```
2018.05.26 15:40:45 - Database connection succeeded
==============================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
User Var. that affect SADMIN behavior  Description                      This System Result
==============================================================================================
[001] ins.ver                         Get/Set version number           : .2.6.
[002] ins.pn                           Get script name                  : .sadmlib_std_demo.py.
[003] ins.inst                         Get script name without extension : .sadmlib_std_demo.
[004] ins.username                     Get current user name            : .root.
[005] ins.tpid                         Get Current Process ID           : .19319.
[006] ins.multiple_exec                Get/Set Allow running multiple copy : .N.
[007] ins.use_rch                      Get/Set Gen. entry in .rch file      : .False.
[008] ins.dbsilent                     When DBerror, No ErrMsg (Just ErrNo): .False.
[009] ins.usedb                        Set Script need Database ?           : .True.
[010] ins.log_type                     Set Output to [S]creen [L]og [B]oth : .B.
[011] ins.log_append                   Get/Set Append Log or Create New One: .True.
[012] ins.log_header                   Get/Set Generate Header in log       : .False.
[013] ins.log_footer                   Get/Set Generate Footer in  log      : .False.
[014] ins.log_footer                   Get/Set Generate Footer in  log      : .False.
[015] ins.exit_code                    Get/Set Script Exit Return Code      : .0.


==============================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
SADMIN Python specific functions       Description                      This System Result
==============================================================================================
[001] ins.silentremove('file')         Silent File Del, No Err if not exist: .None.
[002] ins.writelog(msg,'nonl'|'bold')  Write Msg to Log or Screen or Both  : .None.

ccode,cstdout,cstderr = ins.oscommand("%s" % (wcommand))

ins.trimfile (file, maxline=500)

pathname = ins.locate_command(wcommand)


==============================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
Calling Functions                      Description                      This System Result
==============================================================================================
[001] ins.get_release()                SADMIN Release Number (XX.XX)        : .0.86.
[002] ins.get_ostype()                 OS Type (Uppercase,LINUX,AIX,DARWIN): .LINUX.
[003] ins.get_osversion()              Return O/S Version (Ex: 7.2, 6.5)   : .7.5.1804.
```

```
[004] ins.get_osmajorversion()        Return O/S Major Version (Ex 7, 6)  : .7.
[005] ins.get_osminorversion()        Return O/S Minor Version (Ex 2, 3)  : .5.
[006] ins.get_osname()                O/S Name (REDHAT,CENTOS,UBUNTU,...) : .CENTOS.
[007] ins.get_oscodename()            O/S Project Code Name               : .CORE.
[008] ins.get_kernel_version()        O/S Running Kernel Version          : .3.10.0-862.
[009] ins.get_kernel_bitmode()        O/S Kernel Bit Mode (32 or 64)      : .64.
[010] ins.hostname                    Current Host Name                   : .holmes.
[011] ins.get_host_ip()               Current Host IP Address             : .192.168.1.12.
[012] ins.get_domainname()            Current Host Domain Name            : .maison.ca.
[013] ins.get_fqdn()                  Fully Qualified Domain Host Name    : .holmes.maison.ca.
[014] ins.get_epoch_time()            Get Current Epoch Time              : .1527363645.
[015] ins.epoch_to_date(1527363645)   Convert epoch time to date          : .2018.05.26 15:40:45.
      WDATE=2018.05.26 15:40:45
[016] ins.date_to_epoch(WDATE)        Convert Date to epoch time          : .1527363645.
      DATE1=2018.06.30 10:00:44
      DATE2=2018.06.30 10:00:03
[017] ins.elapse_time(DATE1,DATE2)    Elapse Time between two timestamps  : .00:00:41.




=========================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
Overview of ins.start() & ins.stop() function
=========================================================================================


----------
ins = setup_sadmin()
Example : ins = setup_sadmin()    # Setup Var,Load Lib,Create Instance,Call ins.start()
----------
    Setup User Var., Load Module, Create Instance, call ins.start() and return instance object
    If SADMIN root directory is not /sadmin, make sure the SADMIN Env. variable is set to proper dir.
    Please call this function when your script is starting
    What this function will do for us :
        1) Make sure all directories & sub-directories exist and have proper permissions.
        2) Make sure log file exist with proper permission ($SADM_LOG)
        3) Make sure Return Code History (.rch) exist and have the right permission
        4) If PID file exist, show error message and abort.
           Unless user allow more than one copy to run simultaniously (SADM_MULTIPLE_EXEC='Y')
        5) Add line in the [R]eturn [C]ode [H]istory file stating script is started (Code 2)
        6) Write HostName - Script name and version - O/S Name and version to the Log file (SADM_LOG)


----------
ins.stop()
Example : st.stop(st.exit_code)   # Close SADM Environment
          sys.exit(st.exit_code)  # Exit To O/S
```

```
----------
    Accept one parameter - Either 0 (Successfull) or non-zero (Error Encountered)
    Please call this function just before your script end
    What this function do.
        1) If Exit Code is not zero, change it to 1.
        2) Get Actual Time and Calculate the Execution Time.
        3) Writing the Script Footer in the Log (Script Return code, Execution Time, ...)
        4) Update the RCH File (Start/End/Elapse Time and the Result Code)
        5) Trim The RCH File Based on User choice in sadmin.cfg
        6) Write to Log the user mail alerting type choose by user (sadmin.cfg)
        7) Trim the Log based on user selection in sadmin.cfg
        8) Send Email to sysadmin (if user selected that option in sadmin.cfg)
        9) Delete the PID File of the script (SADM_PID_FILE)
       10) Delete the User 3 TMP Files (SADM_TMP_FILE1, SADM_TMP_FILE2, SADM_TMP_FILE3)


================================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
SADMIN CONFIG FILE VARIABLES         Description                        This System Result
================================================================================================
[001] ins.cfg_server               SADMIN SERVER NAME (FQDN)          : .holmes.maison.ca.
[002] ins.cfg_host_type             SADMIN [C]lient or [S]erver        : .S.
[003] ins.cfg_mail_addr             SADMIN Administrator Default Email : .duplessis.jacques@gmail.com.
[004] ins.cfg_mail_type             0=NoMail 1=OnError 3=OnSuccess 4=All: .1.
[005] ins.cfg_cie_name              Your Company Name                  : .Batcave.
[006] ins.cfg_domain                Server Creation Default Domain     : .maison.ca.
[007] ins.cfg_user                  SADMIN User Name                   : .sadmin.
[008] ins.cfg_group                 SADMIN Group Name                  : .sadmin.
[009] ins.cfg_www_user              User that Run Apache Web Server     : .apache.
[010] ins.cfg_www_group             Group that Run Apache Web Server    : .apache.
[011] ins.cfg_dbname                SADMIN Database Name               : .sadmin.
[012] ins.cfg_dbhost                SADMIN Database Host               : .sadmin.maison.ca.
[013] ins.cfg_dbport                SADMIN Database Host TCP Port      : .3306.
[014] ins.cfg_rw_dbuser             SADMIN Database Read/Write User    : .sadmin.
[015] ins.cfg_rw_dbpwd              SADMIN Database Read/Write User Pwd : .Nimdas17!.
[016] ins.cfg_ro_dbuser             SADMIN Database Read Only User     : .squery.
[017] ins.cfg_ro_dbpwd              SADMIN Database Read Only User Pwd  : .Query18!.
[018] ins.cfg_rrdtool               RRDTOOL Binary Location            : ./bin/rrdtool.
[019] ins.cfg_ssh_port              SSH Port to communicate with client : .32.
[020] ins.cfg_nmon_keepdays         Nb. of days to keep nmon perf. file : .60.
[021] ins.cfg_rch_keepdays          Nb. days to keep unmodified rch file: .60.
[022] ins.cfg_log_keepdays          Nb. days to keep unmodified log file: .60.
[023] ins.cfg_max_rchline           Trim rch file to this max. of lines : .125.
```

```
[024] ins.cfg_max_logline            Trim log to this maximum of lines   : .2000.
[025] ins.cfg_network1               Network/Netmask 1 inv. IP/Name/Mac  : .192.168.1.0/24.
[026] ins.cfg_network2               Network/Netmask 2 inv. IP/Name/Mac  : ..
[027] ins.cfg_network3               Network/Netmask 3 inv. IP/Name/Mac  : ..
[028] ins.cfg_network4               Network/Netmask 4 inv. IP/Name/Mac  : ..
[029] ins.cfg_network5               Network/Netmask 5 inv. IP/Name/Mac  : ..
[030] ins.cfg_mksysb_nfs_server      AIX MKSYSB NFS Server IP or Name    : .batnfs.maison.ca.
[031] ins.cfg_mksysb_nfs_mount_point AIX MKSYSB NFS Mount Point          : ./volume1/mksysb.
[032] ins.cfg_mksysb_backup_to_keep  AIX MKSYSB NFS Backup - Nb .to keep : .2.
[033] ins.cfg_rear_nfs_server        Rear NFS Server IP or Name          : .batnas.maison.ca.
[034] ins.cfg_rear_nfs_mount_point   Rear NFS Mount Point                : ./volume1/Linux_DR.
[035] ins.cfg_rear_backup_to_keep    Rear NFS Backup - Nb. to keep       : .3.
[036] ins.cfg_backup_nfs_server      NFS Backup IP or Server Name        : .batnas.maison.ca.
[037] ins.cfg_backup_nfs_mount_point NFS Backup Mount Point              : ./volume1/linux.
[038] ins.cfg_backup_nfs_to_keep     NFS Backup - Nb. to keep            : .3.
[039] ins.cfg_storix_nfs_server      Storix NFS Server IP or Name        : .batnas.maison.ca.
[040] ins.cfg_storix_nfs_mount_point Storix NFS Mount Point              : ./volume1/storix.
[041] ins.cfg_storix_backup_to_keep  Storix NFS Backup - Nb. to Keep     : .3.


========================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
Client Directories Var. Avail.      Description                      This System Result
========================================================================================
[001] ins.base_dir                  SADMIN Root Directory            : ./sadmin.
[002] ins.bin_dir                   SADMIN Scripts Directory         : ./sadmin/bin.
[003] ins.tmp_dir                   SADMIN Temporary file(s) Directory : ./sadmin/tmp.
[004] ins.lib_dir                   SADMIN Shell & Python Library Dir. : ./sadmin/lib.
[005] ins.log_dir                   SADMIN Script Log Directory      : ./sadmin/log.
[006] ins.cfg_dir                   SADMIN Configuration Directory   : ./sadmin/cfg.
[007] ins.sys_dir                   Server Startup/Shutdown Script Dir. : ./sadmin/sys.
[008] ins.doc_dir                   SADMIN Documentation Directory   : ./sadmin/doc.
[009] ins.pkg_dir                   SADMIN Packages Directory        : ./sadmin/pkg.
[010] ins.dat_dir                   Server Data Directory            : ./sadmin/dat.
[011] ins.nmon_dir                  Server NMON - Data Collected Dir. : ./sadmin/dat/nmon.
[012] ins.dr_dir                    Server Disaster Recovery Info Dir. : ./sadmin/dat/dr.
[013] ins.rch_dir                   Server Return Code History Dir.  : ./sadmin/dat/rch.
[014] ins.net_dir                   Server Network Information Dir.  : ./sadmin/dat/net.
[015] ins.rpt_dir                   SYStem MONitor Report Directory  : ./sadmin/dat/rpt.


========================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
```

```
Server Directories Var. Avail.      Description                    This System Result
========================================================================================
[001] ins.www_dir                   SADMIN Web Site Root Directory : ./sadmin/www.
[002] ins.www_doc_dir                SADMIN Web Site Root Directory : ./sadmin/www/doc.
[003] ins.www_dat_dir                SADMIN Web Site Systems Data Dir. : ./sadmin/www/dat.
[004] ins.www_lib_dir                SADMIN Web Site PHP Library Dir. : ./sadmin/www/lib.
[005] ins.www_tmp_dir                SADMIN Web Temp Working Directory : ./sadmin/www/tmp.



========================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
SADMIN FILES VARIABLES AVAIL.       Description                    This System Result
========================================================================================
[001] ins.pid_file                  Current script PID file        : ./sadmin/tmp/sadmlib_std_demo.pid.
[002] ins.cfg_file                   SADMIN Configuration File      : ./sadmin/cfg/sadmin.cfg.
[003] ins.cfg_hidden                 SADMIN Initial Configuration File : ./sadmin/cfg/.sadmin.cfg.
[004] ins.tmp_file1                  User usable Temp Work File 1   : ./sadmin/tmp/sadmlib_std_demo_1.19319.
[005] ins.tmp_file2                  User usable Temp Work File 2   : ./sadmin/tmp/sadmlib_std_demo_2.19319.
[006] ins.tmp_file3                  User usable Temp Work File 3   : ./sadmin/tmp/sadmlib_std_demo_3.19319.
[007] ins.log_file                   Script Log File                : ./sadmin/log/holmes_sadmlib_std_demo.log.
[008] ins.rch_file                   Script Return Code History File : ./sadmin/dat/rch/
holmes_sadmlib_std_demo.rch.
[009] ins.dbpass_file                SADMIN Database User Password File : ./sadmin/cfg/.dbpass.
[010] ins.rpt_file                   SYStem MONitor report file     : ./sadmin/dat/rpt/holmes.rpt.



========================================================================================
sadmlib_std_demo.py v2.6 - Library v2.14
COMMAND PATH USE BY SADMIN STD. LIBR. Description                  This System Result
========================================================================================
[001] ins.lsb_release                Cmd. 'lsb_release', Get O/S Version : ./bin/lsb_release.
[002] ins.dmidecode                  Cmd. 'dmidecode', Get model & type : ./sbin/dmidecode.
[003] ins.facter                     Cmd. 'facter', Get System Info : ./bin/facter.
[004] ins.bc                         Cmd. 'bc', Do some Math.       : ./bin/bc.
[005] ins.fdisk                      Cmd. 'fdisk', Get Partition Info : ./sbin/fdisk.
[006] ins.which                      Cmd. 'which', Get Command location : ./bin/which.
[007] ins.perl                       Cmd. 'perl', epoch time Calc.  : ./bin/perl.
[008] ins.mail                       Cmd. 'mail', Send SysAdmin Email : ./bin/mail.
[009] ins.lscpu                      Cmd. 'lscpu', Socket & thread info : ./bin/lscpu.
[010] ins.nmon                       Cmd. 'nmon', Collect Perf Statistic : ./bin/nmon.
[011] ins.parted                     Cmd. 'parted', Get Disk Real Size : ./sbin/parted.
[012] ins.ethtool                    Cmd. 'ethtool', Get System IP Info : ./sbin/ethtool.
[013] ins.ssh                        Cmd. 'ssh', SSH to SADMIN client : ./bin/ssh.
```

```
[014] ins.ssh_cmd                      Cmd. 'ssh', SSH to Connect to client: ./bin/ssh -qnp 32 .
2018.05.26 15:40:45 -
2018.05.26 15:40:45 - Closing Database connection
```