

Oh no!
Someone zipped my dataset!



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Health Dialog 

Houston, we've got a problem

- You are on nature's whim: this code only works HALF of the time

```
/*do something*/  
libname curlib ".";  
proc contents data = curlib.testdata; run;
```



Houston, we've got a problem

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```
/*do something*/
```

```
libname curlib ".";
```

```
proc contents data = curlib.testdata; run;
```

— ERROR: File CURLIB.TESTDATA.DATA does not exist.



Houston, we have a problem

- Situation: you need to access a SAS dataset that might have been zipped.
- Your goal: write a SAS program to do the file checking and file handling behind the scene



A little SAS magic goes a long way

-- this code works ALL the time

```
%open_zip(    fname_wo_ext=testdata,  
              zpath=.,  
              znum=1);
```

```
/*do something*/
```

```
libname curlib ".";
```

```
proc contents data = curlib.testdata; run;
```

```
%close_zip(    znum=1);
```



open_zip macro

- Check if the dataset has been zipped, if so, unzip it

```
%macro open_zip(  fname_wo_ext=,
                  zpath=,
                  znum=);
  %global zname&znum. zpath&znum.  flag&znum.;
  %let zname&znum. = &fname_wo_ext.;
  %let zpath&znum. = &zpath.;
  %let flag&znum. = no;
```

NOTE: the code here is written for Linux platform, and needs to be modified for windows. The same principle applies though.



open_zip macro

- Check if the dataset has been zipped, if so, unzip it

```
%if %sysfunc(fileexist(&zpath&znum../&zname&znum...sas7bdat))^=1  
and %sysfunc(fileexist(&zpath&znum../&zname&znum...sas7bdat.gz))=1  
%then %do;  
    %let flag&znum. = yes;  
    x "gunzip &zpath&znum../&zname&znum...sas7bdat.gz" wait;  
%end;  
%mend open_zip;
```



close_zip macro

- If you unzipped the dataset before, now zip it back

```
%macro close_zip(znum=);  
  %if &&flag&znum.. = yes %then %do;  
    x "gzip &&zpath&znum../&&zname&znum...sas7bdat" wait;  
    %let flag&znum. = no;  
  %end;  
%mend close_zip;
```



Problem solved



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Take home message

- The SAS X command and SYSTASK command are used in order to execute operating system commands
 - These commands provide a fast approach when you need to copy, move or manage files and directories
- Write dynamic SAS codes to pull you out of the sticky situation



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