aspect Two-Phase-Locking depends on Tracing, Lockable, AccessClassified

I2PLContext
I2PLParticipant
I2PLObject

structure

Tracing instantiation
Tracing.ITracingContext → I2PLContext
Tracing.ITracingParticipant → I2PLParticipant
Tracing.ITraced → ILocked

I2PLContext

I2PLObject
+ * m(..)

Tracing Binding
m → + *Traced.*(..)

AccessClassified instantiation
AccessClassified.IAccessClassified → I2PLObject

I2PLParticipant
+ createContext() + leaveContext()

stateview I2PLParticipant is Tracing.ITracingParticipant

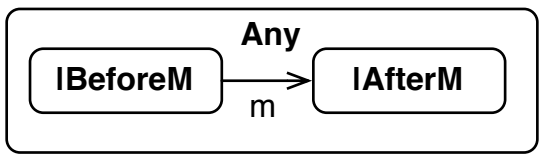
stateview I2PLContext is Tracing.ITracingContext

Context Binding
Any → Context.Active

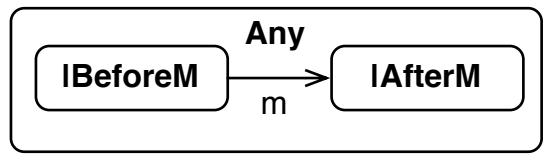
stateview I2PLObject depends on Lockable, AccessClassified

IBeforeM
IAfterM

Pointcut



Advice

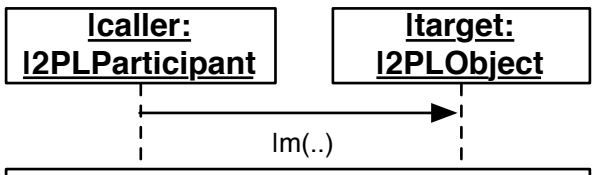


ILockable instantiation
ILockable.GetAllowed → IBeforeM
ILockable.ReleaseAllowed → IAfterM

IAccessClassified instantiation
IAccessClassified.Any → Any

behavior acquireLock depends on Tracing, Lockable

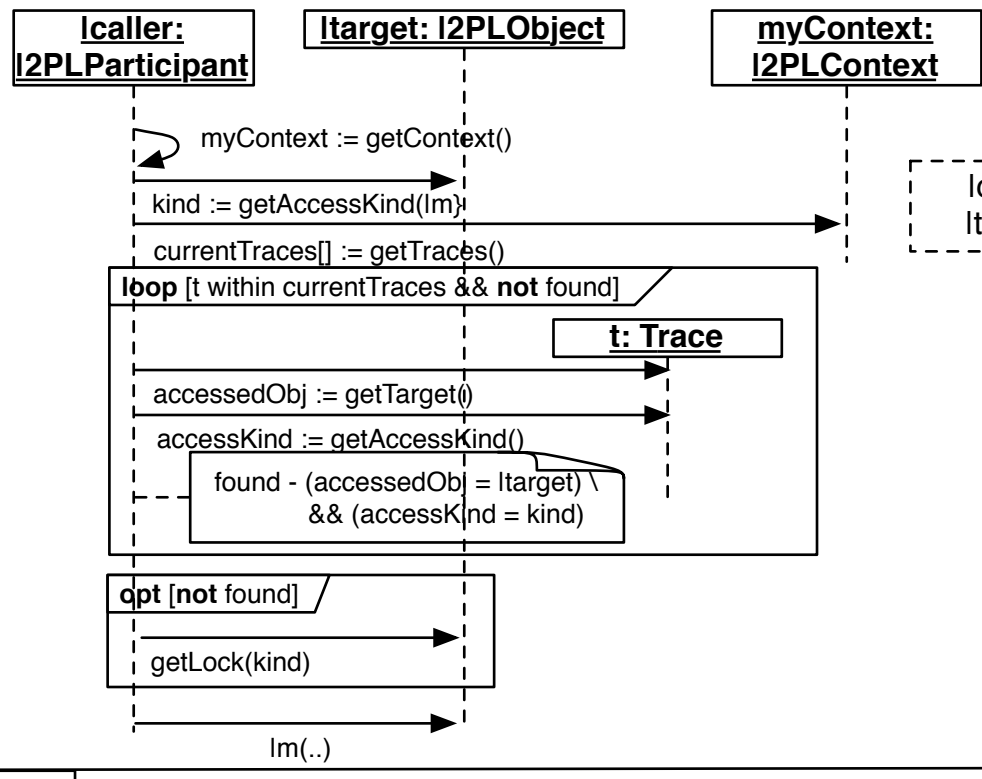
Pointcut



Tracing.traceMethod instantiation
traceMethod.Icaller → Icaller
traceMethod.Icallee → Itarget
traceMethod. Im → Im
Tracing.getTraces instantiation
getTraces.Itarget → myContext
getTraces.ICaller → I2PLParticipant
getTraces.Icaller → Icaller
getTraces.Iresult → currentTraces

Lockable.getLock instantiation
getLock.Itarget → Itarget
getLock.ICaller → I2PLParticipant
getLock.Icaller → Icaller

Advice



Icaller
Itarget

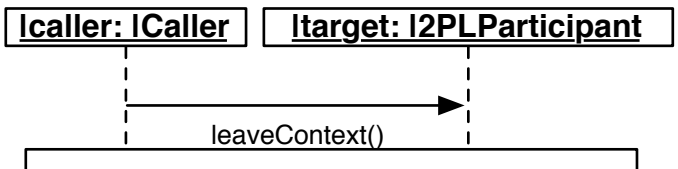
behavior createContext is Tracing.createContext

Itarget
ICaller, Icaller

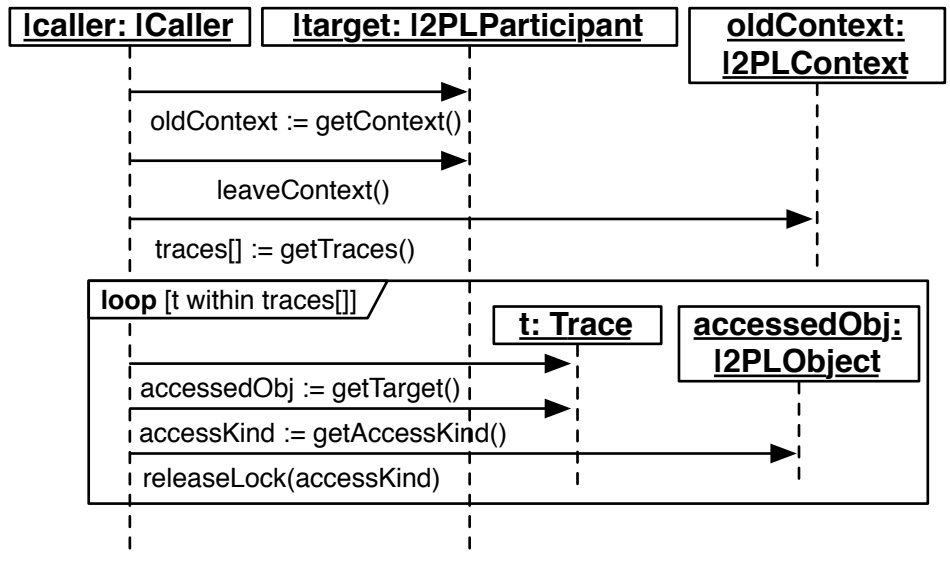
behavior leaveContext depends on Tracing, Lockable

Itarget
ICaller, Icaller

Pointcut



Tracing.leaveContext instantiation
leaveContext.Itarget → Itarget
leaveContext.ICaller → ICaller
leaveContext.Icaller → Icaller
Tracing.getTraces instantiation
getModified.Itarget → Itarget
getModified.ICaller → ICaller
getModified.Icaller → Icaller
getModified.Iresult → accessedObjs[]

Lockable.releaseLock instantiation
releaseLock.Itarget → Itarget
releaseLock.ICaller → I2PLParticipant
releaseLock.Icaller → Icaller

Advice