

# Reserves automàtiques per l'estona de Manteniment

 explicar el programet per fer les reserves automàtiques per l'estona de manteniment.

## `maintenance_bookings.sh`

Aquest es el programet que crea les reserves per l'estona de manteniment. S'executa tots els diumenges a les 3 de la matinada, i crea les reserves amb dues setmanes d'antel·lació per tal que es puguin modificar si s'escau. El programet també envia un correu electrònic indicant si ha pogut fer les reserves.

[maintenance\\_bookings.sh](#)

```
#!/bin/bash
#
# maintenance_bookings.sh
#
# (c) 2013, Miquel Cabanas, SeRMN, UAB
#
# Started writing: 2013/10/28
# Last updated: 2013/10/28
#
# This script runs the MySQL commands needed to automatically create
the
# bookings for the spectrometers maintenance tasks, mainly liquid
nitrogen
# refills.
#
# To run this script every Sunday 2am append an entry like,
#
# FIXME 0 3 * * 1 /opt/bmbee-114-1/bin/maintenance_nmr_bookings.sh
#
# to crontab. This entry means, at minute 0, hour 2, on every (*) day
of
# the month and on every (*) month of the year, if that day happens to
be
# a Sunday (day 0), execute the commands in the script file
# 'maintenance_nmr_bookings.sh' (this file).

# VARIABLES -----
----

# programs
#
```

```
date=`which date`
mail=`which mail`
mysql=`which mysql`

# email recipients and subject

to_address="miquel.cabanas@uab.cat"
#
cc_address="miriam.perez@uab.cat,pau.nolis@uab.cat,eva.monteagudo@uab.c
at"
cc_address="miquel.cabanas@gmail.com,miquel.cabanas@uab.es"
subject="SeRMN Booking System - Weekly maintenance reservations"

# date related variables. This script runs on Sunday, and bookings are
made
# eight weeks in advance (56 days) on Wednesday from 09:00 to 13:00.
Hence,
# we need to find those dates so that we can use them later when
booking time-slots.
#
# NOTE: these date variables are not currently used for booking
commands,
# only for the reporting email messages.

today_date=`$date --date='Today' +%Y/%m/%d` # 2013/10/28
mon_date_mail=`$date --date='8 week 3 day' +%a %Y/%m/%d` # Thu
2013/12/06
mon_weekno=`$date --date='8 week 3 day' +%V/%Y` # 52/2013

# Bumblebee booking system database where everything gets stored

myuser='sermnadmin'
mypass='53rmn4dm1n'
mydb='bmbdb114'

# INSERT BOOKING ENTRIES IN THE DATABAE -----
-----

$mysql --database=$mydb --user=$myuser --password=$mypass << EOF
/* begin transaction */
BEGIN;
/* Insert bookings for weekly maintenance tasks in all vertical
magnets. */
/* By default, book Wednesday morning from 09:00 to 13:00, 8 weeks in
advance */
/* (i.e. 59 days) */

/* Avance DPX-250-QNP (250-AUT0) - Wednesday from 09:00 to 13:00 -> 4
hours */
```

```
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 12, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* Avance DPX-250-BACS (250-ROBOT) - Wednesday from 09:00 to 13:00 -> 4
hours */
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 15, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* Avance DPX-360 - Wednesday from 09:00 to 13:00 -> 4 hours */
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 1, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* AvanceIII 400SB - Wednesday from 09:00 to 13:00 -> 4 hours */
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 6, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* AvanceII 400WB - Wednesday from 09:00 to 13:00 -> 4 hours */
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 9, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* Avance DRX-500 - Wednesday from 09:00 to 13:00 -> 4 hours */
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 2, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* AvanceII+ 600 - Wednesday from 09:00 to 13:00 -> 4 hours */
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 7, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* Hypersense DNP - Wednesday from 09:00 to 13:00 -> 4 hours */
INSERT INTO bookings(bookwhen, duration, instrument, bookedby, userid,
```

```
projectid, discount, ip, comments, log, deleted) VALUES (date_add(
date_add( current_date(), interval 59 day), interval 9 hour),
'04:00:00', 17, 7, 7, 1, 0, '192.168.2.2', 'Weekly maintenance tasks',
'Weekly maintenance tasks', 0);

/* commit transaction */
COMMIT;
EOF

# MAIL THE SYSTEM AND INSTRUMENT ADMINISTRATORS - -----
- -
#
# Report to the system and instrument administrators whether Routine
NMR
# bookings have been created.
#
status=$?

if [ $status -ne 0 ]; then
# mysql command failed. Send an email reporting the failure
#
$mail -s "$subject" -c $cc_address $to_address << EOM

AUTOMATED EMAIL MESSAGE. DO NOT REPLY

SeRMN - Universitat Autònoma de Barcelona

Failed to allocate time slots for weekly maintenance tasks
week $mon_weekno starting: $mon_date_mail.

Please, report this issue to the system administrator.

EOM

else
# mysql command succeeded. Send an email reporting that routine
# bookings have been created
#
$mail -s "$subject" -c $cc_address $to_address << EOM

AUTOMATED EMAIL MESSAGE. DO NOT REPLY

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Time slots have been allocated for weekly maintenance tasks
on all SeRMN spectrometers for week $mon_weekno starting:
$mon_date_mail.

EOM
```

```
fi
exit
```

El programet envia el següent correu electrònic si ha aconseguit fer les reserves,

```
----- Original Message -----
Subject: SeRMN Booking System - Weekly maintenance reservations
Date:    Mon, 28 Oct 2013 16:54:46 +0100
From:    root <root@sermn.uab.cat>
To:      Miquel.Cabanas@uab.cat
```

AUTOMATED EMAIL MESSAGE. DO NOT REPLY

SeRMN - Universitat Autònoma de Barcelona

Time slots have been allocated for weekly maintenance tasks on all SeRMN spectrometers for week 52/2013 starting: Thu 2013/12/26.

i aquest altre missatge en cas contrari,

```
----- Original Message -----
Subject: SeRMN Booking System - NMR Routine reservations
Date:    Fri, 18 Oct 2013 11:09:27 +0200
From:    root <root@sermn.uab.cat>
To:      Miquel.Cabanas@uab.cat
```

AUTOMATED EMAIL MESSAGE. DO NOT REPLY

SeRMN - Universitat Autònoma de Barcelona

Failed to allocate time slots for weekly maintenance tasks week \$mon\_weekno starting: \$mon\_date\_mail.

Please, report this issue to the system administrator.

## Entrada al registre crontab

Aquesta és l'entrada creada al programa crontab per executar automàticament el programet que crear les reserves (crontab -u root -l):

```
# Bumblebee 1.1.4 - Automated bookings for weekly maintenance tasks. It runs
# on Sunday at 03:00.
#
0 3 * * 0 /opt/bmbee-114-1/bin/maintenance_bookings.sh
```

# Seguretat

Per motius de seguretat (el programet conté el nom d'usuari i clau de pas de la base de dades de reserves) la carpeta /opt/bmbee-114-1/bin/ està protegida i té l'accés restringit,

- permisos carpeta bin: 700
- permisos fitxer maintenance\_bookings.sh: 700
- propietari (user:group): root:root

A més, per impedir el seu accés a través del servidor web, la carpeta bin conté un fitxer .htaccess amb el següent contingut:

```
order deny,allow
deny from all
```

From: <https://sermn.uab.cat/wiki/> - SeRMN Wiki

Permanent link: [https://sermn.uab.cat/wiki/doku.php?id=sermn\\_wiki:userpages:marta:reserves\\_automatiques\\_manteniment&rev=1382979357](https://sermn.uab.cat/wiki/doku.php?id=sermn_wiki:userpages:marta:reserves_automatiques_manteniment&rev=1382979357)

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