

# m\_hdr\_gen\_documents.sas File Reference

## Documentation

Header macro to generate documentation for programs or macros

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### Description

This program is used to read all programs in a given directory to create Markdown, PDF, or RTF formatted documents based using the Doxygen header structure in each SAS program or macro file. The header needs to comply to the Doxygen command structure to be able to use this program. The following Doxygen program header commands are mandatory:

- `\\file`
- `\\ingroup`
- `\\brief`
- `\\details`
- `\\author`
- `\\date`
- `\\version`
- `\\sa`
- `\\param`
- `\\return`
- `\\calls`
- `\\usage`
- `\\example`

The following Doxygen program header commands are optional:

- `\\note`
- `\\todo`
- `\\warning`

### Note

*The `\\param` command is checked for valid suffices `[in]` and `[out]`. All other given suffix values will result as invalid.*

### Todo

*The consolidated RTF document output when `APPEND` parameter value is set to `Y` is not finalised yet, and it may result in missing bookmarks links in the target RTF document file. For consolidated file output it is best to use the `DOC_TYPE` parameter value "PDF" in combination with `APPEND` parameter value set to `Y`. The issue will be analysed, resolved and released in the near future, or latest by the end of 2021.*

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**Version**

23.1.07

**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	in_dir	Specifies the full path and directory name where the source SAS programs or macros resides. These programs must include a header including example code that will be used for generating the scripts. The default value for IN_DIR is: <code>_NONE_</code> .
Input	out_dir	Specifies the full path and directory name where the generated test scripts are to be created in. The default value for OUT_DIR is: <code>_NONE_</code> .
Input	excl_lst	Optional. A list of valid but optional Doxygen header commands which are to be ignored.
Input	doc_type	Indicator [MD PDF RTF] to specify the format type. The default value for DOC_TYPE is: MD.
Input	doc_image	Optional. Specifies an image file name including a full or relative path. If an image file is set it will be located on top of the output MD file.
Input	doc_name	Optional. Specifies the output file name in case of parameter APPEND value is set to: Y. The file extension part is defined by the DOC_TYPE value. The default value for DOC_NAME is: reference.
Input	doc_title	Optional. Specifies an optional title value for the output document files in OUT_DIR, but only when the APPEND parameter value is set to: Y.
Input	doc_author	Optional. Specifies an optional author value for the output document files in OUT_DIR.
Input	doc_subject	Optional. Specifies an optional subject value for the output document file in OUT_DIR.
Input	append	Optional. Boolean [Y N] parameter to specify whether to output into a single document or into separate program documentation files. If set to (Y)es, the program documentation will be loaded into a single document in the format that is set by the DOC_TYPE parameter value. The default value for APPEND is: N.
Input	print	Boolean [Y N] parameter to generate the output by using proc report steps with style HtmlBlue. The default value for PRINT is: N.
Input	sendmail	Boolean [Y N] parameter to specify if a result summary document in PDF format will be send to one of more addresses defined by the MAILADDR parameter. The default value is: N.
Input	mailaddr	Specifies one or more email addresses to which notifications will be send to. In case of more than one email address, the parameter contains a list of email addresses seperated by a blank.
Input	debug	Boolean [Y N] parameter to provide verbose mode information. The default value is: N.

## Returns

- Directory with the generated program or macro documentation.

## Calls

- [m\\_hdr crt md file.sas](#)
- [m\\_hdr crt pdf file.sas](#)
- [m\\_hdr crt rtf file.sas](#)
- [m\\_util create dir.sas](#)
- [m\\_util get file list.sas](#)
- [m\\_util nlobs.sas](#)
- [m\\_util print message.sas](#)
- [m\\_util print mtrace.sas](#)
- [m\\_util printto.sas](#)

## Usage

Example 1: Show help information:

```
%m_hdr_gen_documents(?)
```

Example 2: Generate MD documentation into temporary folder in WORK:

```
%m_hdr_gen_documents(  
  in_dir      = %str(&APPL_PRGM.)  
, out_dir    = %str(%sysfunc(getoption(WORK))\misc\docs)  
, doc_type   = MD  
, doc_image  = %str(..\misc\images\doc_banner.png)  
, print      = Y  
, debug      = N  
);
```

Example 3: Generate PDF documentation into temporary folder in WORK:

```
%m_hdr_gen_documents(  
  in_dir      = %str(&APPL_PRGM.)  
, out_dir    = %str(%sysfunc(getoption(WORK))\misc\docs)  
, doc_type   = PDF  
, doc_name   = reference  
, doc_title  = SAS PDF Documentation Reference  
, doc_author = Paul Alexander Canals y Trocha  
, doc_subject = Generated SAS Documentation  
, print      = Y  
, debug      = N  
);
```

Example 4: Generate RTF documentation into temporary folder in WORK:

```
%m_hdr_gen_documents(  
  in_dir      = %str(&APPL_PRGM.)  
, out_dir    = %str(%sysfunc(getoption(WORK))\misc\docs)  
, doc_type   = RTF  
, doc_title  = SAS RTF Documentation Reference  
, doc_author = Paul Alexander Canals y Trocha  
, doc_subject = Generated SAS Documentation  
, print      = Y  
, debug      = N  
);
```

Example 5: Generate RTF documentation and output report by email:

```
*%m_hdr_gen_documents(  
*   in_dir      = %str(&APPL_PRGM.)  
* , out_dir    = %str(%sysfunc(getoption(WORK))\misc\docs)  
* , doc_type   = RTF  
* , doc_title  = SAS RTF Documentation Reference  
* , doc_author = Paul Alexander Canals y Trocha  
* , doc_subject = Generated SAS Documentation  
* , sendmail   = Y  
* , mailaddr   = %str(pact@hermes.local)  
* , debug      = N  
* );
```

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