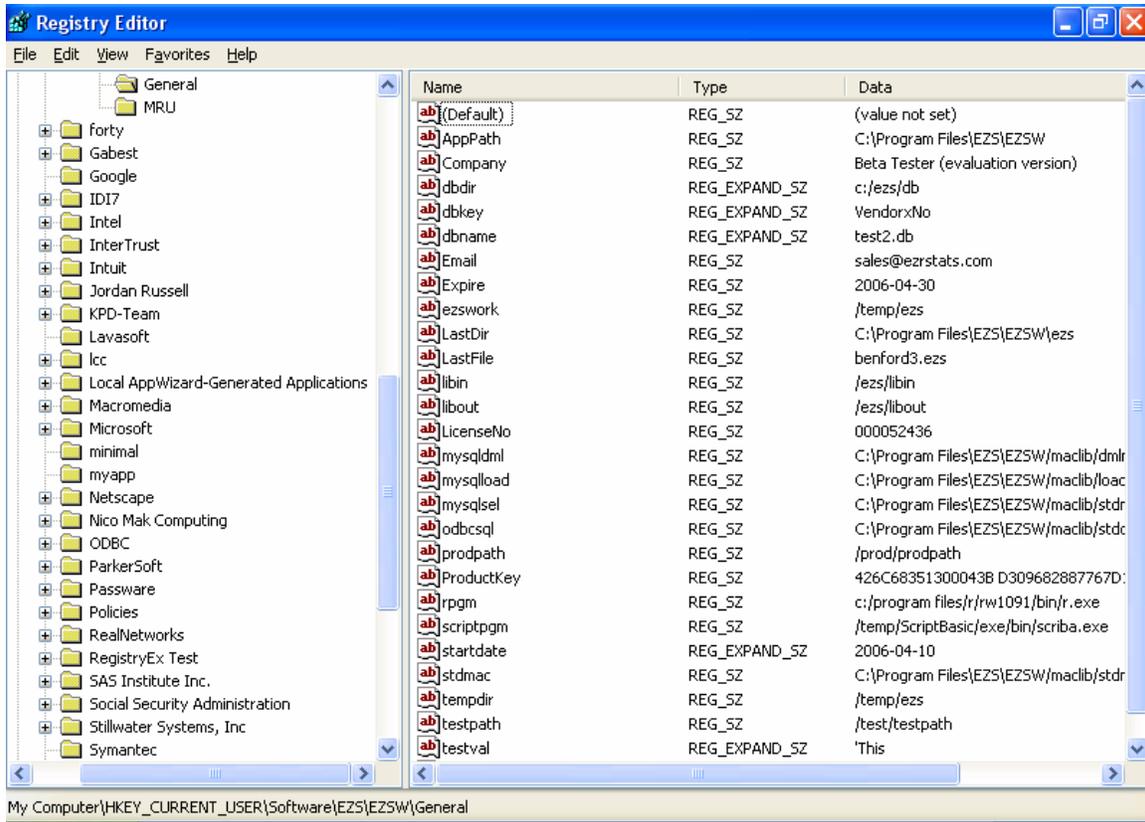
There are several components of EZ-R Stats for Windows that may be customized:

1. Registry entries to simplify use of the system
2. Customization of Script Basic initialization, in order to handle MySQL, ODBC connections, etc.
3. The directories that EZ-R Stats for Windows will use during processing

### Registry Entries

Below is a screenshot of a typical registry entry stored under the registry key HKEY\_CURRENT\_USER/Software/EZS/EZSW/General.

## EZ-R Stats for Windows Installation, Customization and Operation Guide



EZ-R Stats makes use of certain directories and variable names during processing. These can be tailored for specific requirements:

| Name     | Default value                             | Purpose/explanation   |
|----------|---|---|
| ezswork  | /ezs/work                                 | A work directory used by EZ-R Stats to store intermediate files   |
| Libin    | /program files/ezs/ezsw/libin             | Commonly used to specify the directory where data files to be analyzed are stored. This is done using the substitution parameter {%libin} in the script file. |
| Libout   | /program files/ezs/ezsw/libout            | Commonly used to specify the directory where results are to be stored. This is done using the substitution parameter {%libout} in the script file.            |
| Mysqldml | /program files/ezs/ezsw/maclib/dmlsql.mac | This is the macro template used for   |
| Rpgm     | C:/program files/rw1091/bin/r.exe         | This is the name and location of the “R” program executable which is downloaded from the  |

## EZ-R Stats for Windows Installation, Customization and Operation Guide

|         |           |  |
|---------|-----------|--|
|         |           | CRAN Institute. This is used for processing any "R" scripts.                     |
| Tempdir | /temp/ezs | This is a directory for storing intermediate files used during script processing |

### **Script Basic Customization**

EZ-R Stats uses the ScriptBasic program to process MySQL SQL and DML commands. The connection to MySQL must be specified within the Scriptbasic template file and compiled into script basic configuration format. The procedure can be summarized as follows:

1. Open the template file config.tmpl which will normally be located in the folder /Program Files/EZS/EZSW/bin if you have selected the default installation. Review and edit the contents of this text file and specify the configuration of your MySQL installation.
2. Once all needed changes have been applied, save the edited template file.
3. Compile the template file into a configuration file using the script basic routine provided. This can be done by double clicking the file updateconfig.cmd. This is a DOS command script which will use script basic to compile the template file into a configuration file.

A similar procedure should be followed if you wish to define any ODBC data sources.

The section of the template file for MySQL is as follows (and must be customized):

```
;  
; MySQL configuration  
;  
mysql (  
  connections (  
    test (      ; the name of the connection  
      host "127.0.0.1" ; the host for the connection  
      db "test"      ; database for the connection  
      user "test"    ; user for the connection  
      password "test" ; password for the connection  
      port 0         ; the port to use  
      socket ""      ; the name of the socket or ""  
      flag 0         ; the client flag  
      clients 10    ; how many clients to serve before  
really closing the connections  
    )  
  )  
)
```

## **EZ-R Stats for Windows Installation, Customization and Operation Guide**

### ***Directories used during processing***

The primary directory used during script processing is the folder associated with the registry key “tempdir”. This directory stores intermediate results of processing. The contents of the directory may be deleted in their entirety without any risk to processing.

### **Operation**

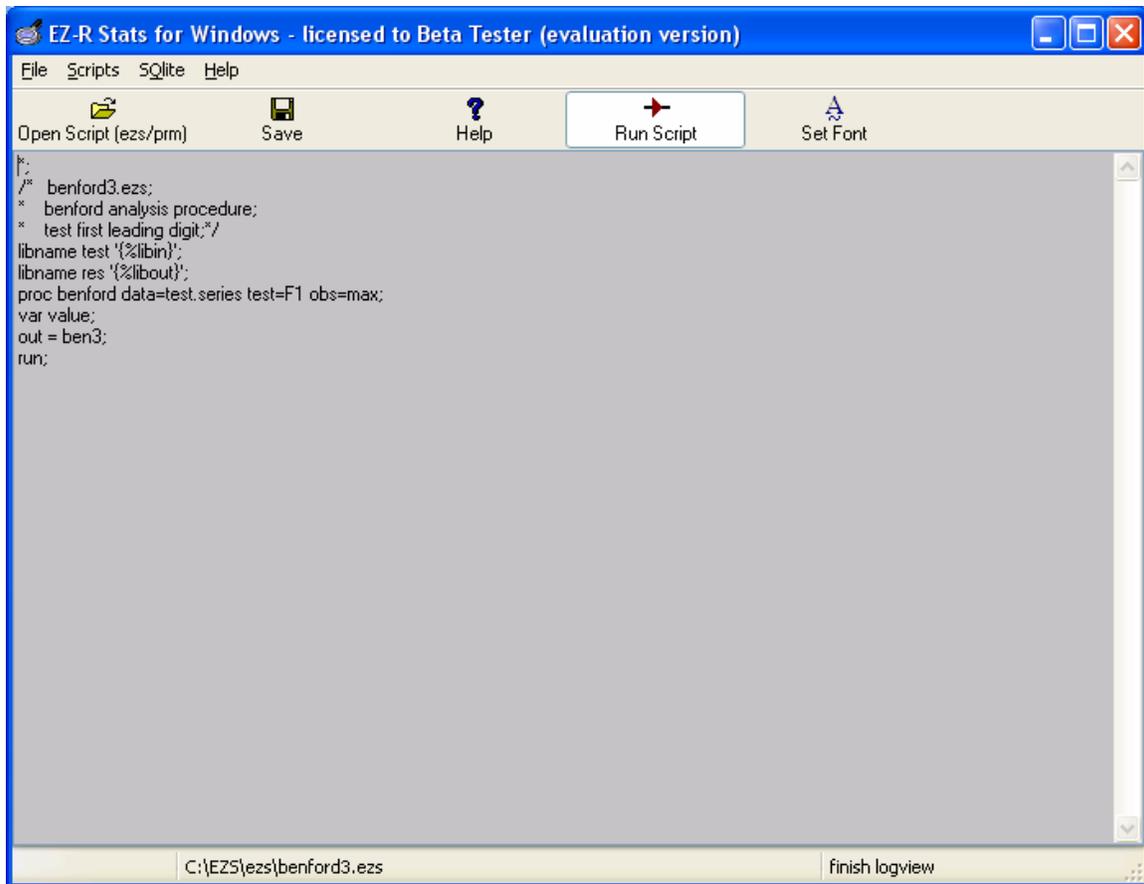
There are two primary modes of operation for EZ-R Stats for Windows:

1. Windows interface that allows “pick and choose” of scripts, running scripts and viewing the results of processing
2. Explorer interface, where the EZS file extension is associated with a program to run. This option can be selected if you do not wish to use the GUI that is provided.

### ***Windows Interface***

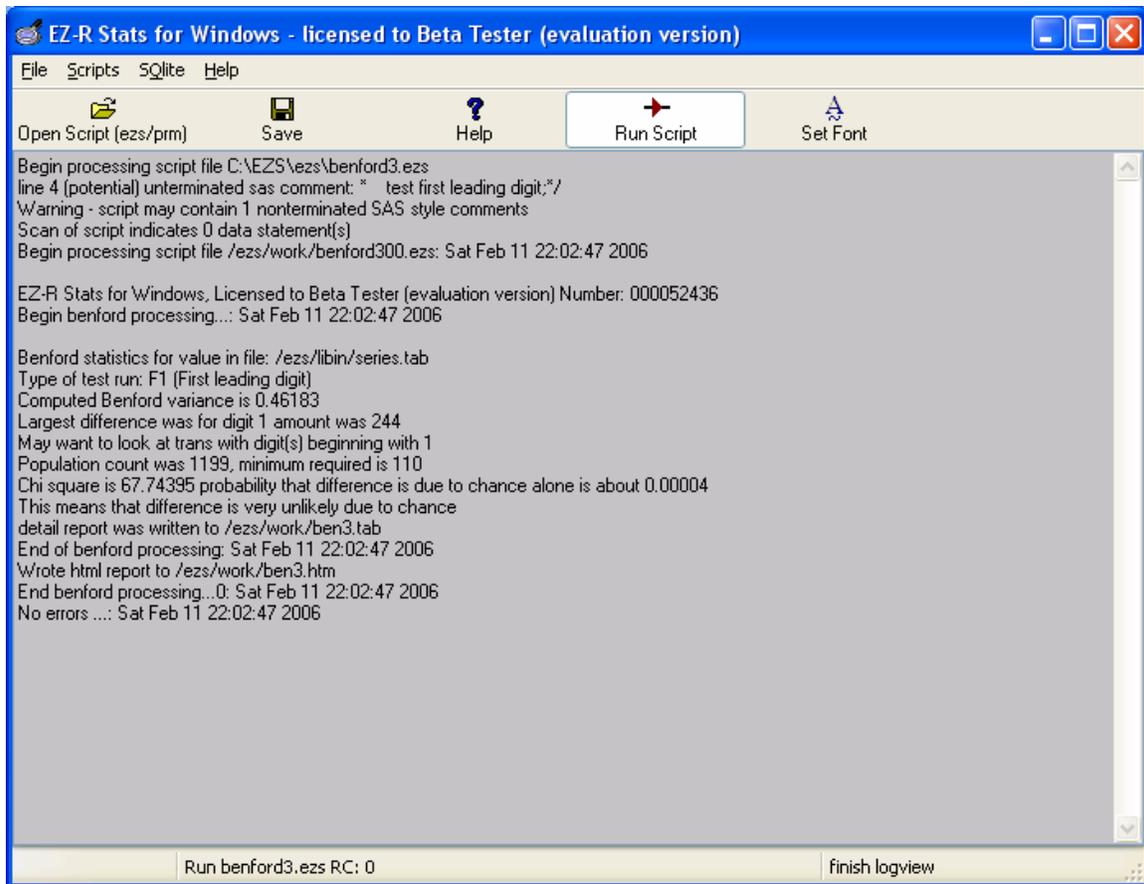
The Windows Interface allows you to view the script file names, make a selection and then either click the “run” toolbar, or else select the menu option “run”. To view the log of processing, click the “view Log Toolbar”

## EZ-R Stats for Windows Installation, Customization and Operation Guide



After running the program (in this case Benford3), you can view the results by clicking the “Log View” ToolBar:

## EZ-R Stats for Windows Installation, Customization and Operation Guide



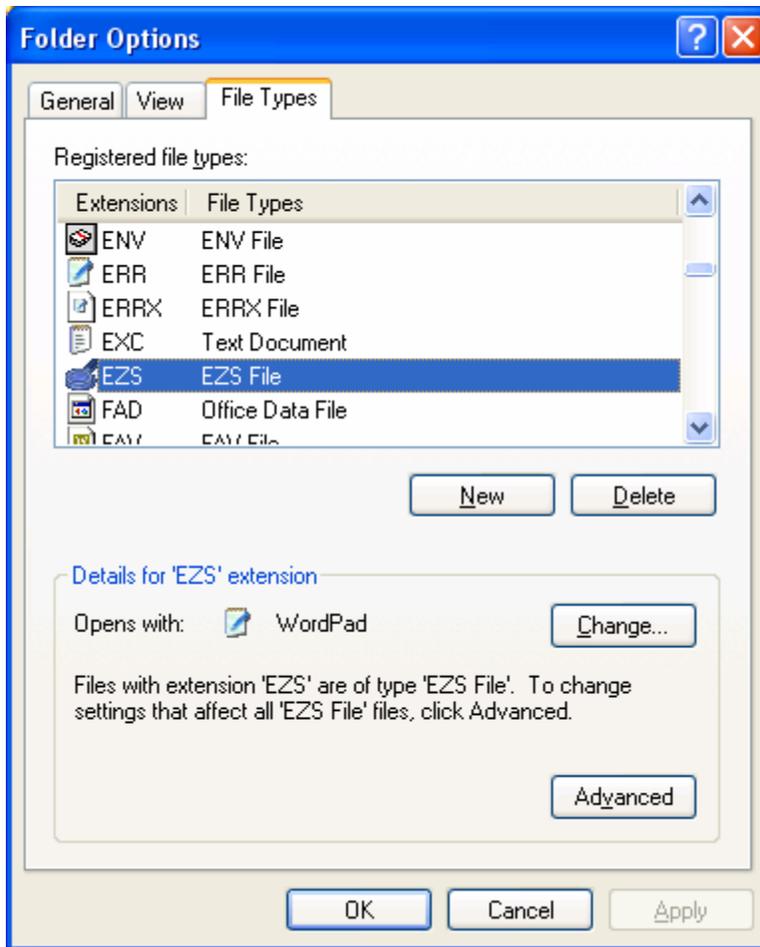
### ***Explorer Interface***

To set up the Explorer interface, you will need to associate programs with the EZ-R Stats file extension of "ezs". This can be done using the following steps:

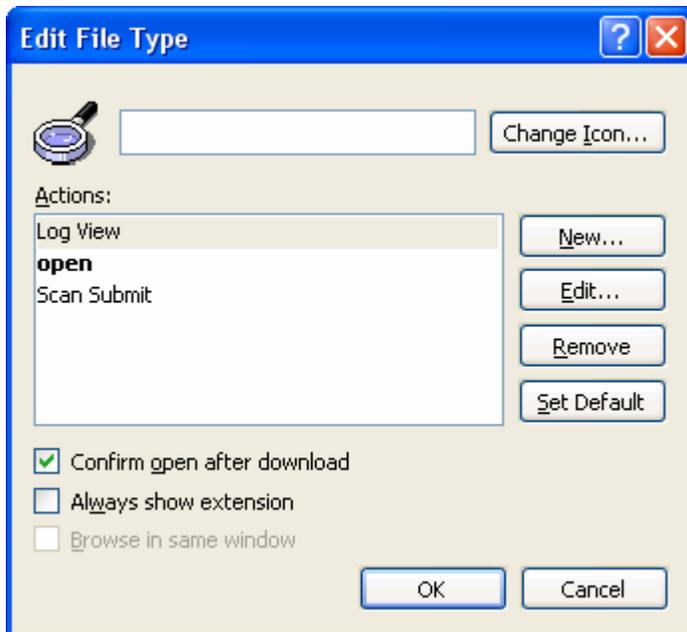
In Explorer, select Tools | Folder Options | File Types.

This will display a list of registered file types as follows:

## EZ-R Stats for Windows Installation, Customization and Operation Guide



Click “Advanced” in order to set up custom actions.



## EZ-R Stats for Windows Installation, Customization and Operation Guide

Here, we have set up three actions, named “Log View”, “open” and “Scan submit”. Associated with each of these actions is a program name and a parameter, as follows:

| Action      | Program name   |
|-------------|--|
| Log View    | “/program files/ezs/ezsw/logview.exe” “%1”                 |
| Open        | “C:\Program Files\Windows NT\Accessories\WORDPAD.EXE” “%1” |
| Scan Submit | “/program files/ezs/ezsw/scan.exe” “%1”                    |

Note that the names of the actions can be whatever makes sense to you. The program name must be enclosed in quotes if the pathname contains embedded spaces. Also, the parameter must be enclosed in quotes as some parameters will contain embedded spaces.

With these file associations set up, when you select a script file with a suffix of “ezs” and do a right mouse click, you will receive a pop up menu for an action to take:

- Open – edit the script file in wordpad (selected as the default)
- Scan Submit – submit the script file for processing
- Log View – view the results of processing in word pad.