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Script started on 2025-03-07 14:44:48-05:00
[TERM="xterm-256color" TTY="/dev/pts/0" COLUMNS="164" LINES="26"]
# sadmlib_std_demo.py
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Fri 07 Mar 2025 14:45:13 - sadmlib_std_demo.py v3.24 - Library v4.58
Demonstrate functions & variables available to developers using SADMIN Tools
sherlock.maison.ca - User: root - Umask: 0002 - Arch: x86_64
Redhat Linux v9.5 - Kernel 5.14.0-503.29.1.el9_5.x86_64 - SADMIN(S): /opt/sadmin
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User var. that affect SADMIN behavior	Description	This system result
[001] pver	Program version number	: 3.24
[002] sa.pn	Program name	: sadmlib_std_demo.py
[003] sa.pinst	Program name without extension	: sadmlib_std_demo
[004] sa.pusername	Current user name	: root
[005] sa.ppid	Current Process ID	: 2510830
[006] sa.multiple_exec	Allow running multiple copy	: Y
[007] sa.use_rch	Generate entry in .rch file	: False
[008] sa.log_type	Set Output to [S]creen [L]og [B]oth	: B
[009] sa.log_append	Append to log(True), New log=(False)	: False
[010] sa.log_header	Generate header in log	: True
[011] sa.log_footer	Generate footer in log	: True
[012] sa.pexit_code	Script Exit Return Code	: 0
[013] sa.proot_only	Script can only be run by root	: True
[014] sa.psadm_server_only	Script can only run on SADMIN server	: False

Calling Functions	Description	This System Result
[001] sa.get_release()	SADMIN Release Number (XX.XX)	: 1.5.0
[002] sa.get_ostype()	OS Type (Uppercase, LINUX, AIX, DARWIN)	: LINUX
[003] sa.get_osversion()	Return O/S Version (Ex: 7.2, 6.5)	: 9.5
[004] sa.get_osmajorversion()	Return O/S Major Version (Ex 7, 6)	: 9
[005] sa.get_osminorversion()	Return O/S Minor Version (Ex 2, 3)	: 5
[006] sa.get_osname()	O/S Name (REDHAT, CENTOS, UBUNTU, ...)	: REDHAT

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[007] sa.get_oscodename()           O/S Project Code Name           : N/A
[008] sa.get_kernel_version()       O/S Running Kernel Version      : 5.14.0-503.29.1.el9_5.x86_64
[009] sa.get_kernel_bitmode()       O/S Kernel Bit Mode (32 or 64)  : 64
[010] sa.phostname                   Current Host Name                 : sherlock
[011] sa.get_host_ip()               Current Host IP Address          : 192.168.1.48
[012] sa.get_domainname()           Current Host Domain Name         : maison.ca
[013] sa.get_fqdn()                  Fully Qualified Domain Host Name : sherlock.maison.ca
[014] sa.get_serial()                Get System serial Number
[015] sa.get_epoch_time()            Get Current Epoch Time           : 1741376713
[016] sa.epoch_to_date(1741376713)  Convert epoch time to date       : 2025.03.07 14:45:13
      WDATE=2025.03.07 14:45:13
[017] sa.date_to_epoch(WDATE)        Convert Date to epoch time       : 1741376713
      DATE1 is End date/time : 2018.06.30 10:00:44
      DATE2 is Start date/time : 2018.06.30 10:00:03
[018] sa.elapsed_time(DATE1,DATE2)   Elapse Time between two timestamps : 00:00:41
[019] sa.get_packagetype()           Get package type (rpm,deb,aix,dmg) : rpm
[020] sa.get_arch()                  Get system architecture          : x86_64
[021] sa.lock_system(hostname)       Lock the specified hostname (Not FQDN): True
[022] sa.lock_status(hostname)       Check if host specified is lock   : True
[023] sa.unlock_system(hostname)     Unlock host specified, monitoring on: True
[024] sa.write_log('message',[,lf=true]) Write msg to Screen,Log or Both : message
[025] sa.write_err('message',[,lf=true]) Write message to Log & Error log : message
[026] sa.sendmail(mail,sub,body,att)  sadm_sendmail(email,"subject","body","file1,file2")
[027] sa.show_version(pver)           Used -v cmdline to show script info : Ver.+Desc.+LibrVer
[028] sa.sleep(60,15)                 Sleep 60 sec & update every 15 sec. : 60...45...30...15...0
[029] sa.trimfile(filename,nlines=500) Keep last 500 lines of filename. : 0=Success 1=Error

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FUNCTIONS AVAILABLE ONLY PYTHON	Description	This System Result
[001] sa.db_connect('sadmin')	Open connection to database	: 1=Success 1=Error
[002] sa.db_close():	Close connection to database	: 0=Success, 1=Error
[003] sa.db_silent	If DBerror, No ErrMsg(Return Error#):	False
[004] sa.db_used	Need to access SADMIN Database ?	: True
[005] sa.silentremove('file')	Silent file delete (no msg, no err)	: 0
[006] sa.touch_file('filename')	Create an empty file	: 0=File created 1=Error

Overview of the 'sa.start()' and 'sa.stop()' functions

Function 'sa.start(pver,pdesc)'

- 'pver' variable in SADMIN section, indicate the script version.
- 'pdesc' variable in SADMIN section, is a short description of the script.

What this function does:

- 1) Make sure all \$SADMIN directories & sub-dir. exist and have proper permissions.
- 2) Make sure log files exist with proper permission.
- 3) Write the log header (if 'sa.log_header = True').
- 4) If script run on the SADMIN server, check if the system is lock
- 5) If PID file exist, show error message and abort.
Unless user allow to run simultaneously more than one copy (sa.multiple_exec=True).
- 6) Record the start Date/Time.
- 7) Add line in the [R]eturn [C]ode [H]istory file stating script is started (Code 2).

Function 'sa.stop(pexit_code)'

- 'pexit_code' variable defined in SADMIN section, is the script exit code (0=OK 1=Error).

This should be the last function called at the end of your script.

It accept one parameter - Either 0 (Successful) or non-zero (Error Encountered).

Example : sa.stop(pexit_code) # Close SADMIN Environment

What this function does:

- 1) Get actual time and calculate the execution time.
- 2) If the exit code is not zero, change it to 1.
- 3) If 'sa.log_footer = True', write the log footer.
- 4) If 'sa.use_rch = True', append (Start/End/Elapse Time ...) in the RCH File.
- 5) Trim The RCH File according to user choice in 'sa.sadm_max_rchline'.
No trim is done if 'sa.sadm_max_rchline = 0'.
- 6) Trim the log according to user choice in 'sa.sadm_max_logline'.
No trim is done if 'sa.sadm_max_logline = 0'.
- 7) Delete the PID file of the script (sa.pid_file).

SADMIN CONFIG FILE VARIABLES	Description	This System Result
[001] sa.sadm_server	SADMIN server name (FQDN)	: sherlock.maison.ca
[002] sa.sadm_host_type	SADMIN [C]lient or [S]erver	: S
[003] sa.sadm_mail_addr	SADMIN Administrator Default Email	: brucetalbot95@gmail.com
[004] sa.sadm_alert_type	0=NoMail 1=OnError 3=OnSuccess 4=All:	1

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[005] sa.sadm_alert_group      Default Alert Group          : default
[006] sa.sadm_alert_repeat     Seconds to wait before repeat alert : 0
[007] sa.sadm_days_history     Days to keep alert in History file : 14
[008] sa.sadm_max_arc_line     Max lines to keep in alert archive file: 1000
[009] sa.sadm_textbelt_key     TextBelt.com API Key        : *Hidden*
[010] sa.sadm_textbelt_url     TextBelt.com API URL        : https://textbelt.com/text
[011] sa.sadm_cie_name         Your Company name          : Your Cie Name
[012] sa.sadm_domain          Server creation default domain : maison.ca
[013] sa.sadm_user            SADMIN User Name              : sadmin
[014] sa.sadm_group           SADMIN Group Name              : sadmin
[015] sa.sadm_pwd_random      Auto generation of '$SADM_USER' pwd : Y
[016] sa.sadm_www_user        User that Run Apache Web Server : apache
[017] sa.sadm_www_group       Group that Run Apache Web Server : apache
[018] sa.sadm_dbname          SADMIN Database Name            : sadmin
[019] sa.sadm_dbhost          SADMIN Database Host              : localhost
[020] sa.sadm_dbport          SADMIN Database Host TCP Port       : 3306
[021] sa.sadm_rw_dbuser       SADMIN Database Read/Write User   : sadmin
[022] sa.sadm_rw_dbpwd        SADMIN Database Read/Write User Pwd : *Hidden*
[023] sa.sadm_ro_dbuser       SADMIN Database Read Only User    : squery
[024] sa.sadm_ro_dbpwd        SADMIN Database Read Only User Pwd : *Hidden*
[025] sa.sadm_smtp_server     Your internet smtp server    : smtp.gmail.com
[026] sa.sadm_smtp_port       Your internet smtp server port : 587
[027] sa.sadm_smtp_sender     Your internet smtp email address : brucetalbot95@gmail.com
[028] sa.sadm_gmpw            Your internet smtp email password : *Hidden*
[029] sa.sadm_ssh_port        SSH Port to communicate with client : 32
[030] sa.sadm_monitor_update_interval SYSMON web page refresh rate (Sec) : 60
[031] sa.sadm_monitor_recent_count SYSMON web page nb. recent scripts : 10
[032] sa.sadm_monitor_recent_exclude SYSMON recent scripts excluded : sadm_nmon_watcher,sadm_fetch_clients
[033] sa.sadm_nmon_keepdays    Nb. of days to keep nmon perf. file : 10
[034] sa.sadm_rch_keepdays     Nb. days to keep unmodified rch file: 35
[035] sa.sadm_log_keepdays     Nb. days to keep unmodified log file: 35
[036] sa.sadm_max_rchline      Trim rch file to this max. of lines : 100
[037] sa.sadm_max_logline     Trim log to this maximum of lines : 500
[038] sa.sadm_network1         Network/Netmask 1 inv. IP/Name/Mac : 192.168.1.0/24
[039] sa.sadm_network2         Network/Netmask 2 inv. IP/Name/Mac : None
[040] sa.sadm_network3         Network/Netmask 3 inv. IP/Name/Mac : None
[041] sa.sadm_network4         Network/Netmask 4 inv. IP/Name/Mac : None
[042] sa.sadm_network5         Network/Netmask 5 inv. IP/Name/Mac : None
[043] sa.sadm_rear_nfs_server   ReaR NFS Server IP or Name      : 3
[044] sa.sadm_rear_nfs_mount_point ReaR NFS Mount Point           : /volume1/backup_rear
[045] sa.sadm_rear_backup_to_keep ReaR NFS Backup - Nb. to keep   : 2
[046] sa.sadm_rear_backup_dif    ReaR alert cur vs prev size differ : 25 %
[047] sa.sadm_rear_backup_interval ReaR alert if Backup older than : 10 days
[048] sa.sadm_backup_nfs_server NFS Backup IP or Server Name    : 3

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[049] sa.sadm_backup_nfs_mount_point    NFS Backup Mount Point      : /volume1/backup_linux/sadmin_backups
[050] sa.sadm_backup_dif                  Backup alert cur vs prev size differ: 40 %
[051] sa.sadm_backup_interval              Backup alert if older than X days : 7 days
[052] sa.sadm_daily_backup_to_keep         Daily Backup to Keep         : 2
[053] sa.sadm_weekly_backup_to_keep        Weekly Backup to Keep         : 2
[054] sa.sadm_monthly_backup_to_keep        Monthly Backup to Keep        : 2
[055] sa.sadm_yearly_backup_to_keep         Yearly Backup to keep        : 2
[056] sa.sadm_weekly_backup_day            Weekly Backup Day (1=Mon,7=Sun) : 5
[057] sa.sadm_monthly_backup_date          Monthly Backup Date (1-28)     : 1
[058] sa.sadm_yearly_backup_month          Yearly Backup Month (1-12)     : 12
[059] sa.sadm_yearly_backup_date           Yearly Backup Date (1-31)      : 31
[060] sa.sadm_pid_timeout                   PID file default TimeToLive (Sec) : 7200
[061] sa.sadm_lock_timeout                  Maximun nb. sec. a host can be lock : 3600
[062] sa.sadm_vm_export_nfs_server           NFS Export Server             : 3
[063] sa.sadm_vm_export_mount_point         NFS Export Mount Point        : /volume1/backup_vm/virtualbox_exports
[064] sa.sadm_vm_export_to_keep             Nb. of export to keep         : 2
[065] sa.sadm_vm_export_interval            Days without export before alert : 21
[066] sa.sadm_vm_export_alert               Issue an alert if interval reached : Y
[067] sa.sadm_vm_user                       User part of 'vboxusers' user group : jacques
[068] sa.sadm_vm_stop_timeout               Max. seconds given for acpi shutdown: 120
[069] sa.sadm_vm_start_interval             Sec. to sleep between each VM start : 30

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Directories Var. Avail.	Description	This System Result
[001] sa.dir_base	SADMIN Root Directory	: /opt/sadmin
[002] sa.dir_bin	SADMIN Scripts Directory	: /opt/sadmin/bin
[003] sa.dir_tmp	SADMIN Temporary file(s) Directory	: /opt/sadmin/tmp
[004] sa.dir_lib	SADMIN Shell & Python Library Dir.	: /opt/sadmin/lib
[005] sa.dir_log	SADMIN Script Log Directory	: /opt/sadmin/log
[006] sa.dir_cfg	SADMIN Configuration Directory	: /opt/sadmin/cfg
[007] sa.dir_sys	Server Startup/Shutdown Script Dir.	: /opt/sadmin/sys
[008] sa.dir_doc	SADMIN Documentation Directory	: /opt/sadmin/doc
[009] sa.dir_pkg	SADMIN Packages Directory	: /opt/sadmin/pkg
[010] sa.dir_dat	Server Data Directory	: /opt/sadmin/dat
[011] sa.dir_nmon	Server NMON - Data Collected Dir.	: /opt/sadmin/dat/nmon
[012] sa.dir_dr	Server Disaster Recovery Info Dir.	: /opt/sadmin/dat/dr
[013] sa.dir_rch	Server Return Code History Dir.	: /opt/sadmin/dat/rch
[014] sa.dir_net	Server Network Information Dir.	: /opt/sadmin/dat/net
[015] sa.dir_rpt	SYStem MONitor Report Directory	: /opt/sadmin/dat/rpt
[016] sa.dir_dbb	Database Backup Directory	: /opt/sadmin/dat/dbb
[017] sa.dir_setup	SADMIN Setup Directory.	: /opt/sadmin/setup

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[018] sa.dir_usr      User/System specific directory      : /opt/sadmin/usr
[019] sa.dir_usr_bin  User/System specific bin/script Dir.: /opt/sadmin/usr/bin
[020] sa.dir_usr_lib  User/System specific library Dir. : /opt/sadmin/usr/lib
[021] sa.dir_usr_doc  User/System specific documentation : /opt/sadmin/usr/doc
[022] sa.dir_usr_mon  User/System specific SysMon Scripts : /opt/sadmin/usr/mon
[023] sa.dir_www      SADMIN Web Site Root Directory : /opt/sadmin/www
[024] sa.dir_www_doc  SADMIN Web Site Root Directory : /opt/sadmin/www/doc
[025] sa.dir_www_dat  SADMIN Web Site Systems Data Dir. : /opt/sadmin/www/dat
[026] sa.dir_www_lib  SADMIN Web Site PHP Library Dir. : /opt/sadmin/www/lib
[027] sa.dir_www_tmp  SADMIN Web Temp Working Directory : /opt/sadmin/www/tmp
[028] sa.dir_www_perf Web system performance Graph Dir. : /opt/sadmin/www/tmp/perf

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SADMIN FILES VARIABLES AVAIL.      Description      This System Result
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[001] sa.pid_file      Current script PID file      : /opt/sadmin/tmp/sadmlib_std_demo.pid
[002] sa.cfg_file      SADMIN configuration file     : /opt/sadmin/cfg/sadmin.cfg
[003] sa.cfg_hidden    SADMIN configuration template : /opt/sadmin/cfg/.sadmin.cfg
[004] sa.alert_file    Alert group definition file   : /opt/sadmin/cfg/alert_group.cfg
[005] sa.alert_init     Alert group template file    : /opt/sadmin/cfg/.alert_group.cfg
[006] sa.alert_hist     Alert History file           : /opt/sadmin/cfg/alert_history.txt
[007] sa.alert_hini     Alert History template file   : /opt/sadmin/cfg/.alert_history.txt
[008] sa.tmp_file1      User usable Temp Work File 1 : /opt/sadmin/tmp/sadmlib_std_demo_1.2510830
[009] sa.tmp_file2      User usable Temp Work File 2 : /opt/sadmin/tmp/sadmlib_std_demo_2.2510830
[010] sa.tmp_file3      User usable Temp Work File 3 : /opt/sadmin/tmp/sadmlib_std_demo_3.2510830
[011] sa.log_file        Script Log File              : /opt/sadmin/log/sherlock_sadmlib_std_demo.log
[012] sa.rch_file        Script Return Code History File : /opt/sadmin/dat/rch/sherlock_sadmlib_std_demo.rch
[013] sa.dbpass_file     SADMIN Database User Password File : /opt/sadmin/cfg/.dbpass
[014] sa.rpt_file        [SYS]tem [MON]itor report file : /opt/sadmin/dat/rpt/sherlock.rpt
[015] sa.backup_list     Backup list file name        : /opt/sadmin/cfg/backup_list.txt
[016] sa.backup_list_init Backup list template file     : /opt/sadmin/cfg/.backup_list.txt
[017] sa.backup_exclude  Backup exclude list file name : /opt/sadmin/cfg/backup_exclude.txt
[018] sa.backup_exclude_init Backup exclude template file  : /opt/sadmin/cfg/.backup_exclude.txt

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COMMAND PATH USE BY SADMIN STD. LIBR.  Description      This System Result
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[001] sa.cmd_dmidecode  Cmd. 'dmidecode', Get model & type : /usr/sbin/dmidecode
[002] sa.cmd_bc          Cmd. 'bc', Do some Math.          : /usr/bin/bc
[003] sa.cmd_fdisk        Cmd. 'fdisk', Get Partition Info  : /usr/sbin/fdisk

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[004] sa.cmd_which          Cmd. 'which', Get Command location : /usr/bin/which
[005] sa.cmd_locate         Cmd. 'locate', Get Command location : /usr/bin/locate
[006] sa.cmd_perl           Cmd. 'perl', epoch time Calc.      : /usr/bin/perl
[007] sa.cmd_mutt           Cmd. 'mutt', Used to Send Email    : /usr/bin/mutt
[008] sa.cmd_curl           Cmd. 'curl', To send alert to Slack : /usr/bin/curl
[009] sa.cmd_lscpu          Cmd. 'lscpu', Socket & thread info : /usr/bin/lscpu
[010] sa.cmd_nmon           Cmd. 'nmon', Collect Perf Statistic : /usr/bin/nmon
[011] sa.cmd_parted         Cmd. 'parted', Get Disk Real Size  : /usr/sbin/parted
[012] sa.cmd_ethtool        Cmd. 'ethtool', Get System IP Info : /usr/sbin/ethtool
[013] sa.cmd_ssh            Cmd. 'ssh', SSH to SADMIN client   : /usr/bin/ssh
[014] sa.cmd_ssh_full       Cmd. 'ssh', SSH to connect to client: /usr/bin/ssh -qnp 32 -o ConnectTimeout=2 -o
ConnectionAttempts=2
[015] sa.cmd_rrdtool        Cmd. 'rrdtool' to produce graph    : /usr/bin/rrdtool
[016] sa.cmd_lsb_release    Cmd. 'lsb_release' to get dist. info: /usr/bin/lsb_release
[017] sa.cmd_inxi           Cmd. 'inxi' binary location       : /usr/bin/inxi

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Database Information	Description	This System Result
[001] sa.db_silent	True=No db_errmsg (Just db_errno)	: False
[002] sa.db_used	Script using Database ?	: True

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Script exit code is 0 (Success) and execution time is 00:00:00
Send an alert only when it terminate with error.
Trim log file /opt/sadmin/log/herlock_sadmlib_std_demo.log to 500 lines.
Fri 07 Mar 2025 14:45:13 - End of sadmlib_std_demo.py
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Script done on 2025-03-07 14:45:15-05:00 [COMMAND_EXIT_CODE="0"]