



1. Why are we creating such a program?

There are several different programs on the market for various platforms but so far none that have a combined functionality. This project is being created not only for the Wollongong University's software development project for university students but also on a commercial level to enable a combination of services such as chatting, desktop sharing, video and audio conferencing and a shared whiteboard in one simple package with zero configuration to make it even easier.

Programs already on the market and both their pros and cons:

Marratech – chews up too much memory

- hard to establish a connection without having a portal running – not very self explanatory
- Icons too large and the user interface is not very attractive
- Too heavy wait → need too much resources
- Too expensive
- Current whiteboard very good though needs some more features

MSN – file transfer sucks

- have to have a .net passport to be able to use it
- not very good on a Mac
- have to keep on top of versions other wise wont work → not backwards compatible
- chews up a lot of bandwidth
- flexible with backgrounds and appearances
- easy webcam and audio connections → limitations – have to have direct path between computers can work through nat – unpredictable on a LAN
- crowds desktop with chat dialogues
- joining conversations is nice though – avatars are good – alerting sound
- doesn't make noise if chat window in focus – be able turn on or off

ICQ – memory hog and HDD hog

- skins are attractive
- annoying ads and sounds – keeps the ads on the computer
- not all features work when on a LAN i.e. file transfer

Microsoft Netmeeting – deprecated

- very unpredictable
- video conferencing doesn't work 100% (3 or 4 connections to make it work = bad protocol implementation)
- desktop sharing insecure
- 1:1 only can't have 1:M

VNC – can't disable the turning off of the server program or the changing of passwords without having to write a registry setting to disable this function

- settings for screen updates is not self explanatory and is a bit of trail and error to get it working
- allows multi-user – last person who connected has the control of the mouse

- not disabling of functions though from the desktop – no individual connections
- security issues
- chat between clients and the server (didn't get to work properly)
- free (UltraVNC is the best)

IRC – very primitive but has good file sharing

- able to program robots using this
- uses centralized servers and can split it off but this has its problems

In evaluating the software above it became apparent that a new program is needed in the market that not only combines the functionality of chatting, video and audio conferencing, file sharing, desktop sharing and a shared whiteboard but something that was easy to configure and use for the average person and be cross-platform compatible as well. The team at jSummit has decided to strive to achieve this.

2. GPL & Open Source

Before going any further in descriptions an explanation of the GPL license is in order. Ordinarily software and intellectual property in the computing industry is a warren for developers and a gold pot for lawyers but the invention of the Open Source GNU arrangement this has made a small haven for software developers where developers can access each other's source code and edit and use without major legalities.

The full Open Source License can be obtained from: <http://www.gnu.org/licenses/gpl.html> or <http://www.opensource.org/licenses/gpl-license.php>

Summary:

GPL is the freedom to share and change free software making sure the software is free for all its users. In free it means that the developers are aware that they have the freedom to distribute copies of free software (and charge for this service if they so please), that they can receive source code that can be changed and redistributed into other either similar or completely different packages. Often developers need to avoid the danger of redistribution of a free program that will individually obtain patent licenses, so GPL is in effect making the program proprietary. Effectively a GPL means that the program is 'owned' by the developers but once they release the product they can charge a fee for distribution of it and receive payments but they must also make the source code available for other developers to use and manipulate for their own programs or versions without a cost.