

Working as a team across the Internet

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In real life, teams use rooms to discuss matters, brainstorm ideas, scribble diagrams on a whiteboard etc. They also use rooms to store/display things (draft reports, drawings, references etc.) for other members to look at/modify/add to at any time. TeamWave Workplace is a cross platform Internet-based software package which allows these sorts of collaborations to take place over the Internet in a set of virtual meeting rooms. Not only does this mean that geographically isolated teams can work together but also groups of school students and/or teachers can use the virtual rooms as places to permanently store shared resources.

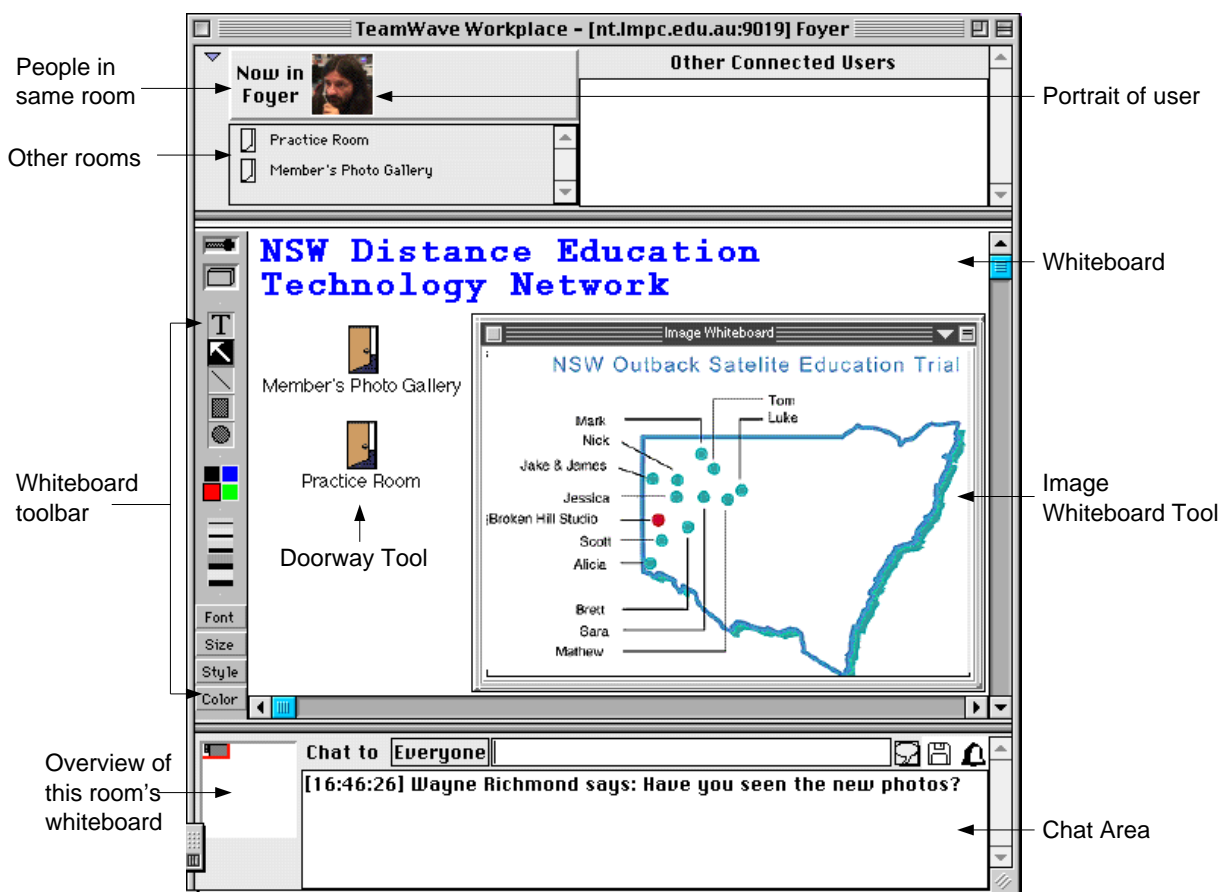
TeamWave Workplace rooms can be used for real time communication (such as Electronic Classroom and other audiographic programs) but the program's distinctive feature is that, unlike Electronic Classroom, whatever is created in the room stays there, unless deliberately removed by someone, and be revisited outside lesson times.

A teacher could ask students to "Find a picture of a _____ and leave it in the Assignment Room before Friday for us all to look at."

A teacher could tell the students to check back in the room on Thursday by which time she will have set up a number of web links for them to investigate.

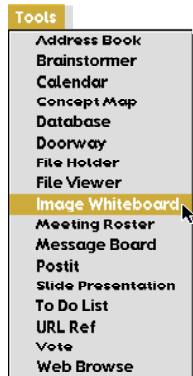
The Interface

Each room consists of a giant whiteboard which can be written/drawn on by anyone at any time using the basic drawing tools in the toolbar on the left. There is also a text chat area at the bottom, and lists of other rooms and current on-line users at the top.



TeamWave Workplace Tools

All rooms include a shared whiteboard that keeps its contents permanently unless deliberately erased. There is also a simple text chat facility that is adequate for ad hoc communication. Some other means such as a teleconference would need to be found for serious real-time communication.



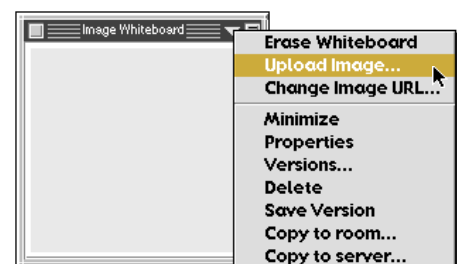
These basic features are very much enhanced by a set of seventeen tools that can be used in any combination in any of the rooms.

To place a tool in a room all you have to do is select it from the Tools menu.

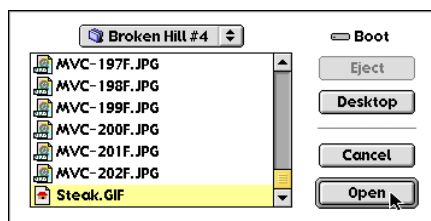
To show you how easy it is to use these tools lets see how we would use the Image Whiteboard tool to place a picture in a room and then annotate it.

First I select Image Whiteboard from the Tools menu.

All tools have their own menus which are used for setting parameters, deleting, etc.. In this example I am selecting Upload Image so that I can upload a GIF image into the Image Whiteboard tool.



Alternatively I could have typed/pasted in a URL to a GIF image on the Internet to establish a permanent dynamic link.



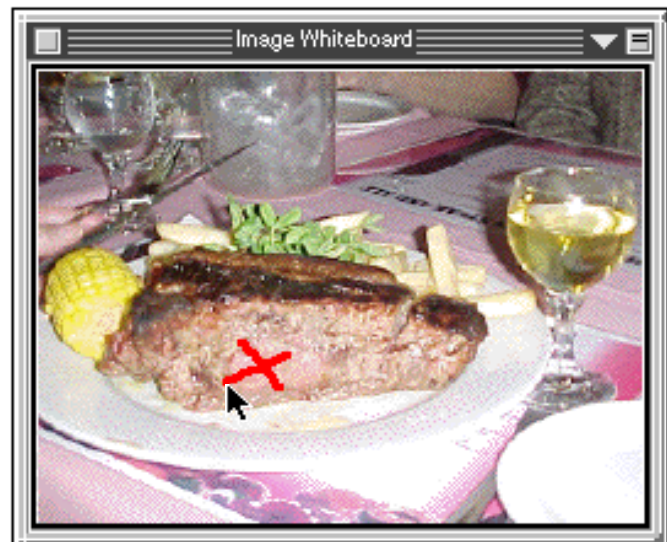
I am presented with a normal 'Open File' dialogue box allowing me to find and select the graphic file I want to open/upload.

Unfortunately the program will currently only allow GIF files to be displayed in the Image Whiteboard.

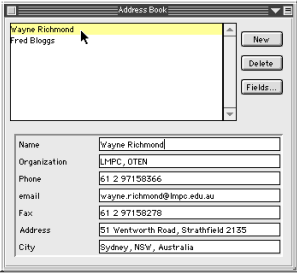
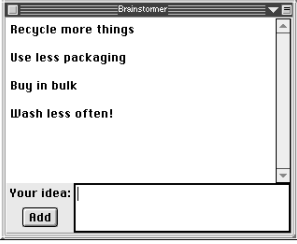
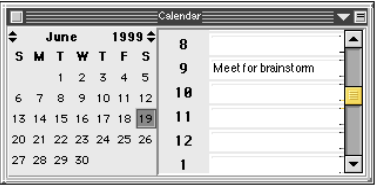
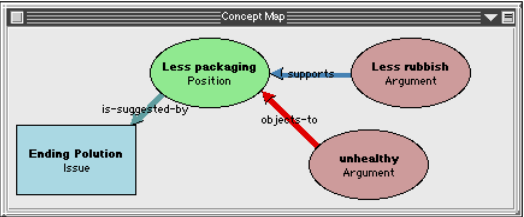


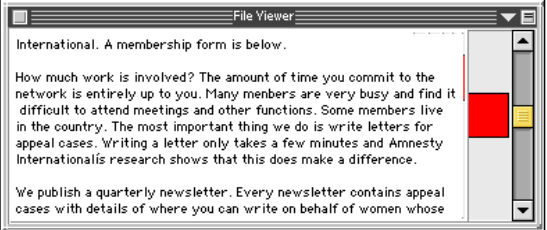
The picture uploads to the server and back to my client (and all other connected clients).

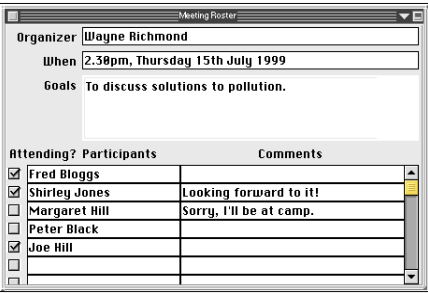
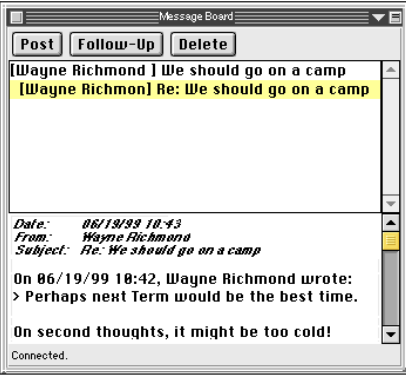
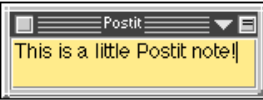

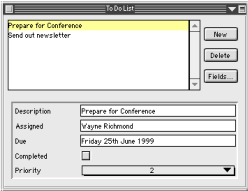

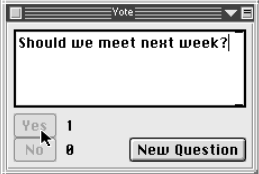
If necessary, I can adjust the size of the Image Whiteboard tool so that all of the picture can be seen.

I (and anyone else) can then use the whiteboard tools to annotate and otherwise draw/write on the image. Such markings are on their own layer which means they can be erased/removed without affecting the image underneath.



A brief summary of the other tools

<p>Address Book</p>		<p>A shared address book that anyone can use.</p>
<p>Brainstormer</p>		<p>Used to generate ideas in any order. Ideas are listed anonymously as they are entered. It could be argued that this anonymity is an <u>improvement</u> on a real life 'face-to-face' brainstorming session.</p>
<p>Calendar</p>		<p>Allows the entry of appointments in a shared calendar.</p>
<p>Concept Map</p>		<p>A tool for organizing concepts and ideas using a visual interface. Links and node types can be added and edited.</p>
<p>Database</p>		<p>A simple configurable database similar to the address book.</p>
<p>Doorway</p>	 <p>Member's Photo Gallery</p>	<p>A link to another room on the server. Doorways can be used to create menus.</p>
<p>Fileholder</p>	 <p>Satellite Paper.pdf</p>	<p>Provides a shared container for any type of file. All users can 'Put' or 'Get' a file in or out of a Fileholder.</p>
<p>File Viewer</p>		<p>View text files simultaneously with others. Coloured bars indicate where various users are up to.</p>

Meeting Roster		<p>Allows users to schedule a real-time meeting.</p>
Message Board		<p>Allows any number of simple newsgroup-style discussions to take place.</p>
Postit		<p>A simple message tool used to place reminders to yourself or others.</p>
Slide Tool		<p>View and annotate Microsoft Powerpoint slide presentations.</p>
To Do List		<p>Keep track of what needs doing, and what's left.</p>
URL Reference		<p>Place a web link for anyone to use. Double clicking will open the specified web site in your browser.</p>
Vote		<p>Pose a question and anonymously vote on it. No one can vote more than once!</p>
Web Browser		<p>Allows simple HTML pages to be shared.</p>

If you are so inclined you can write your own tools using software available free from TeamWave.

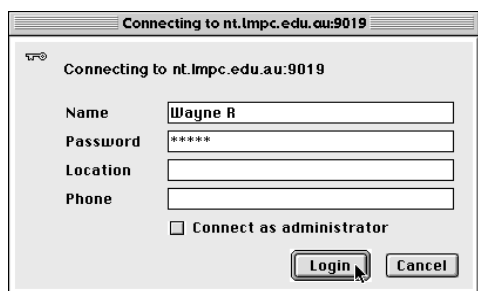
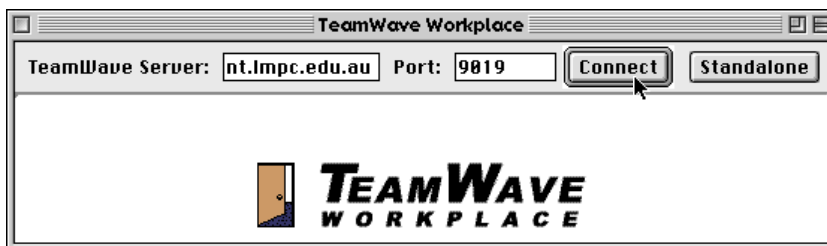
How does TeamWave Workplace work?

TeamWave Workplace consists of two programs - a client program and a server program.

The Client

To connect to a TeamWave Workplace server you need a copy of the client program that can be downloaded free from the TeamWave web site (www.teamwave.com).

When you open the client you will be asked for the name (or IP address) and port number of the server you wish to connect to. (The name & port number of the last used server will be there by default.)



You then enter your name and password (if any) and click Login.

If you have Admin access you can click on the 'Connect as administrator' check box to enter in administration mode to administer the server (set up new users etc.).

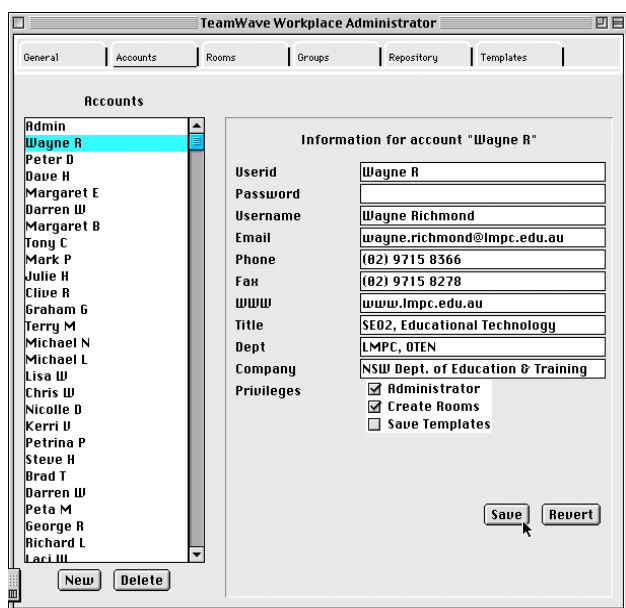
The Server

TeamWave Workplace requires a server version running on a Mac, PC or Unix computer with a permanent connection to the Internet/Intranet. Setting up the server is as simple as firing it up and entering a port number (the default is 9019) - that's all there is to it. With a bit of luck your local ISP will set one up for you.

The actual administration of the site is done using the client program and can be done from any machine on the Internet.

Setting up users

This is done by opening a client version of the program and selecting to connect as an Administrator (see screen dump above).



Information is entered about each user including whether or not they are allowed to:

- connect as an administrator
- create rooms
- save templates

As you can see from the screen grab, there are a few other parameters that can be optionally set but essentially setting up a TeamWave Workplace server is simply a matter of entering the user information for each account.

The only thing left to do now is inform potential users of the name and port number of your server and their user names and passwords.

Other Features

- Each time a user logs off, the server remembers the state of the room and of each tool (what is on the whiteboard, what tools are open, what is in them etc.) and it is possible to revert to any of these former states at any time. This can be handy at times when something is inadvertently deleted or messed up.
- The program tells you who is in the same room, which part of the whiteboard they are looking at and even where their mouse is.
- Users can save a log of the chat in a text file for future reference.
- Although the default settings democratically allow everyone to do anything at any time, it is possible to configure a room so that only the owner (creator) can add and/or delete tools etc.
- Windows users can open a Netmeeting session in a window within the TeamWave environment.

Highlights and Shortcomings

The producers of TeamWave Workplace (a company based in Canada) are to be congratulated for:

- The brilliant concept underlying the program; the simplicity of the structure and the ease of use.
- Their attempts to keep the program usable over low bandwidth connections.
- Their determination to make both client and server versions available on Mac, Unix and Windows platforms.
- Their very reasonable pricing arrangement
- Their receptiveness to suggestions for improvements.

However, there are a number of shortcomings that are worth noting:

- The interface is somewhat clunky in places - probably a legacy of the cross platform nature of production (its worth it!)
- The Image Whiteboard tool can only display GIF images.
- Some of the tools work better than others - I've never found the Web Browser tool to work properly except with very straightforward web pages.

How much does it cost?

TeamWave charges a license fee per user. If you want up to 10 users to access your server then you buy a 10 user license. The client program can be downloaded and used for free. You can also choose to purchase Guest licenses which allow anyone to access your server anonymously.

Quantity	Regular License	Education License
Single User License	US\$49	US\$40
10 User License	US\$399	US\$299
50 User License	US\$1,499	US\$899
Small Server Guest License (up to 100 guests)	US\$1,499	US\$899

Conclusion

It has always been the communication and collaboration capabilities of the Internet that have excited me rather than the bottomless pit of resources to be found on web sites. TeamWave Workplace facilitates a wide range of synchronous and asynchronous interactive and collaborative opportunities for small groups of students and/or teachers. As such it is a good example of what is possible now and a tantalising foretaste of what is to come.