

Managing A Small Open Source Project

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WPLUG

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Preface

- _ This presentation is simply one developers view of how the open source model has worked for one project, Music Player Daemon
- _ This Presentation includes:
 - Opinions
 - Observations
 - Advice for users and developers

The Example

Music Player Daemon (MPD) allows remote access for playing music (MP3, [Ogg Vorbis](#), [FLAC](#), AAC, Mod, and wave files) and managing playlists. MPD is designed for integrating a computer into a stereo system that provides control for music playback over a local network. It is also makes a great desktop music player, especially if you are a [console](#) junkie, like frontend [options](#), or restart X often.

Why Start A Project?

- _ To satisfy an itch
- _ To contribute something to the community
- _ To be famous
- _ Simply enjoy coding

Why Open Source

- _ Learn more about coding through peer review
- _ Can use current open source code
- _ Learn from open source code
- _ Can build a community of developers
- _ The code can potentially survive longer and take on a life of its own
- _ Looks good on a resume!
 - Potential employers actually have samples of your code

What License To Choose

_ GPL

- If someone makes changes to your code and then distributes binaries, they must also distribute the code changes
- Strict patent limitations

_ BSD

- Anyone can change and use the code as they wish so long as credit is given to the original authors

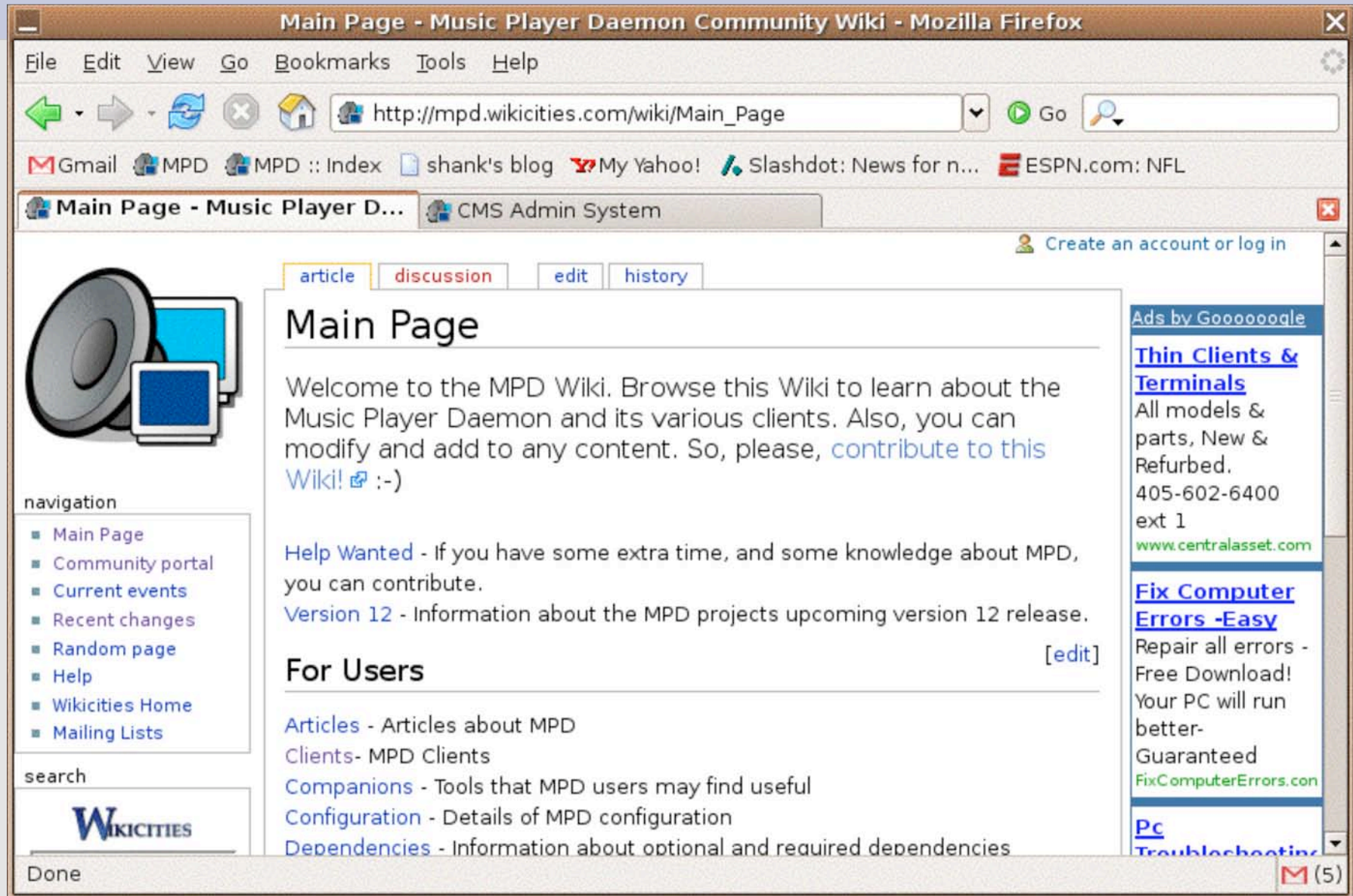
Coding Details

- _ Choosing which language
 - C, C++, C#, Java
 - Perl, Python, PHP, Ruby
- _ Choosing dependencies/requirements
- _ Code Access
 - Tarballs
 - Version Control
 - _ CVS
 - _ Subversion
 - _ Arch
 - _ Bitkeeper

Documentation

- _ README
- _ --help
 - command line parameters and options
- _ --version
 - name of the program, version number
 - LICENSE, no-gaurantee, contact info
- _ Man page
- _ FAQ
- _ HOWTO's
- _ Wiki

Wiki Example



The screenshot shows a Mozilla Firefox browser window with the title "Main Page - Music Player Daemon Community Wiki". The address bar displays "http://mpd.wikicities.com/wiki/Main_Page". The browser's menu bar includes "File", "Edit", "View", "Go", "Bookmarks", "Tools", and "Help". The address bar contains navigation icons and a search box. Below the address bar, there are several bookmarks: "Gmail", "MPD", "MPD :: Index", "shank's blog", "My Yahoo!", "Slashdot: News for n...", and "ESPN.com: NFL". The browser's tab bar shows two tabs: "Main Page - Music Player D..." and "CMS Admin System".

The main content area of the wiki page features a large image of a speaker and a computer monitor. Below the image is a "navigation" menu with the following items: "Main Page", "Community portal", "Current events", "Recent changes", "Random page", "Help", "Wikicities Home", and "Mailing Lists". A "search" box is located below the navigation menu, with the Wikicities logo. The main content area has tabs for "article", "discussion", "edit", and "history". The "article" tab is selected, showing the "Main Page" heading. The main text reads: "Welcome to the MPD Wiki. Browse this Wiki to learn about the Music Player Daemon and its various clients. Also, you can modify and add to any content. So, please, [contribute to this Wiki!](#) :-)". Below this text are two links: "Help Wanted - If you have some extra time, and some knowledge about MPD, you can contribute." and "Version 12 - Information about the MPD projects upcoming version 12 release." There is an "[edit]" link next to the "Version 12" link. Below the main text is a section titled "For Users" with a list of links: "Articles - Articles about MPD", "Clients- MPD Clients", "Companions - Tools that MPD users may find useful", "Configuration - Details of MPD configuration", and "Dependencies - Information about optional and required dependencies".

On the right side of the page, there are two advertisements. The first is titled "Thin Clients & Terminals" and includes the text: "All models & parts, New & Refurbed. 405-602-6400 ext 1 www.centralasset.com". The second is titled "Fix Computer Errors -Easy" and includes the text: "Repair all errors - Free Download! Your PC will run better- Guaranteed FixComputerErrors.com". Below these ads is a link for "Pc Troubleshooting".

The browser's status bar at the bottom shows "Done" on the left and "M (5)" on the right.

Publicizing the Project

- _ Webpage
 - Sourceforge
 - Savannah
 - Your own web site
- _ Open Source Software Sites
 - Freshmeat
 - IceWalkers

SourceForge

The screenshot shows a Mozilla Firefox browser window displaying the SourceForge.net project page for Gaim. The browser's address bar shows the URL <http://sourceforge.net/projects/gaim>. The page features a navigation menu with links for [my sf.net](#), [software map](#), [donate to sf.net](#), and [about sf.net](#). The main content area is titled "Project: Gaim: Summary" and includes a navigation bar with links for [Summary](#), [Admin](#), [Home Page](#), [Forums](#), [Tracker](#), [Bugs](#), [Support](#), [Patches](#), [RFE](#), [Lists](#), [News](#), [CVS](#), and [Files](#). The main text describes Gaim as a GTK2-based instant messenger application. A "Developer Info" section lists project admins (Ischiere, seanegan, thekingant) and developers (11). A "Project of the month" badge for October 2002 is also present. The left sidebar contains a search box, a subscription section, and resources. A vertical banner on the right promotes job opportunities. The browser's status bar at the bottom shows "Done" and a mail icon with a count of 4.

SourceForge.net

my sf.net | software map | donate to sf.net | about sf.net | My Favorites

Login via SSL
New User via SSL

Search

Software/Group Search

results by **YAHOO!** search

SF.net Subscription

- Subscribe Now
- Manage Subscription
- Advanced Search
- Direct Download
- Priority Tech Support
- Project Monitoring

SF.net Resources

- Site Docs
- Site Status (03/29)

Project: Gaim: Summary

Summary | Admin | Home Page | Forums | Tracker | Bugs | Support | Patches | RFE | Lists | News | CVS | Files

Gaim is a GTK2-based instant messenger application. It supports multiple protocols via modules, including AIM, ICQ, Yahoo!, MSN, Jabber, IRC, Napster, Gadu-Gadu and Zephyr. It has many common features found in other clients, as well as many unique featur

Developer Info

Project Admins:
[Ischiere](#)
[seanegan](#)
[thekingant](#)

Developers: 11
[\[View Members\]](#)

Project of the month for: [October 2002](#)

- Development Status: 5 - Production/Stable
- Intended Audience: End Users/Desktop
- License: [GNU General Public License \(GPL\)](#)
- Operating System: [All 32-bit MS Windows](#)

Browse thousands of jobs now. Click here.

Done (4)

MPD Webpage

The screenshot shows a Mozilla Firefox browser window titled "MPD: Music Player Daemon - Mozilla Firefox". The address bar contains "http://www.musicpd.org/". The browser's menu bar includes "File", "Edit", "View", "Go", "Bookmarks", "Tools", and "Help". The page content features the MPD logo (Music Player Daemon) with a speaker icon, a navigation menu with "Info", "Clients", "Download", "Support", and "Develop" buttons, and a main text area with an "About" section. The "About" section describes MPD as a music player daemon for remote access. A "News" section lists two recent releases: "mpc-0.11.2 released" and "ncmpc-0.11.1". On the right side, there are two advertisement boxes: "Music - Free Downloads" and "MP3 Source". The browser's status bar at the bottom shows "Done" and a mail icon with "(4)".

MPD: Music Player Daemon - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.musicpd.org/

Gmail MPD MPD :: Index shank's blog My Yahoo! Slashdot: News for n... ESPN.com: NFL



mpd
Music Player Daemon

Info Clients Download Support Develop

About

Music Player Daemon (**MPD**) allows remote access for playing music (MP3, [Ogg Vorbis](#), [FLAC](#), AAC, Mod, and wave files) and managing playlists. MPD is designed for integrating a computer into a stereo system that provides control for music playback over a local network. It is also makes a great desktop music player, especially if you are a [console](#) junkie, like frontend [options](#), or restart X often.

News XML

mpc-0.11.2 released
March 11, 2005, 2:45 pm
mpc-0.11.2 is out! This includes a few bug fixes and a few new commands:crop, stats, toggle.

ncmpc-0.11.1
February 2, 2005, 3:48 am

Ads by Goooooogle

[Music - Free Downloads](#)
12 Billion Songs,
No Download
Fees 100% Legal
- Find Any Song
Fast!
[www.AllCoolMusic.com](#)

[MP3 Source](#)
Download
Unlimited MP3's
join now for a
\$1.00 a month
[mp3source.us](#)

Done  (4)

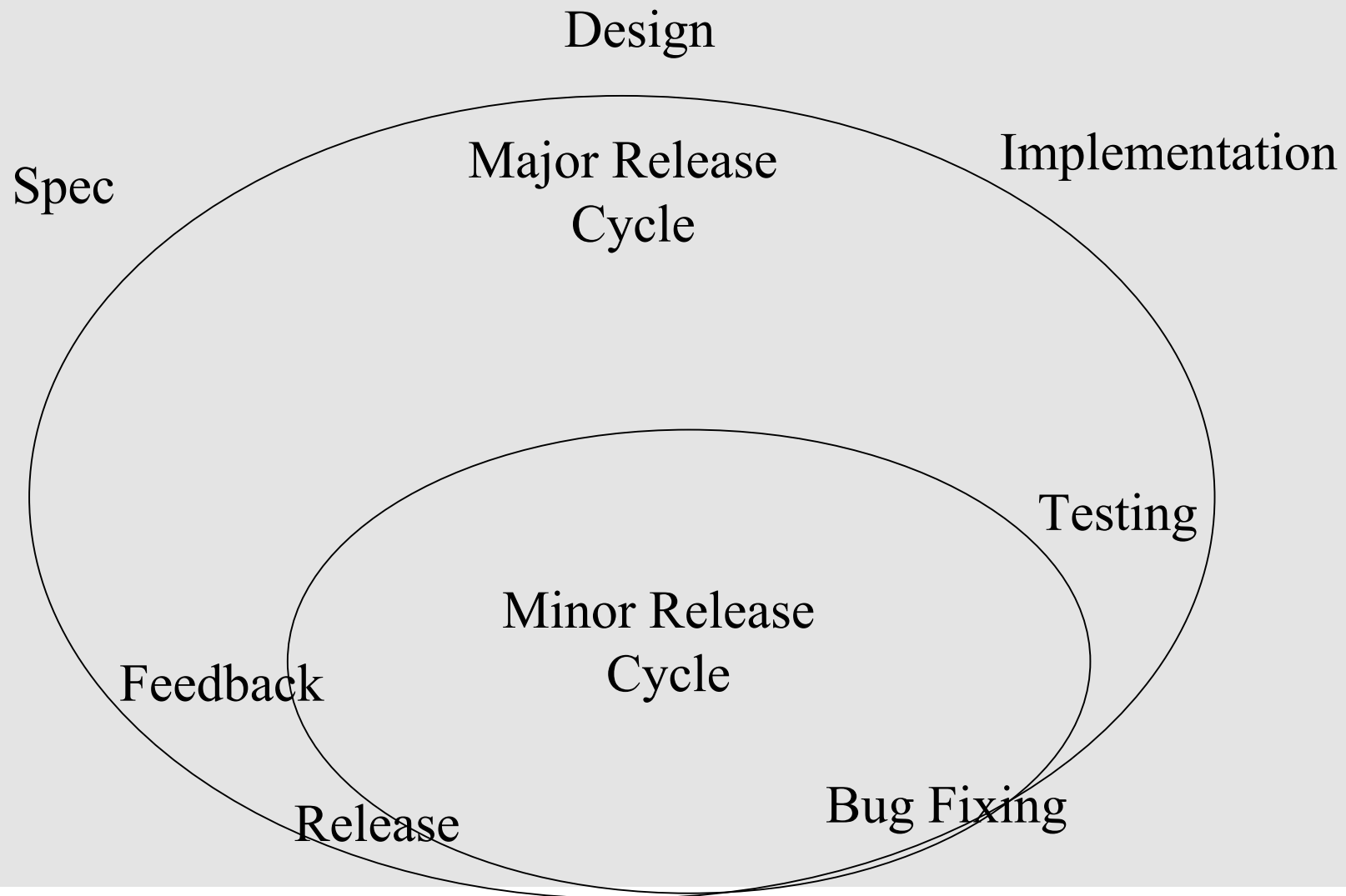
Development Cycle

- _ Development Cycle
 - Specification
 - Design
 - Implementation
 - Testing
 - Fix Bugs
 - Release
 - Feedback
 - Rinse and Repeat
- _ Open source shortens the feedback loop between Users and Developers

Release

- _ Major Releases
 - Major design phase
 - New Features
 - Protocol changes
 - Longer Development Cycle
- _ Minor Releases
 - Bug Fixes
 - Minor feature enhancements
 - Short Development Cycle

Minor and Major Development Cycles



Packaging

- _ Source Tarball
 - C* based programs – configure, make, make install
- _ Packages
 - dpkg
 - rpms
- _ Distro's and Repositories
 - Gentoo
 - FreeBSD/NetBSD/OpenBSD
 - Debian/Ubuntu
 - Fedora

Let the distribution developers package your

Types of Feedback

- Opinions
 - Sweet! / Sucks!
 - Ratings
- Feature Requests
 - New Features (Users)
 - Design Changes (Developers)
 - “Backend” changes, efficiencies
 - Protocol changes
- Bugs
 - Spelling
 - Non-Critical
 - Critical
 - Show Stoppers

Positive Feedback Example

mpd kicks ass [Inbox](#)

☆ Juha <[redacted]@[redacted].com> to me

[More options](#)

Hi,

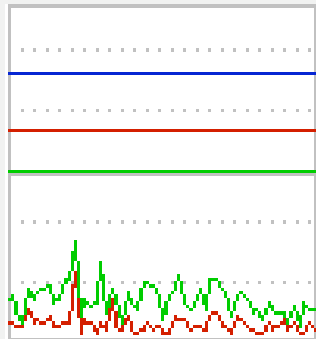
I just installed the **mpd** Debian package, and it looks like it's everything I've wanted in a music server/player. Tomorrow morning **mpd** is going to wake me up with some sweet tunes. =) [1] So thank you and the other **mpd** developers for implementing it!

I'll be sure to send you guys patches, if I find something that I need in the daemon.

Cheers,
Juha

Freshmeat Feedback Example

- » [Rating](#): 8.94/10.00
(Rank N/A)
- » [Vitality](#): 0.02%
(Rank 2523)
- » [Popularity](#): 3.74%
(Rank 895)



(click to enlarge
graphs)

Record hits: 19,380

URL hits: 12,091

Subscribers: 115

Comments

[>>] **Wonderful!**

by [Paiway](#) - Jan 24th 2005 14:11:31

I would just like to say that you people are doing a great job, and that mpd, in conjunction with mpc and gmcp, is by far my favourite music player. Keep it up!

Feedback Mechanisms

- _ Bug Tracker / Feature Request Tracker
 - Bugzilla
 - Mantis
- _ Community
 - Mailing Lists
 - Forums
 - IRC Channel
 - Email
- _ Ratings
 - Freshmeat
 - Polls - Magazines/Forums

Bug Reporting

- _ Bug Reports from Users are indispensable
 - _ Leave contact info
 - _ Give Every Detail that You Can
 - _ version numbers
 - _ ***config files***
 - _ explicit error messages / output
 - _ OS, distribution
- _ Never simply say X doesn't work!
- _ Be patient.

Feature Requests

- _ Understand the purpose for program X
 - Does the feature request match the goals/purpose?
- _ If only one person requests something very specific, don't expect it to be implemented
 - even if it only takes one line of code
 - even if you supply a patch, the community will still be forced to support this code
- _ developers time is limited

Coordinating Development

- _ Documentation! Documentation!
Documentation!
 - Keep documentation up-to-date
 - Keeps docs in you version control system
 - Wiki – great for ideas in progress
- _ Bug Tracker
 - Very useful for delegating responsibility
- _ Version Control Access
 - Subversion

Community Structure

- _ Leader
- _ Board / Committee
- _ Developers
- _ Administrators
 - _ Webmaster
 - _ Docwriters
- _ Testers
- _ Users
 - _ User and testers who give feedback (such as filing bug reports) are indispensable.

MPD Community Structure

Leader

MPD Developers

Client Developers

Administrators

Testers

Support Helpers

Users

Contributing

- _ Feedback
 - Bug Reports
 - Feature Requests
 - Opinions
- _ Testing
- _ Documentation
- _ Developers

Coordinating with Other Projects

- _ Competitors!
 - Share ideas, if possible
 - Share code
- _ Collaborating
 - Can broaden the user base of your project
 - Can potentially bring in new developers
 - Be open minded!

MPD Collaborations

- _ Dependency collaborations
 - libao
- _ Web “Jukebox” collaborations
 - Netjuke
 - Jinzora
- _ Embedded collaborations
 - IPOD Linux
 - Networked Audio Player
 - _ Analog Devices Inc. (ADI) demonstrated a networked audio player, running uClinux on the Blackfin STAMP Board at the Embedded Systems Conference in San Francisco.

Do's and Don'ts

_ Users

- Don't be impatient
 - _ wait for help
- Do search with google
- Do searches in forums/mailings lists
- Do Give detailed bug reports and feature requests

_ Developers

- Don't be arrogant
 - _ don't assume you know more about how things 'should' work
- Do propose ideas and promote discussion of these ideas

My Development Philosophy

- _ I do this for fun
- _ I have no obligation to implement or anything.
- _ I care about my users.
- _ I have a vision of how the things should work and evolve.
- _ My time is limited, so the things I do spend time on need to be worthwhile.