VBSCRIPT FILESYSTEM OBJECTS

What are FSO Objects?

As the name suggests, FSO Objects help the developers to work with drives, folders and files. In this section, we will discuss:

Objects and Collections

Object Type	Description
Drive	Drive is an Object. Contains methods and properties that allow you to gather information about a drive attached to the system
Drives	Drives is a Collection. It Provides a list of the drives attached to the system, either physically or logically.
File	File is an Object. It Contains methods and properties that allow developers to create, delete or move a file.
Files	Files is a Collection. It Provides a list of all files contained within a folder.
Folder	Folder is an Object. It Provides methods and properties that allow developers to create, delete or move folders.
Folders	Folders is a Collection. It Provides a list of all the folders within a Folder.
TextStream	TextStream is an Object. It enables developers to read and write text files.

Drive

Drive is an object, which provides access to the properties of a particular disk drive or network share. The Following properties are supported by **Drive** object:

- AvailableSpace
- DriveLetter
- DriveType
- FileSystem
- FreeSpace
- IsReady
- Path
- RootFolder
- SerialNumber
- ShareName
- TotalSize
- VolumeName

Example

```
<!DOCTYPE html>
<html>
<body>
<script language="vbscript" type="text/vbscript">
```

```vbscript
    Dim oFS, drive, space
    Set oFS = CreateObject("Scripting.FileSystemObject")
    Set drive = oFS.GetDrive(oFS.GetDriveName("C:\"))
    space = "Drive " & UCase(drvPath) & " - "
    space = space & drive.VolumeName   & "  "
    space = space & "Free Space: " & FormatNumber(drive.FreeSpace/1024, 0)
    space = space & " Kbytes"
    Document.write space

</script>
</body>
</html>
```

If the above script is saved as HTML and executed in IE, we would get the following output in the console.

```
Drive - Win 7 Free Space:20,154,059 Kbytes
```

Drives

Drives is a collection, which provides details of all the drives attached to the system, either physically or logically. It carries two properties:

- Count Property
- Item Property

Example

```vbscript
<!DOCTYPE html>
<html>
<body>
<script language="vbscript" type="text/vbscript">

    Dim oFS, d, dc, s, n
    Set oFS = CreateObject("Scripting.FileSystemObject")
    Set dc = oFS.Drives
    For Each d in dc
       n = ""
       s = s & d.DriveLetter & " - "
       If d.DriveType = 3 Then
          n = d.ShareName
       ElseIf d.IsReady Then
          n = d.VolumeName
       Else
          n = "Drive not available"
       End If
       s = s & n & "::"
    Next

    document.write s
    document.write dc.count

</script>
</body>
</html>
```

If the above script is saved as HTML and executed in IE, we would get the following output in the console.

```
C- Win 7::D-Personal ::E-Common::F-Songs::
4
```

File

File is an Object, which contains both properties and methods that allow the developers to create, delete or move a file.

Methods

- Copy
- Delete
- Move
- openasTextStream

Properties

- Attributes
- DateCreated
- DateLastAccessed
- DateLastModified
- Drive
- Name
- ParentFolder
- Path
- ShortName
- ShortPath
- Size
- Type

Example

```
<!DOCTYPE html>
<html>
<body>
<script language="vbscript" type="text/vbscript">

   Dim fso, f
   Set fso = CreateObject("Scripting.FileSystemObject")
   Set f = fso.GetFile("C:\user.js")
   document.write "Line 1: "& f.DateCreated & "<br />"
   document.write "Line 2: "& f.Attributes & "<br />"
   document.write "Line 3: "& f.DateLastAccessed & "<br />"
   document.write "Line 4: "& f.DateLastModified & "<br />"
   document.write "Line 5: "& f.Drive  & "<br />"
   document.write "Line 6: "& f.Name  & "<br />"
   document.write "Line 7: "& f.ParentFolder & "<br />"
   document.write "Line 8: "& f.Path  & "<br />"
   document.write "Line 9: "& f.ShortName  & "<br />"
   document.write "Line 10: "& f.ShortPath & "<br />"
   document.write "Line 11: "& f.Size  & "<br />"
   document.write "Line 12: "& f.Type & "<br />"
   f.copy ("D:\") & "<br />"     'copying to file to another location'
   f.Move ("E:\") & "<br />"    'Move the file to another location'
   f.Delete ("D:\") & "<br />"   'Delete to file from one location'

</script>
</body>
</html>
```

If the above script is saved as HTML and executed in IE, we would get the following output in the console.

```
Line 1: 08/02/13 06:57:34
Line 2: 32
Line 3: 08/02/13 06:57:34
Line 4: 04/18/12 22:23:37
Line 5: C:
Line 6: user.js
Line 7: C:\
Line 8: C:\user.js
Line 9: user.js
Line 10: C:\user.js
Line 11: 474
Line 12: JScript Script File
```

Files

Files is a collection, which provides a list of all files contained within a folder.

Properties

- Count
- Item

Example

```
<!DOCTYPE html>
<html>
<body>
<script language="vbscript" type="text/vbscript">

    Dim fso, f, f1, fc, s
    Set oFS = CreateObject("Scripting.FileSystemObject")

    'get the folder by giving its path
    Set f = oFS.GetFolder("D:\PROJECT\")
    Set fc = f.Files

    'Get Item
    Set s = fc.Item("sendmail.vbs")

    'Get Count
    x = fc.Count

    Document.write s
    Document.write x

</script>
</body>
</html>
```

If the above script is saved as HTML and executed in IE, we would get the following output in the console.

```
D:\PROJECT\sendmail.vbs
6
```

Folder

Folder is an Object, which contains both properties and methods that allow the developers to create, delete or move a folder.

Methods

- Copy

- Delete
- Move
- CreateTextFile

Properties

- Attributes
- DateCreated
- DateLastAccessed
- DateLastModified
- Drive
- Files
- IsRootFolder
- Name
- ParentFolder
- Path
- ShortName
- ShortPath
- Size
- SubFolders
- Type

Example

```
<!DOCTYPE html>
<html>
<body>
<script language="vbscript" type="text/vbscript">

   Dim fso, f
   Set fso = CreateObject("Scripting.FileSystemObject")

   ' Enter a Folder Name that exists on your System'
   Set f = fso.GetFolder("D:\PROJECT\")

   ShowFileInfo = "Created: " & f.DateCreated & "<br / >"
   document.write ShowFileInfo

   ShowFileInfo = "attributes " & f.attributes & "<br / >"
   document.write ShowFileInfo

   ShowFileInfo = "Last Accessed : " &  f.DateLastAccessed & "<br / >"
   document.write ShowFileInfo

   ShowFileInfo = "DateLastModified : " & f.DateLastModified & "<br / >"
   document.write ShowFileInfo

   ShowFileInfo =  "Drive : " &  f.Drive & "<br / >"
   document.write ShowFileInfo

   ShowFileInfo =   "count : " &  f.Files.count & "<br / >"
   document.write ShowFileInfo

   ShowFileInfo = "IsRoot folder : "  &f.IsRootFolder   & "<br / >"
   document.write ShowFileInfo
```

```vbscript
    ShowFileInfo =  "Name : " & f.Name    & "<br / >"
    document.write ShowFileInfo

    ShowFileInfo =  "parent folder : " & f.ParentFolder    & "<br / >"
    document.write ShowFileInfo

    ShowFileInfo =  "Path : " & f.Path    & "<br / >"
    document.write ShowFileInfo

    ShowFileInfo =  "shortname : " & f.ShortName    & "<br / >"
    document.write ShowFileInfo

    ShowFileInfo =  "ShortPath : "  & f.ShortPath    & "<br / >"
    document.write ShowFileInfo

    ShowFileInfo =  "File Size : " & f.Size & "<br / >"
    document.write ShowFileInfo

    ShowFileInfo = "Type : " &  f.Type    & "<br / >"
    document.write ShowFileInfo

</script>
</body>
</html>
```

If the above script is saved as HTML and executed in IE, we would get the following output in the console.

```
Created: 22/02/2012 8:24:57 PM
attributes 16
Last Accessed : 1/08/2013 12:48:36 PM
DateLastModified : 1/08/2013 12:48:36 PM
Drive : D:
count : 6
IsRoot folder : False
Name : PROJECT
parent folder : D:\
Path : D:\PROJECT
shortname : PROJECT
ShortPath : D:\PROJECT
File Size : 8655239975
Type : File folder
```

Folders

Folders is an collection of all Folder Objects within a Folder object.

Methods

- Add

Properties

- Count
- Item

Example

If the above script is saved as HTML and executed in IE, we would create a folder with name "Test_Folder".

```html
<!DOCTYPE html>
<html>
<body>
<script language="vbscript" type="text/vbscript">
```

```
    Dim fso, f, fc, nf
    Set fso = CreateObject("Scripting.FileSystemObject")
    Set f = fso.GetFolder("D:\PROJECT")
    Set fc = f.SubFolders
    folderName = "Test_Folder"
    If folderName <> "" Then
        Set nf = fc.Add(folderName)
    Else
        Set nf = fc.Add("New Folder")
    End If

</script>
</body>
</html>
```

TextStream

TextStream object helps the developers to work with text files seamlessly. Developers can read, write or append the contents to the text file using the text stream object.

Syntax

```
TextStream.{property  | method( )}
```

Example

If the above script is saved as HTML and executed in IE, we would create a folder with name "Test_Folder".

```
<!DOCTYPE html>
<html>
<body>
<script language="vbscript" type="text/vbscript">

  Dim objFSO
  Set objFSO = CreateObject("Scripting.FileSystemObject")
  Dim objTextFile
  Set objTextFile = objFSO.CreateTextFile("D:\Testfile.txt")
  objTextFile.Close
  Const ForAppending = 8
  Set objTextFile = objFSO.OpenTextFile("D:\Testfile.txt",ForAppending,True)
  objTextFile.WriteLine "Welcome to VBScript Programming"
  objTextFile.Close
  Set objTextFile = Nothing
  Set objFSO = Nothing

</script>
</body>
</html>
```

If the above script is saved as HTML and executed in IE, it will create a text file in D:\ Drive and append the string specified in the WriteLine Method.

```
Welcome to VBScript Programming
```