

Memoirs of a Programmer: My OS/2 Software

by Alex Taylor

Chief UI Architect, Arca Noae LLC



About Me

- ❖ B.A. Computer Science (1998), M.M.D. Media Design (2015)
- ❖ Worked as:
 - ❖ OS/2 LAN & workstation support at major Canadian insurance company
 - ❖ Unix (Solaris) system administrator
 - ❖ Lotus Domino administrator
 - ❖ English teacher at Japanese elementary and junior high schools
 - ❖ Independent software and UI developer/consultant
 - ❖ TBA ;-)

Early OS/2 Development

- ❖ Joined eComStation volunteer development team as a UI consultant for version 1.0
- ❖ Wrote a simple utility to view/extract ZIP files and other archives (Archive Viewer 1.x)
- ❖ Learned enough REXX to begin contributing to eCS 1.1 installer development
- ❖ Learned enough PM to write a simple volume manager for the installer (MINILVM 1.x)
- ❖ Completely rewrote installer backend for eCS 1.2 (still largely in use today)

My OS/2 Software

In general, I write programs that I decide I need.
(Or else because of some momentary burst of interest.)

Home page: <http://www.altsan.org/>

Github: <https://github.com/altsan/>

E-mail: alex@altsan.org

I will try to respond to questions/feedback/requests...
...but I am very bad at answering e-mails.
(Send me a polite reminder if necessary.)

Various Utilities

- ❖ Archive Viewer (the one that started it all)
- ❖ UniClock – Unicode-capable world clock application
- ❖ Text encoding & conversion tools:
 - ❖ DBCSMap – Unicode and DBCS-aware character map
 - ❖ ConText – convert text between encodings
 - ❖ IMERJ – *very* primitive Japanese input utility

Installation & Configuration Tools

- ❖ MINILVM – simplified install-time GUI for LVM
- ❖ TCP/IP Profile Manager – manage multiple IP configurations
- ❖ NAPS – replacement for MPTS configuration GUI
- ❖ LANInst – installer for LAN Server on OS/2 clients
- ❖ MyIP – report your external IP address
- ❖ InstFont – install a font from the command line
- ❖ eComStation Remote Install tool
- ❖ Arca Noae package manager (YUMIE)

Printing

- ❖ CUPS Wizard – simplify installation of CUPS printers
- ❖ PM Printer Manager – unified printer control panel
- ❖ EPRINT.EXE – enhanced PRINT command supporting USB and network-attached printers
- ❖ PSPRINT.DRV – replacement for PSCRIPT.DRV (and maybe ECUPS.DRV & ECUPS-HP.DRV)

Font Support

- ❖ FONTNAME & FONTINFO
- ❖ FreeType/2 IFI version 1.3x
 - ✧ Inherited from KO Myung-hun and Michal Necasek
 - ✧ Added/improved a few features and fixed some minor problems
- ❖ FreeType/2 IFI version 2.x
 - ✧ Rewrite based on FreeType library v2
 - ✧ Now supports OpenType (OTF) fonts
 - ✧ Unfortunately, stuck in beta because of bugs :-)

Some Wishlist Items

- ❖ Modern update or replacement for XCenter
- ❖ Unicode-capable MLE control for PM (e.g. for PMMail)
- ❖ Japanese IME based on open-source engine (Anthy, FreeWnn, etc.)
- ❖ Rewritten Archive Viewer based on ARCHIVER.BB2 with individual file manipulation
- ❖ OS/2 bitmap font support for FreeType library

My Usual Development Environment

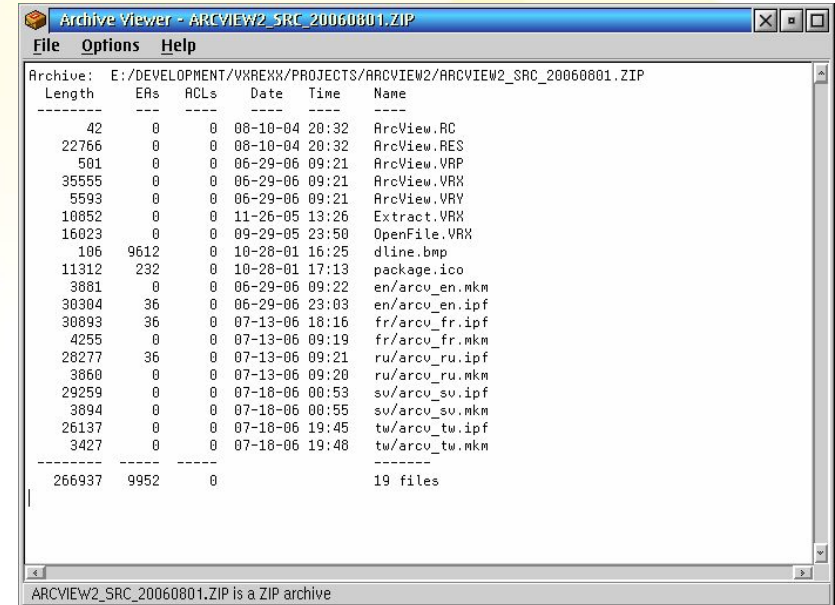
- C
 - Presentation Manager API for graphical programs
 - IBM C Compiler 3.08 or 3.65 or GCC 3.x/4.x (depending)
- Watcom VX-REXX
 - Usually plus my own custom controls (VROBJEX)
- Standard REXX (not Object REXX)
- Have also done a few things in Java (but not recently)
- Preferred text editor: MED

A Look At Selected Programs



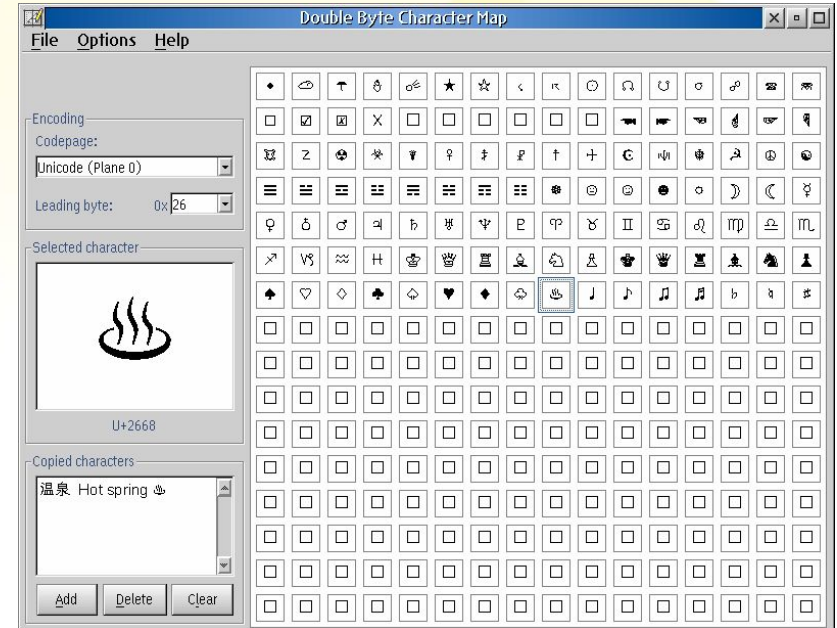
Archive Viewer

- ❖ Included in eComStation since v1.x.
- ❖ Deliberately crude and limited in features.
- ❖ GPL; latest is available from my website.
- ❖ Now supports extracting and/or viewing individual files.



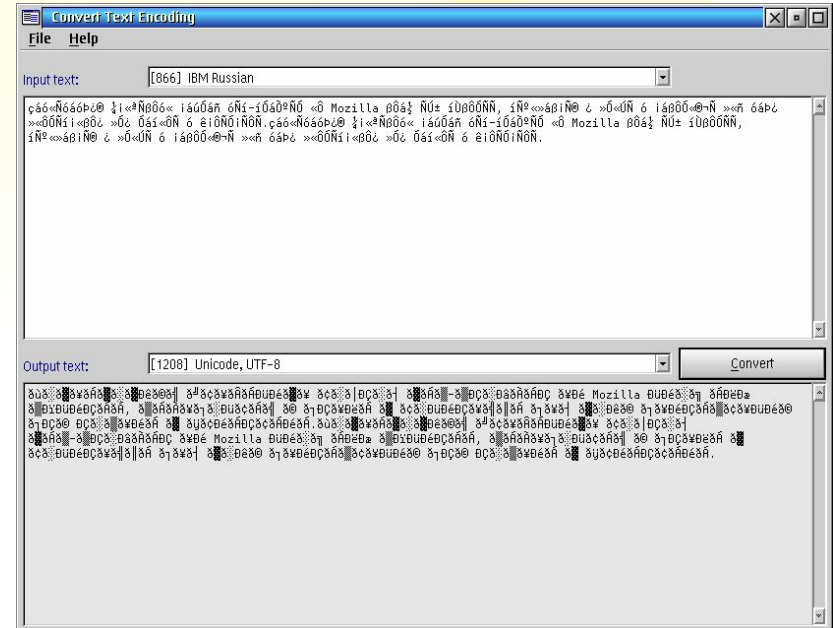
DBCSMap

- ❖ Character map for Unicode and selected DBCS codepages.
- ❖ Characters are sorted by codepoint (in blocks of 256).
- ❖ Can copy multiple characters to clipboard.
- ❖ Text is copied in both Unicode and plain text clipboard formats.



ConText

- ❖ Simple tool to convert text from one encoding or codepage to another.
- ❖ Supports Unicode conversion and clipboard copy/paste (not display).



Universal Clock

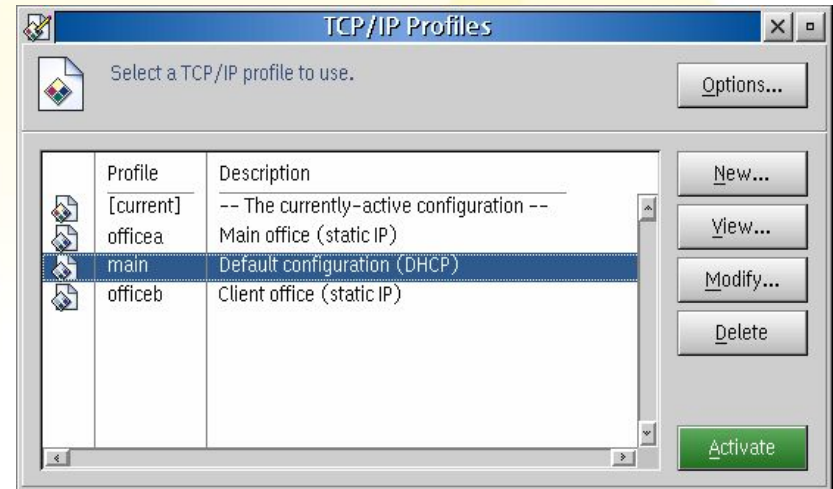
- ❖ Alternative to eCSClock, WorldClock, etc.
- ❖ UniClock program is just a simple container for the clock panels, which are instances of a custom PM window class, 'WTDPPanel'.
 - ❖ WTDPPanel is designed to be embeddable in applications (e.g. as XCenter widgets).
 - ❖ Each WTDPPanel supports large and small display modes, presentation parameters (font/colour), etc.

Central Europe	02:12 pm
Eastern	8:12 am
Pacific	5:12 am
UK	1:12 pm

Central Europe
02:12 pm
2015-10-16
Eastern
8:12 am
2015-10-16
Pacific
5:12 am
2015-10-16
UK
1:12 pm
2015-10-16

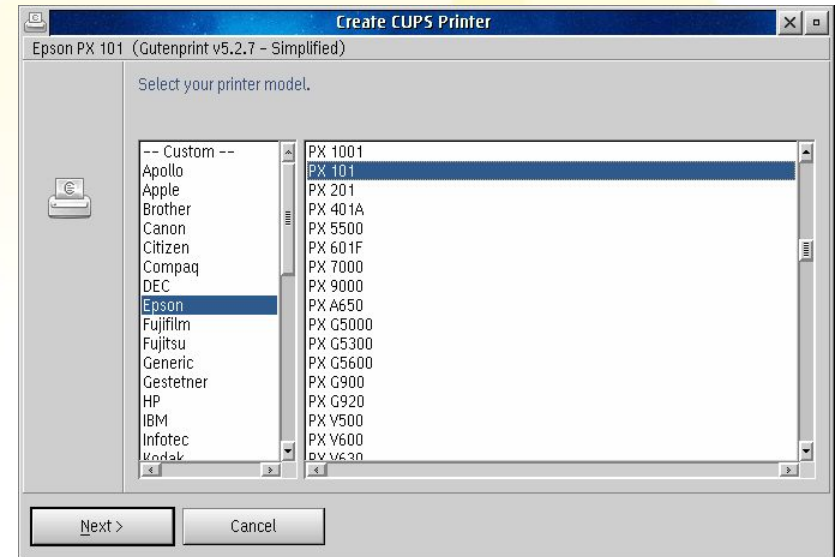
TCP/IP Profile Manager

- ❖ Allows the user to set up different TCP/IP configurations, and switch between them as needed.
 - ❖ e.g. DHCP for home and static IP for work.
- ❖ Not designed to enable/disable physical interfaces (like WiFi) but can change the current IP configuration on all active interfaces.



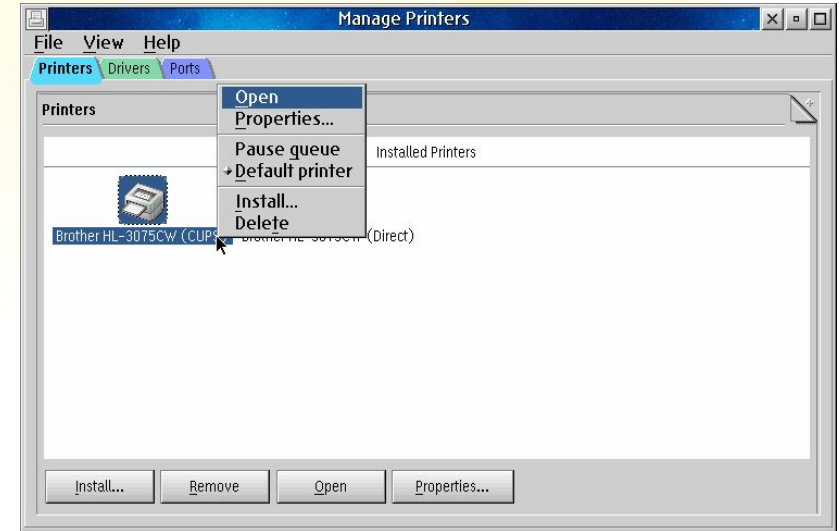
CUPS Wizard

- ❖ Simple wizard for creating CUPS-based OS/2 printers.
- ❖ Easier and faster than web admin GUI.
- ❖ Automates creation of corresponding desktop printer object + queue.
- ❖ Automatically 'cleans' PPD files before importing.



PM Printer Manager

- ❖ Unified printer manager; designed to replace:
 - ❖ InstPDR
 - ❖ eCSPrint
 - ❖ PRNDRV (at least in many cases)
- ❖ ‘One stop shop’ for managing both ‘normal’ and CUPS printers.
- ❖ Still TODO: fully integrate CUPS printer management (setting options, etc.), and maybe fully replace CUPSWIZ as well.



PSPRINT.DRV

- ❖ Enhanced replacement for the OS/2 PostScript printer driver (PSCRIPT.DRV).
- ❖ Includes all fixes from ECUPS.DRV plus several others.
 - ❖ Does not include ECUPS workaround for printed equations in WordPro.
- ❖ Supports TrueType font embedding.
 - ❖ Improved quality of printed text.
 - ❖ Better compatibility with PDF converters.
 - ❖ Often results in smaller file sizes, and faster spooling/printing.

FreeType/2 IFI

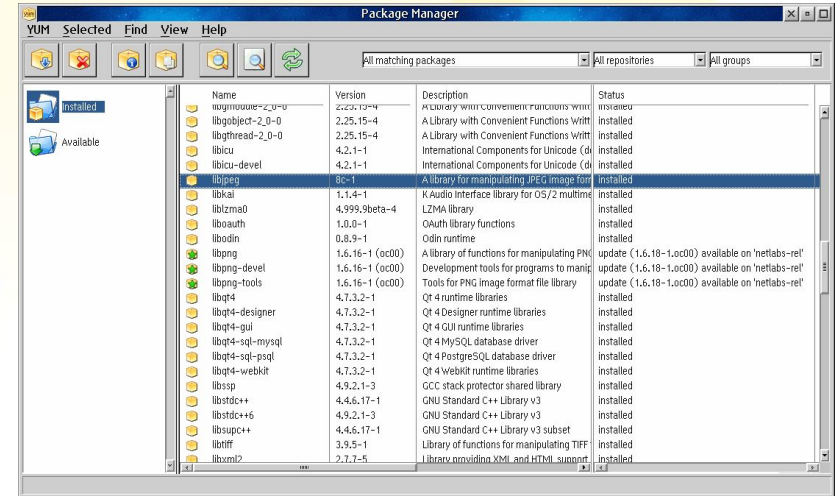
- ❖ Replacement for OS/2's TrueType font driver (TRUETYPE.DLL) that improves on-screen text quality.
- ❖ Version 1.3 (FREETYPE.DLL)
 - ❖ Based on the FreeType library version 1.x.
 - ❖ Earlier versions written by Michal Necasek and others.
 - ❖ 1.3 adds several configuration options, improves DBCS font support, and provides a workaround for certain printing problems in OpenOffice.
- ❖ Version 2.0 (FT2IFI.DLL)
 - ❖ Rewrite based on the FreeType library version 2.x.
 - ❖ Adds support for OpenType fonts (.OTF) – including enabling their use in OpenOffice and Mozilla.
 - ❖ Stuck in beta due to some bugs I can't figure out. :-)

And Now... A Special Preview



“Arca Noae Package Manager” (name TBA)

- ❖ Native graphical interface for managing software packages.
 - ❖ First release supports YUM/RPM repositories and packages.
 - ❖ Support for WarpIN is planned.
- ❖ Includes features for Arca Noae subscription offerings (like access to protected repositories).
- ❖ Provides a user-friendly way to install YUM/RPM.



Questions?

