Tortitech – Gaim project

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Gaim's changes (I)

- Add a new option for the msn plugin
  - We had to change the core to call the plugin's callbacks of the group node (as it is a group option)
    - for some reason the core only asks for extra functions to the plugins when is about a buddy, but it doesn't with groups
  - The new option's name (the one that appears in the menu for the user) would be one that is already being used so there is no need of adding more translations to the dictionaries

Gaim's changes (II)

- Add a new option for the core, as it will be used independent of the plugins that are available
  - Copy the name of the buddy to the clipboard is useful for any protocol, in the case of msn it copies the mail address, that is precisely what we wanted
  - As Gaim is GTK, we used the GTK functions to put data in the clipboard, and so we ensure that the code is portable

Gaim's design (I)

- It is not an object oriented program
  - Difficult to make an UML diagram
  - Stack trace of the calls to the functions
    - gtk_blist_button_press_cb
      - a registered callback is called with the button_press event
    - gaim_gtk_blist_show_context_menu
      - this function will call to the corresponding menu creator
    - create_buddy_menu
      - a menu will be created for the selected buddy
    - gaim_gtk_blist_make_buddy_menu
      - calls to the gtk functions to make a context menu (or submenu)

Gaim's design (II)

- Even if there are no objects there are structures that are being used as "abstract classes"
  - A pointer to a function enables other structure to implement that function

```
struct _GaimBlistUiOps
{
void (*new_list)(GaimBuddyList *list); /**< Sets UI-specific data on a buddy
    list. */
[...]
};
```

Gaim acquiring ways

- Download from sourceforge
- Get the latest CVS (if the server is not overloaded)
  - $ export CVSROOT=:pserver:anonymous@cvs.sourceforge.net:/cvsroot/gaim
  - $ cvs login (hit enter as the password)
  - $ cvs co gaim (you'll see it getting all of the files)
  - $ cd gaim
  - $ ./autogen.sh

Contact with the developers

- The emails we wrote
  - The project administrator :

    seanegan@users.sourceforge.net (13th of April)
  - The msn plugin developer :

    chipx86@chipx86.com (21st of April)
- But we still don't have answers of them
  - We think they are overload of emails and it takes them time to answer

The source (I)

- In `create_group_menu` in `gtkblist.c`:

  ```
  //Gets the extended menu for all actives accounts
  for (accounts = l = gaim_accounts_get_all_active(); l != NULL; l = l->next){
          gaim_gtk_append_blist_node_proto_menu(menu,((GaimAccount*)l->data)->gc,node);
  }
  g_list_free(accounts);
  ```

- In `msn_blist_node_menu` in `msn.c`:

  ```
  if(GAIM_BLIST_NODE_IS_GROUP(node))
          return msn_group_menu();
  ```

- In `msn_group_menu` in `msn.c`:

  ```
  act = gaim_menu_action_new(_("Initiate _Chat"),
                      GAIM_CALLBACK(initiate_group_chat_cb),
                      NULL, NULL);
  return g_list_append(NULL, act);
  ```

The source (II)

- In `gaim_gtk_blist_make_buddy_menu` in `gtkblist.c`:
  gaim_new_item_from_stock(menu, _("Copy to clipboard"), NULL,
  G_CALLBACK(gtk_copy_to_clipboard_cb), buddy, 0, 0, NULL);

- In `gtk_copy_to_clipboard_cb` in `gtkblist.c`:
  GtkClipboard *clipboard = gtk_clipboard_get(GDK_SELECTION_CLIPBOARD);
  //We know for sure that the node is a buddy
  gtk_clipboard_set_text(clipboard, ((GaimBuddy *)node)->name, -1);

The results

- The blur in the image is due to it wasn't possible to take a screenshot of gaim within a contextual menu, as if it doesn't pass the unhandled events (print_button_pressed) to the container (in this case the gnome window manager)