# SSIS Script Task – Working with Files and Folders

## 1. Introduction

The Script Task in SSIS allows you to write custom .NET code (C# or VB) to perform operations that are not directly available through built-in SSIS tasks. One of the most common uses is manipulating files and folders — creating, reading, writing, moving, or deleting files.

## 2. Real-World Example

Objective:  
We will:  
1. Create a text file at C:\files\MyTestFile.txt.  
2. Write text into the file.  
3. Create a new folder C:\files\MyDir.  
4. Move the newly created file into the new folder.

## 3. Step-by-Step Implementation in SSIS

### Step 1 – Create SSIS Variables

Go to SSIS → Variables and add:  
FilePath (String) – C:\files\MyTestFile.txt (initial file location)  
DirPath (String) – C:\files\MyDir (target folder to create)  
FileNewPath (String) – C:\files\MyDir\MyTestFile.txt (final file location)

### Step 2 – Add Script Task

1. Drag and drop a Script Task into the Control Flow.  
2. Edit the Script Task.  
3. Under ReadOnlyVariables, select:  
 User::FilePath, User::DirPath, User::FileNewPath  
4. We are only reading these values, so they go in ReadOnlyVariables.

### Step 3 – Writing Script Code

1. Click Edit Script to open the script editor.  
2. Add at the top:  
 using System.IO;  
3. Inside Main() method, read SSIS variables into local variables, write content to the file, create the directory if it doesn't exist, and move the file.

Complete Script Example:  
using System;  
using Microsoft.SqlServer.Dts.Runtime;  
using System.IO;  
  
public class ScriptMain  
{  
 public void Main()  
 {  
 string filePath = Dts.Variables["User::FilePath"].Value.ToString();  
 string dirPath = Dts.Variables["User::DirPath"].Value.ToString();  
 string fileNewPath = Dts.Variables["User::FileNewPath"].Value.ToString();  
  
 string content = "This is my text inside the flat file using Script Task.";  
  
 File.WriteAllText(filePath, content);  
  
 if (!Directory.Exists(dirPath))  
 {  
 Directory.CreateDirectory(dirPath);  
 }  
  
 File.Move(filePath, fileNewPath);  
  
 Dts.TaskResult = (int)ScriptResults.Success;  
 }  
}

### Step 4 – Execute Package

Before execution:  
- C:\files\ contains no MyTestFile.txt and no MyDir folder.  
  
After execution:  
1. MyTestFile.txt is created with text.  
2. MyDir folder is created.  
3. File is moved to: C:\files\MyDir\MyTestFile.txt

## 4. Key Points to Remember

- Script Task provides flexibility for complex file system operations.  
- Always import System.IO for file/directory operations.  
- Use ReadOnlyVariables for variables you only read.  
- Check for directory existence before creating it.  
- Script Task can handle file creation, movement, reading, and custom logic.

## 5. Possible Variations

- Copy file instead of moving using File.Copy().  
- Append text to an existing file using File.AppendAllText().  
- Read file content into SSIS variables for further processing.