VITELS - HOWTO

Graphical User Interface for VITELS Scheduling

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1 Web-based User Interface

This Section shows the web-based user interfaces of the scheduling implementations and explains how they are supposed to be used.
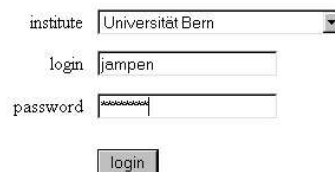
1.1 Online Timetable and Administration Interface

The online timetable and the administration menu are a user interface to the scheduling script. Due to the fact that students are visiting an online course and intend to access the timetable through the Internet, the user interface is programmed as a set of websites that can be viewed in every browser. The websites do not contain special code that requires certain plug-ins, they are just shown to the user as normal HTML pages containing basic JavaScript code.

1.1.1 Login

At the beginning, the user (e.g. student or administrator) is prompted to enter his username and password. He also has to choose from a pull-down list to which educational institute he belongs (see Figure 1.1). Module administrators choose "VITELS Staff" in order to get the appropriate privileges.

VITELS Timetable Login

institute Universität Bern

login jampen

password ********

login

Figure 1.1: Login Website

If the login is successful, the user is directly brought to the online timetable. If not, the same login site is displayed again.

1.1.2 Timeslot Reservation

After a successful login, the current week's timetable of one module is displayed (see Figure 1.2). There are three symbols used in order to visualize the state of each timeslot within the timetable. A red cross indicates that the slot has already been reserved by another student. A green circle shows that this slot is still available and can be reserved simply by clicking on

the circle. The blue check mark is used to mark slots that have been reserved by the user himself. These slots can be freed by clicking on the blue symbol.

Timetable

1a 1b 1c 1d 2 3 5 **6** 7

previous week   April 29 - May 05, 2002   next week

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00 - 03:00	O	O	O	O	O	O	O
03:00 - 06:00	O	O	O	O	O	O	O
06:00 - 09:00	O	✗	O	O	✗	✓	O
09:00 - 12:00	O	✗	O	✗	O	✓	✗
12:00 - 15:00	✗	✓	O	✗	O	O	✗
15:00 - 18:00	✗	O	O	O	✗	O	O
18:00 - 21:00	✗	O	O	✓	O	O	O
21:00 - 00:00	O	O	O	O	O	✗	O

O slot free   ✓ your slot   ✗ slot reserved

Figure 1.2: Timetable

Above the timetable the displayed week is indicated. On the left and on the right side links have been placed in order to change to the timetable of the previous or the next week, respectively. On top, there is a list of all available modules. The module that is currently selected is marked with a bigger font face. If a user clicks on a module id, the timetable of that module is displayed. The time period stays the same as before changing the module. In the case that the directory does not contain entries for the currently selected week and module, the message "no timeslots available" is displayed instead of the timeslot information symbols.

1.1.3 LDAP Directory Administration

If a VITELS administrator is logged in, an administration menu is displayed below the timetable (see Figure 1.3).

admin menu   timetable   ldap entries   status
                     view names   add/remove slots
                                      change module settings

Figure 1.3: Administration Menu

An administrator is allowed to see who has reserved which slot. This allows him to track students that reserve lots of slots and, thus, block other students. A module administrator is

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even allowed to free slots, but only for modules he administrates. In order to free a slot he has to click on *view names* first and then, select the slot he likes to free. When the administrator moves the mouse over a username the user's real name appears within a little window. The administrator can only free slots, when clicking on a username whose slot he intends to free. It is not possible to free slots without seeing the corresponding username (e.g. when seeing only the symbols). This is done not only for error prevention but also because a module administrator should be allowed to reserve slots as well and, thus, being able to solve the module or parts of it himself in order to make sure everything works as planned.

When an administrator clicks on *add/remove slots*, he is presented a page where he can add and remove timeslots (see Figure 1.4).

Add/Remove LDAP Entries (Slots)

module	6	(module id)
starting date	20020506	(YYYYMMDD)
ending date	20020512	(blank = same as starting date)
expiry date	20020513	(blank = slot never expires)
	add remove	

Figure 1.4: Adding and Removing Timeslots

The first field has to be filled with the module identification. Unfortunately, this cannot be filled automatically because the access restrictions for administrators are not saved within the LDAP directory tree but in the LDAP server's configuration file. Thus, it is not possible for the scheduling script to determine whether an administrator is allowed to do changes to just a single module, to several or to none of them. This is not a security problem because if an administrator tries to add or remove slots to or from a module he does not administrate, the LDAP server daemon prohibits the changes. There is a status report field in the administration menu that reports whether and how many entries have been added or removed. The second and third field must be filled with the date for the first and last slot to be added or removed, respectively (the format for the date is YYYYMMDD). The last field allows the administrator to specify an expiration date for the slots he intends to add. This field is ignored when removing slots. A daily cron job checks the LDAP directory tree for expired slots and removes them automatically. Slots without expiration date will have to be removed manually by the module administrator. Before any changes to the LDAP directory tree are performed, the administrator is displayed a pop-up window, explaining the steps that will be executed. Now, he has the possibility to commit the changes or to abort without changing anything.

By clicking on *change module settings* the administrator is shown a page where the slot duration, the number of slots per day and the starting time of the first slot can be changed (see Figure 1.5). Caution: This should be done only at the beginning of a semester because all information stored within the module's timetable will be deleted when changing these values.

The first field takes the identity of the module to change. Administrators are strongly recommended to press the *load* button after entering the module identity in order to check the current values before performing unnecessary changes. The second field takes a four digit

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Change Module Settings

Figure 1.5: Change Module Settings

number specifying the starting time of a day's first slot (the format is `HHMM`). Starting with this time, all the other slot times will be calculated without any break in between. The duration of a single slot can be entered in the third field. Module administrators should pay attention to specify a number representing the duration in hours. The last field allows to specify how many slots you would like to make available per day. It is important to enter reasonable values, otherwise the execution will fail or produce unwanted results. Before any changes to the LDAP directory tree are applied, the administrator has to validate the changes and press the OK button in a pop-up window.

1.2 VITELS Staff Website

The staff member list on the VITELS website displays the contact information of the staff members. The first page lists all VITELS staff members (see Figure 1.6) and the educational institute they are belonging to.

After clicking on a single entry, detailed information for this person is displayed (see Figure 1.7). The details contain links to the homepage of the staff member, email address, phone and fax numbers and the corresponding educational institute. The button *change entry* placed below the table can be used in order to change the own personal details, while the button *change password* can be used to change the own password.

After clicking on *change entry*, the personal details are presented in the same table as described before, but the values are written in text field which allows staff members to make the appropriate changes (see Figure 1.8). Each staff member can only change its own entry because a password has to be specified. The button *save changes* can be used to write the changes to the LDAP directory.

When a staff member intends to change its password, the old password has to be supplied together with the new password. This new password must be entered two times in order to prevent mistyping (see Figure 1.9).

1.3 VITELS Staff Address Book

The above described staff member list can also be accessed using Netscape's address book. Figure 1.10 shows the configuration window for accessing a directory. `Description` is the

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Staff

Name	Organisation
Berqia Amine	University of Geneva
Braun Torsten	University of Berne
Casties Robert	University of Berne
Di-Vitantoni Giuliano	HP

Figure 1.6: VITELS Staff List

Jampen Thomas	
Organisation	University of Bern
Telephone Number	+41 31 631 33 12
Fax Number	+41 31 631 32 62
Mail	jampen@iam.unibe.ch
Homepage	http://www.iam.unibe.ch/~jampen/

change entry   change password

Figure 1.7: VITELS Staff Details

Jampen Thomas	
Organisation	University of Bern
Telephone Number	+41 31 631 33 12
Fax Number	+41 31 631 32 62
Mail	jampen@iam.unibe.ch
Homepage	http://www.iam.unibe.ch/~
password	**********

save changes

Figure 1.8: Change VITELS Staff Details

Figure 1.9: Change VITELS Staff Password

name of the address book, `LDAP Server` takes the IP address or the domain name of the directory server and the base dn can be specified in the `Search Root` field. Verify the port and check `Login with name and password` if anonymous binding is not allowed.

When selecting the newly created VITELS staff directory in the address book list, a pop-up window prompting for a username and a password appears (see Figure 1.11). The username that must be entered here is the email address stored in the personal details in the directory tree. After entering the password and clicking the OK button, the address book can be searched. If all addresses are to be displayed, the value for the name to search is * (see Figure 1.12).

Figure 1.10: Netscape - VITELS Staff Configuration
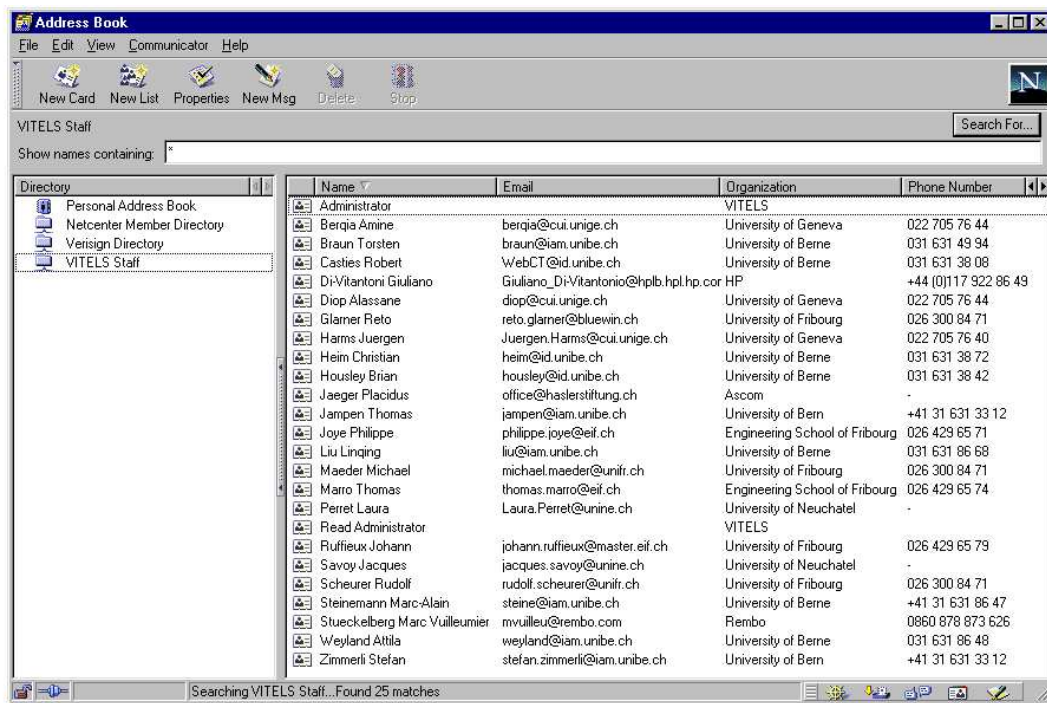
Figure 1.11: Netscape - VITELS Staff Password

Figure 1.12: Netscape - VITELS Staff Address Book