Table 5. API Constructs of SIMPO User Library

Components		Description
Class	*POBase*	Base class of SIMPO. *POBase* includes a memory address range of DRAM, and a memory address range of NVRAM. DRAM stores the buffered copy of PO. NVRAM stores two checkpoint copies, a log list and other metadata. ***poroot***: a pointer to the virtual address of the DRAM copy. ***Constructor***: has an integer parameter *size*, calls *pocreate* to init a persistent object with the *size* and assigns the virtual address of object's DRAM copy to *poroot*. ***Destructor***: calls *pofree* to free a persistent object ***sync***: an empty IF
Directives	*#begin defer* *#end*	The *#begin* and *#end* directives are used to wrap the declarations of those functions which are classified as deferrable functions
	#begin inst *#end*	The *#begin* and *#end* directives are used to wrap the declarations of those functions which are classified as instant functions
Function	*int pthread_create_simpo(* *pthread_t *thread,* *const pthread_attr_t *attr,* *void *(*start_routine) (void *),* *void *arg, int potid)*	A wrapper function of *pthread_create*. First, the parent thread creates a new thread. Second, the new thread records *potid* as a thread local variable. If *potid* is null, then the new thread generates a value with its stack information. Finally, the new thread calls *start_routine* function.