CS311 - FA13: Final

Trevor Bramwell

December 10, 2013

1 Overview

This paper compares and contrasts Stream Sockets, Anonymous Pipes, and Multiprocessing, between the Windows and POSIX APIs. For each section I will provide a sample piece of code for each interface, using as many API functions as possible. I will first give an overview of what the example does, provide the example, then explain how the APIs differ within each example. When these interfaces are placed side by side, this should allow the reader to easily see the similarites and differences between them.

2 Sockets

The first API I will be comparing is Sockets. In Windows these are referred to as *WinSock*. WinSock has the same commands for creating and accepting connections as POSIX sockets, with the addition of 'closesocket'. The difference is in Window's use of macros over *file descriptors* (fds).

3 Anonymous Pipes

4 Multiprocessing

5 References

5.1 Sockets

`http://msdn.microsoft.com/en-us/library/windows/desktop/bb530741(v=vs.85).aspx`

Windows API Reference: `msdn.microsoft.com/en-us/library/windows/desktop/ms741394(v=vs.85).aspx` POSIX References: `http://pubs.opengroup.org/onlinepubs/9699919799/toc.htm`

5.2 Pipes

`http://msdn.microsoft.com/en-us/library/windows/desktop/aa365780(v=vs.85).aspx`

`http://msdn.microsoft.com/en-us/library/windows/desktop/aa365590(v=vs.85).aspx`

5.3 Multiprocessing

`http://msdn.microsoft.com/en-us/library/windows/desktop/ms684841(v=vs.85).aspx`