

# Working with Large Open Source Projects

My experiences with OpenOffice.org and the Fedora Project

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# Where we're headed, who am I?

- I'm Colin Charles, student by day, {hacker,consultant} by night
- This is the Programmers SIG, but we're not going into code today
- Human aspects and dynamics of large projects help you become a better person; a better leader even
- It sort of shows my path into OSS goodness

# What I am @OpenOffice.org

- Community Marketing Contact  
Victoria/Australia & Malaysia
- Commit access to the CVS repository
  - JCA signed
- OpenOffice.org Mac OS X porter, esp.  
during 1.1.2 and its launch at WWDC 2004
- Maintained the wildly popular unofficial  
FAQ before we got user-faq.oo.o
- Behind SpreadOpenOffice.org

# What I am @FedoraProject.org

- Fedora News Updates in FC-1 days
- Thru a mishmash of things
  - Submit patches, Extras contributor
    - Fedora developer... esp. PPC arch
    - Bug boy
  - FESCO Member (1/16)
  - Marketing CMC kickoff
  - FUDCon organiser
  - <insert random Fedora anything here>

# All paths lead to code

- Never met a single OSS contributor that didn't touch code in some way
  - OK, loosely, compiled something that didn't work, edit Makefile, etc...
- If you think you're starting with documentation (highly required) or translation, that's a good start
- But you will see and hit the code, at some stage – it's part of the maturity process

# From Sithling to Sithawan



# Communication

- Mailing lists
  - Useful, can get noisy sometimes, but a lot of work gets done here
- Forums
  - I hate these, not brought up in the “Web era”, but its popular among newbies
- IRC
  - More stuff gets done here, I promise. Get on it.

# Harnessing bugs (QA)

- All clueful users report bugs
  - Bug quality varies
- Triagers job to fix that
- Gets you testing the code
- Gets you familiar with the application
- Test out patches with EasyFix (touching code!)
- Submit your own



# Documentation

- Or... the torture of using the program
- Gets you experienced with all aspects of the program
- Start of with user documentation
- Move on to developer documentation if skills exist
- Work with upstream, where possible

# From Sithawan to Sith Lord



# Writing code

- A lot of peer review
- Don't be disgusted if someone has something nasty to say
  - Learn from it
- Just need to find your path of entry
  - Start with a sub-project
  - Pick a component (wrt OOo)
  - Create a simple Extras package

# Fedora

- Learn RPM package management
  - Use fedora-rpmddevtools: fedora-newrpmspec
  - We can have a HOWTO talk too
- We have a long todo list on the wiki at <http://fedoraproject.org/wiki/>
  - Read NewPackageProcess
  - 1CD install and a LiveCD are tools we require
- Review/maintain packages in Extras

# OOo

- Is large (1.1 had 7.5M SLOC, 2.0 has 10+M SLOC)
  - 2.8% is Java, small amount assembly (on arch), most is C++
- Pick one of the many (~80) modules to hack on and become an expert in it
- [development.openoffice.org](http://development.openoffice.org)
  - Api, framework, tools, graphics (gsl/nwf/impress), UNO (udk), sw, sc, macros

# Getting commit access

- Means you've significantly annoyed the maintainers, on list and Bugzilla, that you can do it yourself now
- Don't diverge from what you're meant to do
  - It's rude to touch someone else's package, or visit a module you have no idea about
- Remember: nothing has changed, except you've been given more **trust**

# Human aspect to things

- People will flame you
  - You will disagree with other project contributors
- Bad days never helped anyone
  - Good friends do
- Good leadership skills involve not flaming; disagreeing in private; and getting work done (as well as delegating)

# ... and then you become famous

- Or synonymous with a project
  - Think Xorg, we think Daniel Stone. Think Linux, we think Alan Cox. Think GNOME, we think Jeff Waugh. Think Ubuntu we think Mark Shuttleworth.
- Don't let it get to your head :)
- Speak at events
- Your every move gets watched
  - Comments are easily taken out of context



# You are a Sith Lord if...

- Wit and cunning you possess
- Do or do not, there is no trying
- Grow with exposure
  - (i.e. At meetups, don't hesitate to have a beer or Guinness)
- Don't presume
- Ego will blind you

# Things in my eye

- Performance tuning
  - Hot topic. Faster boot time, faster app. startup time, productivity increase
- OpenOffice
  - Perl server side, client side in C#
- Flock
  - Lots of potential for social/Web2.0 goodness
    - I own #1220 for Linux/ppc now
- Fedora
  - CMC, LiveCD, installer testing, directory server, SystemTap

# Cleaning up OOo

- Goal to have warning free code
- Rough guide:
  - Wno-reorder
    - Order of variables in class declaration cause errors, and its usually never a real error (parent initialisation depends on child data)
  - Wno-unknown-pragmas
  - Wparentheses
- Lot of leg work, but achievable goal

# In conclusion

- No Star Wars was {harmed,watched} in the making of this presentation
- I hope you had a good laugh
- And start contributing to large projects
  - It really isn't that daunting if you start small and expand
  - Take a break when you're famous ;-)
- And no, I'm not a “Dr” in spite of my nick

# Thank You!

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