OPAL Dashboard with DUCKLING Tools

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CNIC, Beijing
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Proposed Project

- Develop a Dashboard Similar to the Opal Dashboard locates @ ws.nbcr.net/opal2, and add user control by using duckling’s tools.

- The Dashboard should show all the applications (services) deployed on NBCR web server (ws.nbcr.net)

- Based on each application’s metadata, dashboard should Automatically Generate User Interfaces (forms), and collect information upon submit.

- Collected information will be submitted to that application’s Service URL, and request to run job based on those information.
Proposed Project (cont’d)

- As in return from the service, Dashboard will get a Output URL and store it into database reference it with current user.

- Users can see previous job submissions in the Job History page.
欢迎使用Duckling协同工作环境！

2010年3月17日，Duckling开源啦！

Duckling协同工作环境研究中心

支持e-Science的协同工作环境（Duckling）开源软件是专门为科研团队提供的综合性的资源共享和协作平台。通过协同工作环境核心工具集和其门户框架（支持Portlet框架）下开发的各类学科应用插件，集成网络环境中的硬件、软件、数据、信息等各类资源，为科研人员提供先进的信息化科研平台。用户可在该平台上按照Portlet规范开发特定的插件应用。

如果您有使用中的疑虑，请访问使用帮助。

【支持服务：010-38812945 eLab@enu.cn】
Login & Register Page

Sign in

Username

Password

Login

Forgot your password

Register if don’t have an account!

Username *

Password *

Retype Password

First name *

Middle name

Last name *

Company

Job Title

Cell Phone

Please Enter an Username

Please enter password

Please confirm password

Please Enter Your First Name

Please Enter Your Last Name

optional

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协同工作环境套件

<table>
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Application’s metadata

- Application’s metadata are requested from application’s service URL by using Opal2’s function:
  `AppServicePortType.getAppConfig();`

- There are four types of application metadata:
  - Flag: Checkbox.
  - Tagged Parameter: Parameters with tag id.
  - Unagged Parameter: Parameters without tag id.
  - Groups: Specify groups for the above three type, a group may exclusive, in this case, we need to add ratio button for user to choose.
Application Page (metadata)
Application Page (metadata)
协同工作环境套件

Welcome!

Menu

Home
Service List
Job History

GOMO 4.6.0's Submit Form

Insert command line here:

Choose input file:
Choose File | No file chosen
Choose File | No file chosen
Choose File | No file chosen
Choose File | No file chosen

Submit  Reset  Another File  Show Help

×××× 协同工作环境 Powered by Duckling2.1 (DCT 5.1.29)
Job Submission

- There are two basic information we need to send to server:
  - Command
  - Uploaded Files

- Service will return a Job ID in return of job request, based on ID, we can go to ws.nbcr.net/jobid (output URL) to get all the uploaded files, and job output file(result).
Job Result Page

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Welcome  系统管理员!  Log out  My Account  My Pref.  Edit Mode  Help  Full Screen  语言

Menu
Home  Service List  Job History

Job Submitted

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<tr>
<th>Application Name</th>
<th>PDB2PQR 1.7.0</th>
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协同工作环境 Powered by Duckling2.1 (DCT 5.1.29)
### List of Job Output

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<td>--uploaded rgb.txt pearson evalu 0.5 README.txt p</td>
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<td>2011-08-18 22:17:20</td>
<td>p change.txt -l logfile fasti.txt url</td>
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<td>app1313677103618</td>
<td>2011-08-18 22:18:23</td>
<td>-p trash eval.txt</td>
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<td>app1313677205348</td>
<td>2011-08-18 22:20:05</td>
<td>-p trash eval.txt</td>
</tr>
</tbody>
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*协同工作环境 Powered by Duckling2.1 (DCT 5.1.29)*
Database

• There are three tables for database dashboard:
  o Users: contains information about user including email, name, company, job title, cell phone number, register date.
  o Jobs: contains all the job submission including job id, output URL, submit date, command, reference to Users.
  o Services: contains information about services including service name, service URL, service usage.

• There are also Duckling database to save user email, and password...
What I have Learned

• Spring MVC Portalet
  ▪ Easier and More futures than Struct.

• MySQL Database

• Jquery and CSS

• Duckling (installation)

• Setup Linux Server.

• Myeclipse on Win7.
Things can be improved

- Validation for metadata application page.
- Save application metadata into database (MongoDB).
- User Control page for admin (userlevel = 0).
- A page where user can change their information including password.
- Register email validation by umt, not dashboard’s database.
- Add more duckling tools.
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