[](https://www-ps.net.plm.eds.com/wiki-nx/index.php/General_Instructions)

Samcef Solver

**Samcef Solver**

**Command Mode**

**Objective**: To log the Self-training on Samcef/qualif, questions and answer.

**Internal using only.**

**Revision history**

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev. #** | **Date of change** | **Person making the change** | **Description of the change** |
| 1.0 | 18 Nov 2019 | Yibao | Creation of the document |
| 2.0 | 7 Feb 2020 | Yibao | Add copy\_unzip\_alias, lgli6s03 .cshrc ktest/Test |
| 3.0 | 19 Mar 2020 | Yibao | Update rc.bat nv.bat |

# Chapter 1. Installation and configuration

Part1: Windows

For windows(installation version)

1. download the installation version (GTAC: <https://download.industrysoftware.automation.siemens.com/>)
2. license, go to environment to set SAM\_USE\_UGS = 1
3. add C:\SCSamcef\2019r2\_1884\_i4\Exec\ (samcef.cmd folder) into path of Environment
4. <https://stackoverflow.com/questions/20530996/aliases-in-windows-command-prompt>
5. DOSKEY samcef=D:\v99\exec\64-i8-release\samcef.cmd $\*
6. 

for development version,

1. On Windows, try to access [\\plm\samtech\product\Samcef](file:///\\plm\samtech\product\Samcef)
2. If you have access, perform the following steps if you want to be able to compile and link on Windows:
3. •             Map [\\plm\samtech](file:///\\plm\samtech) to your Z:\
4. •             Z:\Product\Samcef\windows\samcef.sync.bat 99   (If you see "ERROR: Access is denied. ", you can ignore the message for now)
5. •             P:\Samcef\nv 99
6. •             Z:\Product\Samcef\windows\nastran.sync.bat  99
7. •             P:\Nastran\nxv  99

Shanghai users, could copy [\\shi6w1309\Liege\samcef.windows](file:///\\shi6w1309\Liege\samcef.windows) to local.



Cwu.bat is to copy 7z from w and then uncompress 7z file.

rc:robust copy to local folder.(it costs about 4 minutes for every downloading and unzip.)

nv: to start samcef, command: nv 99



Part2: linux

Linux: lgli6s03 (through mobaxterm, Shanghai):



Mobaxterm is recommended for linux.

Advanced SSH setting in mobaxterm. export SHELL=/bin/csh;exec csh -l

This **.bashrc** file could be created if it does not exist in the folder [\\plm\lgnas\users\n8icul](file:///\\\\plm\\lgnas\\euler\\n8icul). (n8icul is the user name for yibao, you should know your own name for u disk)

[\\plm\lgnas\users\n8icul](\\\\plm\\lgnas\\users\\n8icul), it does not work, please file HD.Help-desk.

It seems that you don't have rights to access the /samsrc2/srcvyysam directory. Don't worry, we can set the basic environment variables manually, for bash execute:

**export SAM\_EXE=/sambin/samcef/v99/exec/64-i8-release**

**export PATH=$SAM\_EXE:$PATH**

**export SAM\_ZONE=10000000**

or if you are using csh do:

**setenv SAM\_EXE /sambin/samcef/v99/exec/64-i8-release**

**setenv PATH $SAM\_EXE:$PATH**

**setenv SAM\_ZONE 10000000**

You can add these commands to the .bashrc or .cshrc scripts on you home directory do do this automatically after each login.

This should make it possible for you to execute the "samcef" command. Please try these and tell me if there is any problem.

Kind regards

- Miguel

*Vargas Miguel*

*Command in details:*

1. *ls -lh ~/.bashrc* to check whether there is such file.
2. *vi ~/.bashrc* to edit or create the file.
3. copy corresponding lines and paste them into the file(~/.bashrc).
4. *source ~/.bashrc*
5. *samcef ba* to check the command.

The command could be (on lgli6s07):

**grep -i PRELOAD $(find /samsrc2/ktest/Data/mecanl -name "\*.dat") | cut -d : -f 1 | sort -u | cut -d / -f 6**

grep       is the command to search texts in a list of files

                -i means ignore case

find        this command search for files in a directory, the result is printed as a list

                -name “\*.dat” means that only files with this name pattern are going to be printed

cut          this command splits a string

                -d :  separated by colon

                -f 1 take the first field

sort        sort a list (in this case files)

                -u means remove duplicates

cut          this command splits a string

                -d /  separated by slash

                -f 6 take the sixth field (in this case the name of the test)

The result is:

boltbar3

boltload

boltload2

boltloadbar

boltloadmeankr

boltloadnref

boltlodibar

boltmct2dnrefm1

boltmct2dnrefm2

boltmeanfac

mctprob

subbolt

subtypbolt

subtypboltb

Kind regards

- Miguel

To run samcef case within notepad++, it could be useful to set below command in run of notepad++.

cmd /k cd /d $(CURRENT\_DIRECTORY) && (echo input && echo .fin 1)| D:\workdir\prod\samcef\v99\exec\64-i8-release\samcef.cmd ba,me $(FILE\_NAME)

cmd /k cd /d $(CURRENT\_DIRECTORY) && nv 99 && (echo input && echo .fin 1)| sam ba,me $(FILE\_NAME)

cmd /k cd /d $(CURRENT\_DIRECTORY) && nv 99 && (echo input && echo .fin 1)| sam ba,as $(FILE\_NAME)

ll /samsrc2/ktest/Tests/dynam/contact01.test

From Christophe

Hello,

I requested an account for the 3 of you on our development Linux machine in Liege (LGLI6S03) similar to what I did for part of Logan’s team. According to IT, everything should be up and running.

Could you try to log and perform the following actions from MobaXterm (or any Linux terminal)

* + Connect to LGLI6S03 using your siemens account
  + copy from Aron’s home drive (~mofyv7) the following files .login, .logout, .cshrc, .nedit (this is a folder):  “**cd ~** **mofyv7; cp -pr .login .logout .cshrc .nedit ~**”
  + Once this is done, log-off and log back on
  + can you read folder/samsrc2/srcvyysam/v99? This is a copy of the source code. Material routines are in the Ov folder (**/samsrc2/srcvyysam/v99/Ov**) but I’ll give you more details.
  + Could you generate SSH public/private keys for each of the 5 users:
    - **ssh-keygen -t rsa**
    - hit enter twice
    - Navigate to the folder .ssh created by ssh-keygen: “**cd ~/.ssh**”
    - Copy the file id\_rsa.pub to your home directory: **cp id\_rsa.pub ~**
    - Copy the “config” file from my home dir (~msb4e9) to each user’s .ssh folder:  “**cp ~msb4e9/config ~/.ssh**”
      * Add your id\_rsa.pub to the authorized users: “cat id\_rsa.pub >> authorized\_keys”
      * Make sure the authorized\_keys file has the correct file permissions: “chmod 640 authorized\_keys”
  + Make sure your home folder has the correct permissions: “cd /u; chmod 750 `whoami`”
  + Go back to your home folder: “cd”
  + Check that ssh works without password: “ssh `whoami`@lgli6s03 pwd”
  + This should print the name of your home folder without asking for your password
  + Once done, let me know because I need to copy each user’s private key to one of our file to grant you more privilege.

On Windows, try to access [\\plm\samtech\product\Samcef](file:///\\plm\samtech\product\Samcef)

If you have access, perform the following steps if you want to be able to compile and link on Windows:

•             Map [\\plm\samtech](file:///\\plm\samtech) to your Z:\

•             Z:\Product\Samcef\windows\samcef.sync.bat 99   (If you see "ERROR: Access is denied. ", you can ignore the message for now)

•             P:\Samcef\nv 99

•             Z:\Product\Samcef\windows\nastran.sync.bat  99

•             P:\Nastran\nxv  99

Thanks,

Christophe

# **First Example in Command Mode**

**Questions & Answer**

1. How to turn on bacon graphic window to show nodes and elements?

set SAM\_HOME=D:\Products\Samcef

IN folder, copied bacon.ini (example: \\shi6s007\Christophe\bacon.ini)

How to turn off bacon graphic window and back to pure command mode?

Not possible to close it once turned on

2. How to exit MENU and back to command?

Type OFF in command windows

or "menu Mgt"--> disable

3. How to exit command normally? .STOP

.STO --> quit (and save SDB or not)

.FIN --> generate \*.sam and \*.sdb

.FIN 1 --> same as .FIN + .STO

4. ATT number 0 /402 case?

.MAI

I 345 AT 1 0 N 1 2

.MAI

I 1 ATT 123 73 N $

2 4 8 6 0 12 $

16 24 20

First attribute for user. For 402, same as PID

Second one?!? Internal use`. For 402, 2nd integer from tripplet.

Example 73 for CHEXA: RECORD=CHEXA(7308,73,253)

5. Computing rupture probability in 2D (element types 15-26)

In RES (or F06) file, check this line:

NUMBER OF ELEMENTS OF TYPE.........................8 = 125 #

It means you have 125 elements of type 8 (T008)

6. Samcef allows to map temperatures from a Samcef Thermal computation onto a mechanical model 

with a dissimilar mesh that will be solved with Samcef Mecano.

Temperature distribution depends on time?(steady / transient)

6.1 steady

6.2 transient

https://cauldron.net.plm.eds.com/browse/SAM2-11

One-way coupling

samcef mt name --> mecano module=mecath

samcef ba name with .IT3

samcef me name --> mecano

Cosimulation

samcef sv name --> Supervisor (Maya middleware) http://lgintranet.lmsintl.com/v99/m030/m030.html

Amarylis?

http://lgintranet.lmsintl.com/v99/m007/remesh-m007.html

http://lgintranet.lmsintl.com/v99/m007/loads-m007.html#Ablation

Access to Z:\Engineering Services\SAMTECH Liege\Gestion Projets\ProjetsDevelSpecif\ASAQ18

Z:\Engineering Services\SAMTECH Liege\Gestion Projets\ProjetsDevelSpecif\SCHAEFFLER\_GEAR

**Profile of bank file.**

|  |  |  |
| --- | --- | --- |
| **Quick procedure** | **Step by step procedure** | **Note** |
| .DEL.\*  ! A. GEOMETRY  ! ===========  ! A.1. 2-D Geometry  ! ----------------  ! A.2. 2-D Mesher  ! --------------  !  !  ! B. HYPOTHESIS AND MATERIAL ==========================  ! C. BOUNDARY CONDITIONS  ! ======================  .FIN  exit  !  ! D. POST-PROCESSING  ! ==================  exit  return | .DEL.\*  ! A. GEOMETRY  ! ===========  ! A.1. 2-D Geometry  ! ----------------  exit  ! A.2. 2-D Mesher  ! --------------  exit  ! B. HYPOTHESIS AND MATERIAL ==========================  exit  ! C. BOUNDARY CONDITIONS  ! ======================  .FIN  exit  ! D. POST-PROCESSING  ! ==================  exit  return | 1. PART+MESH   A.1.PART  A.2.  MESH(Node+ Element)   1. **Property**+   Material   1. BC.+Load 2. Post-process. |

Note:

1. when input A.2. 2-D Mesher of step by step procedure, be careful, it should be input.mesh, there is not any space between input and the point “.”
2. powershell may be better to run samcef command in win10.

[**.FIN**](file:///C:\SCSamcef\2019r2_1884_i4\Dochtml\m002\fin-m002.html) : Generation of BACON Data and End of execution

[**EXIT**](file:///C:\SCSamcef\2019r2_1884_i4\Dochtml\m002\exit-m002.html) : End of reading of a BACON data bank (STATE COMMAND)

Each data set can be identified by a label (entry point) and is closed either by [**EXIT**](file:///C:\SCSamcef\2019r2_1884_i4\Dochtml\m002\exit-m002.html) or **Return** command.

[**.STO**](file:///C:\SCSamcef\2019r2_1884_i4\Dochtml\m002\sto-m002.html) : Stopping the program (Modeling Command)

**Return** : Stop reading a BACON data bank (STATE COMMAND)

**clos** : Closing and De-Assigning a Unit (STATE COMMAND)

This command lets you close and de-assign a unit at any time, provided it is not reserved for the program. If not followed by any keyword, this closes the default reading unit (**INPUT** command).

It is applied to all the elements with: **.AEL MAT** ***"mat1"***.

Selection by identification takes precedence. If nothing is specified, the program will select all the existing elements by default.

Example: **.AEL MAT** ***"mat1"***.

**.DES** : Display of F. E. modeling data and Display of results



|  |  |
| --- | --- |
| ! Defining the mesh  .NOEUD I 1 X 0 Y 0  I 1 X 1 R 10  I 20 Y 1 Q 5  .MAILLE I 1 N 1 2 22 21  I 1 M 1 R 9  I 10 M 20 Q 4  .SEL GROUPE 1 MAILLES  BOITE NOEUDS 1 44  GRAP NOE  GRAP MAILLE  VI | ! Defining the mesh  .NOEUD I 1 X 0 Y 0  I 1 X 1 R 10  I 20 Y 1 Q 5  .MAILLE I 1 N 1 2 22 21  I 1 M 1 R 9  I 10 M 20 Q 4  .SEL GROUPE 1 MAILLES  BOITE NOEUDS 1 44  VI  GRAP NOE  GRAP MAILLE |
| Command :  samcef.cmd ba noe.dat  input | Command :  samcef.cmd ba noe.dat  input |

Note:

1. BOITE NOEUD *n1 n2*

It's a rectangular box of which two opposite corner nodes are nodes *n1* and *n2*, the faces being perpendicular to the screen axes(STRUCT0) or to the structural axes (STRUCT1).

1. To show the node id or element id, grap noe or grap mai should be in command and then vi needs to be used.



.POINT I 5 X 60. Y 30. ! (X, Y) Coordinates

.ARC I 1 CENTRE 5 RAYON 5. ANGLES -180 0

I 3 CENTRE 5 RAYON 10.

Note:

**ANGLE *angle1 angle2***

The arc of circle is delimited by two given angles measured in degrees with respect to the *X* axis.

SAMCEF Files

The names of all files related to a problem are made from the problem name (written name in the following table); the file type is denoted by the file extension. Moreover, most files created by analysis modules contain the module identifier (written **xx** in the following table):

*<problem\_name>*\_*<module\_identifier>*.*<extension>*

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type of file** | **Description** | **Format** |
| **B=binary** |
| **A=ASCII** |
| ***name*** **.dat */user*** | [Bank file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#Bank) | Data in command language for **BACON** | A |
| ***name*** **.sdb */bacon*** | [Database file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#Database) | Saving file and transfer from **BACON** to analysis modules | B |
| (non formatted structured data) |
| ***name*** **.adb */solver*** | Complementary database file | Storing of some results related to constitutive laws in the elements (in order to reduce the size of **name.sdb**) | B |
| ***name*** **.fdb */bacon*** | [Formatted database file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#Database) | idem | A |
| (formatted structured data) |
| ***name*** **.sam */bacon*** | [SAMCEF file  (non formatted BACON output file)](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#samcef) | Data for computation: transfer from **BACON** to analysis modules | B |
|
| ***name*** **.saf */bacon*** | [SAMCEF file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#samcef) | idem | A |
| (formatted BACON  output file) |
| ***name*** **\_xx.res** | [Results file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#results) | Output from analysis modules, with warning and error messages | A |
| (also called listing file) |
| ***name*** **\_xx.u18** | [Storage file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/anal-guid-m001.html#u18) | Storage file for analysis modules | B |
| ***name*** **\_xx.des */fac*** | [Descriptive file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#Desfac) | File for interactive post-processing; describes the content of the **.fac** file | A |
| ***name*** **\_xx.fac */fac*** | [Post-processing file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#Desfac) | File for interactive post-processing; contains all results;The**.des** and **.fac** files always go together | B |
| ***name*** **\_xx.fmt** | [Formatted post-processing file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#Desfac) | idem, but formatted | A |
| ***name*\_xx.log** /bacon | Log file | [Resume of the batch operations (see execution modes)](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/access-gets-m001.html#exec) | A |
| ***name*** **\_xx.u\*\*** | Working files | Between modules chaining files | B or A |
| ***name*** **\_xx.w\*\*** | Temporary working files | Working files, deleted at the end of the execution | B or A |
| ***name*** **.spy */bacon*** | [Spy file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#spy) | Spy file of the computers used during the session | A |
| **bacon.ini** /user | [Initialization file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#BACON.ini) | User's initialization of **BACON** session (abbreviations) | A |
| **samrc.ini** /SAMCEF Procedure | [User's customization file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#samrc.ini) | [Default user variables](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/samvar-gets-m001.html#default) | A |
| ***name*** **.tra** | [Trace file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#trace) | Trace of (part of) the session | A |
| ***name*** **.dia** | [Diagnostic file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#diag) | Trace of messages |  |
| ***name*** **.gra** | [Graphic file](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#gra) | Trace of graphics commands |  |
|  | [Foreign files](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html#foreign) |  |  |

**.SAI**

This command is used to define strategies for result storage in **name\_xx.u18**(flag **ARCHIVE**) and printing selections in the result (or listing) file **name\_xx.res** (flag **IMPRESS**).

.SAI IMPRESS *[node\_sel](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m011/sai-m011.html" \l "nodesel)* COMP *[component\_sel](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m011/sai-m011.html" \l "compsel)*

**.CLX** ***Support Entity\_Type Variation\_law(s) Value(s)***

* ***Support*** is the object on which the boundary condition or loading is to be applied, as nodes, interfaces, elements, faces, edges and the structure itself (see [below](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m002/clx-m002.html#support)). It is designated either explicitly or using groups, attributes or CAD entities.
* ***Entity\_Type*** is a keyword describing the nature of the loading or boundary condition or physical property
* [**DEI**](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/bdcs-bdcs-m003.html#init), [**VII**](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/bdcs-bdcs-m003.html#init), [**FIX**](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/bdcs-bdcs-m003.html#perm), [**DEP**](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/bdcs-bdcs-m003.html#pres), [**POS**](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/bdcs-bdcs-m003.html#pres), [**VFX**](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/bdcs-bdcs-m003.html#pres), [**ACC**](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/bdcs-bdcs-m003.html#pres).

*Examples*

.CLT TFX NOEUD 11 V 100   ! Entity\_type=prescribed temperature (TFX), Support=node 11, with value

.CLM FIX NOEUD 22         ! Entity\_type=fixation (FIX), Support=node 22, without value

.CLM CHA COM 3 NOEUD 33 V 444 NC 1

! Entity\_type=loading (CHA), Support=node 33, component=3, Variation\_law=load case 1, with value

.CLM VI FIX NOEUDS;VI PRESS NC 1

**VI*Entity\_Type Support* [GROUP|ATT*sel*] [TIME|TEMP|NC|ANGL*val*]**

Entity\_type=FIX

Support=Noeudes

.CLM ADD

!

! fix\_12345\_node1

GROUP "@SC@fix\_12345\_node11" FIX C 1 2 3 4 5

! Samcef Bank File : GROUPS.

! --------------------------

.SEL

GROUP 1 NOEUDS NOM "@SC@fix\_12345\_node11"

I 1

I 7

# **Samcef Bank on Windows 10 with Powershell**

1. cd bank dirctory
2. Start powershell. Shift+right-click.
3. Input command

*samcef.cmd ba .\first-steps-m020.dat*

then take a check,

*Bacon >*

*Should be shown at the bottom of powershell window.*

1. The data relative to the geometry is described in the data set .GEOM contained in the bank. It is reloaded with command:

*INPUT*

*or*

*INPUT.GEOM*

PS: it could be lower case or upper case. letters can be written indifferently with uppercase or lowercase characters [except in file names under UNIX].

1. Mesh is described in the data set .MESH, it is reloaded with command:

*INPUT.MESH*

1. COMMAND

*INPUT.PROP*

1. COMMAND

INPUT.BC

1. COMMAND

.FIN

1. COMMAND for analysis

The analysis is performed with the static linear module (ASEF) (followed by the FAC run to obtain the results, by default in the procedure) in interactive mode.

*samcef.cmd as .\first-steps-m020.dat n 1*

To check \*.res file.

Verification of the results file first-steps-m020**\_as.res**: edition and search of %%% in order to find the error and warning messages.

%%%

0DIAGNOSTICS: 0 WARNING(S), 0 ERROR(S)

1. To reload the model from the database with command,

*.DOC DB*

Or

*.DOC DB “first-steps-m020.sdb”*

first-steps-m020.sdb will be loaded.

1. *.DES* is to display the figure.

*Code 163 vect depl;vi*

[Nodal results post-processing](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/nodal-m010.html)

[Element results post-processing](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/elem-post-m003.html#code)

1. command to check results.

*List*

*Code 1411;vi*

*List des*

*.sto* and save/quit

**How to reproduce a PR?**

[9613899](https://webtac.industrysoftware.automation.siemens.com/webpr/webpr.php?objtype=frames&g_startlink=view&g_startdata=9613899)

We could reproduce this pr, with command:

Samcef ba, me flex



**Useful links**

1. [Simcenter Samcef](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/index.html)
2. [First example in command mode](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m020/first-m020.html)
3. [Command mode](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/comlang-gets-m001.html)
4. [Running samcef](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/run-gets-m001.html)
5. Access to [samcef](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/access-gets-m001.html)
6. [modules](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/mod-gets-m001.html)
7. [mesh](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m020/mesh-m020.html)
8. [samcef file types](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/files-gets-m001.html)
9. [How to Post-process](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m001/post-guid-m001.html)
10. [DES: Display of results after computation](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m002/des-m002-results.html#ReloadingCode)
11. [Post-processing](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/m010.html)
12. [Post-processing codes](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/codes-m010.html)
13. [Element results post-processing](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m003/elem-post-m003.html#code)
14. [Nodal results post-processing](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/nodal-m010.html)
15. [Reference codes](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/ref-code-m010.html)
16. [Structural codes](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/struc-m010.html)
17. [List of all the universal and references codes](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/list-codes-m010.html)
18. [Storage files (POSTFAC)](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m010/postf-m010.html)
19. [.CLX: Common syntax for .CLT, .CLM, .CLE, .CLU, .PHP, .SAI, .AMO, commands](https://docs.plm.automation.siemens.com/data_services/resources/nx/1872/nx_help/custom/en_US/samcef_solver_documentation/m002/clx-m002.html#support)

Installation & license(done)

Windows10 and Linux(done)

Command to Run bank file(done)

Output result file

Diagnostics on error and warning messages

During modeling.

After simulation.

In bank file,

Geometry create/edit(done)

Mesh(node/element input and show) (done)

Material(create and assign) (done)

Property(create and assign) (done)

BC(loading and constrain)

Functions for curve.

Solver(control parameter)

Post(output results, save and print, static/mode/time, nodal/element, force moment displacement stress strain…, frame, Graph)

Lgli6s03

ll /samsrc2/ktest/Data/asef/wei\*

ll /samsrc2/ktest/Tests/asef/wei\*



Hi Yibao,

I used the following parameters:

.SAM    NOP3 6    NOP4 6  NALG 4   MF 0

The printouts in the .res file may then be huge if the model is a big one. Here, we only have 9 degrees of freedom.

On the other hands, some titles are in French.   RAIDEUR means STIFFNESS and MASSE means  MASS.

These options are mainly used to understand problems without generating a specific user module.

Norbert