m_utl_create_zip.sas File Reference

Utilities

Utility macro to copy files and directory tree into a ZIP file

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Description

This program copies all files from a given directory including sub directories preserving the directory structure or it copies a single selected file defined by the INDIR into a ZIP archive. The macro uses the ODS package function or a fileref to create the archive. The ODS package archiving is restricted to a single source file size maximum of 4GB. This means that if a file has an uncompressed size larger than 4 GB, an error is returned. The ZIP fileref function comes without this restriction and is available since SAS 9.4. However when archiving a large number of files the ZIP fileref function can be much slower than with using ODS package ZIP archiving function. Therefore the program has a third and default runmode that combines both ODS archiving and ZIP fileref to overcome both the ODS 4GB restriction and the ZIP fileref problem. The macro program also checks for locked files, which are excluded gracefully from the archiving routine.

Note

This program is able to work in system environments where x-command or unix pipes are not allowed or cannot be used.

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Version

23.1.09

Link

https://github.com/paul-canals/toolbox

Parameters

Input	help	Parameter, if set (Help or ?) to print the Help information in the log. In all other cases this parameter should be left out from the macro call.
Input	indir	Full qualified path to the source directory, or full path and file name to a single file.
Input	infile	Alias of the INDIR= parameter when selecting an input file instead of an input directory.
Input	outdir	Full qualified path to the target directory where the ZIP file is to be created.
Input	zipname	Name of the archive file to be created including the .ZIP extention.
Input	runmode	Indicator [A|F|O] specify whether the macro uses the (O)DS package function, the (F)ileref or the default (A)uto mode for which a combination of ODS archiving and Fileref is selected to create the archive. The default value is: A.
Input	overwrite	Boolean [Y|N] parameter to specify wether to overwrite or appended to an existing archive. The default value is: Y.
Input	subdirs	Boolean [Y|N] parameter to decide if the file list is to include files in sub directories under ROOTDIR. The default value is: N.
Input	emptydirs	Boolean [Y|N] parameter to specify wether empty folders are included in the output zip file. This parameter is only valid when used together with RUNMODE set to Auto, SUBDIRS set to Y. The default value for EMPTYDIRS is: N.
Input	print	Boolean [Y|N] parameter to generate the output by a proc print step. The default value is Y.
Input	debug	Boolean [Y|N] parameter to provide verbose mode information. The default value is: N.

Returns

- The program returns a ZIP archive

Calls

- m_utl_create_dir.sas
- m_utl_delete_file.sas
- m_utl_get_file_list.sas
- m_utl_print_message.sas
- m_utl_print_mtrace.sas

Usage

Example 1: Show help information:

```
%m_utl_create_zip(?)
```

Example 2: Copy SAS core samples into a ZIP file using Auto mode:

```
%m_utl_create_zip(
    indir   = %sysget(SASROOT)/core/sample
  , outdir  = %sysfunc(getoption(WORK))/backup
  , zipname = &sysuserid._sasuser.zip
  , runmode = AUTO
  , print   = Y
  , debug   = Y
    );
```

Example 3: Copy SAS core samples into a ZIP file using ODS package:

```
%m_utl_create_zip(
    indir     = %sysget(SASROOT)/core/sample
  , outdir    = %sysfunc(getoption(WORK))/backup
  , zipname   = &sysuserid._sasuser.zip
  , runmode   = ODS
  , overwrite = Y
  , subdirs   = Y
  , print     = Y
  , debug     = Y
    );
```

Example 4: Copy SAS core samples into a ZIP file using ZIP fileref:

```
%m_utl_create_zip(
    indir     = %sysget(SASROOT)/core/sample
  , outdir    = %sysfunc(getoption(WORK))/backup
  , zipname   = &sysuserid._sasuser.zip
  , runmode   = FILEREF
  , overwrite = Y
  , subdirs   = Y
  , print     = Y
  , debug     = Y
    );
```

Example 5: Copy a single file into a ZIP archive using Auto mode:

```
%m_utl_create_zip(
    indir     = %sysget(SASROOT)/core/sashelp/class.sas7bdat
  , outdir    = %sysfunc(getoption(WORK))/backup
  , runmode   = AUTO
  , overwrite = Y
  , print     = Y
  , debug     = Y
    );
```

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