DIL 2.0a2 Release Notes

Septermber 19, 1997

Changes since first Web/CD release:
- All libraries (CDIL, FDIL, PDIL) combined into a single library (DIL).
- This release includes the PDIL.

A note on versioning:
Since the DIL library is composed of several sub-libraries, the difficult question to answer is, "What do we call the version number?" Rather than answering a difficult question, we punted and are currently just incrementing the 'd' version. As soon as all the components reach an alpha or beta milestone, we'll switch the version, but it will probably always represent the least common denominator.

CDIL

The CDIL is currently of Alpha quality. It is feature complete, and most people will probably be able to use it with no problems. However, there may be some configurations (mostly Windows) under which the CDIL doesn't work. If that happens to you, then we definitely need to hear from you.

Changes since DIL 2.0d10/2.0a1:
- (Mac only) ADSP connections running on 68K Macs would not signal broken connections.

- (Windows only) MNP serial connections could infrequently spontaneously disconnect.

- (Windows only) MNP serial connections would leak 112K after every disconnect.

Changes since DIL 2.0d9:
- (Mac only) If an error occured while calling CD_StartListening on a pipe returned by CD_CreateMNPSerial, and that error condition were corrected (for instance, say you learned that an out of memory condition occured, so you freed up some memory), a subsequent call to CD_StartListening would return kCD_InternalError. Now we clean up properly after the first call to CD_StartListening.

- (Windows only) Attempting to listen on an MNP connection would sometimes fail for no apparent reason with kCD_PlatformError, and with CD_GetPlatformError returning ERROR_ACCESS_DENIED. A subsequent attempt would succeed. This problem should be fixed.

Changes since DIL 2.0d8:
- Calling CD_GetSerialPortName with a buffer exactly the right size (for instance, you specified a size of 6 when making a call that would return "COM1:\0") would return kCD_BufferTooSmall.

Changes since DIL 2.0d6:
- Turned on MNP compression (Windows only; it got turned off in the Grand Unified DIL merge).

Changes since DIL 2.0d5:
- Added CD_SetTimeout, which sets the timeout on a per-pipe basis. The timeout parameter to CD_Read and CD_Write has been removed.

- TCP/IP via Open Transport added.

- CD_HasCTB(NULL) now returns an error.

- Return kDIL_InvalidHandle instead of kCD_NotAPipe. The latter no longer exists.

Changes since CDIL 2.0d3:
- Added CD_FlushOutput. All outgoing data is now buffered until the next call to CD_FlushOutput, CD_Idle, CD_Read, or CD_Disconnect. Data will also get flushed when the internal outgoing buffer fills up.

- Mac Serial connections would proceed from kCD_Connected to kCD_Unknown rather than the correct kCD_DisconnectPending.

- When a Mac ADSP connection is cancelled while in KCD_ConnectionPending state, the NBP entry is now removed.

Known bugs:
- (Macintosh) TCP/IP connections established via MacTCP accept the connection on the same port they're listening on.

Known limitation:
- The Dock application does not currently support TCP/IP connections. We are working on the necessary patch, but are not yet ready to commit to a release date.

FDIL

The FDIL is currently of Beta quality. It is feature complete, has passed all internal testing, and has been seeded to developers. This version is close to Final.

Changes since DIL 2.0d10/2.0a1:
- For compatibility with NewtonScript, calling FD_GetClass on certain bytecode objects now returns '_function or '_function.native instead of undocumented immediate values.

Changes since DIL 2.0d9:
- Strings and symbols now print via FD_PrintObject when using 2-byte integers.

Changes since DIL 2.0d5:
- Now supports being linked into a 2-byte int, 68K environment. To support this, the following functions now take longs instead of ints or enumerated types: FD_MakeImmediate, FD_MakeLargeBinary, FD_GetImmediate, FD_SetWideCharEncoding, and the FDT_xxx suite of functions.

- Declaration of FD_MakeLargeBinary changed. It no longer takes an FD_LargeBinaryProcs* parameter. Instead, it uses the procs established with FD_SetLargeBinaryProcs. Additionally, FD_MakeLargeBinary now takes an object class parameter.

```
FD_Handle FD_MakeLargeBinary(long size,
                             const char* objClass,
                             long compressionType);
```

- Added tracking version of FD_MakeLargeBinary in debug mode.

Known Bugs:
<None>

PDIL

This release of the PDIL is Alpha quality. It is feature complete, now having support for protocol extensions. It mostly works as advertised in all respects, but has received limited testing so far, and may not always work as expected under adverse conditions. Additionally, there may be a few more tweaks to some of the parameters as we get more feedback from you.

Changes since DIL 2.0d10/2.0a1:
- PD_CreateSession takes two additional parameters to support passwords from

the Newton device. The first new parameter is the password string, and the final parameter is the number of retries to allow. If you don't require passwords, simply pass NULL or an empty string for the password, and 0 for the retry attempts.

Changes since 2.0d9:

- Under certain circumstances, Newton's Dock/Connection application will flush the second of two commands if it receives the two commands too quickly. This release of the PDIL accounts for it. You no longer need to call CD_FlushOutput after calling PD_CreateSession.

- This release of the PDIL will delay for a half-second at the end of PD_CreateSession, so you may remove the previously suggested workaround from your code.

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