

WEINTEK LABS., INC.

# **SysFile & SysDir Library** **Folder & File Management**

Demo Project

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## 1. Overview

SysFile and SysDir are libraries that can be used to manage File System.

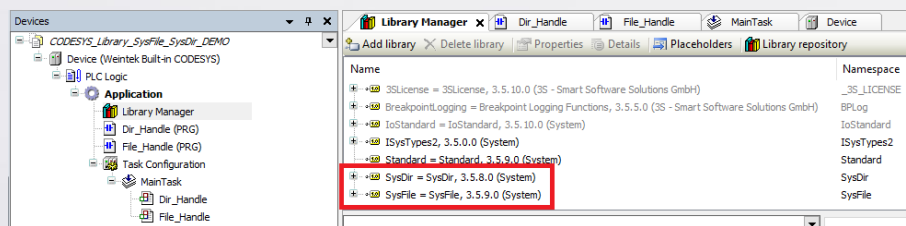
Users can use these libraries to read/write files in File System, and move the files between PC and CODESYS.

SysDir Library can manage the directories in File System.

SysFile Library can open the files in File System.

## 2. Adding Library

**Step 1.** Add SysDir & SysFile Libraries in CODESYS software.



**Step 2.** Use the Function in the Library to manage File System in CODESYS.

### 3. Function

#### SysDir Library

Function Name	Description
SysDirGetCurrent	Get the current directory. The default directory is /PlcLogic/.
SysDirCreate	Create a folder.
SysDirRename	Rename a folder.
SysDirOpen	Directory and the first directory entry.
SysDirRead	Read the next directory entry.
SysDirSetCurrent	Set a directory.
SysDirClose	Close a directory.

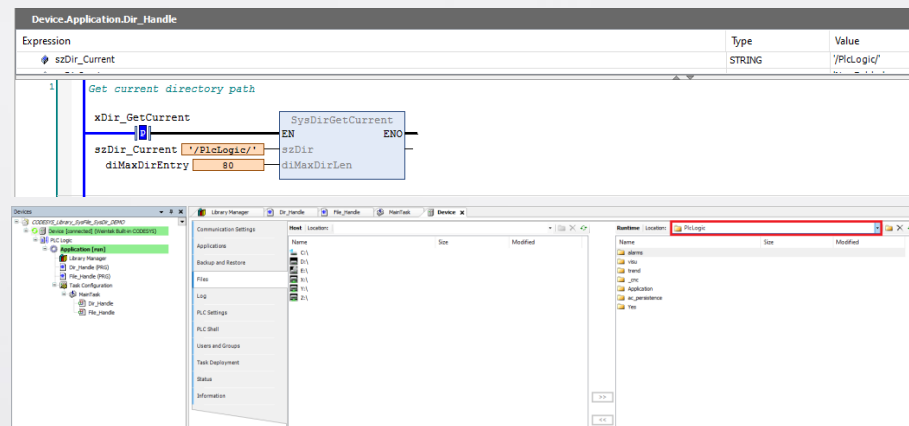
#### SysFile Library

Function Name	Description
SysFileOpen	Open a file under the current directory.
SysFileWrite	Write the data to a file.
SysFileRead	Read a file.
SysFileClose	Close and save a file.

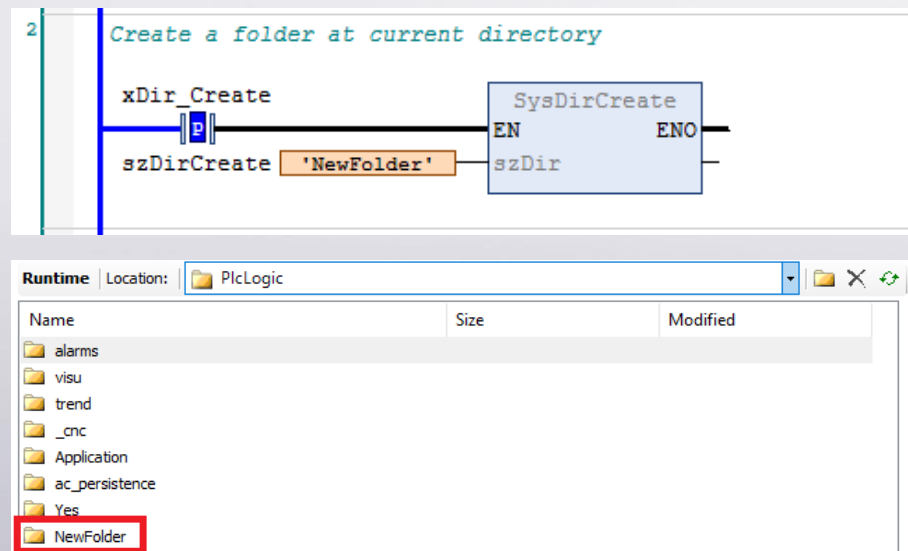
## 4. Demonstration

**Step 1.** Get the current directory and by default the directory is '/PlcLogic/'.

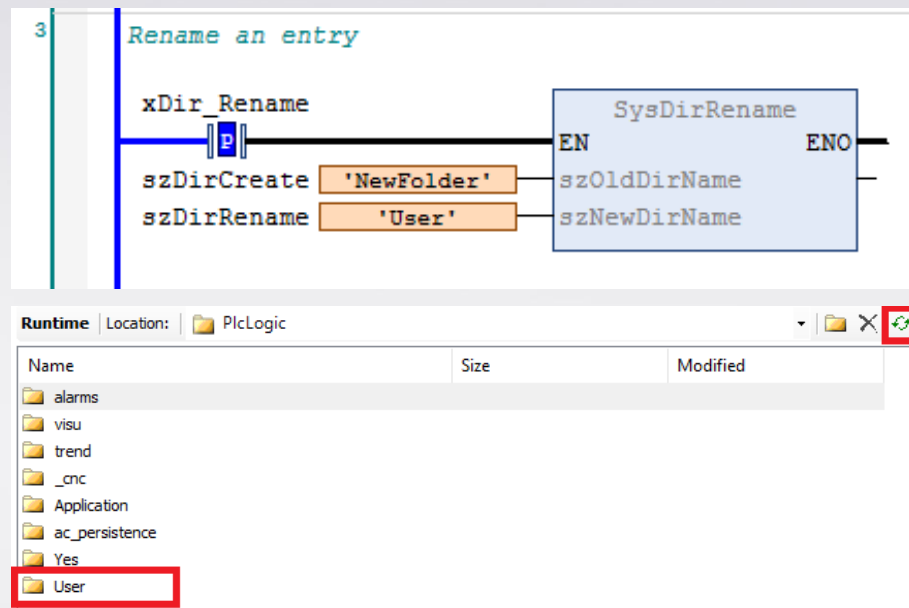
Go to [Device] -> [File] to browse for a folder or file name in File System.



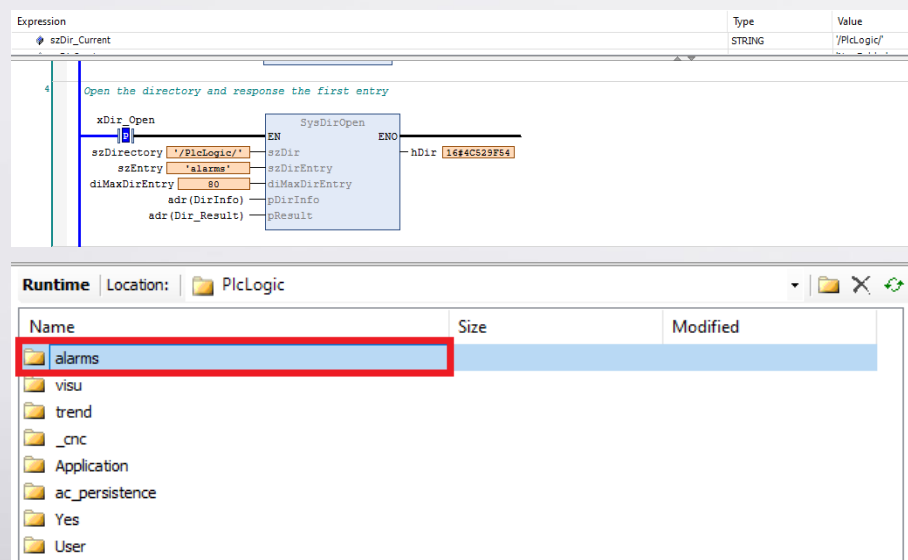
**Step 2.** Create a new folder and name it "NewFolder". This folder is added under PlcLogic directory.



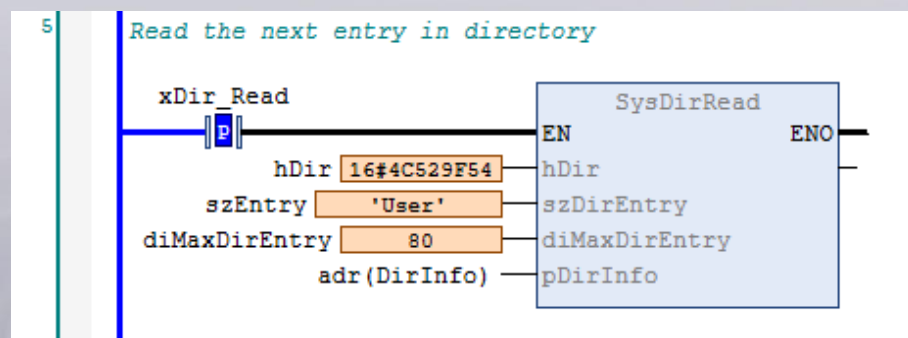
**Step 3.** Change the folder name from "NewFolder" to "User".



**Step 4.** Open the directory and get the first directory entry of the default path.



**Step 5.** Read the next directory entry.



**Step 6.** Set a folder under “/PlcLogic/User/”. The folder is currently empty.

Expression

Expression	Type	Value
szDirDirectory_New	STRING	/PlcLogic/User/

4 Open the directory and response the first entry

5 Read the next entry in directory

6 Set the current directory path

Runtime Location: PlcLogic/User

Name	Size	Modified
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**Step 7.** Open a file in User folder. If the file with the same name cannot be found, a new file named “NewFile.txt” will be generated.

✂ Select read or write as Access\_Mode.

Expression

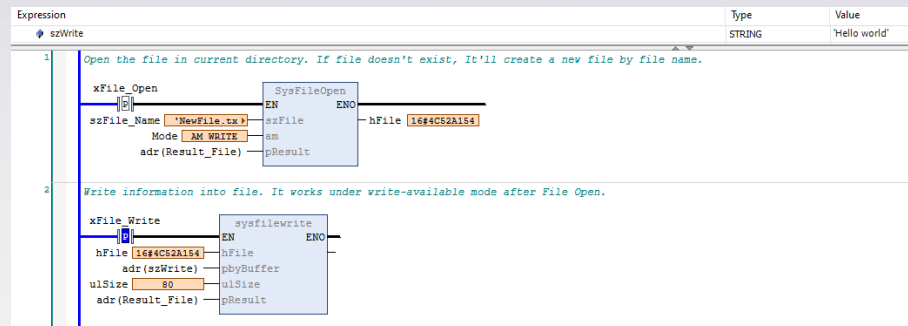
Expression	Type	Value
szFile_Name	STRING	NewFile.txt

1 Open the file in current directory. If file doesn't exist, It'll create a new file by file name.

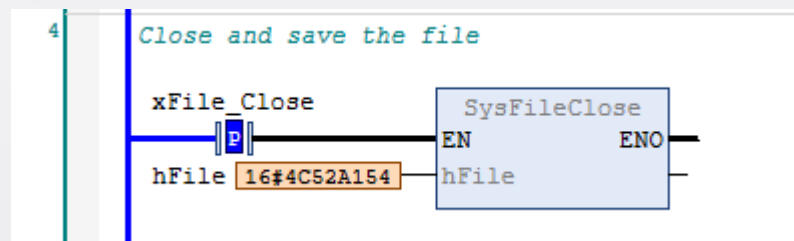
Runtime Location: PlcLogic/User

Name	Size	Modified
NewFile.txt	0 bytes	8/13/2019 2:53 PM

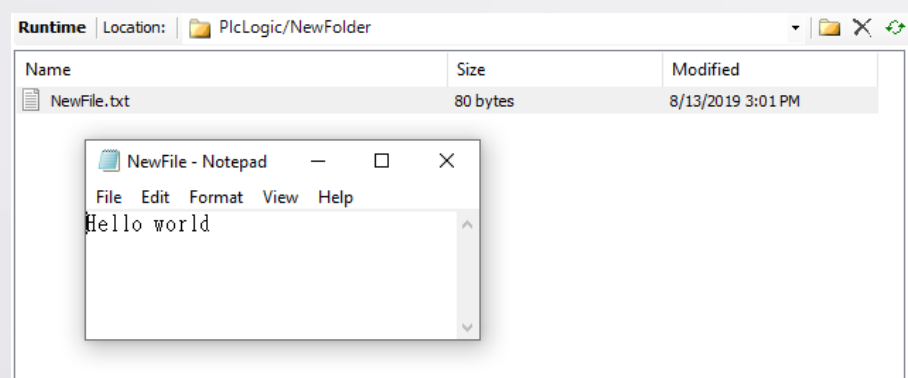
**Step 8.** Write “Hello world” string.



**Step 9.** Close and save the file.



**Step 10.** Move “NewFile” to PC and open the file.



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