

AppCOE 1.6.1 Release

Highlights in this release:

New products:

- Standalone RT Linux interface has been included in the release.
- The support for the tiered shared memory module APIs are added newly for Cross OS ThreadX target.

QA validations:

- ThreadX target product was validated using QA_test suites and critical bugs are fixed.
- VX Works interface critical bugs are fixed.
- Windows target validated using QA_test suites on target window.
- Linux target validated using QA_test suites on different Linux distributions.
- Other customers related issues are been addressed.

Included Raspberry Package in RTOS Simulator for Academic Institutions:

- Profiler product support for ARM controller is developed for Raspbian(Raspberry-pi) target.
- Latest Raspberry package with GNU ARM and remote debugging plug-in was embedded with AppCOE new releases.

Critical bugs list from AppCOE 1.6.1 release:

Effective for All products:

- 1929 This bug is for document changes regarding limitation about OS_APP_FREE_EXIT in target which does not support the memory virtualization for process.
- 1930 The execution hanging issue while resetting the bits with the OS_AND flag setting in OS_Set_Events API has been fixed.
- 1932 Error checking added in OS_Set_Semaphore_Scope_To_System API.
- 1933 This bug is for document changes regarding limitation about OS_APP_FREE_EXIT in target which does not support the memory virtualization for process.
- 1934 Error fixed for unable to get the error code for the time out scenario, while taking the mutex. If the specified time expires.
- 1962 Updated proper return-error codes to all the ports.

Effective for Linux Target:

- 1978 Debug message is added for unable to delete the mutex in this OS_DELETE_MUTEX API.
- 1959 Added support for OS_Task_Restart which was not supported in all Linux.
- Issue fixed for extending the scope of the local lock to protect some non-reentrant code in API ,os_create_queue() .

Effective ThreadX Target:

- 1939 Fixes done for unable to get the timeout error code while taking the semaphore.
- 1940 Fixed error for unable to allocate the partition using the os_allocate_partition() API, error (OS_ERR_PARTITION).

- 1941 Fixed error for unable to get the timeout error code while trying to receive from queue with specified time interval.
- 1942 Fixed error for unable to get the timeout error code while sending data using `os_send_to_queue ()` API.
- 1945 Fixed error for unable to get the timeout error code in `os_get_events ()` API.
- 1950 Fixed error for unable to get the time out error code if the timeout value is provided in the argument of `os_receive_from_pipe()`
- 1953 Fixed error for unable to delete a process from another process using the API `os_delete_process()` by passing the argument `OS_APP_FREE_EXIT` or `OS_APP_FREE_RETURN`.
- 1954 Fixed error for the execution hangs at the `os_delete_process` API.
- 1956 Fixed error for unable to get the timeout error while trying to take the mutex with certain time interval passing in the argument.
- 1967 Support for tiered shared memory module APIs are newly added in Cross OS ThreadX component.
- 1968 Misplaced condition check in `int_os_restart_task.c`, it has been fixed with needed changes
- 1973 Support for tiered shared memory module APIs are newly added in Cross OS ThreadX component.
- 1974 Fixed issue by adding appropriate condition check to generate the `OS_ERR_TIERED_POOL` error code
- 1975 Fixed issue for unable to create the timeout scenario while allocating the tiered memory

Effective for UCOS:

- 1983 Appropriate changes are made to parent file for compilation error on template UCOS project.

Effective for Windows Target:

- 1917 Error code fixed for "OS_ERR_MUTEX" unable to call mutex function from another process.
- 1918 Error fixed for unable to get the exact bits using the `OS_get_event()` API after resetting the bits.
- 1920 Problem fixed for the issue with creating a task under the condition of both the task pool and the process mode are enabled in `cross_os_usr.h`.
- 1928 The issue founded and fixed with the scope changing APIs `OS_Set_Semaphore_Scope_To_System`, `OS_Set_Pipe_Scope_To_System` and `OS_Set_Queue_Scope_To_System`

Code Generation Issues:

- 1984 Problem with Legacy code conversion, fixes done in ITRON Legacy source code.
- 1985 Problem with Legacy code conversion, increasing the `HEAP_SIZE` value will resolve the issue.

Effective for POSIX Interface:

- 1957 Issue resolved for unable to set the timer in POSIX interface.