

## **PHP / MS Exchange - Interface**

The PHP-Application needs at least two public functions:

### **1. Reading Access to the public user-calendars**

This function has to contact a given Microsoft Exchange-Server 2003 and check the availability of a user in a given period.

We assume that the Microsoft Exchange-Server is configured for "Outlook Web Access".

This functions takes the unique User-Id, i.e. the "samaccountname" and the requested interval to query the Exchange-Server. So i.e.

```
samaccountname: tp  
appointment_start: 2008-10-28 10:00  
appointment_end: 2008-10-28 16:00
```

and receives all appointments of the user which overlap with the given interval.

Example:

The user has 3 appointments which overlap with the requested interval, the response should look like:

```
$info = array(   '1'   => array(   'title'   => 'Meeting 1',  
                'start'   => '2008-10-28 09:30',  
                'end'     => '2008-10-28 10:30',  
                ),  
                '2'   => array(   'title'   => 'Meeting 2',  
                'start'   => '2008-10-28 12:30',  
                'end'     => '2008-10-28 13:30',  
                ),  
                '3'   => array(   'title'   => 'Meeting 3',  
                'start'   => '2008-10-28 15:30',  
                'end'     => '2008-10-28 17:30',  
                ),  
                ),  
                );
```

If no appointment overlap with the given interval, the function will return an empty array.

```
$info = array();
```

### **Important:**

Appointments can be longer than one day (i.e. start: 2008-10-28 19:00, end: 2008-11-02 09:00)

Appointments overlap also if only the beginning or ending overlap with a requested interval.

So the interface of the first function should look like this:

```
public function getUserCal($userId, $start, $end)
```

and the return value is a array like the one above.

## 2. Writing the appointment to the user-calendar and generating Outlook invitation mailings

This function is supposed to write an appointment to the owners calendar and send an Outlook appointment (invitation) via mail if more attendees are required.

For this the function takes three arguments.

The first argument is the unique User-Id of the owner which corresponds again to the samaccountname of the appointment-owner (i.e. "tp").

The second argument is an array of persons to invite:

```
$persons = array( '1' => array( 'name' => 'John Smith',  
                                'email' => 'js@my-exchange-host.com',  
                                ),  
                '2' => array( 'name' => 'Burt Miller',  
                                'email' => 'bm@my-exchange-host.com',  
                                ),  
                );
```

The third argument will be the detail-information of the planned appointment:

```
$appointment = array( 'from' => 'tp',  
                    'attendees' => 'aw;pg;ms',  
                    'subject' => 'New Meeting',  
                    'location' => 'Room 101',  
                    'start' => '2008-10-29 10:00',  
                    'end' => '2008-10-29 11:00',  
                    'body' => "Short description of the event. Can be  
empty or contain\n text with newlines\n",  
                    );
```

The return value of the function has to be the unique (Exchange) ID, so that it can be stored in the database.

Possible interface of the function:

```
public function writeAppointment($userId, $persons, $appointment)
```

return value should be a string with the unique (Exchange) ID on success otherwise FALSE.

## 3. Modifying an existing appointment (optional)

Given will be a unique (Exchange) ID of the appointment, a users-id (samaccountname), and the new start- and end-date and an array of all attendees.

This function is supposed to move an existing appointment in the calendar of the owner and generating again Outlook invitation mails to all other attendees.

### Development:

If necessary we can provide a VPN-Access to an Exchange-Server 2003 with dummy data and configured for Outlook-Web Access. There won't be any grafical access to the windows-system!

We think that the PHP-Job is quite simple. So you have to make sure to have enough experience with the Microsoft Exchange-Server and know how to speak to it :-)