



**Campus Grid Computing System
(CGCS)**

User manual

Prepared By

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1. Introduction

We appreciate the time you are taking to familiarize yourself with Campus grid computing system. This manual helps you to work and interact easily with the system.

2. Administrator side

Administrator has the control over Campus Grid Computing System (CGCS). He can create, manage and delete projects. Also, he can add, modify and delete users. These functions can be applied through account that has Admin level as described below.

- **Project creation**

Admin can create a new BOINC project as follow:

1. Login as administrator.
2. Enter a valid project name (letters, digits, underscores).
3. Select the project type.
4. Click on create button.

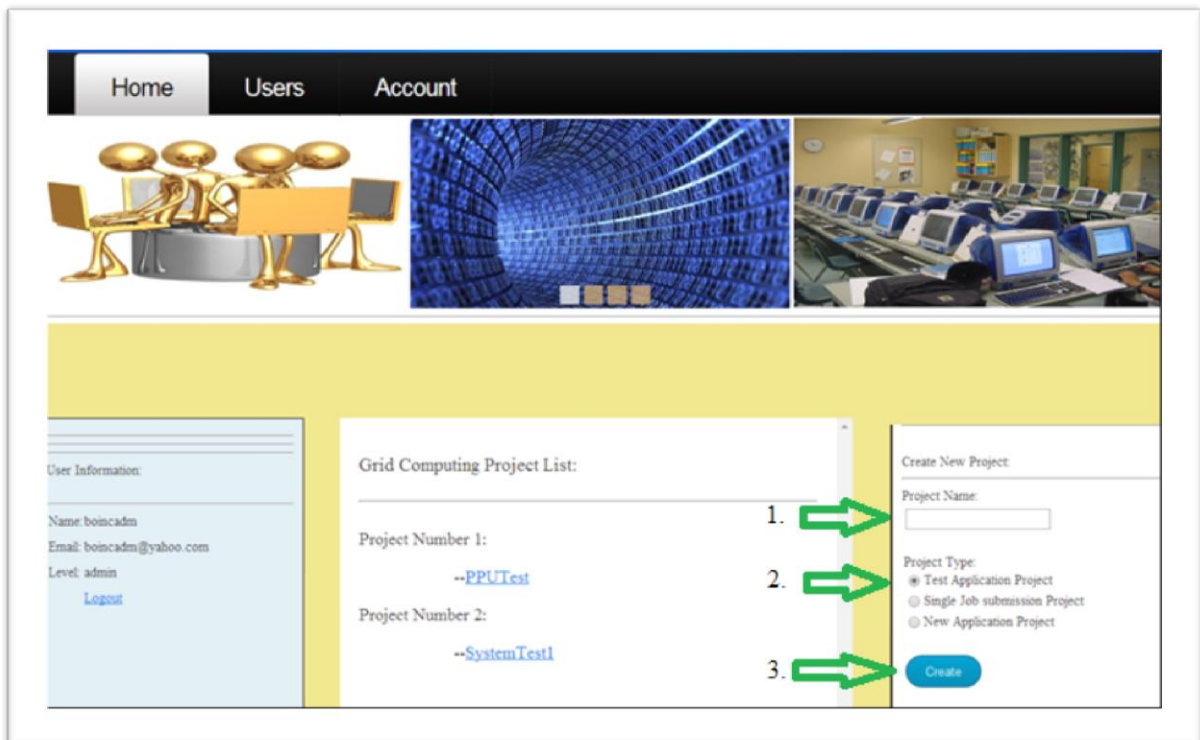


Figure 1: project creation.

- **Resource attachment**

Attaching resources that will execute the computations can be done as follow:

1. Login as administrator.
2. Select a project from projects list.
3. Enter the clients IPs to be attached; if you need to attach more than one client at a time, enter all the clients IPs separated by spaces.
4. Click on attach button.

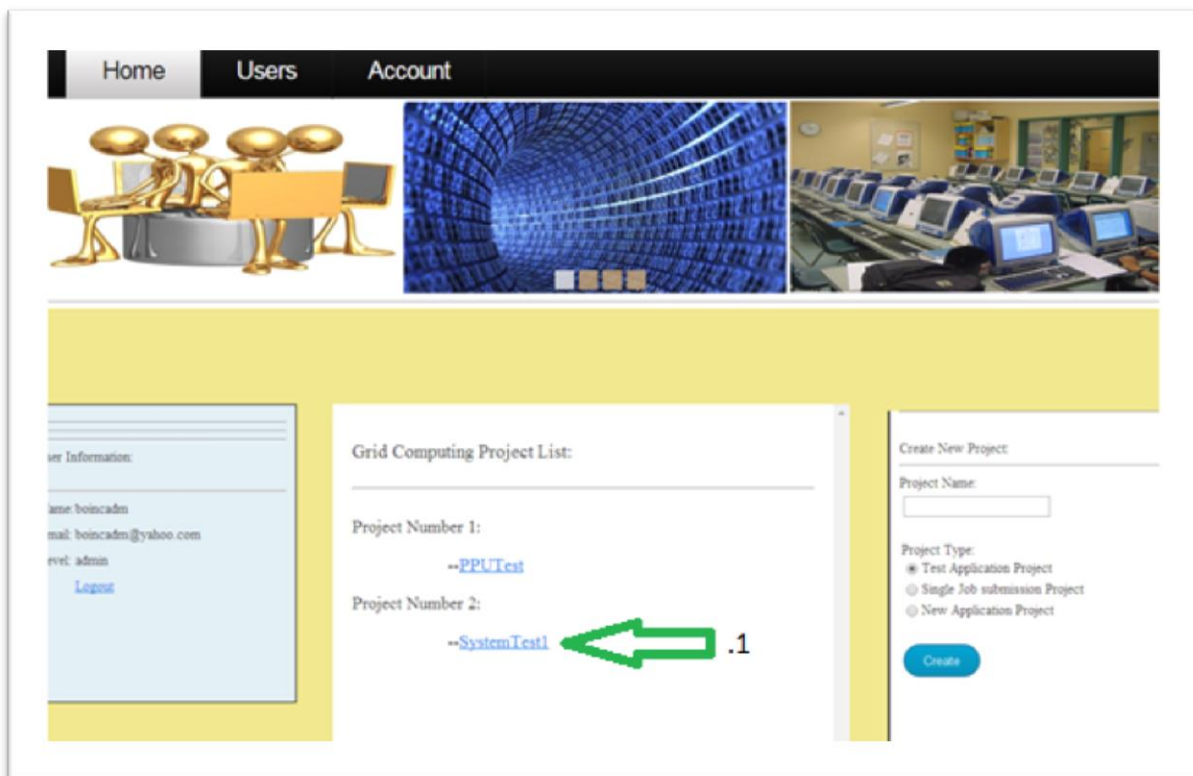


Figure 2: Resource attachment 1.

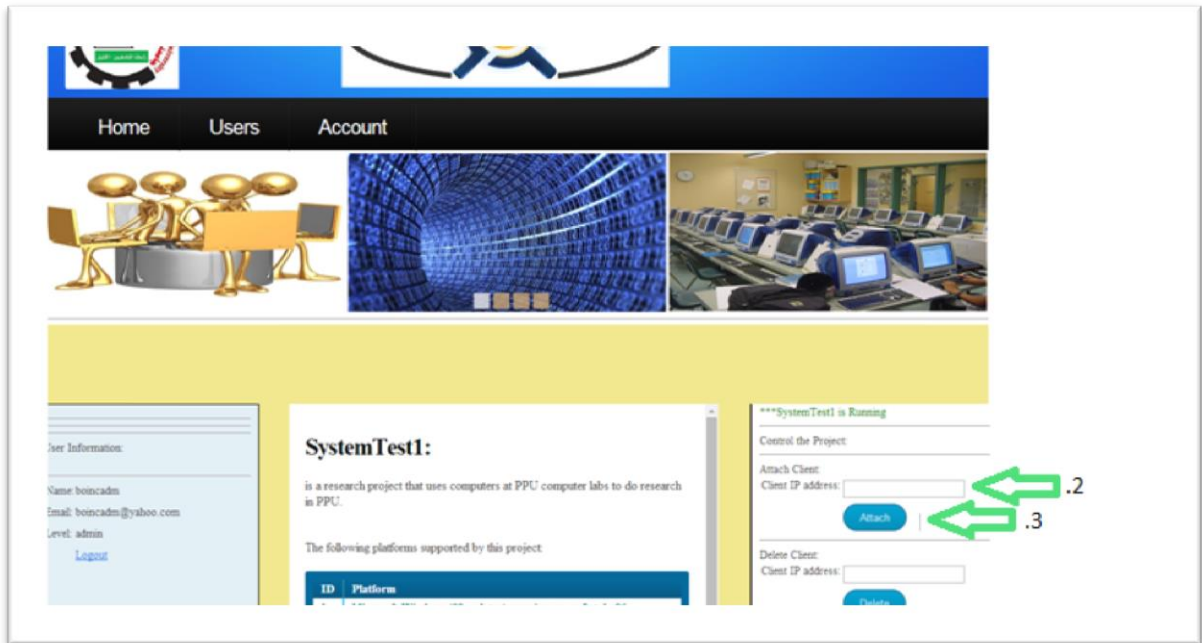


Figure 3: Resource attachment 2.

- **Resource detachment**

To remove a computing resource from the grid clients that perform computations to a specific project you can follow similar steps as resource attachment.

- **Project update**

If you don't want to wait the clients contacting schedule to handle the new available computations, you can update the project on the attached clients; Project update causes the BOINC core client to contact scheduling server immediately. Project update done in similar way as resource attachment.

- **Disabling account creation**

Disable account creation prevent anyone from adding new account to attach resources under that account. By default each project has one account. All the computing resources added under this account. Disabling account creation applied by clicking on the disable button. This button appeared at the project management page if the account creation is enabled.

- **Enabling account creation**

Used to allow users to create accounts and attach resources under those accounts. This may be more appropriate for volunteer computing rather than for grid computing. Enabling account creation applied similarly as disabling account creation.

- **Stopping, Starting, Restarting or Deleting project**



Stopping a project used to stop performing any computations following to that project. It can be applied by clicking on Stop button appeared in the project management page.

Starting a project used to resume performing computations following to that project. It can be applied by clicking on Start button appeared in the project management page.


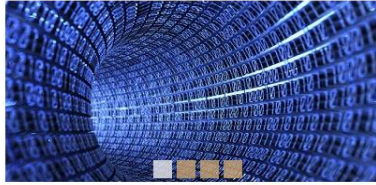

Restarting a project performs stopping then starting the project. Used for the cases if one or more of the project daemons stopped for some reasons. It can be applied by clicking on Restart button appeared in the project management page.

Deleting a project used to permanently delete the BOINC project. It can be applied by clicking on Delete button appeared in the project management page.

PPU Grid
195.3.191.24/PPUGridSystem/projectHome.php?projName=SystemTest1

  [Logout](#) [boincadm](#)

[Home](#) [Users](#) [Account](#)

User Information:

Name: boincadm
Email: boincadm@yahoo.com
Level: admin
[Logout](#)

SystemTest1:

is a research project that uses computers at PPU computer labs to do research in PPU.

The following platforms supported by this project:

ID	Platform
1	Microsoft Windows (98 or later) running on an Intel x86-compatible CPU
2	Microsoft Windows running on an AMD x86_64 or Intel EM64T CPU
3	Linux running on an Intel x86-compatible CPU
4	Linux running on an AMD x86_64 or Intel EM64T CPU
5	Mac OS X 10.3 or later running on Motorola PowerPC
6	Mac OS 10.4 or later running on Intel

for more details about supported platforms you can visit [Platforms](#)

For more information you can visit:

- >> [Home Page](#)
- >> [Project status](#)
- >> [Administrative Page](#)
- >> [Administrator Account](#)
- >> [Computing resources](#)
- >> [Computing preferences](#)
- >> [Submitted Jobs](#)

***SystemTest1 is Running

Control the Project:

Attach Client:
Client IP address:
[Attach](#)

Delete Client:
Client IP address:
[Delete](#)

Update the attached Projects on client:
Client IP address:
[Update](#)

Restart the Project,
Restart All diemons:
[Restart](#)

Stop the Project:
All running diemons will be stopped:
[Stop](#)

Delete the Project:
Project will be deleted permanently:
[Delete](#)


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Figure 4: project management page.

- **Adding new user**

Adding new user can be done as follow:

1. Login as admin
2. Go to users page
3. Through the form 'Adding new user' enter the required inputs and click on the button 'Add user'

- **Modifying user information**

Admin can change the level of the user or move the user from a project to another as follow:

1. Login as admin
2. Go to users page
3. Click on the name of a specific user
4. Through the appeared form you can change the user level or move the user form project to another.

- **Deleting users**

Admin can delete users as follow:

1. Login as admin
2. Go to users page
3. Select the user you want to delete by click on the checkbox
4. Click on delete button

PPU Grid
195.3.191.24/PPUGridSystem/Users.php

PPU Grid Computing System

Logout boincadm

Home Users Account

Adding users

Select users to delete

User Information

Name: boincadm
Email: boincadm@yahoo.com
Level: admin
Logout

All Authenticated System Users

Name	Email	Project	select
boincadm	boincadm@yahoo.com		<input type="checkbox"/>
Mohammad	mohammad.thwaib@yahoo.com	SystemTest1	<input type="checkbox"/>
Ibrahim	quaymus@yahoo.com	SystemTest1	<input type="checkbox"/>
Mohammed	mohammed@ppu.edu	SystemTest1	<input type="checkbox"/>
superuser	superuser@ppu.edu	SystemTest1	<input type="checkbox"/>
salcom	salcom@ppu.edu		<input type="checkbox"/>

Modify user

Delete users

Click to delete selected users

Add a New user

Name:
Email:
Password:
ProjectID: SystemTest1
Level: user
Add user

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BOINC

Figure 5: Users page.

3. User side

Users can submit jobs for execution, monitor the execution status, abort jobs execution and download or delete results. These functions can be applied through account that has User level as described below.

- **Submitting jobs**

Users can submit jobs for execution as follow:

1. Login as user
2. Go to Job Submission page
3. Select the compressed folder of the job (supported compressions are: zip, rar and 7z)
4. Select the appropriate platform that can execute the job
5. Enter any arguments if exist. Arguments separated by space.
6. Click on submit button

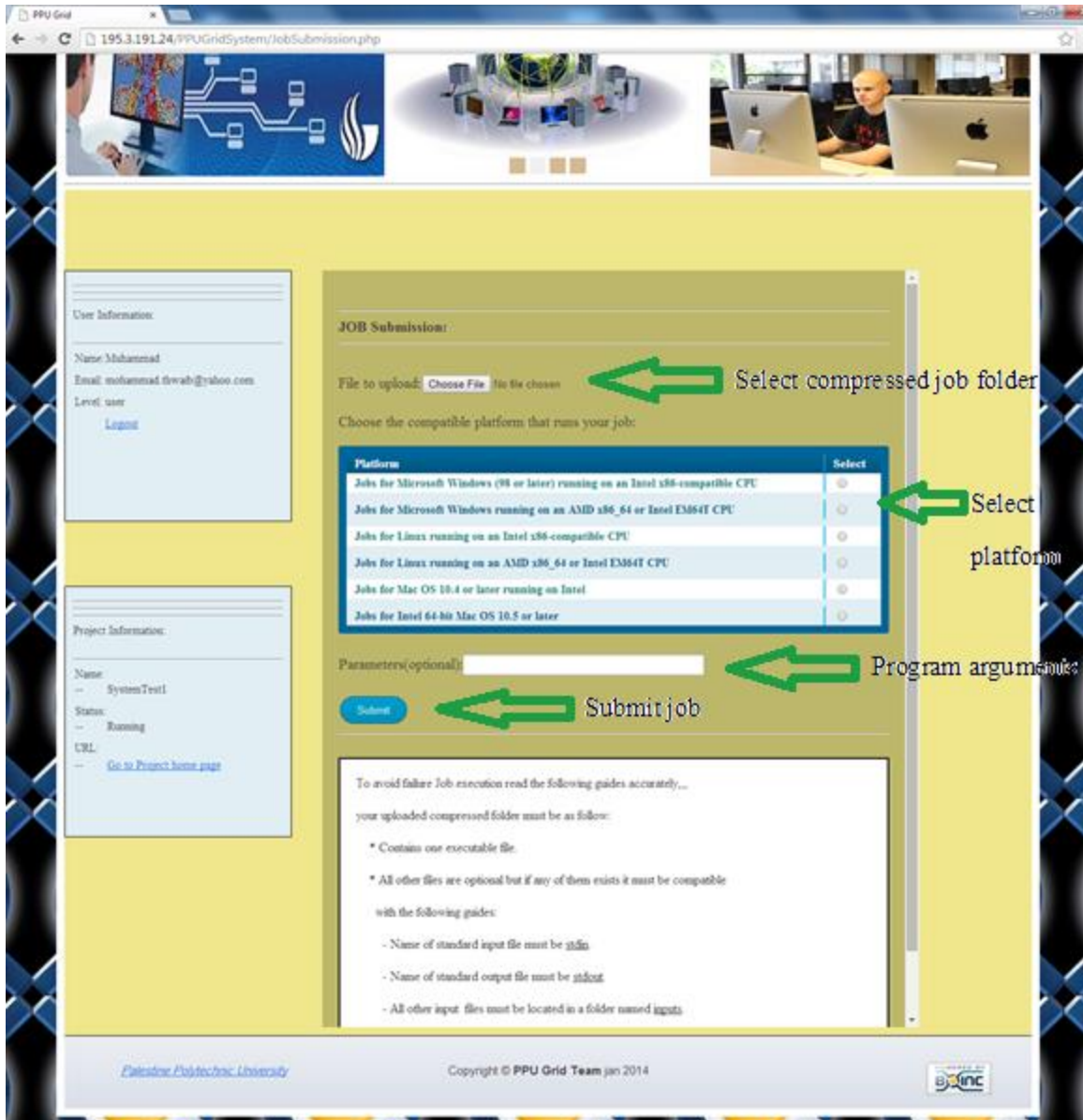


Figure 6: Job Submission.

- **Monitoring and Controlling jobs**

User can monitor all his submitted jobs while their execution through Home page. He can also abort jobs while execution by clicking on abort button appeared for the job while execution. In addition, user can download the results by clicking on

download link appeared for finished jobs. Moreover, user can delete the results by selecting them and clicking on delete button.



Figure 7: User Home page.

- **Modify account**

A user can modify his name, email address, password as follow:

1. Login as user
2. Go to Account page
3. Enter a new name
4. Enter new email address
5. Enter the current password and a new one then confirm the new password
6. Click on the button 'update information'.

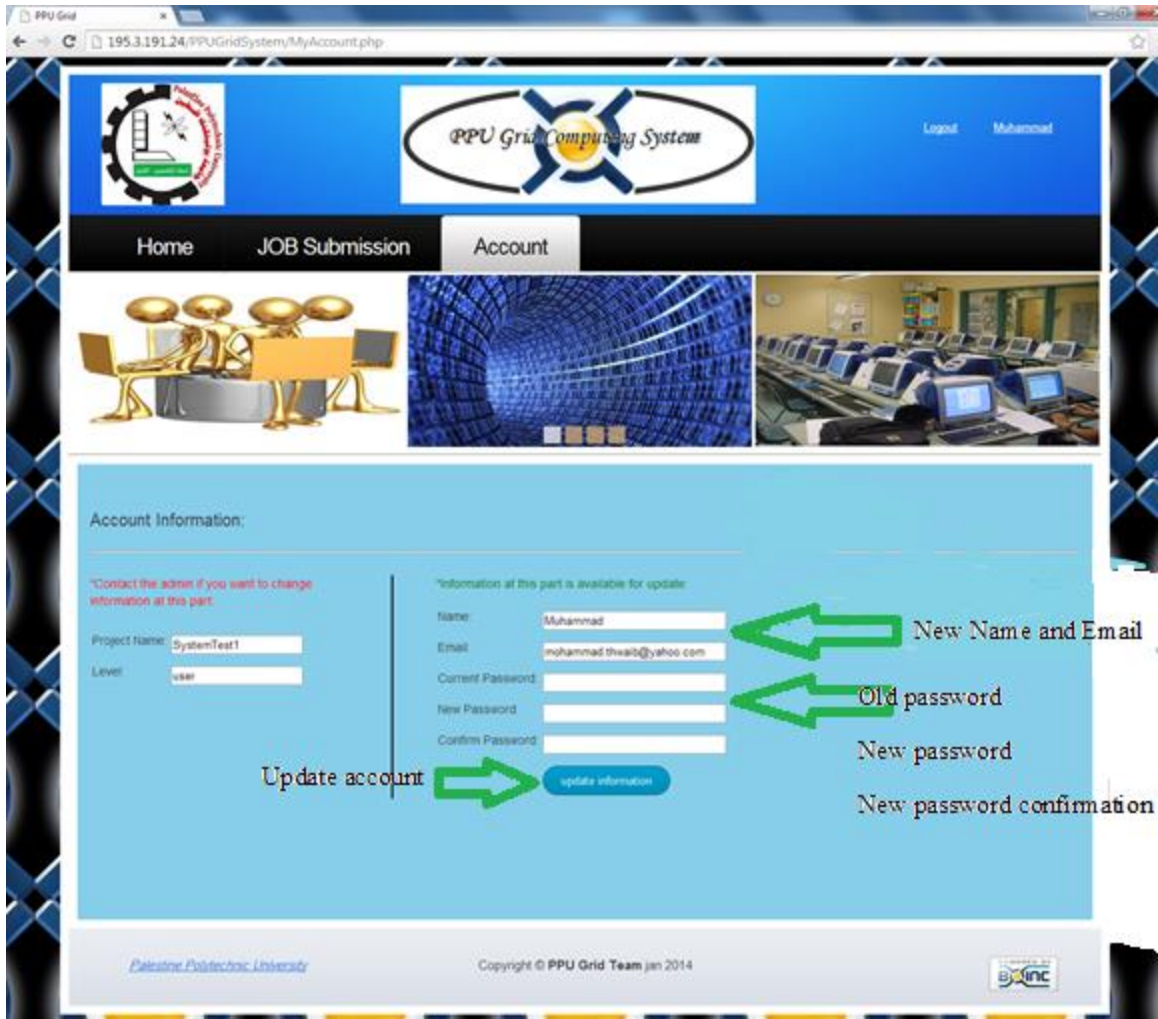


Figure 8: Account page.