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sadmlib_std_demo.py v2.6 - Library v2.13
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| Calling Functions | Description | 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 | : .1527279217. |
| [015] ins.epoch_to_date(1527279217) | Convert epoch time to date | : .2018.05.25 16:13:37. |
| WDATE=2018.05.25 16:13:37 | | |
| [016] ins.date_to_epoch(WDATE) | Convert Date to epoch time | : .1527279217. |
| 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. |
| [018] ins.inst | Get Script without extension | : .sadmlib_std_demo. |
| [019] ins.username | Current User Name | : .root. |
| [020] ins.tpid | Get Current Process ID | : .11349. |
| [021] ins.multiple_exec | Allow running simultaneous copy | : .N. |
| [022] ins.use_rch | Generate entry in ReturnCodeHistory | : .False. |
| [023] ins.dbsilent | No DB err.mess. only return error# | : .False. |
| [024] ins.usedb | Script need to use Database ? | : .True. |
| [025] ins.log_type | Output to [S]creen [L]ogFile [B]oth | : .B. |
| [026] ins.log_append | Append Log or Create New One | : .True. |
| [027] ins.log_header | Show/Generate Header in log | : .False. |
| [028] ins.log_footer | Show/Generate Footer in log | : .False. |

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Overview of ins.start() & ins.stop() function
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ins.start()
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Start and initialize sadm environment - Accept no Parameter
 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 simultaneously (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()

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)

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| SADMIN CONFIG FILE VARIABLES | Description | 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 | RRDT00L 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 MKSYB NFS Server IP or Name | : .batnfs.maison.ca. |
| [031] | ins.cfg_mksysb_nfs_mount_point | AIX MKSYB NFS Mount Point | : ./volumel/mksysb. |
| [032] | ins.cfg_mksysb_backup_to_keep | AIX MKSYB 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 | : ./volumel/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 | : ./volumel/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 | : ./volumel/storix. |
| [041] | ins.cfg_storix_backup_to_keep | Storix NFS Backup - Nb. to Keep | : .3. |

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| Client Directories Var. Avail. | Description | 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. |

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[007] ins.sys_dir      Server Startup/Shutdown Script Dir. : ./sadmin/sys.
[008] ins.dat_dir      Server Data Directory                : ./sadmin/dat.
[009] ins.pkg_dir      SADMIN Packages Directory                : ./sadmin/pkg.
[010] ins.nmon_dir     Server NMON - Data Collected Dir.    : ./sadmin/dat/nmon.
[011] ins.dr_dir       Server Disaster Recovery Info Dir.   : ./sadmin/dat/dr.
[012] ins.rch_dir      Server Return Code History Dir.      : ./sadmin/dat/rch.
[013] ins.net_dir      Server Network Information Dir.      : ./sadmin/dat/net.
[014] ins.doc_dir      SADMIN Documentation Directory        : ./sadmin/doc.

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| Server Directories Var. Avail. | Description | 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. |

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| SADMIN FILES VARIABLES AVAIL. | Description | 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/ |
| holmes_sadmlib_std_demo_1.11349. | | |
| [005] ins.tmp_file2 | User usable Temp Work File 2 | : ./sadmin/tmp/ |
| holmes_sadmlib_std_demo_2.11349. | | |
| [006] ins.tmp_file3 | User usable Temp Work File 3 | : ./sadmin/tmp/ |
| holmes_sadmlib_std_demo_3.11349. | | |
| [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. |

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COMMAND PATH USE BY SADMIN STD. LIBR. Description

Result

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[001] ins.lsb_release      Cmd. 'lsb_release', Get O/S Version : ./bin/lsb_release.
[002] ins.dmi decode      Cmd. 'dmi decode', Get model & type : ./sbin/dmi decode.
[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.ethhtool        Cmd. 'ethhtool', Get System IP Info : ./sbin/ethhtool.
[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 .
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Environment Variables.

Description

Result

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[001] HISTSIZE             Env.Var. HISTSIZE : .1000.
[002] LS_COLORS            Env.Var. LS_COLORS : ..
[003] XDG_DATA_DIRS        Env.Var. XDG_DATA_DIRS : ./root/.local/share/flatpak/exports/
share/./var/lib/flatpak/exports/share/./usr/local/share/./usr/share/.
[004] QT_PLUGIN_PATH       Env.Var. QT_PLUGIN_PATH : ./usr/lib64/kde4/plugins:/usr/lib/kde4/
plugins.
[005] HOME                 Env.Var. HOME : ./root.
[006] HISTTIMEFORMAT        Env.Var. HISTTIMEFORMAT : .%d/%m/%y %T .
[007] PATH                 Env.Var. PATH : ./usr/lib64/qt-3.3/bin:/usr/local/sbin:/
usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin::/sadmin/bin::/sadmin/bin:/usr/local/git/bin:/sadmin/bin:/sadmin/jac/bin.
[008] PS1                  Env.Var. PS1 : .\u@h:\w\$ .
[009] QT_GRAPHICSSYSTEM_CHECKED Env.Var. QT_GRAPHICSSYSTEM_CHECKED : .1.
[010] BASH_ENV              Env.Var. BASH_ENV : ./root/.bashrc.
[011] USERNAME              Env.Var. USERNAME : .root.
[012] SHELL                 Env.Var. SHELL : ./bin/bash.
[013] SADMIN                Env.Var. SADMIN : ./sadmin.
[014] OLDPWD                Env.Var. OLDPWD : ./home/jacques.
[015] XDG_SESSION_ID        Env.Var. XDG_SESSION_ID : .cl.
[016] MAIL                  Env.Var. MAIL : ./var/spool/mail/root.
[017] QTINC                 Env.Var. QTINC : ./usr/lib64/qt-3.3/include.
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[018] HISTCONTROL      Env.Var. HISTCONTROL      : .ignoredups.
[019] NS                Env.Var. NS                : ./usr/local/nagios/etc/servers.
[020] LANG              Env.Var. LANG              : .en_US.UTF-8.
[021] LESSOPEN          Env.Var. LESSOPEN          : .||/usr/bin/lesspipe.sh %s.
[022] XAUTHORITY        Env.Var. XAUTHORITY        : ./root/.Xauthority.
[023] DISPLAY           Env.Var. DISPLAY           : ::10.0.
[024] DNSDIR            Env.Var. DNSDIR            : ./var/named/chroot/var/named.
[025] RES_RETRY         Env.Var. RES_RETRY         : .1.
[026] KDEDIRS           Env.Var. KDEDIRS           : ./usr.
[027] TERM              Env.Var. TERM              : .xterm-256color.
[028] RES_TIMEOUT       Env.Var. RES_TIMEOUT       : .2.
[029] NP                Env.Var. NP                : ./usr/local/nagios/libexec.
[030] HOSTNAME           Env.Var. HOSTNAME           : .holmes.maison.ca.
[031] _                  Env.Var. _                  : ./sadmin/bin/sadmlib_std_demo.py.
[032] _USER              Env.Var. _USER              : .root.
[033] QTDIR              Env.Var. QTDIR              : ./usr/lib64/qt-3.3.
[034] CVS_RSH            Env.Var. CVS_RSH            : .ssh.
[035] LOGNAME            Env.Var. LOGNAME            : .root.
[036] PWD                Env.Var. PWD                : ./home/jacques/Downloads.
[037] QTLIB              Env.Var. QTLIB              : ./usr/lib64/qt-3.3/lib.
[038] SHLVL              Env.Var. SHLVL              : .1.
2018.05.25 16:13:37 - Closing Database connection
```