paceval_cRegisteredObject

unsigned long registerPosition

+ paceval_cRegisteredObject (paceval_cCleanupHandler *handle_CleanupHandler_in)
+ ~paceval_cRegisteredObject()
+ void setRegisterPosition (unsigned long registerPosition_in)
+ unsigned long getRegister Position()

paceval_cListOfPointer

- unsigned int size_voidPointer
- unsigned int size_eListOf PointerTypes
- void ** arrayOfPointer
- paceval_eListOfPointerTypes * arrayOfPointerTypes
- unsigned long size _arrayOfPointer
- unsigned long sizeUsed _arrayOfPointer
- unsigned long increaseCounter

+ paceval_cListOfPointer (paceval_cCleanupHandler *handle_CleanupHandler_in)
+ void initializeData (unsigned long proposedSize_in)
+ ~paceval_cListOfPointer()
+ bool doAddPointer(void *handle_Pointer_in, paceval _eListOfPointerTypes ePointerType _in, unsigned long *pointerPosition_out)
+ paceval_eListOfPointerTypes getPointerType(unsigned long position_in)
+ void * getPointer(unsigned long position_in)
+ bool removePointer (unsigned long position_in)
+ unsigned long sizeOf()
- bool doIncreaseSize()

paceval_cUnsignedLongList

unsigned long * arrayOfUnsignedLong
unsigned long size _arrayOfUnsignedLong
unsigned long sizeUsed _arrayOfUnsignedLong
unsigned long increaseCounter

+ paceval_cUnsignedLongList (paceval_cCleanupHandler *handle_CleanupHandler_in)
+ void initializeData()
+ ~paceval_cUnsignedLongList()
+ bool doAddUnsignedLong (unsigned long valueUnsigned Long_in)
+ unsigned long * getUnsigned LongPointer(unsigned long position_in)
+ bool setUnsignedLong (unsigned long position _in, unsigned long valueUnsigned Long_in)
+ unsigned long sizeOf()
# bool doIncreaseSize()

paceval_sErrorInformation

+ paceval_eErrorTypes error_eErrorType
+ paceval_eOperatorTypes error_eOperator
+ long error_ePosition

#handle_CleanupHandler

-listOfLevelMultithreadPositions

-listOfcAtomicGraphNodes

#listOfpacevalObjects

#lastErrorInformation

paceval_cGraph

- PACEVAL_HANDLE handle _pacevalComputation
- long numberOfPositionLevels
- long maxToDoLevelMultithread Position
- pthread_mutex_t handle _lockToDoLevelMultithreadMutex Object

+ paceval_cGraph(paceval _cCleanupHandler *handle _CleanupHandler_in, PACEVAL _HANDLE handle_pacevalComputation_in)
+ void initializeData()
+ ~paceval_cGraph()
+ unsigned long addAtomicGraph Node(paceval_cBaseAtomicGraphNode *handle_cBaseAtomicGraphNode _in, paceval_eListOfPointerTypes ePointerType_in, bool *success_out)
+ paceval_cBaseAtomicGraph Node * getAtomicGraphNode (unsigned long position_in)
+ long sizeOf()
+ long getMaximumField()
+ long getNumberOfPosition Levels()
+ long getMaxToDoLevelMultithread Position()
+ void resetMaxToDoLevelMultithread Position()
+ long lockAndGetToDoLevel MultithreadPosition(unsigned long stackNumber_in, unsigned long idSingleCalculationToDo _in, unsigned long *lastToDoLevelMultithread Position_in, unsigned long *startSpecificAtNode _in, unsigned long *endSpecificAtNode_in)
+ bool unlockToDoLevelMultithread Position(unsigned long stackNumber _in, unsigned long lockedLevelMultithread Position_in, unsigned long idSingleCalculationToDo_in)
+ bool identifyGraphCaching Opportunities(paceval_cBaseAtomic GraphNode *handle_cAtomicGraphNode _in, unsigned long handle_handle _AtomicGraphPosition_in)
- long identifyOuterCaching Opportunity(paceval_cAtomicGraph NodeOperation *handle_cAtomicGraphNode _in, unsigned long handle_handle_AtomicGraph Position_in)
- bool identifyMultiplyByZero CachingOpportunity(paceval _cBaseAtomicGraphNode *handle _cAtomicGraphNode_in, unsigned long handle_handle_AtomicGraphPosition_in)
- bool identifyMultithread Opportunity(paceval_cBaseAtomic GraphNode *handle_cAtomicGraphNode _in, unsigned long handle_handle _AtomicGraphPosition_in)

paceval_cCleanupHandler

paceval_callbackStatusType * handle_CallbackStatus
paceval_eStatusTypes currentStatus
int percentageDone
unsigned long length _functionString
bool lastError_isError
unsigned long numberOfObjects
unsigned long maxNumberOf Objects

+ paceval_cCleanupHandler (paceval_callbackStatusType *paceval_callbackStatus_in)
+ bool initializeDataCleanup Handler()
+ ~paceval_cCleanupHandler()
+ void setCurrentStatus (paceval_eStatusTypes currentStatus_in, int percentageDone_in)
+ paceval_eStatusTypes getCurrentStatus(int *percentageDone_out)
+ void setPercentageDone (int percentageDone_in)
+ int getPercentageDone()
+ void setLengthFunctionString (unsigned long length_functionString_in)
+ unsigned long getLengthFunction String()
+ bool registerObject (unsigned long *registerPosition _out, void *handle_Pointer _in, paceval_eListOfPointerTypes ePointerType_in)
+ bool unregisterObject (unsigned long registerPosition _in, void *handle_Pointer_in, paceval_eListOfPointerTypes ePointerType_in)
+ void cleanupAllpacevalObjects()
+ bool resetComputationError()
+ void setLastError(bool lastError_isError_in, paceval_eErrorTypes lastError _eErrorType_in, paceval_eOperatorTypes lastError_eOperator_in, long lastError _ePosition_in)
+ bool getLastError(char *lastError_strOperator _out, paceval_eErrorTypes *lastError_eErrorType_out, paceval_eOperatorTypes *lastError _eOperator_out, long *lastError _ePosition_out)