MRBS
Meeting Room Booking System

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Introduction

- Who am I?
- Why am I here (non-metaphysical answers only, sadly)?
- What is MRBS?
- Why should I be interested?
- How hard is it to set up?
- Will my users like it?

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| 10 ∨ | Mar ∨ | 2009 ∨ | goto |

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Areas
Department of Statistics

February 2009	March 2009	April 2009
Sun Mon Tue Wed Thu Fri Sat	Sun Mon Tue Wed Thu Fri Sat	Sun Mon Tue Wed Thu Fri Sat
1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4
8 9 10 11 12 13 14	8 9 *10* 11 12 13 14	5 6 7 8 9 10 11
15 16 17 18 19 20 21	15 16 17 18 19 20 21	12 13 14 15 16 17 18
22 23 24 25 26 27 28	22 23 24 25 26 27 28	19 20 21 22 23 24 25
	29 30 31	26 27 28 29 30

Tuesday 10 March 2009

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Time:	1SPR Lecture Room(48)	1SPR MSc Lab(20)	1SPR Seminar Room(25)	1SPR Teaching Room(10)	2SPR Lab(10)	2SPR Meeting Room(20)	OCGF Meeting Room B(10)	Projector Unit(0)
07:00am	✚	✚	✚	✚	✚	✚	✚	✚
07:30am	✚	✚	✚	✚	✚	✚	✚	✚
08:00am	✚	✚	✚	✚	✚	✚	✚	✚
08:30am	✚	✚	✚	✚	✚	✚	✚	✚
09:00am	MCMC and Applied Bayesian Statistics - MSc	✚	✚	✚	✚	Departmental Meeting (with Faculty) (coffee needed)	✚	✚
09:30am	"	✚	✚	✚	✚	"	✚	✚
10:00am	✚	✚	✚	Dr Neil Laws	✚	"	✚	✚
10:30am	✚	✚	✚	"	✚	Bioinformatics standing committee	✚	✚
11:00am	✚	✚	✚	"	✚	"	✚	✚
11:30am	✚	✚	✚	"	✚	"	✚	✚
12:00pm	✚	✚	✚	✚	✚	"	✚	✚
12:30pm	✚	✚	✚	✚	✚	"	✚	✚
01:00pm	✚	✚	✚	✚	✚	"	Peter Donnelly	✚
01:30pm	✚	✚	✚	✚	✚	✚	"	✚
02:00pm	MS1b Statistical Data Mining	Reserved for MSc students	✚	✚	UG Maple drop in session	✚	"	✚
02:30pm	"	"	✚	✚	"	✚	"	✚
03:00pm	MS3a Stochastic Models in Mathematical Genetics	"	BS3b Further Statistical Inference class	✚	"	✚	"	✚
03:30pm	"	"	"	✚	"	✚	✚	✚
04:00pm	✚	Nicolai Meinhausen	✚	✚	✚	✚	✚	✚
04:30pm	✚	"	✚	✚	✚	✚	✚	✚
05:00pm	✚	"	✚	✚	✚	✚	✚	✚
05:30pm	✚	"	✚	✚	✚	✚	✚	✚
06:00pm	✚	✚	✚	✚	✚	✚	✚	✚
06:30pm	✚	✚	✚	✚	✚	✚	✚	✚
07:00pm	✚	✚	✚	✚	✚	✚	✚	✚

Anatomy DTC External Physiology IT related
Statistics Internal

Preliminaries – Web server

- You need Apache – preferably Apache2

- PHP needs to be supported.

- That includes recognising .php files.
  - index.php support
  - .php included as "AddType" declaration

Preliminaries - MySQL

- You can use PostgreSQL, but I prefer MySQL.

- Best to set up a dedicated mrbs user:

  ```
  > create user mrbs@localhost identified by "pwd";
  ```

- Each MRBS instance requires a separate database:

  ```
  > create database mrbs1;
  ```

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Installing MRBS – files and security

- It comes as a tarball of PHP files.

- Unpack the tarball in a web-visible directory.

- Make sure the permissions are safe:

```
# chown -R user:apache mrbs

# chmod 750 mrbs

# chmod -R o-rwx mrbs

# chmod -R g-w mrbs

# chmod g+s mrbs
```

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Installing MRBS – Next steps

- **First edit** `config.inc.php`:

  ```
  $dbsys = "mysql";

  $db_host = "localhost";

  $db_database = "mrbs1";

  $db_login = "mrbs";

  $db_password = "pwd";

  $mrbs_admin = "Eric the Viking";

  $mrbs_admin_email = "eric@vikings.org";

  $mrbs_company = "Vikings, inc.";
  ```

- **Plus lots of tweaks under the "Calendar Settings" section**

Installing MRBS – Next steps 2

- **Next load up the tables:**

```
# mysql -u root -p mrbs1 < ./tables.my.sql
```

- **Finally grant permissions on the database to the mrbs user:**

```
# mysql -u root -p

> grant all on mrbs1.* to mrbs@localhost;

> flush privileges;
```

Authentication

- ## MRBS uses three levels of access:

  - Level 0 - Unknown user

  - Level 1 - Authenticated user

  - Level 2 - Administrator

- ## Edit config.inc.php - "Authentication settings"

  - You can authenticate against a list of entries in a table in the MySQL database.

  - You can authenticate against any OpenLDAP-style server.

  - You can authenticate against Active Directory.

  - With the help of the ITSS wiki you can even use WebAuth. (the methods used were developed independently by Jeremy Rowntree and Barry Cornelius but requires some coding).

Example AD Authentication

```
$auth["session"] = "php";

$auth["type"] = "ldap";

$cookie_path_override = '';


# The list of administrators (can modify other peoples
settings)

$auth["admin"][] = "127.0.0.1";

# A user name from the user list. Useful with most other
session schemes.

$auth["admin"][] = "fred";

$auth["admin"][] = "gregory";
```

Example AD Authentication 2

'session_http' configuration settings

$auth["realm"] = "mrbs";

Where is the LDAP server

$ldap_host = "ldap://ad1.stats.ox.ac.uk/";

$ldap_v3 = true;

$ldap_tls = false;

$ldap_base_dn = "ou=User Accounts,dc=stats,dc=ox,dc=ac,dc=uk";

$ldap_dn_search_attrib = "sAMAccountName";

$ldap_dn_search_dn = "CN=Computer Boffin,ou=IT Staff,ou=User Accounts,dc=stats,dc=ox,dc=ac,dc=uk";

$ldap_dn_search_password = "boffin-pwd";

Other tweaks to consider

- In "config.inc.php":
  - You can define your "default view". Would you like to see the current day? Current week? Current month? Set $default_view as appropriate. Default is "day".
  - You can set the interval between booking events (hourly? Half-hourly? Half-daily?) via $resolution. Default is 1800 seconds.
  - You can define the start and end of the "booking day" via $morningstarts and $eveningends. Defaults are $morningstarts=7, $eveningends=19

Keep on tweaking

- You can change the header:

  - By changing the vocab["mrbs"] line in lang.en (yes I know, it's not intuitive – that's why I mention it)

- You can change the footer:

  - By hacking with the contents of trailer.inc. We put in our own custom footer.

- You can change the style sheet:

  - By simply replacing mrbs.css with one of your own.

On the tweak again

- Or ad a logo by editing the config.inc.php file. Below is one of my examples:

  $mrbs_company = "<CENTER>

  <img src=../icons/ox_stats_logo.gif border=0>";

  # $mrbs_company = "Department of Statistics";

- Or even emails. Same file, under a section imaginitively labelled "Email settings"

Colour coding

```
##############
# Entry Types
##############
# This array maps entry type codes (letters A through J) into
# descriptions. Each type has a color (see TD.x classes in the
# style sheet mrbs.css).
#    A=Pink  B=Blue-green  C=Peach  D=Yellow     E=Light blue
#    F=Tan   G=Red         H=Aqua   I=Light green J=Gray
$typeI["A"] = "Staff";
$typeI["B"] = "Visitor";
$typeI["C"] = "Postdoc";
$typeI["D"] = "Student";
$typeI["E"] = get_vocab("external");
# $typeI["F"] = "F";
# $typeI["G"] = "G";
$typeI["H"] = "Computing team";
$typeI["I"] = get_vocab("internal");
# $typeI["J"] = "J";
```

Basically it's PHP

- So you can do pretty much what you want to it, if you can spare the time and energy.

- Have we still got time? You want to see some examples? Stats have four different MRBS instances on two different systems. Let's take a look.

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