```
1   root@holmes:/sadmin/lib# ./sadmlib_std_test.sh
2
3   =====================================================================================================
…   =
4   Library V2.19 - Script V2.8                      FUNCTIONS AVAILABLE IN SADM_LIB_STD.SH (Part I)
5                                                                                         RETURN VALUE
6   VARIABLE AVAILABLE TO USE                    DESCRIPTION                          PREFIX & SUFFIX BY 3 DOTS
7   =====================================================================================================
…   =
8   $(sadm_get_release)                          SADMIN Release Number (XX.XX)                   : ...00.85...
9   $(sadm_get_ostype)                           OS Type (Always in Uppercase) (LINUX,AIX,...)   : ...LINUX...
10  $(sadm_get_osversion)                        OS Version (Ex: 7.2, 6.5)                       : ...7.4.1708...
11  $(sadm_get_osmajorversion)                   OS Major Version (Ex 7, 6)                      : ...7...
12  $(sadm_get_osminorversion)                   OS Minor Version (Ex 2, 3)                      : ...4...
13  $(sadm_get_osname)                           OS Distribution (Always in Uppercase) (Ex:REDHAT,CENTOS,UBUNTU) : ...CENTOS...
14  $(sadm_get_oscodename)                       OS Project Code Name                            : ...Core...
15  $(sadm_get_kernel_version)                   OS Running Kernel Version (Ex: 3.10.0-229.20.1.el7.x86_64) : ...3.10.0-693...
16  $(sadm_get_kernel_bitmode)                   OS Kernel Bit Mode is a 32 or 64 Bits           : ...64...
17  $(sadm_get_hostname)                         Host Name                                       : ...holmes...
18  $(sadm_get_host_ip)                          Host IP Address                                 : ...192.168.1.12...
19  $(sadm_get_domainname)                       Host Domain Name                                : ...maison.ca...
20  $(sadm_get_fqdn)                             Fully Qualified Host Name                       : ...holmes.maison.ca...
21  $(sadm_get_epoch_time)                       Get Current Epoch Time                          : ...1520820284...
22  $(sadm_epoch_to_date 1520820284)             Convert epoch time to date (YYYY.MM.DD HH:MM:SS) : ...2018.03.11 22:04:44...
23  $(sadm_date_to_epoch '2018.03.11 22:04:44') Convert Date to epoch time (YYYY.MM.DD HH:MM:SS) : ...1520820284...
24  $(sadm_elapse_time '2016.01.30 10:00:44' '2016.01.30 10:00:03') Return Elapse Time between two timestamp : ...00:00:41...
25  sadm_toupper string                          Return the string it receive in uppercase       : ...STRING...
26  sadm_tolower STRING                          Return the string it receive in lowercase       : ...string...
27  sadm_is_root                                 True if script is running as root, False if not. : ...true...
28
29  =====================================================================================================
…   =
30  =====================================================================================================
…   =
31  Library V2.19 - Script V2.8                      FUNCTIONS AVAILABLE IN SADM_LIB_STD.SH (Part II)
32
33  FUNCTION NAME                            DESCRIPTION OF IMPORTANT FUNCTION
34  =====================================================================================================
…   =
35  sadm_start                               Start and initialize sadm environment - Accept no Parameter
36                                           If SADMIN root directory is not /sadmin, make sure the SADMIN Env. variable is set to proper
…   directory.
37                                           Please call this function when your script is starting
```

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38 |                                    What this function will do for us :
39 |                                      1) Make sure All SADM directories and sub-directories exist and they have proper permissions.
40 |                                      2) Make sure the log file exist with proper permission (/sadmin/log/holmes_sadmlib_std_test.log)
41 |                                      3) Make sure the Return Code History Log exist and have the right permission
42 |                                      4) Create script PID file - If it exist and user want to run only 1 copy of script, then abort
43 |                                      5) Add line in the [R]eturn [C]ode [H]istory file stating script is started (Code 2)
44 |                                      6) Write HostName - Script name and version - O/S Name and version to the Log file (SADM_LOG)
45 |
46 | sadm_stop 0                         Accept one parameter - Either 0 (Successfull) or non-zero (Error Encountered)
47 |                                     Please call this function just before your script end
48 |                                     What this function do.
49 |                                      1) If Exit Code is not zero, change it to 1.
50 |                                      2) Get Actual Time and Calculate the Execution Time.
51 |                                      3) Writing the Script Footer in the Log (Script Return code, Execution Time, ...)
52 |                                      4) Update the RCH File (Start/End/Elapse Time and the Result Code)
53 |                                      5) Trim The RCH File Based on User choice in sadmin.cfg
54 |                                      6) Write to Log the user mail alerting type choose by user (sadmin.cfg)
55 |                                      7) Trim the Log based on user selection in sadmin.cfg
56 |                                      8) Send Email to sysadmin (if user selected that option in sadmin.cfg)
57 |                                      9) Delete the PID File of the script (SADM_PID_FILE)
58 |                                     10) Delete the Uers 3 TMP Files (SADM_TMP_FILE1, SADM_TMP_FILE2, SADM_TMP_FILE3)
59 |
60 | =================================================================================================================================
 … | =
61 | =================================================================================================================================
 … | =
62 | Library V2.19 - Script V2.8                      FUNCTIONS AVAILABLE IN SADM_LIB_STD.SH (Part III)
63 |                                                                                                      RETURN VALUE
64 | VARIABLE AVAILABLE TO USE    DESCRIPTION                                                       PREFIX & SUFFIX BY 3 DOTS
65 | =================================================================================================================================
 … | =
66 | $(sadm_server_ips)           All Network Interfaces IP Address and Netmask use on server    :
 … | ...em1|192.168.1.12|255.255.255.0|98:90:96:b7:64:a2,em1:1|192.168.1.20|255.255.255.0|98:90:96:b7:64:a2,em1:2|192.168.1.68|255.255.255.0|
 … | 98:90:96:b7:64:a2,em1:3|192.168.1.13|255.255.255.0|98:90:96:b7:64:a2,em1:4|192.168.1.6|255.255.255.0|98:90:96:b7:64:a2,em1:5|192.168.1.
 … | 23|255.255.255.0|98:90:96:b7:64:a2,em1:6|192.168.1.126|255.255.255.0|98:90:96:b7:64:a2,em1:7|192.168.1.28|255.255.255.0|98:90:96:b7:64:
 … | a2...
67 | $(sadm_server_type)          Host is Physical or Virtual (P/V)                               : ...P...
68 | $(sadm_server_model)         Server model is (Ex: OptiPlex 755)                              : ...OptiPlex 7020...
69 | $(sadm_server_serial)        Server serial number is (Ex: 4S7GYF1)                           : ...BJSV942...
70 | $(sadm_server_memory)        Server total memory in MB  (Ex: 3790)                           : ...7731...
71 | $(sadm_server_hardware_bitmode) Server CPU Hardware is a 32 or 64 bits capable               : ...64...
72 | $(sadm_server_nb_logical_cpu) Number of Logical CPU on the server (Ex: 4)                    : ...4...
73 | $(sadm_server_nb_cpu)        Number of Physical CPU on the server (Ex: 4)                     : ...1...
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 74 │ $(sadm_server_nb_socket)        Number of socket on the server (Ex: 2)                  : ...1...
 75 │ $(sadm_server_core_per_socket)  Number of Core per Socket (Ex: 4)                       : ...4...
 76 │ $(sadm_server_thread_per_core)  Number of Thread per Core                               : ...1...
 77 │ $(sadm_server_cpu_speed)        Server CPU Speed in MHz                                 : ...3369...
 78 │ $(sadm_server_disks)            Server disks list (MB) (Ex: DISKNAME|SIZE,DISKNAME|SIZE,...)  : ...sda|512000,sdb|1024000...
 79 │ $(sadm_server_vg)               Server vg(s) list (MB) (Ex: VGNAME|SIZE|USED|FREE,...)  : ...rootvg|476426|376822|99604...
 80 │
 81 │ =====================================================================================================
 82 │ =====================================================================================================
 …  │ =
 83 │ Library V2.19 - Script V2.8                         GLOBAL VARIABLES AVAILABLE TO USER (Part I)
 84 │
 85 │ VARIABLE NAME     VALUE
 86 │ =====================================================================================================
 …  │ =
 87 │ DIRECTORIES VARIABLES
 88 │
 89 │ SADM_BASE_DIR           = /sadmin
 90 │ SADM_BIN_DIR            = /sadmin/lib
 91 │ SADM_TMP_DIR            = /sadmin/tmp
 92 │ SADM_LIB_DIR            = /sadmin/lib
 93 │ SADM_LOG_DIR            = /sadmin/log
 94 │ SADM_CFG_DIR            = /sadmin/cfg
 95 │ SADM_SYS_DIR            = /sadmin/sys
 96 │ SADM_DAT_DIR            = /sadmin/dat
 97 │ SADM_PKG_DIR            = /sadmin/pkg
 98 │ SADM_NMON_DIR           = /sadmin/dat/nmon
 99 │ SADM_DR_DIR             = /sadmin/dat/dr
100 │ SADM_SAR_DIR            = /sadmin/dat/sar
101 │ SADM_RCH_DIR            = /sadmin/dat/rch
102 │ SADM_NET_DIR            = /sadmin/dat/net
103 │ SADM_WWW_DIR            = /sadmin/www
104 │ SADM_WWW_DOC_DIR        = /sadmin/www/doc
105 │ SADM_WWW_DAT_DIR        = /sadmin/www/dat
106 │ SADM_WWW_LIB_DIR        = /sadmin/www/lib
107 │ SADM_WWW_RCH_DIR        = /sadmin/www/dat/holmes/rch
108 │ SADM_WWW_SAR_DIR        = /sadmin/www/dat/holmes/sar
109 │ SADM_WWW_NET_DIR        = /sadmin/www/dat/holmes/net
110 │ SADM_WWW_DR_DIR         = /sadmin/www/dat/holmes/dr
111 │ SADM_WWW_NMON_DIR       = /sadmin/www/dat/holmes/nmon
112 │ SADM_WWW_TMP_DIR        = /sadmin/www/tmp
113 │ SADM_WWW_LOG_DIR        = /sadmin/www/dat/holmes/log
114 │ SADM_PID_FILE           = /sadmin/tmp/sadmlib_std_test.pid
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115   SADM_CFG_FILE        = /sadmin/cfg/sadmin.cfg
116   SADM_REL_FILE        = /sadmin/cfg/.release
117   SADM_CFG_HIDDEN      = /sadmin/cfg/.sadmin.cfg
118   SADM_TMP_FILE1       = /sadmin/tmp/sadmlib_std_test_1.30540
119   SADM_TMP_FILE2       = /sadmin/tmp/sadmlib_std_test_2.30540
120   SADM_TMP_FILE3       = /sadmin/tmp/sadmlib_std_test_3.30540
121   SADM_LOG             = /sadmin/log/holmes_sadmlib_std_test.log
122   SADM_RCHLOG          = /sadmin/dat/rch/holmes_sadmlib_std_test.rch
123   DBPASSFILE           = /sadmin/cfg/.dbpass
124   SADM_SERVER          = holmes.maison.ca
125   SADM_DOMAIN          = maison.ca
126
127   PROGRAM USED & MISC. VARIABLES
128
129   SADM_LSB_RELEASE     = /bin/lsb_release
130   SADM_DMIDECODE       = /sbin/dmidecode
131   SADM_FACTER          = /bin/facter
132   SADM_BC              = /bin/bc
133   SADM_FDISK           = /sbin/fdisk
134   SADM_WHICH           = /bin/which
135   SADM_PERL            = /bin/perl
136   SADM_MAIL            = /bin/mail
137   SADM_LSCPU           = /bin/lscpu
138   SADM_NMON            = /bin/nmon
139   SADM_PARTED          = /sbin/parted
140   SADM_ETHTOOL         = /sbin/ethtool
141   SADM_SSH             = /bin/ssh
142   SADM_DASH            = =================================================================================
143   SADM_TEN_DASH        = ----------
144   VARIABLES LOADED FROM SADM CONFIGURATION FILE
145
146   SADM_MAIL_ADDR          = duplessis.jacques@gmail.com
147   SADM_MAIL_TYPE          = 1
148   SADM_CIE_NAME           = Batcave
149   SADM_HOST_TYPE          = S
150   SADM_USER               = sadmin
151   SADM_GROUP              = sadmin
152   SADM_SSH_PORT           = 32
153   SADM_RRDTOOL            = /bin/rrdtool
154   SADM_WWW_USER           = apache
155   SADM_WWW_GROUP          = sadmin
156   SADM_MAX_LOGLINE        = 2000
157   SADM_MAX_RCLINE         = 125
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158   SADM_NMON_KEEPDAYS            = 60
159   SADM_SAR_KEEPDAYS            = 60
160   SADM_RCH_KEEPDAYS            = 60
161   SADM_LOG_KEEPDAYS            = 60
162   SADM_DBNAME                 = sadmin
163   SADM_DBDIR                  = /var/lib/mysql
164   SADM_DBHOST                 = sadmin.maison.ca
165   SADM_DBPORT                 = 3306
166   SADM_RW_DBUSER              = sadmin
167   SADM_RW_PGPWD               = Nimdas17!
168   SADM_RO_DBUSER              = squery
169   SADM_RO_DBPWD               = Query18!
170   SADM_NETWORK1               = 192.168.1.0/24
171   SADM_NETWORK2               =
172   SADM_NETWORK3               =
173   SADM_NETWORK4               =
174   SADM_NETWORK5               =
175   SADM_MKSYSB_NFS_SERVER      = batnfs.maison.ca
176   SADM_MKSYSB_NFS_MOUNT_POINT = /volume1/mksysb
177   SADM_MKSYSB_BACKUP_TO_KEEP   = 2
178   SADM_REAR_NFS_SERVER        = batnas.maison.ca
179   SADM_REAR_NFS_MOUNT_POINT    = /volume1/Linux_DR
180   SADM_REAR_BACKUP_TO_KEEP     = 3
181   SADM_BACKUP_NFS_SERVER       = batnas.maison.ca
182   SADM_BACKUP_NFS_MOUNT_POINT = /volume1/linux
183   SADM_BACKUP_NFS_TO_KEEP      = 3
184   SADM_STORIX_NFS_SERVER       = batnas.maison.ca
185   SADM_STORIX_NFS_MOUNT_POINT = /volume1/storix
186   SADM_STORIX_BACKUP_TO_KEEP   = 3
187   root@holmes:/sadmin/lib#
```