
Subject: Windows drives vs POSIX mounts

Posted by [guido](#) on Fri, 28 Apr 2006 13:36:26 GMT

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I tried to port FileSel to POSIX.

Unfortunately it makes assumptions which work for the MS-DOS drive letter system only.

In the POSIX world "drives" are mounted into /mnt and /media or /Volumes in the case of MacOS X.

Only the boot disk is mounted directly into the root (/).

I hacked FileSel to have it work better with modern Linux systems, conforming to POSIX FHS 2.3:

```
Image PosixGetDrivelImage(String dir)
```

```
{
  if(dir.Find("cdrom") == 0 || dir.Find("cdrecorder") == 0)
    return CtrlImg::CdRom();
  if(dir.Find("floppy") == 0 || dir.Find("zip") == 0)
    return CtrlImg::Diskette();
  // if (??) return CtrlImg::Computer();

  return CtrlImg::Hd();
}
```

```
bool Load(FileList& list, const String& dir, const char *patterns, bool dirs,
          Callback3<bool, const String&, Image&> WhenIcon, FileSystemInfo& filesystem)
```

```
{
  if(dir.IsEmpty()) {
    Array<FileSystemInfo::FileInfo> root = filesystem.Find(Null);
    for(int i = 0; i < root.GetCount(); i++)
      list.Add(root[i].filename, GetDrivelImage(root[i].root_style),
        Arial(FNTSIZE).Bold(), SBlack, true, -1, Null, SCyan,
        root[i].root_desc, Arial(FNTSIZE));
  }
  else {
    Array<FileSystemInfo::FileInfo> ffi =
      filesystem.Find(AppendFileName(dir, filesystem.IsWin32() ? ".*" : "**"));
    if(ffi.IsEmpty())
      return false;
#ifdef PLATFORM_POSIX
    bool isdrive = dir == "/media" || dir == "/mnt";
#endif
    for(int t = 0; t < ffi.GetCount(); t++) {
      const FileSystemInfo::FileInfo& fi = ffi[t];
#ifdef PLATFORM_POSIX
      Image img = fi.is_directory ?
        (isdrive ? PosixGetDrivelImage(fi.filename) : CtrlImg::Dir()) :
```

```

    CtrlImg::File();
#else
    Image img = fi.is_directory ? CtrlImg::Dir() : CtrlImg::File();
#endif
    WhenIcon(fi.is_directory, fi.filename, img);
    bool nd = dirs && !fi.is_directory;
    if(fi.filename != "." && fi.filename != ".." != 0 && fi.filename.Find('.') != 0 &&
        (fi.is_directory || PatternMatchMulti(patterns, fi.filename)))
        list.Add(fi.filename, img,
            fi.is_directory ? Arial(FNTSIZE).Bold() : Arial(FNTSIZE),
            nd ? SGray : SBlack, fi.is_directory, fi.is_directory ? -1 : (int)fi.length,
            Null, nd ? SGray : fi.is_directory ? SBlack : SLtBlue);
    }
}
return true;
}

```

(I made it hide dotfiles also - maybe open/save dialog needs a show-hidden toggle for POSIX)

Still, the drives DropList doesn't get populated.

But this code snipped as meant as demonstration only- it's really a hack. FileSel needs to be rewritten, allowing for the "conceptual root" of POSIX systems, no longer assuming all drives are to be found in "/" flat.

Sorry if code snipped comes out distorted!
How do I do that properly?
