

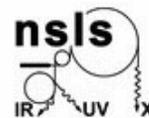
X6A Web Environment



Kun Qian



2007-2-18

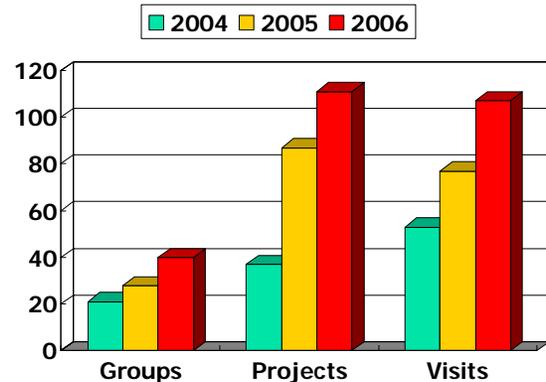


Introduction



■ Beamline current situation

- 77% user beamtime
- 40 Groups, 111 Projects, 107 visits



■ Beamline needs

- Easy and quick access of beamtime for users
- More regulated and simplified beamline management
- Up-to-date user instructions and beamline logbook

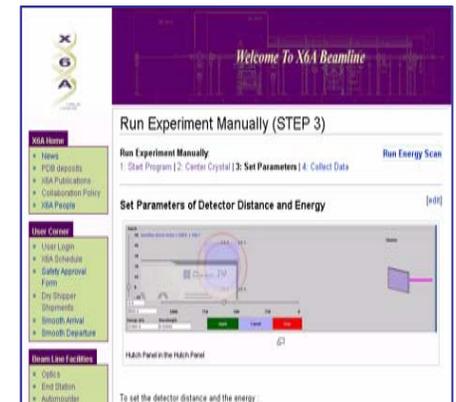
What is the X6A web?



■ X6A Wiki Site

- Mediawiki (Wiki) provides a simple, web-based environment that enables users to collaborate and provide and share information.

➤ The wiki is concerned with storing, categorizing and sharing information in a way that allows any registered user to update, edit and enhance the information



What is the X6A web?



- A Schedule System

- User proposal submission
- Proposal review procedure
- Beamtime schedule



- A Management Toolkit

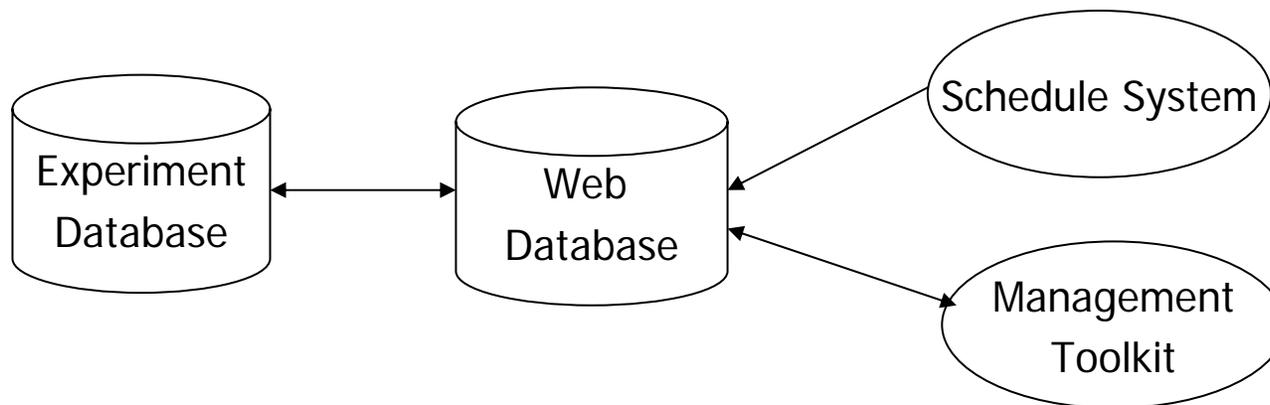
- Assignment tool
 - user level, new reviewer, local contact
- Statistic tool
 - Beamtime allocation, user group, survey, localcontact and reviewer contribution time
- Tracking tool
 - beamtime %, survey, user experiment

What is the X6A Web?



■ X6A Web Application Architecture

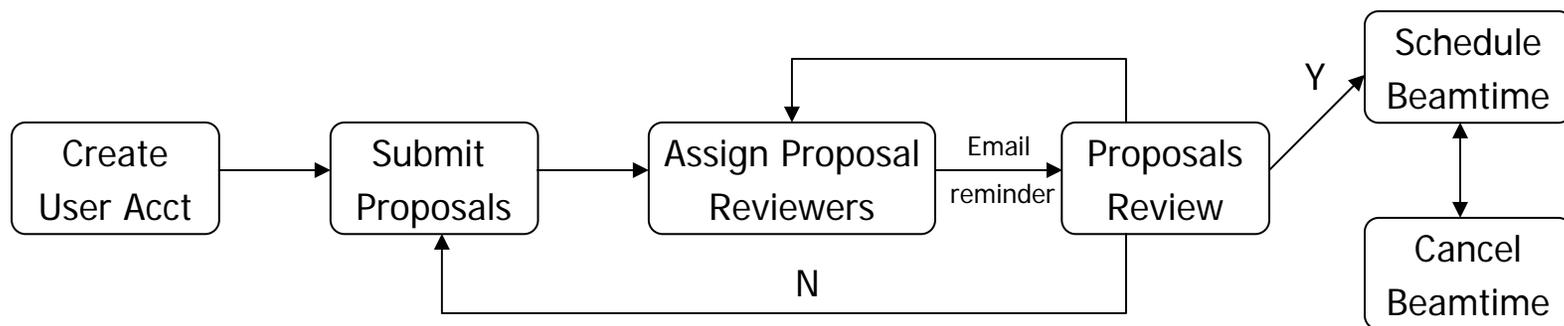
- Program language ----- PHP
- Database ----- Postgresql
- Experiment Database --- Mysql



Schedule System



■ Schedule System Work Flow

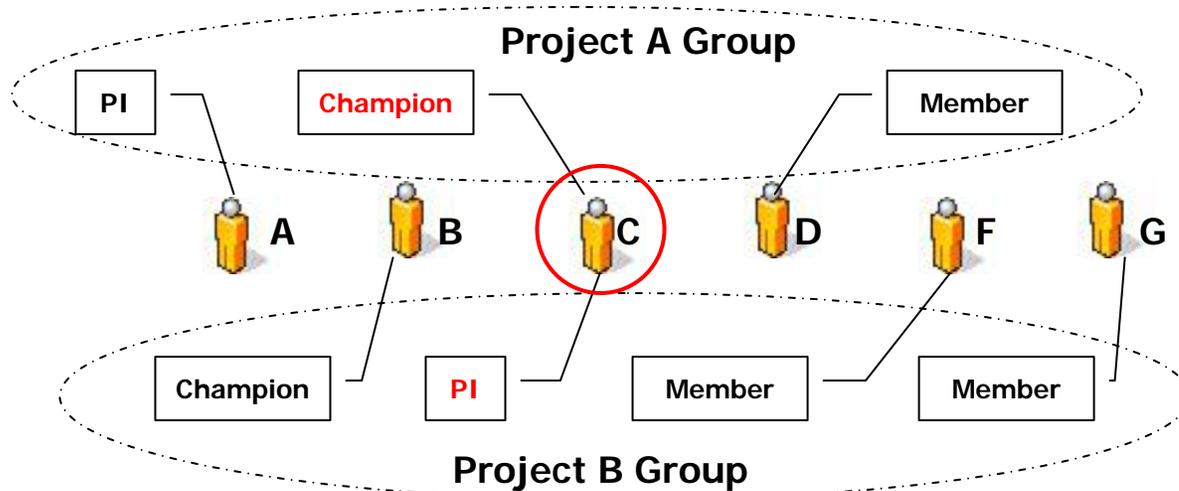


- Automated work flow
 - system auto send emails, reminders based on the status checking
- Increased efficiency
 - Review procedure takes 1~7 days, schedule procedure occurs instantly

Schedule System



- Concept of Project Group



- Multiple User Roles

Schedule System



- Schedule System Examples

February

X6A Schedule Form

*Fields marked with * are required.*

Schedule available Beam Time

Projects : x6a1

Begin Date:* 1 January 2007

Shift Begin Time :* 0:00:00

End Date:* 1 January 2007

Shift END Time :* 0:00:00

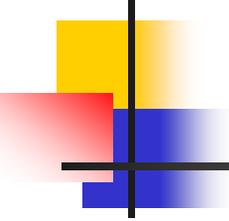
Visit X6A Beamline : YES NO

Available Beamtime Slots

From	To	Duration
2007-02-16 07:00:00 (Friday)	2007-02-16 12:00:00 (Friday)	0days 12hours
2007-02-20 07:00:00 (Tuesday)	2007-02-20 12:00:00 (Tuesday)	0days 5hours
2007-02-27 08:00:00 (Tuesday)	2007-02-27 12:00:00 (Tuesday)	0days 4hours
2007-03-02 12:00:00 (Friday)	2007-03-03 12:00:00 (Saturday)	1days 0hours
2007-03-04 00:00:00 (Sunday)	2007-03-05 06:00:00 (Monday)	1days 6hours

Schedule Reset

Schedule Page



Schedule System



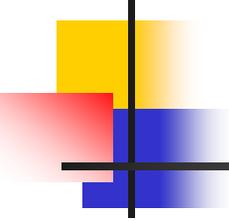
■ Advantages

- Fairness for all the users --- First come First Serve
- User can access X6A schedule anywhere at any time
- User can pick the beamtime they prefer
- No need for beamline staff involvement
- No overbooking

■ Disadvantages

- Currently no links to the PASS system and HR database
- User might have to register twice





Beyond the Schedule System



- An idea of tracking Beamtime Usage
- Assist Beamline Staff with their duties



Management Toolkit



- Assignment Toolkit Example
 - Local contact, user level, new reviewer, x6a beamtime

BeamTime Description	From	To	Current Contact	Duration	Assign
x6a155 x6a79	2007-02-27 12:00:00	2007-03-02 12:00:00	jean jakoncic	3days 0hours	<input type="checkbox"/> Qian, Kun <input type="checkbox"/> jakoncic, jean <input type="checkbox"/> Allaire, Marc <input checked="" type="checkbox"/> Stojanoff, Vivian
x6a138	2007-03-03 12:00:00	2007-03-04 00:00:00		0days 12hours	<input type="checkbox"/> Qian, Kun <input type="checkbox"/> jakoncic, jean <input type="checkbox"/> Allaire, Marc <input type="checkbox"/> Stojanoff, Vivian
x6a174 x6a175 x6a67	2007-03-22 12:00:00	2007-03-27 00:00:00		4days 12hours	<input type="checkbox"/> Qian, Kun <input type="checkbox"/> jakoncic, jean <input type="checkbox"/> Allaire, Marc <input checked="" type="checkbox"/> Stojanoff, Vivian

Assign Local contact Page

usr_id	usr_id	level	view
200	Aaron.J	User	<input type="radio"/>
19	u7973	User	<input type="radio"/>
92	X7636	User	<input type="radio"/>
132	Aggarwal.A	User	<input type="radio"/>
60	A5914	User	<input type="radio"/>
2	allaire	Staff	<input type="radio"/>
3	A5242	User	<input type="radio"/>
114	mario	User	<input type="radio"/>
120	GR29550	User	<input type="radio"/>
199	Atilla-G.G	User	<input type="radio"/>

Success!
New Level has been assigned.

Currently X6A have 6 SPECIAL USERS.

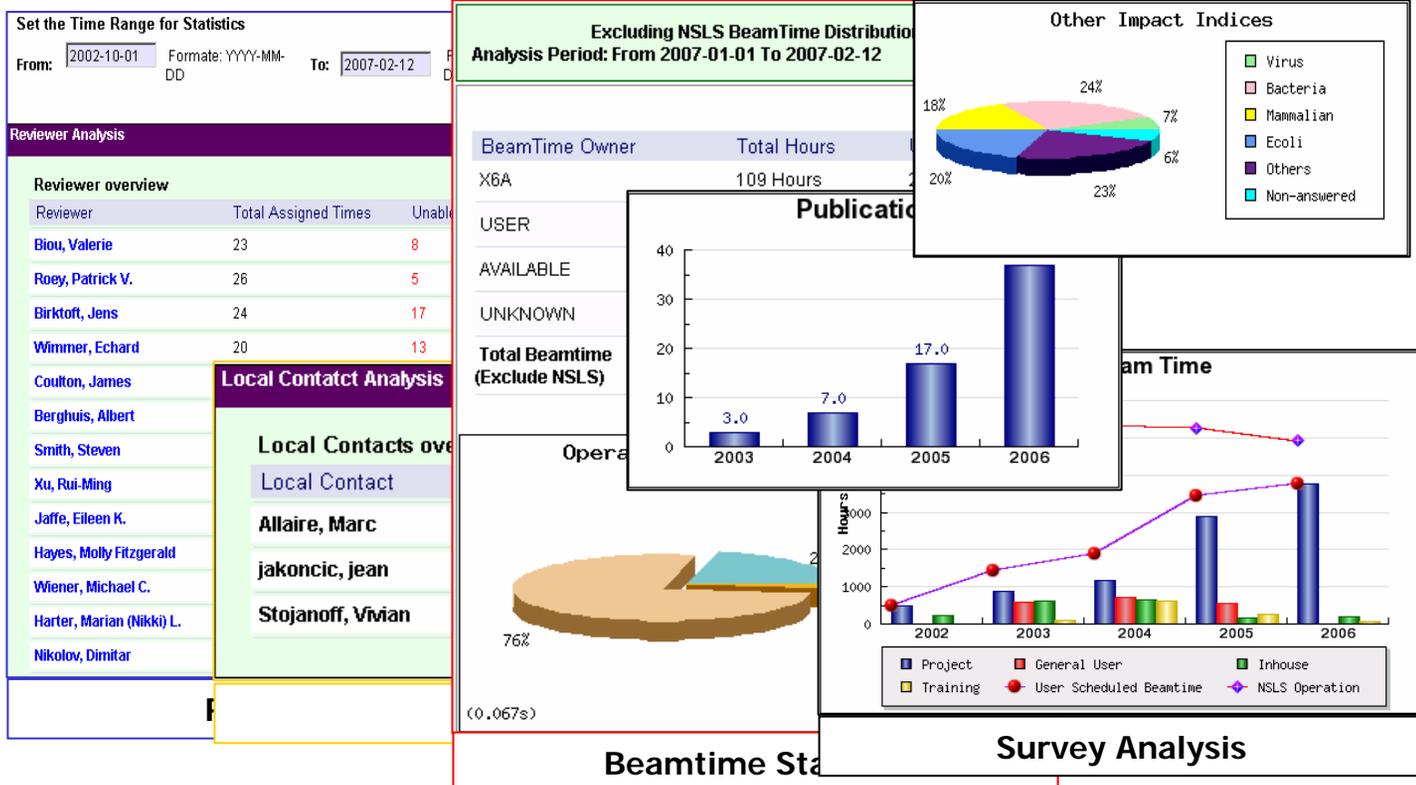
usr_id	firstname	lastname	level
kun@x6a	Kun	Qian	Admin
AMOR	Vivian	Stojanoff	Admin
jakoncic	jean	jakoncic	Staff
allaire	Marc	Allaire	Staff
B7302	Dirksen	Bussiere	Proprietary User
Snell.G	Gyorgy	Snell	Proprietary User

Assign User Level Page

Management Toolkit



- Statistic Toolkit Example
 - Beamtime, local contact and reviewer contribution, survey



Management Toolkit



- Tracking Toolkit Example
 - Duty page, beamtime, survey and user experiment

Pending Projects: 1 projects are during review procedure.

x6a179 Unable to review --- [Jaffe, Eileen K]
Approved (1) --- [Chayen, Naomi]
Rejected (1) --- [Ramaswamy, S.]

Pending (1) --- [Roey, Patrick V] **Assigned on: 2007-02-10 00:03:00 Expire on 23:59:59**

Next 3 Schedules

Future Visits

Projects: [x6a173] **Schedule:** From: 2007-02-16 12:00:00 To: 2007-02-19 12:00:00

Local Contact: jakoncic, jean **Visitors:**

User Folder: >>> Dir /data_cys/User/6969/2007-02-16 **Scheduler:** [Olivier , Nelson]

Visit Form: **Done** [View Visit Detail] **Crystal Form:** **Incomplete!!!**
 Local Contact should ask user to fill in the crystal form.

No user sample shipment

Projects: [x6a104] [x6a81] **Schedule:** From: 2007-02-23 12:00:00 To: 2007-02-27 00:00:00

Admin Staff Duty Tracking Page

Visit Analysis Confirm

Schedule From 2007-01-24 21:00:00 To 2007-01-29 00:00:00 **Projects** PRO1

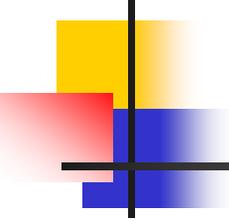
Content

Experiment Overview [+ More Details]

crystal	filePath	createDate	images
f-006b2b	/data_cys/User/Takeda/2007-01-24/collect/f-006b2b	2007-01-28 22:46:21	201
g-114x1f	/data_cys/User/Takeda/2007-01-24/collect/g-114x1f	2007-01-28 16:46:12	212
hsp_003a3B-102046	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:45:51	2
hsp_003a3A-102045	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:45:42	2
hsp_003b3D-102044	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:45:33	2
hsp_003b3C-102043	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:45:24	2
hsp_003b3B-102042	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:45:14	2
hsp_003b3A-102041	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:44:57	2
hsp_003a2B-102040	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:44:47	2
hsp_003a2B-102047	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 16:44:47	2
135734d9a	/data_cys/User/Takeda/2007-01-24/collect/135734d9a	2007-01-28 16:43:52	208
138033d2c	/data_cys/User/Takeda/2007-01-24/collect/138033d2c	2007-01-28 15:37:47	52
137516a7D-102028	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 10:54:15	2
137516a7C-102027	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 10:54:06	2
137516a7B-102026	/data_cys/User/Takeda/2007-01-24/screen	2007-01-28 10:53:57	2

User Experiment Tracking





Management Toolkit



- Advantages

- Real-time tracking and analysis
- More accurate and quicker statistic evaluation
- Regulated management procedure
- Time saving on statistic calculation
- All the advantages with web applications.



Summary

- Improved schedule performance
- Statistic and Analysis tools
- Connection between Databases

