32-bit version versus 64-bit version

It seems that the 64-bit version of java cannot load a 32-bit version dll. When attempting to do it we get the following runtime error:

“Can't load IA 32-bit .dll on a AMD 64-bit platform”

The conclusion is that if the Java version being used for development is 32-bit, then it needs to load 32-bit dlls. And if the Java version is 64-bit, it needs to load 64-bit dlls.

Therefore, we need to compile our JNI dlls (CryptoPPJavaInterface.dll, MiraclJavaInterface.dll, NTLJavaInterface.dll) for both options (32-bit and 64-bit). To do so, the corresponding libraries we use need to be compiled in the same manner. Attention needs to be put to the fact that if the libs are compiled with /MT instruction also the dlls need to be compiled with the same instruction. Of course, everything has to be compiled in release mode and not in debug mode.