**SUMMARY**

A concurrency bug in Eclipse 3.4 JDT Core.

**DETAILS**

Some details can also be found at: [https://bugs.eclipse.org/bugs/show\_bug.cgi?id=235778](https://bugs.eclipse.org/bugs/show_bug.cgi?id=57467)

This bug is due to a data race.

JavaProject.resolveClasspath(PerProjectInfo) has a potential race condition: if the raw classpath is changed while we are computing the resolved classpath, we will overwrite the new raw classpath with the previous one when setting the resolved classpath.

|  |  |
| --- | --- |
| Thread1 (JavaProject.java) | Thread2 (JavaProject.java) |
| public void resolveClasspath(PerProjectInfo perProjectInfo) throws JavaModelException {  .. rawClasspath= perProjectInfo.rawClasspath;  ..  resolvedEntries.toArray(resolvedClasspath);  perProjectInfo.setClasspath(rawClasspath, outputLocation, rawClasspathStatus, resolvedClasspath, rawReverseMap, rootPathToResolvedEntries, unresolvedEntryStatus); | public void resolveClasspath(PerProjectInfo perProjectInfo) throws JavaModelException {  .. rawClasspath= perProjectInfo.rawClasspath;  ..  resolvedEntries.toArray(resolvedClasspath);  perProjectInfo.setClasspath(rawClasspath, outputLocation, rawClasspathStatus, resolvedClasspath, rawReverseMap, rootPathToResolvedEntries, unresolvedEntryStatus); |
| public synchronized ClasspathChange setClasspath(IClasspathEntry[] newRawClasspath, IPath newOutputLocation, IJavaModelStatus newRawClasspathStatus, IClasspathEntry[] newResolvedClasspath, Map newRootPathToRawEntries, Map newRootPathToResolvedEntries, IJavaModelStatus newUnresolvedEntryStatus) {  // remember old info  JavaModelManager manager = JavaModelManager.getJavaModelManager();  DeltaProcessor deltaProcessor = manager.deltaState.getDeltaProcessor();  ClasspathChange classpathChange = deltaProcessor.addClasspathChange(this.project, this.rawClasspath, this.outputLocation, this.resolvedClasspath);    this.rawClasspath = newRawClasspath;  this.outputLocation = newOutputLocation;  this.rawClasspathStatus = newRawClasspathStatus;  this.resolvedClasspath = newResolvedClasspath;  this.rootPathToRawEntries = newRootPathToRawEntries;  this.rootPathToResolvedEntries = newRootPathToResolvedEntries;  this.unresolvedEntryStatus = newUnresolvedEntryStatus;  this.javadocCache = new LRUCache(JAVADOC\_CACHE\_INITIAL\_SIZE);    return classpathChange;  } | public synchronized ClasspathChange setClasspath(IClasspathEntry[] newRawClasspath, IPath newOutputLocation, IJavaModelStatus newRawClasspathStatus, IClasspathEntry[] newResolvedClasspath, Map newRootPathToRawEntries, Map newRootPathToResolvedEntries, IJavaModelStatus newUnresolvedEntryStatus) {  // remember old info  JavaModelManager manager = JavaModelManager.getJavaModelManager();  DeltaProcessor deltaProcessor = manager.deltaState.getDeltaProcessor();  ClasspathChange classpathChange = deltaProcessor.addClasspathChange(this.project, this.rawClasspath, this.outputLocation, this.resolvedClasspath);    this.rawClasspath = newRawClasspath;  this.outputLocation = newOutputLocation;  this.rawClasspathStatus = newRawClasspathStatus;  this.resolvedClasspath = newResolvedClasspath;  this.rootPathToRawEntries = newRootPathToRawEntries;  this.rootPathToResolvedEntries = newRootPathToResolvedEntries;  this.unresolvedEntryStatus = newUnresolvedEntryStatus;  this.javadocCache = new LRUCache(JAVADOC\_CACHE\_INITIAL\_SIZE);    return classpathChange;  } |
| 0-lock | 1-lock |