**SUMMARY**

A concurrency bug in Eclipse 3.0.2 JDT Core

**DETAILS**

Some details can also be found at: <https://bugs.eclipse.org/bugs/show_bug.cgi?id=162517>

This bug is due to a data race.

public static HashSet existingExternalFiles = new HashSet(); <===== the unsynchronized global hashset

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| Thread1 (JavaModel.java) | Thread2 (JavaModel.java) |
| public static Object getTarget(IContainer container, IPath path, boolean checkResourceExistence)  {  if(path == null)  return null;  if(path.getDevice() == null)  {  IResource resource = container.findMember(path);  if(resource != null)  if(!checkResourceExistence || resource.exists())  return resource;  else  return null;  }  if(!path.isAbsolute())  return null;  File externalFile = new File(path.toOSString());  if(!checkResourceExistence)  return externalFile;  if(existingExternalFiles.contains(externalFile)) <======= thread A, B reading global hashmap  return externalFile;  if(JavaModelManager.ZIP\_ACCESS\_VERBOSE)  System.out.println("(" + Thread.currentThread() + ") [JavaModel.getTarget(...)] Checking existence of " + path.toString());  if(externalFile.exists())  {  existingExternalFiles.add(externalFile); <===== unlocked threads C, D, E, ... updating global hashmap  return externalFile;  } else  {  return null;  }  } // end method | public static Object getTarget(IContainer container, IPath path, boolean checkResourceExistence)  {  if(path == null)  return null;  if(path.getDevice() == null)  {  IResource resource = container.findMember(path);  if(resource != null)  if(!checkResourceExistence || resource.exists())  return resource;  else  return null;  }  if(!path.isAbsolute())  return null;  File externalFile = new File(path.toOSString());  if(!checkResourceExistence)  return externalFile;  if(existingExternalFiles.contains(externalFile)) <======= thread A, B reading global hashmap  return externalFile;  if(JavaModelManager.ZIP\_ACCESS\_VERBOSE)  System.out.println("(" + Thread.currentThread() + ") [JavaModel.getTarget(...)] Checking existence of " + path.toString());  if(externalFile.exists())  {  existingExternalFiles.add(externalFile); <===== unlocked threads C, D, E, ... updating global hashmap  return externalFile;  } else  {  return null;  }  } // end method |
| 0-lock | 0-lock |