**SUMMARY**

A concurrency bug in Eclipse 3.2.2 JDT Debug

**DETAILS**

Some details can also be found at: <https://bugs.eclipse.org/bugs/show_bug.cgi?id=178912>

This bug is due to a data race.

|  |  |
| --- | --- |
| Thread1 () | Thread2 () |
| IVMInstall vm= doCreateVMInstall(id); 99 IVMInstall vm = null;  fVMs.add(vm); | public IVMInstall findVMInstallByName(String name) {  for (int i= 0; i < fVMs.size(); i++) {  IVMInstall vm= (IVMInstall)fVMs.get(i);  if (vm.getName().equals(name)) {  return vm;  }  }  return null;  } |
| 0-lock | 0-lock |

There are two thread safety problems here:

1. IVMInstallType api causes new runtimes to be made available to everyone before they can be fully initialized.

2. AbstractVMInstallType internally does not use synchronization. Most specifically, access to fVMs list member variable is not synchronized.