## RiverWare Software MaintenanceSoftware updatesRiverWare 3rd Party Libraries

Upgrading RiverWare to Microsoft Visual Studio 2013 has been an ongoing project, with work spanning several months. Part of the effort includes upgrading to new versions of 3rd party libraries, either downloading libraries as precompiled binaries or building libraries from source.

There are 18 3rd party libraries which RiverWare uses and there are dependencies between the libraries, Visual Studio and Windows which can sometimes make the path forward difficult, if not impossible. For example, we would prefer to use VS 2015 (or perhaps VS 2017) but Oracle Client requires VS 2013, so Oracle Client is preventing us from moving beyond VS 2013. It gets worse! VS 2013 isn’t supported on Windows 10, so Oracle Client is preventing us from moving beyond Windows 8.1. It gets worse! Microsoft has stated that PCs based on new CPUs will require Windows 10, so Oracle Client may constrain our ability to buy new PCs. This is but one example of the types of problems which arise with RiverWare’s complex development environment. Navigating the dependencies can be soul-sucking work providing little satisfaction, but it needs to be done and we try to spread the ~~pain~~ work around.

Back to the accomplishments…

In May focus turned to the 32-bit development environment; the 32-bit 3rd party libraries were either downloaded as precompiled binaries or built from source. Also in May a few “straggler” issues were resolved. By the end of May the Visual Studio 2013 port was for the most part complete – there were working 64-bit and 32-bit release and debug executables available to begin testing.