

High-Resolution OS/2

Alex Taylor



Some Context

- OS/2 Presentation Manager was designed for a resolution of 96–120 pixels per inch.
- Increasingly, modern computer screens may be as high as 200 ppi (or more).
 - ➔ Icons, text, and UI elements appear smaller.
 - ➔ Most operating systems now provide “scaling” options to compensate...

However, PM lacks such an option.

The Simplest Workaround

- Set the desktop to a lower resolution.
 - ↳ Also, configure the screen for full-screen scaling.
 - ↳ This ‘wastes’ the screen’s capabilities, and may result in a fuzzier-looking image (although modern screens are getting better at this).
- For virtual machines, turn on VM scaling (if supported).

Is there a better solution?

The Basic Problem

- How to increase the size of
 - Icons
 - GUI text
 - Dialogs & controls
 - Windowed command prompts

Desktop Icons

Easy! Use a high-resolution icon enhancer like Dynamic Icons.

...Unfortunately, this does not help with WarpCenter or XCenter, which continue to use the original (OS/2 native) mini-icons.

Text & Dialogs

- The desktop defines several different types of text:
 - Menu text, icon text, window text
 - Titlebar text
 - Default dialog text
 - Application-specific dialog text
 - Application content text
- Without a global text scaling function, all of these must be set individually, usually in different places.
- Dialogs can be scaled... to an extent.

Individual Settings

- Set the font DPI and dialog size to maximum in video driver (requires a reboot).
- Apply a Scheme with large fonts for Window Text, Desktop Icon Text, Folder Icon Text, Menu Text, Active Title Text & Inactive Title Text.
- Change (or disable) the replacement dialog font in Styler.
- Change the system default font (a.k.a. *PM_SystemFonts* → *DefaultFont*).

See: <https://www.arcanoae.com/wiki/arcaos/post-install-tips-hints/large-text-and-icons-for-high-resolution-displays/>

What The Settings Do

- Scheme settings:
 - “Icon text” & “menu text” fonts: just what it says on the tin.
 - “Window text” font is used in folders, *but also...*
 - ➔ The font *size* determines what size of WarpSans is used for WPS settings pages (original IBM only).
 - “Active/inactive title text” font is used for titlebars, *but also...*
 - ➔ Controls titlebar (and frame control) height.
- Styler settings:
 - Titlebar font is used instead of the scheme setting if enabled.
 - Dialog font replaces the default dialog text font, but does not rescale the dialog controls.

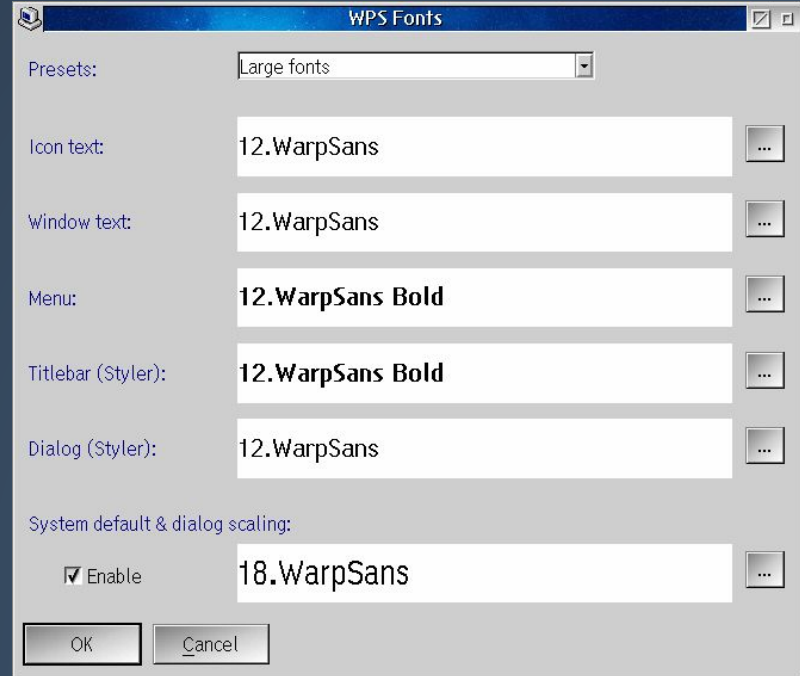
Dialog Scaling

- Setting *PM_SystemFonts* → *DefaultFont* changes the default dialog and presentation space font.
 - If not defined, the default is System Proportional (the exact size depends on the screen resolution).
- Unlike the Styler setting, *DefaultFont* also changes the default dialog scaling unit to match the selected font.
- This means you can make all dialogs bigger (along with the text) by setting this to a larger font.
- If you use the Styler dialog font setting, always make sure *DefaultFont* is the same or larger.

Can't We Make This Easier?

Wouldn't it be nice to have a one-click "Desktop Font Size" setting?

Under development:



Current Limitations

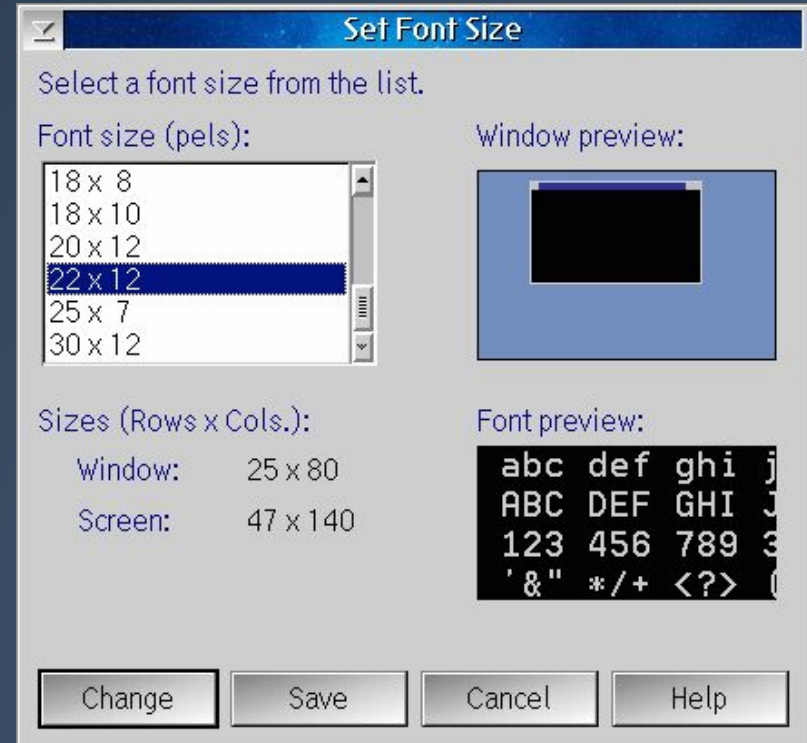
- Non-IBM WPS properties notebooks.
- Notebook tab & status text.
- Scrollbar/combobox/spinbutton width.
- Third-party applications with hard-coded fonts.
- Win-OS/2

Next Objectives

- Integrate into Styler.
- Figure out how to address limitations.

Windowed Command Prompts

- “Font Size” dialog is accessible from the OS/2 Window system menu.
- All available sizes of System VIO (from DSPRES.DLL) are shown.
- ArcaOS 5.1 adds some new, larger sizes suitable for high resolution screens.



Individual Applications

- Many applications use the system default font for dialogs, and a user-configurable font for other text.
- Some programs use a fixed font for dialogs, like 9.WarpSans or 8.Helv. It may be possible to update them by modifying the dialog resources. This does not require program source code.
- Programs which hard-code fonts directly in the program code will need to be modified. This *does* require program source code.

Questions?