Document Project: Generic Object Pool Lib Title: Class Diagram Doc version: 0.4(May 22, 2020) (Please refer to class_diagram_release_note.md file for version history) Repo: https://github.com/911992/WAsys_sim ple_generic_object_pool Author(s): 911992 Meta Legends Note.. Note

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wasys::lib::generic_object_pool
                                                                       «entity»
                                                              Generic Object Pool Policy
 +DEF MAX OBJ COUNT:int := 64
 +DEF_MIN_OBJ_COUNT:int := 0
+DEF OBJ CREATION POLICY: Full Pool Object Creation Policy := Create New No Pooling+
+DEF INS:Generic Object Pool Policy=new Generic Object Pool Policy(DEF MAX OBJ COUNT, DEF MIN OBJ COUNT, DEF OBJ CREATION POLICY)
 +min_object_count:int {final}
 +max_object_count:int {public-readonly} {package-settable}
 -full_pool_instancing_policy:Full_Pool_Object_Creation_Policy {final}
 +Generic_Object_Pool_Policy(arg_min_obj_count:int,arg_max_obj_count:int,:Full_Pool_Object_Creation_Policy):Generic_Object_Pool_Policy
                                                                                  A:Poolable_Object_
                                 Object_Pool_Type_Wrapper
                                           {leaf}
 -pool:Object_Pool {final}
 +Object_Pool_Type_Wrapper(:Object_Factory,
                                                                                                                              «enum»
                            :Generic_Object_Pool_Policy,
                                                                                                                 Full Pool Object Creation Policy
                           arg_thread_safe:bool,
                                                                                                            Return Null
                           arg_register_pool:bool):Object_Pool_Type_Wrapper
                                                                                                            Create_New_No_Pooling
                                                                                                            Create_New_Extend_Pool_Size
                                                                                                            Wait_Till_One_Free
      «creates»
                       | «uses»
                                                                                                                      «interface»
                                                                                                                      Object Pool
                               «singleton(eager)»
                                                                                                 +get_an_instance(void):Poolable_Object
                                  Pool_Context
                                                                                                 +release_an_instance(:Poolable_Object):void
                                      [leaf }
                                                                                      В
                                                                                               +idle_objects_count(void):int
 _-INSTANCE:Pool_Context = new Pool_Context()_ {final}
                                                                                                 +available objects count(void):int
 -ctx:Vector<Generic_Object_Pool> = new Vector(1,7) {final}
                                                                                                 +working_object_count(void):int
                                                                                                 +shutdown_pool(void):void
 -Pool_Context(void):Pool_Context
                                                                                      D
 +get_instance(void):Pool_Context
                                                                                                 +pool_is_working(void):bool
                                                                                                 +is_registered(void):bool
 +get_pool_unregistered_synced(:Object_Factory,
:Generic_Object_Pool_Policy):Object_Pool {synchronized}
                                                                                                 +get_policy(void):Generic_Object_Pool_Policy
 +get_pool_registered_synced(:Object_Factory,
                :Generic_Object_Pool_Policy):Object_Pool {synchronized}
 +get_pool(:Object_Factory,:Generic_Object_Pool_Policy,
            arg thread safe:bool,
            arg_register:bool):Object_Pool {synchronized}
 +unregister_pool(:Object_Pool,arg_shutdown_pool:bool):void {synchronized}
                                                                                                                 «thread-safe»
                                                                                                        Generic_Object_Pool_Safe_Guard
                                                                                          -pool:Object_Pool {final}
                               Lock on associated pool
                                                                             «creates»
                                                                                          ~Generic_Object_Pool_Safe(:Object_Pool,
                                may be applied by some
                               methods
                                                                                                                   ):Generic_Object_Pool_Safe
                 «holds»
                              «interface»
                                                                                                                                E
                                                        java::lang
                                                         Runnable
                                                                                                                                       java::lanq
                                                                                                                                      AutoClosable
                                                                              api
 ı«creates»
                                   «pool»
                                                                                          «interface»
                                                                                                                                «abstract»
                            Generic Object Pool
                                                                                        Poolable Object
                                                                                                                          Poolable_Object_Adapter
                                                                                                                | --- #pool:Object_Pool
 -factory:Object Factory {final}
                                                                               +post_create(void):void
 -policy:Generic_Object_Pool_Policy {final}
                                                                                                                      +reset_state(void):void
                                                                                +pre_destroy(void):void
 -pool:Vector<Poolable_Object>
                                                                                                                      +close():void{final}
                                                                               +reset state(void):void
 -working ins count:int := 0
                                                                               +set_pool(:Object_Pool):void
 -pool_working:bool := true {volatile}
 -notify_thread_run:Runnable := new Runnable() {final}
 -null_run:Runnable := new Runnable() {final}
 -release_obj_run:Runnable {final}
                                                                                                 |«creates»
 -registered:bool
                                                                               «holds»
                                                                                                                          «interface»
 ~Generic_Object_Pool(:Object_Factory,
                                                                                                                        Object_Factory
                      :Generic_Object_Pool_Policy):Generic_Object_Pool
 -init pool(void):void
                                                                                                         +create_object(void):Poolable_Object
                                                                                       «uses»
 ~get_factory(void):Object_Factory
 ~set_as_registered(:bool):void
 ~get_policy(void):Generic_Object_Pool_Policy
```