

Writing and Reading Compressed SAS Systems File¹

It is possible to use SAS to write SAS systems files that are compressed using the “gzip” or “compress” utility that are readable by SAS. (It is not possible to create a SAS systems file, compress it, and then read it without uncompressing it. The file must be compressed within a SAS program, as shown below, in order for it to be readable as a compressed file.) Below you will find an example of how to write compressed SAS file, and then how to read it. For further reference, point your web browser to this URL:

<http://ftp.sas.com/techsup/download/sample/unix/dstep/compress.html>

It contains the following relevant programs:

compress.sassrc compress xport.sassrc gzip xport dset.sassrc
uncompress.sassrc uncompress xport.sassrc

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*****.
* compwrit.sas ;
title1 '/malthus2/csda/help/sas/compwrit.sas - writing a compressed SAS data set' ;
* This is an example of how to compress a SAS systems file within a SAS program. ;
* The resulting compressed systems file takes about 1/5 of the space of a ;
* non-compressed file. See compread.sas for information about how to read ;
* the file. Lines that would need to be changed are marked with !! ;

options compress = yes linesize = 72 ;
libname lib1 '/full/path/name' ; *!!change this line ;
x '/usr/sbin/mknod piper p' ;
libname fargo 'piper';
filename nwrpipe pipe "compress <piper> /full/path/name.sas7bdat.gz &" ; *!! change this line ;

data _null_ ; infile nwrpipe ; run;
data fargo.a ;
set lib1.sasfile ; *!! change this line ;
run ;
* There can be no procedures after the data statement ;
x 'rm piper';

*****.
* compread.sas ;
title1 '/malthus2/csda/help/sas/compread.sas - reading a compressed data set' ;
* This is an example of how to read a SAS systems file that is compressed ;
* The data set must be compressed within a sas program. ;
* see /malthus2/csda/help/sas/compwrit.sas ;
* Lines that would need to be changed are marked with !! ;

options compress = yes linesize = 72 ;
x '/usr/sbin/mknod piper p' ;
libname fargo 'piper';
filename nwrpipe pipe "uncompress >piper< /full/path/name.sas7bdat.gz &" ; *!! change this line ;

data _null_ ; infile nwrpipe ; run;
* A keep statement can be in the set statement-example 'set fargo.b (keep = v1 v2) ;' ;
data new; set fargo.b ;
* SAS code goes here - variable creation, procedures. ;
x 'rm piper';
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