

## Chapter 3- VRTX API Support and Deviations

API	Supported for windows	Supported for linux	Remarks and Deviations
atomic_add()	Yes	Yes	
atomic_add_value()	Yes	Yes	
atomic_clr()	Yes	Yes	
atomic_clr_value()	Yes	Yes	
atomic_set()	Yes	Yes	
atomic_set_value()	Yes	Yes	
atomic_sub()	Yes	Yes	
atomic_sub_value()	Yes	Yes	
atomic_toggle()	Yes	Yes	
atomic_toggle_value()	Yes	Yes	
ClockAdjust	Yes	Yes	
ClockTime_r	Yes	Yes	
delay	Yes	Yes	
getprio	Yes	Yes	
nanospin	Yes	Yes	
pthread_attr_setstacklazy	Yes	Yes	not supporting the PTHREAD_STACK_NOTLAZY setting
SchedSet	Yes	Yes	we do support the SCHED_RR and the SCHED_FIFO policies only
setprio	Yes	Yes	
TimerSettime_r	Yes	Yes	
TimerTimeout	Yes	Yes	only CLOCK_REALTIME supported
ChannelCreate	Yes	Yes	
ChannelDestroy	Yes	Yes	
ConnectAttach	Yes	Yes	
ConnectDetach	Yes	Yes	
ConnectFlags	NO	NO	
ConnectServerInfo	NO	NO	
dispatch_block	NO	NO	
dispatch_context_alloc	NO	NO	
dispatch_context_free	NO	NO	
dispatch_create	NO	NO	
dispatch_destroy	NO	NO	
dispatch_handler	NO	NO	
dispatch_timeout	NO	NO	
dispatch_unblock	NO	NO	

forkpty	NO	NO	
InterruptAttach	NO	NO	
InterruptAttachEvent	NO	NO	
InterruptDetach	NO	NO	
InterruptUnmask	NO	NO	
InterruptWait	NO	NO	
message_connect	NO	NO	
message_attach	NO	NO	
message_detach	NO	NO	
MsgCurrent	NO	NO	
MsgDeliverEvent	NO	NO	
MsgError	NO	NO	
MsgInfo	NO	NO	
MsgRead	NO	NO	
MsgReadv	NO	NO	
MsgReceive	Yes	Yes	
MsgReceivePulse	NO	NO	
MsgReply	Yes	Yes	
MsgReplyv	NO	NO	
MsgSend	Yes	Yes	
MsgSendnc	NO	NO	
MsgSendPulse	NO	NO	
MsgSendv	NO	NO	
MsgWrite	NO	NO	
MsgWritev	NO	NO	
procmgr_event_notify	NO	NO	We do not support this (Discussed with Raj Sir)
procmgr_guardian	NO	NO	We do not support this (Discussed with Raj Sir)
pulse_attach	NO	NO	
pulse_detach	NO	NO	
stricmp	Yes	Yes	
SyncMutexEvent	NO	NO	we won't support this event mechanisim.
SyncMutexRevive	Yes	Yes	
SyncMutexUnlock	Yes	Yes	
SyncMutexUnlock_r	Yes	Yes	
SyncMutexLock	Yes	Yes	TimerTimeout API for timout value
SyncMutexLock_r	Yes	Yes	
SyncTypeCreate	Yes	Yes	
SyncSemPost	Yes	Yes	

SyncSemWait	Yes	Yes	
sysmgr_reboot	NO	NO	We do not support this (Discussed with Raj Sir)
ThreadCtl	NO	NO	We do not support this (Discussed with Raj Sir)
TimerCreate	Yes	Yes	passing NULL as a argument value of 'const struct sigevent *event' is not supported
TimerDestroy	Yes	Yes	
ThreadCreate	Yes	Yes	
ThreadCancel	Yes	Yes	
ThreadDetach	Yes	Yes	
ThreadJoin	Yes	Yes	
TimerSettime	Yes	Yes	
abort()	Yes	Yes	
alarm()	Yes	Yes	
atexit()	Yes	Yes	
clock()	Yes	Yes	
clock_getcpuclockid()	Yes	Yes	
clock_getres()	Yes	Yes	
clock_nanosleep()	Yes	Yes	
clock_gettime()	Yes	Yes	
clock_settime()	Yes	Yes	
errno	Yes	Yes	
execl()	Yes	Yes	
execle()	Yes	Yes	
execlp()	Yes	Yes	
execv()	Yes	Yes	
execve()	Yes	Yes	
execvp()	Yes	Yes	
exit()	Yes	Yes	
fork()	Yes	Yes	
getenv()	Yes	Yes	
getpgrp()	Yes	Yes	
getpid()	Yes	Yes	
getppid()	Yes	Yes	
kill()	Yes	Yes	
mprotect()	Yes	Yes	
mq_close()	Yes	Yes	
mq_getattr()	Yes	Yes	
mq_notify()	Yes	Yes	

mq_open()	Yes	Yes	
mq_receive()	Yes	Yes	
mq_send()	Yes	Yes	
mq_setattr()	Yes	Yes	
mq_timedreceive()	Yes	Yes	
mq_timedsend()	Yes	Yes	
mq_unlink()	Yes	Yes	
msync()	Yes	Yes	
munlock()	Yes	Yes	
munlockall()	Yes	Yes	
munmap()	Yes	Yes	
nanosleep()	Yes	Yes	
pause()	Yes	Yes	
pipe()	Yes	Yes	
pthread_atfork()	Yes	Yes	
pthread_attr_destroy()	Yes	Yes	
pthread_attr_getdetachstate()	Yes	Yes	
pthread_attr_getguardsize()	Yes	Yes	
pthread_attr_getinheritsched()	Yes	Yes	
pthread_attr_getschedparam()	Yes	Yes	
pthread_attr_getschedpolicy()	Yes	Yes	
pthread_attr_getscope()	Yes	Yes	
pthread_attr_getstackaddr()	Yes	Yes	
pthread_attr_getstacksize()	Yes	Yes	
pthread_attr_init()	Yes	Yes	
pthread_attr_setdetachstate()	Yes	Yes	
pthread_attr_setguardsize()	Yes	Yes	
pthread_attr_setinheritsched()	Yes	Yes	
pthread_attr_setschedparam()	Yes	Yes	
pthread_attr_setschedpolicy()	Yes	Yes	
pthread_attr_setscope()	Yes	Yes	
pthread_attr_setstackaddr()	Yes	Yes	
pthread_attr_setstacksize()	Yes	Yes	
pthread_barrier_destroy()	Yes	Yes	

pthread_barrier_init()	Yes	Yes	
pthread_barrier_wait()	Yes	Yes	
pthread_barrierattr_destroy()	Yes	Yes	
pthread_barrierattr_getpshared()	Yes	Yes	
pthread_barrierattr_init()	Yes	Yes	
pthread_barrierattr_setpshared()	Yes	Yes	
pthread_cancel()	Yes	Yes	
pthread_cleanup_pop()	Yes	Yes	
pthread_cleanup_push()	Yes	Yes	
pthread_cond_broadcast()	Yes	Yes	
pthread_cond_destroy()	Yes	Yes	
pthread_cond_init()	Yes	Yes	
pthread_cond_signal()	Yes	Yes	
pthread_cond_timedwait()	Yes	Yes	
pthread_cond_wait()	Yes	Yes	
pthread_condattr_destroy()	Yes	Yes	
pthread_condattr_getclock()	Yes	Yes	
pthread_condattr_getpshared()	Yes	Yes	
pthread_condattr_init()	Yes	Yes	
pthread_condattr_setclock()	Yes	Yes	
pthread_condattr_setpshared()	Yes	Yes	
pthread_create()	Yes	Yes	
pthread_detach()	Yes	Yes	
pthread_equal()	Yes	Yes	
pthread_exit()	Yes	Yes	
pthread_getconcurrency()	Yes	Yes	
pthread_getcpuclockid()	Yes	Yes	
pthread_getschedparam()	Yes	Yes	
pthread_getspecific()	Yes	Yes	
pthread_join()	Yes	Yes	
pthread_key_create()	Yes	Yes	
pthread_key_delete()	Yes	Yes	
pthread_kill()	Yes	Yes	
pthread_mutex_destroy()	Yes	Yes	
pthread_mutex_getprioceiling()	Yes	Yes	
pthread_mutex_init()	Yes	Yes	

pthread_mutex_lock()	Yes	Yes	
pthread_mutex_setprioceiling()	Yes	Yes	
pthread_mutex_timedlock()	Yes	Yes	
pthread_mutex_trylock()	Yes	Yes	
pthread_mutex_unlock()	Yes	Yes	
pthread_mutexattr_destroy()	Yes	Yes	
pthread_mutexattr_getprioceiling()	Yes	Yes	
pthread_mutexattr_getprotocol()	Yes	Yes	
pthread_mutexattr_getpshared()	Yes	Yes	
pthread_mutexattr_gettype()	Yes	Yes	
pthread_mutexattr_init()	Yes	Yes	
pthread_mutexattr_setprioceiling()	Yes	Yes	
pthread_mutexattr_setprotocol()	Yes	Yes	
pthread_mutexattr_setpshared()	Yes	Yes	
pthread_mutexattr_settype()	Yes	Yes	
pthread_once()	Yes	Yes	
pthread_rwlock_destroy()	Yes	Yes	
pthread_rwlock_init()	Yes	Yes	
pthread_rwlock_rdlock()	Yes	Yes	
pthread_rwlock_timedrdlock()	Yes	Yes	
pthread_rwlock_timedwrlock()	Yes	Yes	
pthread_rwlock_tryrdlock()	Yes	Yes	
pthread_rwlock_trywrlock()	Yes	Yes	
pthread_rwlock_unlock()	Yes	Yes	
pthread_rwlock_wrlock()	Yes	Yes	
pthread_rwlockattr_destroy()	Yes	Yes	
pthread_rwlockattr_getpshared()	Yes	Yes	
pthread_rwlockattr_init()	Yes	Yes	
pthread_rwlockattr_setpshared()	Yes	Yes	

pthread_self()	Yes	Yes	
pthread_setcancelstate()	Yes	Yes	
pthread_setcanceltype()	Yes	Yes	
pthread_setconcurrency()	Yes	Yes	
pthread_setschedparam()	Yes	Yes	
pthread_setspecific()	Yes	Yes	
pthread_sigmask()	Yes	Yes	
pthread_spin_destroy()	Yes	Yes	
pthread_spin_init()	Yes	Yes	
pthread_spin_lock()	Yes	Yes	
pthread_spin_trylock()	Yes	Yes	
pthread_spin_unlock()	Yes	Yes	
putenv()	Yes	Yes	
raise()	Yes	Yes	
regcomp()	Yes	Yes	
regerror()	Yes	Yes	
regexec()	Yes	Yes	
regfree()	Yes	Yes	
sched_getparam()	Yes	Yes	
sched_get_priority_max()	Yes	Yes	
sched_get_priority_min()	Yes	Yes	
sched_getscheduler()	Yes	Yes	
sched_rr_get_interval()	Yes	Yes	
sched_setparam()	Yes	Yes	
sched_setscheduler()	Yes	Yes	
sched_yield()	Yes	Yes	
sem_close()	Yes	Yes	
sem_destroy()	Yes	Yes	
sem_getvalue()	Yes	Yes	
sem_init()	Yes	Yes	
sem_open()	Yes	Yes	
sem_post()	Yes	Yes	
sem_timedwait()	Yes	Yes	
sem_trywait()	Yes	Yes	
sem_unlink()	Yes	Yes	
sem_wait()	Yes	Yes	
setsid()	Yes	Yes	
shm_open()	Yes	Yes	
shm_unlink()	Yes	Yes	
sigaction()	Yes	Yes	
sigaddset()	Yes	Yes	

sigdelset()	Yes	Yes	
sigemptyset()	Yes	Yes	
sigfillset()	Yes	Yes	
sigismember()	Yes	Yes	
signal()	Yes	Yes	
sigpending()	Yes	Yes	
sigprocmask()	Yes	Yes	
sigqueue()	Yes	Yes	
sigsuspend()	Yes	Yes	
sigtimedwait()	Yes	Yes	
sleep()	Yes	Yes	
timer_create()	Yes	Yes	
timer_delete()	Yes	Yes	
timer_getoverrun()	Yes	Yes	
timer_gettime()	Yes	Yes	
times()	Yes	Yes	
uname()	Yes	Yes	
unsetenv()	Yes	Yes	
usleep()	Yes	Yes	