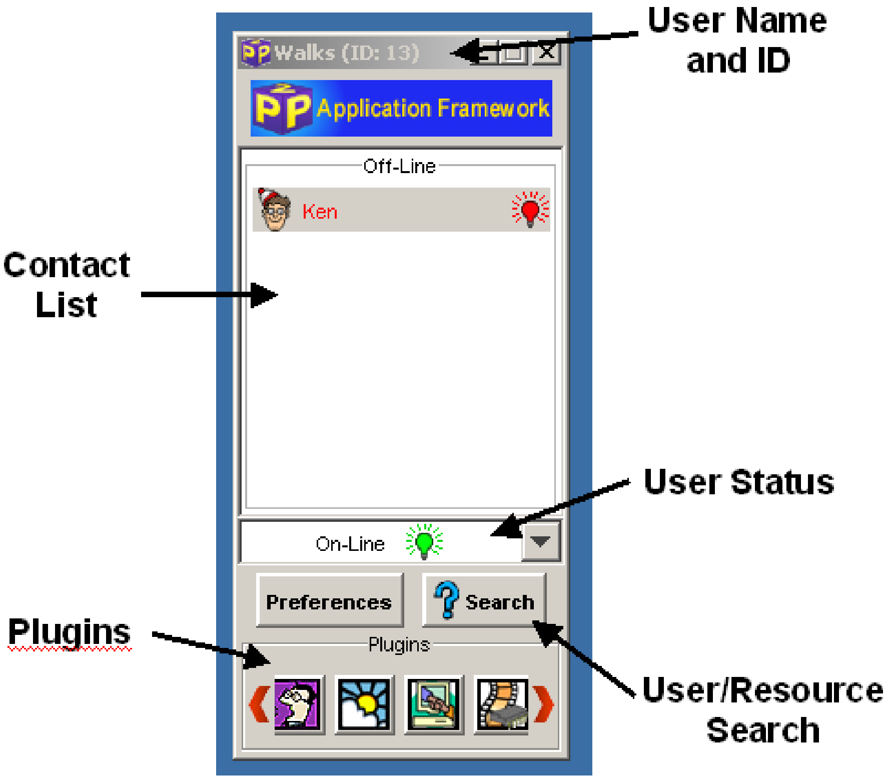
P2P Application Framework User Guide

1. P2P Application Framework Front-end

The main front-end for the P2P Application Framework is depicted below.



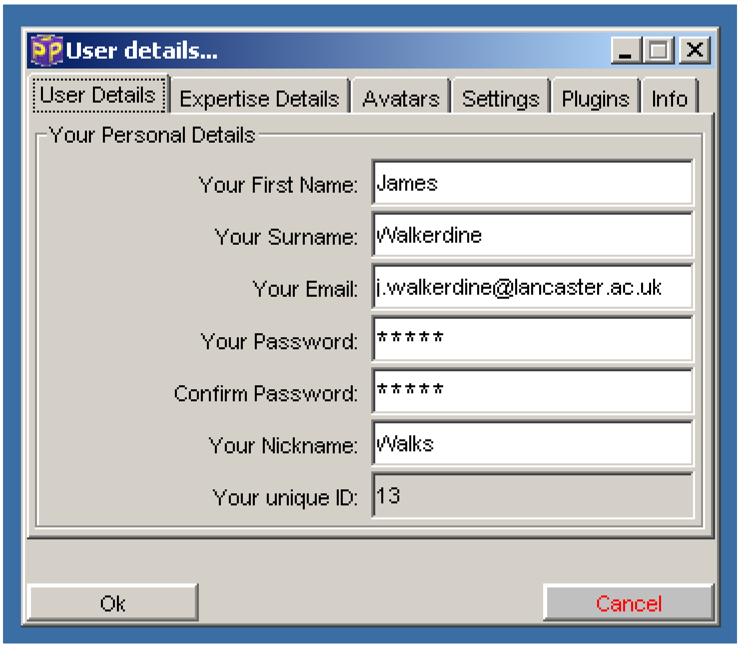
The P2P Application Framework front-end and operation is very similar to traditional Instant Messenger applications. When users first use the system they are required to register with the server, and in return are provided with a unique ID.

Users are able to maintain a contact list or 'buddy' list of people they frequently communicate with. This contact list displays the current status of these people. As will be discussed later, plugins can provide features that are accessible via the contact list (for example, "Sending a file to Ken").

Plugins that are locally available to the framework are loaded up on startup and are represented by icons (if the icon is greyed out then this plugin has been deactivated (see Preferences). These icons can be clicked on to activate functionality specific to that plugin (this would typically be a settings screen for that plugin). There is no limit to the number of plugins that can be loaded up by the framework.

2. Framework Preferences

Clicking on the Preferences button on the main window can access preference settings for the P2P Application Framework.



User Details - this tab is where the user's personal details are provided. All these fields must be filled. The framework provides the unique ID number after initial registration.

Expertise Details - this tab is where the user's expertise details are provided. Although it is not compulsory to fill all these fields it is beneficial, especially for the user search. As well as providing the name of the expertise area, the user can also rate how much of an expert they regard themselves to be within it. For example, 'Java' with a rating of 4.

Avatars - this tab is where users can assign themselves an avatar that will be used to represent them within the framework.

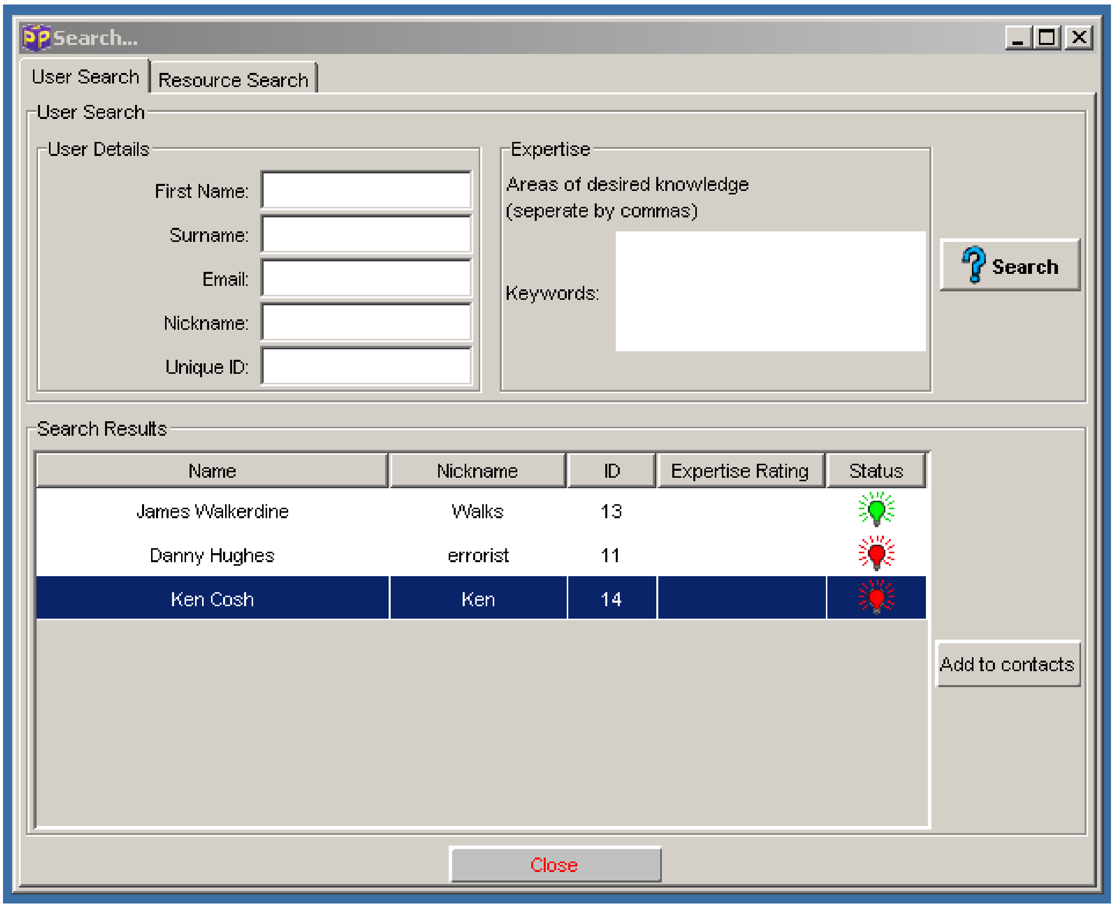
Settings - this tab is where users can set the more specific settings for the framework. Currently this includes whether or not authorisation is required before another user can add them to their contacts list, and details of how many ports are being made available for upload connections (i.e. where another user is downloading a file from you).

Plugins - this tab displays all the plugins that have been installed on this peer, and whether or not they have been activated. A de-activated peer still exists, but is 'ex-communicated' from the rest of the framework.

Info - this tab displays brief general information about the P2P Application Framework

3. User Search

By clicking on the Search button users can search for both users and resources that exist within the framework



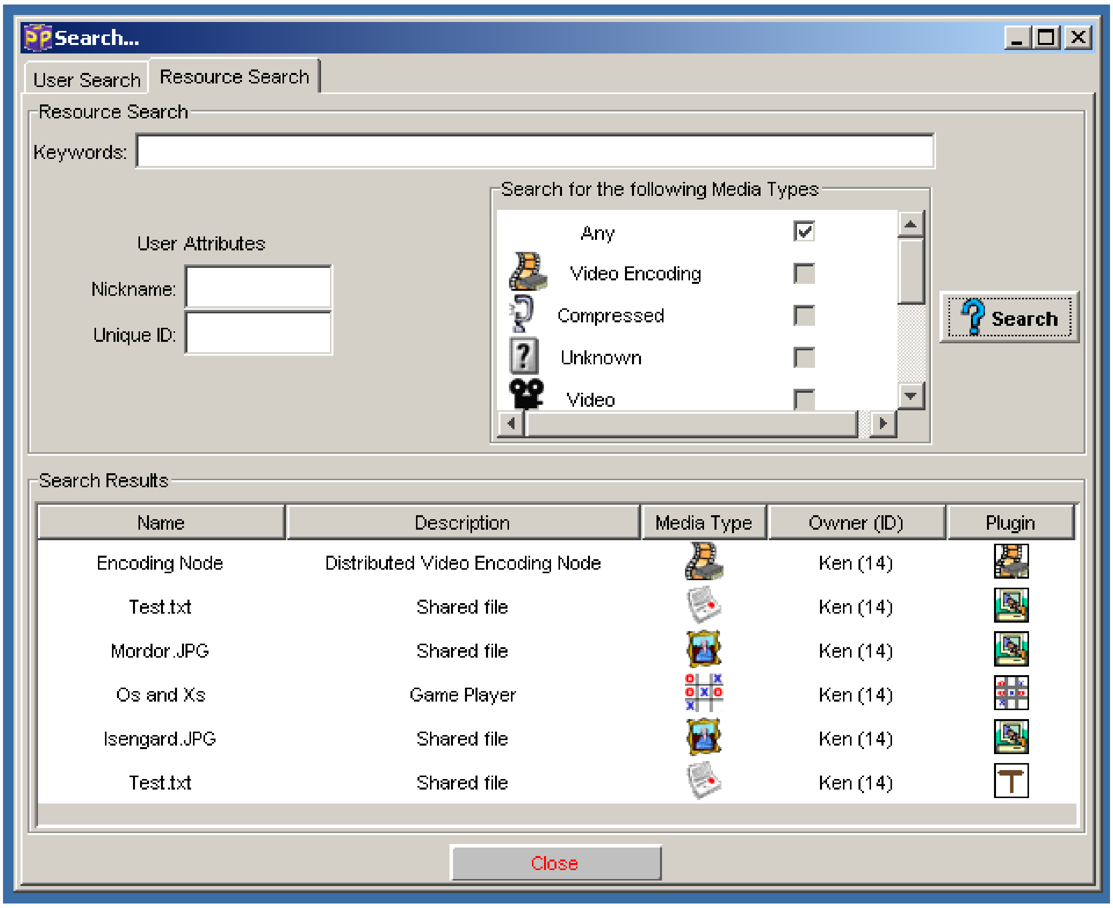
It is possible to search for other users within the framework by either specifying some user details, or areas of expertise. For example, you may want to search for all people called James, or you may want to search for all people who have knowledge of Java.

Upon performing a search the results (if any) are displayed in a table. This table provides basic details of each relevant user and, if applicable, determines the expertise rating of that user in accordance to the areas specified.

By selecting a user and clicking on the 'Add to contacts' button it is possible to add a user to your contact list. In some case authorisation is required before the operation can be completed.

4. Resource Search

By clicking on the Search button users can search for both users and resources that exist within the framework



Users can search for resources that are currently available within the network by either providing keywords (which will be searched for in the resources name and description), user attributes, resource media types or a combination. For example, users could search for all resources with the word 'Java' in them, or users could search for all resources that the user 'James' is making available, or simply all resources within the framework of a particular type (e.g. images).

Upon performing a search the results (if any) are displayed in a table. This table provides basic details of each resource including their owner, media type and the plugin that is providing them. The latter is particularly important because the plugin you use to access the resource needs to be compatible with the plugin that is providing the resource.

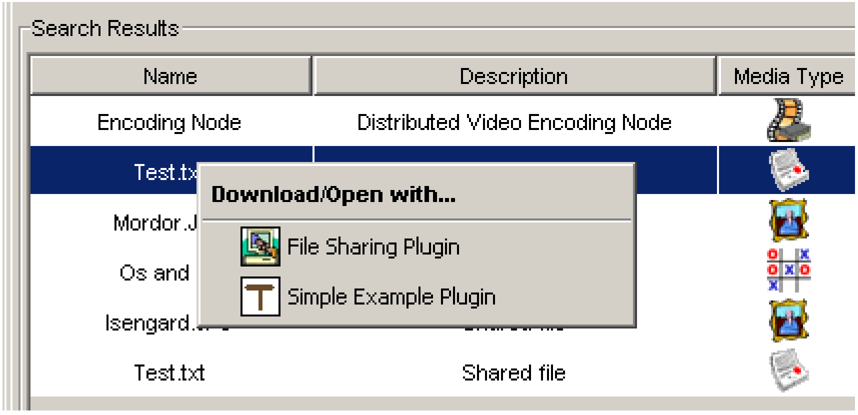
5. Activating a plugin

Aside from activating a plugin by clicking on its icon, a plugin can also be activated in two other ways.

Via the contact list

By bringing up the pop-up menu over a user on the contact list, the user is able to access a range of features that have been provided by the various plugins. These features will apply specifically to the selected user and an icon is used so it can be determined which plugin they belong to. For example, view that users shared files, play game with that user, etc

Via the resource search results



By bringing up the pop-up menu over a resource in the results table, the user is able to access this resource with the relevant plugins. The available plugins will be dependent on the resource's media type. For example, a text document can be downloaded by making use of the file sharing plugin, or viewed by using a document viewer plugin.