www.project-open.com

]project-open[V3.2 Configuration Guide

Klaus Hofeditz and Frank Bergmann,
V1.5, 2006-10-26

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1 About this Document

1.1 Version

Version: 1.5, 2006-10-26

Author: Klaus Hofeditz and Frank Bergmann

Status: Preliminary

1.2 Scope

This manual describes the configuration of **]project-open[** V3.0 product family.

1.3 Audience

The manual is written for application administrators of **]project-open[** both at final customers and at **]po[** partners.

1.4 Limitation of Liability

The procedures described in this manual can affect the behavior of the **]project-open[** system in ways difficult to predict for users unfamiliar with the **]po[** architecture and source code.

Please be aware that execution configuration procedures by uncertified personnel may leave your **]po[** system in an inoperative state. Such situations are not covered by the normal **]po[** maintenance contract.

IN NO EVENT SHALL]project-open[BE LIABLE FOR ANY LOSS OF PROFIT OR ANY OTHER COMMERCIAL DAMAGE, INCLUDING BUT NOT LIMITED TO SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHER INDIRECT DAMAGES UNDER ANY CAUSE OF ACTION ARISING OUT OF OR RELATING TO THE CONTENT OF THIS DOCUMENT, INCLUDING, WITHOUT LIMITATION, CLAIMS ARISING FROM MALFUNCTION OR DEFECTS IN THE PRODUCTS.

1.5 Version History

- V1.1: 050702: New Logo
- V1.10: 050618: Updated module list
- V1.8: 050601: Added chapter about Component configuration
- V1.7: 050426: Added chapter about PostgreSQL configuration
- V1.5: 050314: Version rename, general revision
- V1.4: 050113: Improved software updates chapter

- V1.3: 050112: Added several chapters
- V1.2: 050109: Important enhancements with perspective of the V3.0 launch.
- V1.1: 040531: Extended the document after the installation at Customer #8.

1.6 Related Documents

- **]project-open[** Unix Installation Guide
- **]project-open[** Unix Maintenance Guide
- OpenACS Administrator's Guide: http://openacs.org/doc/openacs-5-1/acs-admin.html

1.7 ToDo's

- Explain package interdependencies
- Describe different category types in-depth
- Convert the email at the end to chapters

2 Configuration Overview

The Configuration of **]project-open[** system consists of taking decisions and modifying parameters in a number of areas:

- Package Selection
- User Administration Matrix
- System Administrators
- System Parameters
- Logo and GUI Colors
- Home Page
- Project States and Project Types
- Customer States and Customer Types

Many of the decisions to be taken require in-depth knowledge of the **]project-open[** architecture, which are not within the scope of this manual. We recommend leaving the configuration of a productive **]project-open[** system to a certified **]project-open[** consultant.

The installation of **]project-open[** is not within the scope of this manual. Please refer to related documents in Chapter 1.6.

3 Configuration During Installation

You need to take the first configuration decisions during the installation of **]project-open[** when the AOLServer application server comes up for the first time. Please find below a sample screen.

The “Email”, “Username” and “Password” fields are important, because they define the default system administrator.

However, you don’t need to worry too much about the other values because the system administrator will be able to modify them later in the page “Admin / Parameters”.

Email:	frank.bergmann@project-open.com
Username:	fraber
First Name:	Frank
Last Name:	Bergmann
Password:	secret
Password (again):	secret
System URL:	http://www.projop.com:8000/
System Name:	]project-open[Demo Server
Publisher Name:	]project-open[
System Owner:	frank.bergmann@project-open.com
Admin Owner:	frank.bergmann@project-open.com
Host Administrator:	frank.bergmann@project-open.com
Outgoing Email Sender:	frank.bergmann@project-open.com
New Registration Email:	frank.bergmann@project-open.com

4 Package Selection and Installation

We assume that the OpenACS system and the **]project-open[** “Core” module been installed according to the **]project-open[** Installation Guide. This chapter talks about the installation of additional modules.

4.1 Version Naming Conventions

Please read http://www.project-open.com/whitepapers/Project-Open-Architecture.ppt for an introduction to the general architecture and the concept of “customizations”.

Package versions are described by a four-digit number such as: “2.1.3.1” or “3.0.0.1”. The digits have the following meanings:

1. “Major Releases”. The first version number changes only after major changes of the system architecture and the data model.
   Main releases will come out every 4-8 years. Customizations (changes of the source code by a customer) will in general not survive an upgrade to a major release. Also, the data model may not be upgradeable to a new major release, possibly requiring a manual transfer process.
2. “Minor Releases”. The second number represents major improvements of the system such as the addition of new modules or important enhancement of existing modules.
   Minor releases with come out every 6-12 months. There will be always two minor releases maintained: A “stable release” that only receives bug fixes and a “feature release” where development happens. The “feature release” will always contain the latest modules etc. From time to time the “feature release” will become the “stable release” and a “new feature” release will be opened.
   Minor releases will always provide an upgrade path for the data model of a previous version. However, customizations may not be preserved between minor releases, depending on the particular case.
3. “Service Releases”. The third number represents minor improvements of the system such as the addition of new fields to a business object etc.
   Service releases require an update of the data model via the database upgrade script. Service releases will preserve customizations in general.
4. “Bug Fix Releases”. The fourth number represents minor bug fixes. Bug fix releases don’t require an upgrade of the data model and will preserve customizations in general.
5. “Internal Release”. A sixth number is used to identify versions for internal testing purposes. These versions (not releases!) should normally not be visible publicly. However, they may be used in special circumstances.

4.2 Decide Which Modules to Install

The table below shows you which module is suitable for which]project-open[product from 2006-02-01. Please check for an updated table at http://www.project-open.org/download/, the information below is probably outdated.

Most]po[modules are free (GPL or FL). However there are some]pt[modules under the CL that are sold for a license fee.

Explanation:

- Module: Name of the module
- License: GPL (free), FL (free) or $ (not free)
- Active Versions: Which versions are active at the moment?
- Maturity:
  - Prod = Ready for production use
  - Beta = For advanced users only who know what they are doing
  - Alpha = Not suitable at all for normal users
  - - = Doesn't exist yet
- Version: 3-1-2: Currently stable V3.1 production release
- pt: Suitable for Project/Translation
- pc: Suitable for Project/Consulting
- pl: Suitable for Project/Lifecycle
- pa: Suitable for Project/Agency

GPLed packages:

Module	License	Active Version	Maturity	Pt	Pc	Pl	Pa	Comments
Project Management								
intranet-core	GPL	3-1-X	Prod	x	x	x	x	Projects, Customers, Offices, Users and infrastructure
intranet-dynfield	GPL	3-1-X	Prod	x	x	x	x	Dynamic Object Fields for CRM
Customer Management								
intranet-spam	GPL	3-1-X	Beta	x	x	x	x	Email Marketing Campaigns
intranet-crm-tracking	GPL	3-1-X	Beta	x	x	x	x	Web site tracking, online registration
Finance								
intranet-payments	GPL	3-1-X	Prod	x	x	x	x	Invoice payments
intranet-timesheet	GPL	3-1-X	Prod	x				Timesheet mgmt
intranet-timesheet2	GPL	3-1-X	Prod		x	x	x	Timesheet mgmt with Material
intranet-cost-travel	GPL	2-1-1	-	x	x	x	x	Travel cost mgmt
Human Resources								
intranet-hr	GPL	3-1-X	Prod	x	x	x	x	Employees, payroll, ...
Knowledge Management								
intranet-wiki	GPL	3-1-x	Prod	x	x	x	x	Wiki Engine
intranet-search-pg	GPL	3-1-x	Prod	x	x	x	x	Search engine for PostgreSQL (>8.0)

Commercial packages (FL = Free License, $=Commercial License)

Module	License	Active Version	Maturity	pt	pc	pl	pa	Comments
								Project Management
intranet-filestorage	FL	3-1-X	Prod	x	x	x	x	File system based filestorage
intranet-forum	FL	3-1-X	Prod	x	x	x	x	Discussion forums with tight permissions
intranet-material	FL	3-1-X	Prod	x	x	x	x	File system based filestorage
intranet-update-client	FL	3-1-X	Prod	x	x	x	x	Discussion forums with tight permissions
								Finance
intranet-cost	FL	3-1-X	Prod	x	x	x	x	Base costs
intranet-invoices	FL	3-1-X	Prod	x	x	x	x	Base invoices
intranet-freelance-invoices	$	3-1-X	Prod	x	x	x	x	POs for freelancers
intranet-timesheet2-tasks	FL	3-1-X	Prod	x	x	x	x	Task-based planning for Timesheet
intranet-timesheet2-invoices	FL	3-1-X	Prod	x	x	x	x	Automatic Invoicing for Timesheet
intranet-exchange-rate	FL	3-1-X	Beta	x	x	x	x	Exchange rate module for multi-currency reporting
								Human Resources
intranet-freelance	$	3-1-X	Prod	x	x	x	x	Freelance skill database & Recruiting Pipeline
								Translation
intranet-translation	FL	3-1-X	Prod	x				Translation base and workflow
intranet-trans-invoicing	FL	3-1-X	Prod	x				Invoicing for Translation
intranet-trans-quality	$	3-1-X	Prod	x				Statistical Process Control (SPC) for Translation
								Reporting & Data Warehouse
intranet-reporting	FL	3-1-X	Prod	x	x	x	x	Reporting Engine
intranet-dw-light	FL	3-1-X	Prod	x	x	x	x	Data-Warehouse using MS-Excel Pivot Tables
intranet-dw-mssql	$	3-1-1	Prod	x	x	x	x	Data-Warehouse using MS-SQL OLAP Services
intranet-dw-mondrian	$	0-0-0	-	x	x	x	x	Data-Warehouse using Mondrian OLAP Server
								Knowledge Management
intranet-simple-survey	FL	3-1-X	Beta	x	x	x	x	Surveys: Project reports, provider satisfaction, customer satisfaction, …

4.3 Download Additional Packages

In order to install additional packages you first need to download and unpack them in your local package directory:

```
/web/<server>/packages
```

You can do this in two ways: Semi automatically using a web interface or manually using Unix commands.

Semiautomatic Download:

- Go to http://www.project-open.org/download/ and check for new packages that you want to download. You need to get the entire URL that ends with a ".apm" postfix (or a ".zip" or ".tgz" postfix for files containing multiple packages).
- Go the package managers page at:

  `http://<server>/acs-admin/apm/package-load`
- Enter the URL and press the "Load" button.

Manual Download:

- Go to http://www.project-open.org/download/ and check for new packages that you want to download. You need to get the entire URL that ends with a ".apm" postfix.
- Download the packages to a Unix location accessible by the **]project-open[** application
- Go the package managers page at:

  `http://<server>/acs-admin/apm/package-load`
- Enter the path and press the "Load" button.

Please note, this was only the *download* of the packages. The next sections describes the *installation* of the packages.

4.4 Install Additional Packages

Start the package installation process with the URL

`http://<server>/acs-admin/apm/`

Please use this URL and don't use the package installation pages offered in the Admin menu (in the case you should have noted that there is such a link…)

Please follow the link "Install Package". You should get a page "Package Installation" with a list of available packages. Please choose all packages that you want to install. Click on those modules that you have decided to install. Package dependencies (for example: intranet-trans-invoices depends on intranet-invoices) are handled automatically and conflicts are reported.

You should get a page "Select Data Model Scripts" with a number of SQL files selected for installation. They should be all selected. Press "Install Packages". You should get a long screen with messages from the SQL interpreter. At the end there should be a link "Click here to restart the server".

There should be no error messages coming up from an installation. If you do find messages, please send us an email with the entire output to mailto:support@project-open.com.

4.5 Installing Full-Text Search (TSearch2)

The installation of the "intranet-search-pg" module may cause some issues because it uses an full text search extension of the PostgreSQL database. Here are some tips & tricks:

4.5.1 Installation

- **MAKE A COMPLETE BACKUP BEFORE INSTALLING!**
  Both code and data. The installation of TSearch2 has already lead to inconsistencies in the database etc.
- The installation of "intranet-search-pg" via /acs-admin/apm/ may go wrong. In this case please uncheck the execution of the ".sql" file, install the package and proceed manually below.
- Get the "tsearch2.sql" file that fits to your PostgreSQL database. The file provided in packages/intranet-search-pg/sql/postgresql/tsearch2.sql is for PostgreSQL 7.4.6 (the CygWin Windows version). Check /usr/lib/pgsql/contrib./tsearch2.sql or similar for the version that fits your PostgreSQL version.
- Source the "tsearch2.sql" file manually. This script should give some warnings, but at the end you should see some 100 "CREATE FUNCTION" lines.
- If you get an error like "**psql:tsearch2.sql:20: ERROR: access denied for language C**" then you've got a permission issue. Your local database user needs to have "superuser" rights. Login as user "postgres", start "psql projop" (we assume that you database is called "projop"), and issue: "alter user projop createdb;" and "alter user stage createuser;". These commands provide the user "projop" with the necessary administration rights.
- After "tsearch2.sql" has been executed successfully, you can now manually source the rest of the code via "psql –f intranet-search-pg-create.sql". Don't worry about the errors in the beginning from "tsearch2.sql". These are due to multiple sourcing of the file..
- If you get the error like "**could not find tsearch config by local**" then you've probably installed your PostgreSQL database with a locale different from the default locale ("C"). Determine your current locale with "show lc_messages;". You should get a string such as "es_ES.UTF-8". Now use

this string and update the TSearch2 locale configuration: "update pg_ts_cfg set locale='es_ES.UTF-8' where ts_name='default';".

Sorry for the hassle, this is due to some issues within the PostgreSQL project. We are in direct contact with the PG developers to influence future development.

5 Configure User Permissions

For an introduction to user permissions please see:

- Overview documentation: http://www.project-open.com/whitepapers/Project-Open-Permissions-Model.ppt
- Developer documentation: http://www.project-open.org/doc/intranet-core/permission_requirements.html
- Developer documentation: http://www.project-open.org/doc/intranet-core/permissions.html
- Or check for general documentation at http://www.project-open.org/doc/

5.1 Vertical User Permissions

You can configure "vertical" permissions (="profiles", permissions related to departments) by granting "privileges" to "profiles". Here is an example:

> *You decide that your employees should be able to see all projects in your organization, because you trust them. So you grant the "view_projects_all" privilege to the "employee profile".*

You can configure vertical permission at the URL:

```
http://<server>/intranet/admin/profiles/
```

The following matrix shows a permissive configuration of vertical permissions.

Permission	Name	P/O Admin	SenMan	Sales	Accounting	PM	Employees	Customers	Freelancers	
General										
Search intranet	search_intranet	x	x	x	x	x	x			General permission to search the Intranet. All returned hits are further restric
Finance										
Add finance	add_finance	x	x	x	x	x	x	x	x	Generic permission to enter any financial or cost items (further restricted)
Add costs	add_costs	x	x		x	x			x	Permission to add cost items in general.
Add payments	add_payments	x	x		x					Permission to add payment items in general.
Add hours	add_hours	x	x	x	x	x	x			Permission (and obligation!) to log hours. You normally allow this only for em
Add absences	add_absences	x	x	x	x	x	x			Permission (no obligation here) to log absences such as vacations, travel tim
Add invoices	add_invoices	x	x	x	x					
View_finance	view_finance	x	x		x					Generic permission to enter into the finance module
View costs	view_costs	x	x		x					

View hours all	view_hours_all	x	x		x					
View absences all	view_absences_all	x	x		x					
View invoices	view_invoices	x	x		x					
View payments	view_payments	x	x		x					
Project Management										
Add projects	add_projects	x	x	x		x				
View filestorage sales	view_filestorage_sales	x	x	x						
View projects all	view_projects_all	x	x	x	x	x	x			
View projects history	view_projects_history	x	x	x	x	x	x			
View project members	view_project_members	x	x	x	x	x	x			
Customer Management										
Add companies	add_companies	x	x	x						
Add offices	add_offices	x	x	x						
Edit internal offices	edit_internal_offices	x	x			x				
View internal offices	view_internal_offices	x	x	x	x	x	x	x	x	View the information of Your Company's offices
View offices	view_offices	x	x	x	x	x	x	x	x	Generic permission to view office (further restricted by other permissions)
View offices all	view_offices_all	x	x							
View crm tracking	view_crm_tracking	x	x	x						
View companies	view_companies	x	x	x	x	x	x	x	x	The general permission to see companies - the user will not see any compar
View companies all	view_companies_all	x	x							
View company contacts	view_company_contacts	x	x	x						
View company details	view_company_details	x	x	x						
User Management										
Add users	add_users	x	x							Generic permission to add users. The profile of the users to be created are li
View users	view_users	x	x	x	x	x	x	x	x	Generic permission to see any kinds of users
View user registrations	view_user_registrations	x	x	x						
System Administration										
System Admin	-	x								This permission is not found in Admin/Profiles but in /acs-admin/users/one?u
Admin categories	admin_categories	x	x							Permission to modify system categories. The user should know what they ar
Translation										
View trans proj detail	view_trans_proj_detail	x	x	x	x	x	x			
View trans tasks	view_trans_tasks	x	x	x	x	x	x			
View trans task matrix	view_trans_task_matrix	x	x	x	x	x	x			
View trans task status	view_trans_task_status	x	x	x	x	x	x			
Forums										
View topics	view_topics	x	x	x	x	x	x	x	x	Generic permission to view topics (further restricted by topic scope)
Add topic client	add_topic_client	x	x			(x)				
Add topic group	add_topic_group	x	x			(x)				
Add topic noncli	add_topic_noncli	x	x	x	x	(x)	x		x	
Add topic pm	add_topic_pm	x	x	x	x	x	x	x	x	

Add topic public	add_topic_public	x	x							
Add topic staff	add_topic_staff	x	x	x	x	(x)	x			
Human Resources										
View Human Resources	view_hr	x	x							Generic permission to view and edit HR information

5.2 Extending Vertical Permissions

You can also create new user permissions for new roles. To do that, please go the profile administration page from the last chapter and follow the link "Add a new profile". (Not working in V3.0 alpha!)

5.3 Sub-Administration and "User Matrix"

The User Matrix administration page can be reached via "Admin/User Matrix". The page specifies the relationship between users of different profiles.

These relationships include:

- **Administration ("A")**:
  The users of one profile can administer users of another profile. This privilege includes adding users of the specified type (if the "add_users" privilege is set for the profile of the creating user), "become this users" (the administrator can convert itself into the administered user and it also includes the following Write, Read and View permissions.
  Examples: "]po[Admins" for example should in general be able to administer all other type of users. Another example are freelancers: In the example below, all "Employees" are allowed to administer freelancers.

- **Write ("W")**:
  The permission to modify user data

- **Read ("R")**:
  The permission to read the user data (name, email, contact information, …)

- **View ("V")**:
  The permission to view the name of the user, but not the right to see it's user data

Users frequently belong to several profiles. In this case the following rules hold:

- **The Administering user**:
  A user that belongs to several profiles receives the sum of all privileges of all profiles he belongs to (union or or-relationship).
  Example: "Peter Projectmanager" is member of both "Employees" and "Project Managers". He enjoys of the privileges of both profiles.

- **The Administered user**:
  An administered user may belong to several profiles. The privileges of the

administering users need to be valid for all of these profiles (intersection or and-relationship) in order to hold.

The following matrix shows a permissive “User Matrix”. Bold capital letters indicate the presence of a privilege; lower case letters indicate the absence.

	Accounting	Customers	Employees	Freelancers	]po[Admins	Project Managers	Sales	Senior Managers
Accounting	v **R** w a	**V** r w a	v **R** w a	**V** r w a	**V R W A**	v **R** w a	v **R** w a	**V R W A**
Customers	v **R** w a	v r w a	v r w a	v r w a	**V R W A**	v r w a	**V R W A**	**V R W A**
Employees	v **R** w a	**V** r w a	v **R** w a	**V** r w a	**V R W A**	v **R** w a	v **R** w a	**V R W A**
Freelancers	**V R W A**	v r w a	**V R W A**	v r w a	**V R W A**	**V R W A**	v **R** w a	**V R W A**
]po[Admins	v **R** w a	**V** r w a	v **R** w a	**V** r w a	**V R W A**	v **R** w a	v **R** w a	**V R** w a
Project Managers	v **R** w a	**V** r w a	v **R** w a	**V** r w a	**V R W A**	v **R** w a	v **R** w a	**V R W A**
Sales	v **R** w a	**V** r w a	v **R** w a	**V** r w a	**V R W A**	v **R** w a	v **R** w a	**V R W A**
Senior Managers	v **R** w a	**V** r w a	v **R** w a	**V** r w a	**V R W A**	v **R** w a	v **R** w a	**V R W A**

5.4 Horizontal User Permissions

You can modify horizontal permissions or “roles” by editing the table im_biz_object_role_map. This table contains a mapping from (acs_object_type, object_type to roles) using SQL commands:

```
create table im_biz_object_role_map (
        acs_object_type constraint im_bizo_rmap_o_type_fk
                        references acs_object_types,
        object_type_id  integer
                        constraint im_bizo_rmap_object_type_fk
                        references im_categories,
        object_role_id  integer
                        constraint im_bizo_rmap_object_role_fk
                        references im_categories,
        constraint im_bizo_rmap_un
        unique (acs_object_type, object_type_id, object_role_id)
);
```

The following relationships are predefined:

- Project
    - Project Manager (admin)
    - Full Member
- Office
    - Office Administrator (admin)
    - Full Member

- Customer
    - Key Account Manager (admin)
    - Full Member

For example, the Projects roles have been defined using the statement:

```
-- Setup the list of roles that a user can take with
-- respect to a project:
--      Full Member (1300) and
--      Project Manager (1301)
--
insert into im_biz_object_role_map values ('im_project',85,1300);
insert into im_biz_object_role_map values ('im_project',85,1301);
insert into im_biz_object_role_map values ('im_project',86,1300);
insert into im_biz_object_role_map values ('im_project',86,1301);
commit;
```

Newly created roles can be used in the filestorage module to restrict permissions. For example, a “software analyst” could be a project member with read permissions on all project folders and write permissions to the “analysis” folder.

6 Configuring the "Internal" Company

The "internal company" represents your company (the company owning the **Project/Translation** server). Several **]po[** modules need this company in order to create transactions, involving your company. You will get an error message if the company has not been set up, such as:

"Internal" company missing

To check if the "Internal Company" exists please go to "Companies" and use the "Company Type" drop-down list and select "Internal". You will most likely see a single company named "Tigerpond" (in the case of preconfigured demo data). Please click on this company and edit it to suit your company. **Please don't touch the "Company Nr" field (needs to remain "internal").**

If there is no "internal" company (a configuration "from scratch") please go to the "Companies" menu and select "Add a new Company" and create a company with the following data:

Company Name	<Your Company Name>
Company Short Name	**internal**
Company Status	**Active**
Company Type	**Internal**
Address	. . .

Please USE THE BOLD VALUES from the example above to setup. Please note that the Company Short Name should be in lowercase!

Please complete all other fields with the relevant information about your company.

7 Configuring Invoice Templates

]project-open[allows users to customize the print appearance of quotes, invoices and purchase orders using HTML templates ("invoice templates"). There are two elements that need to work together to provide a new invoice template:

1. You need to design your own ".adp" template file.
   This ".adp" file is a kind of HTML file with special placeholders to fill-in the invoice data. You need to place your invoice templates into the filestorage, typically located at C:\ProjectOpen\filestorage\templates (Windows) or /web/projop/filestorage/templates (Linux).
2. You need to create a new category entry for your new template.
   In /Admin/Categories page please choose "Intranet Cost Template". This should show you some preinstalled templates. Please modify an existing template or create a new one for your new template. Just specify the name of your templates in the filestorage folder. Example:

7.1 Available Variables

The following variables are available inside an invoice template. You can include the content of these variables into your template using a line like:

```
<H1><%= %page_title %></H1>
```

Please note that "invoice" is frequently used below to refer to "Financial Documents" (Invoice, Quotes, Bills, Delivery Notes, etc).

7.1.1 General Variables

page_title	The HTML Title of the invoice. Just for the browser header (usually not printed)
user_id	The ID of the current user (currently looking at the page)
internal_contact_email	Email of user_id
internal_contact_name	Name of user_id
locale	The locale of this invoice, determined by the name of the invoice template. For example "invoice.en_US.adp" will lead to an "en_US" locale for this financial document. The "locale" determines the language of static texts and the formatting of numbers.
user_locale	The default locale of the current user. Is in general different from the "locale". This locale serves as a fallback value in case that there is no "locale" (see above) defined for the invoice.
rounding_precision	Constant set to "2". Determines the number of digits of rounding precision for subtotals etc.
default_currency	Defines the Defined by "DefaultCurrency" parameter
subtotal	Subtotal (sum of invoice items)
subtotal_pretty	Formatted subtotal.
grand_total	Grand Total (Subtotal + VAT + TAX)

grand_total_pretty	Formatted grand_total

7.1.2 Parameters

The following variables are defined by parameters in the Admin -> Parameters -> intranet-invoicing section and can be modified by the Administrator.

show_company_project_nr	Should we include the customer's project_nr in item_html? The project_nr can change per item (line) but this rarely happens, so setting this parameter to 0 ("ShowInvoiceCustomerProjectNr" parameter) is an option if you are using few cummulative invoices.
show_our_project_nr	Similar to show_our_project_nr. Determines whether _our_ project_nr should appear in the item_html. Defined by "ShowInvoiceOurProjectNr" parameter.

7.1.3 Preformatted Pieces of HTML

These pieces of HTML are already formatted to be included in the InvoiceViewPage and the template.

You can customize these elements via parameters (see section above) or using a StyleSheet.

invoice_item_html	
item_html	
item_list_html	
note_html	Preformatted (<pre>...</pre>) invoice "note" field
payment_list_html	List of related payments formatted for the ViewPage (not for the Preview)
payment_method_html	
terms_html	The "payment terms" section at the bottom of the page
subtotal_item_html	The formatted piece of HTML representing the "subtotal" section with subtotal, VAT, TAX and grand total.
render_template_id	ID of the display template to be used for rendering. Refers to the category_id field in the im_categories table where you find the actual name of the template in the "category" field.
payment_terms_html	Formatted "payment conditions" section. Usually only applicable for "hard costs" where invoice_or_bill_p == true (see below).

7.1.4 Currency and Date Formatting

These formats are used on the SQL level to format variables. The format depend on the "locale" parameter (see above). For further customization (modifying the decimal and thousand separators for a particular locale) you can modify the language definition files in the "catalog" folder of the acs-lang package. Please see the OpenACS documentation for more details.

cur_format	
cur_format	

vat_format	
tax_format	

7.1.5 Related Projects

These variables are useful if you want to refer to the (or the several) project that are related to the given invoice. Please not that you can have 0, 1 or multiple projects related to a single invoice (0 for a "stand-alone" invoice without project, 1 for the standard case of one project per invoice and multiple projects if you choose to do "cumulative invoicing", where you include several (small) projects in a single invoice).

related_project_nrs	The TCL list of the "numbers" of related projects. Please use "<%= [join $related_project_nrs ", "] %> to use this field in the template, so that multiple projects are displayed correctly with a ", " in between.
related_projects	The TCL list of the "names" of related projects. See above for formatting.
num_related_projects	The number of related projects. Can be 0, 1 or more.
related_customer_project_nrs	The TCL list of the customer's project references to the related projects. See above for formatting.

7.1.6 Customer and Provider

An Financial Document is usually between the "internal company" (please see above) and either a Provider or a Customer, depending on the type of financial document. "Company" in this context refers to this 2nd party, independently of whether it's a customer or a provider.

company_id	ID of the customer or provider
company_name	(Long name)
company_path	Path (short name)
deleted_p	The company may already have been deleted…
company_status_id	Status of the company. Use "select im_category_from_id(company_status_id)" to get a human readable status
company_type_id	Type of company. See company_status_id above for formatting.
crm_status_id	Information of CRM acquisition process.
primary_contact_id	ID of the company's main contact person. Please use "select im_name_from_user_id(:primary_contact_id)" to obtain the name and "select im_email_from_user_id(:primary_contact_id)" to obtain the contact's email.
accounting_contact_id	ID of the company's accounting contact person.
vat_number	The VAT number of company

The following fields contain information about the preferences/default values for company's payment conditions and templates for different invoice types.

default_payment_days	
default_vat	
default_payment_method_id	

default_invoice_template_id	
default_bill_template_id	
default_po_template_id	
default_delnote_template_id	

Information about the company's "Office" selected for this invoice. Please note that there can be several Offices per company, so this one refers to the particular office defined in the invoice.

office_id	ID
office_name	Name of the Office. Can be used to designate a company's sub organization (department, ...) if suitable maintained in the customer's file
office_path	Short name of the office
office_status_id	Status (as usual)
office_type_id	Type (as usual)
phone	
fax	
address_line1	First of two address lines
address_line2	Second of two address lines
address_postal_code	ZIP
address_state	May only be useful for US American addresses.
address_city	
address_country_code	Two digit code for the country
country_name	English name of the country (can be localized using L10n, pleases see OpenACS documentation for reference).

7.1.7 Financial Item Information:

cost_id	ID
invoice_id	Same as cost_id
cost_name	Long Name (automatically generated)
cost_nr	Short Name (automatically generated)
invoice_nr	Same as cost_nr
customer_id	Customer, either the "internal" company for an bill/po or customer company for an invoice/quote/delivery_note.
provider_id	Provider, either the "internal" company for an invoice/quote or the provider company for a bill/po.
company_contact_id	ID of the Customer's/Provider's contact person to who we want to send or direct the financial document
company_contact_email	Name of company_contact_id
company_contact_name	Email of company_contact_id
cost_center_id	Cost Center/Department
cost_center_name	Long name CC/Dept
cost_note	Note (prominent field in InvoiceListPage and Template)
cost_status_id	Status (ID)
cost_status	Status (human readable)
invoice_status_id	Same as cost_status_id

cost_type_id	Type (ID)
cost_type	Type (human readable)
invoice_type_id	Same as cost_type_id
calculated_due_date	Due date (effective date + payment days)
calculated_due_date_pretty	Due date formatted according to locale
cffective_date	Effective date of invoice
invoice_date	Same as effective date
invoice_date_pretty	Effective date formatted
payment_days	Number of days for payment, difference between effective_date and calculated_due_date.
invoice_office_id	Company's office ID
invoice_or_bill_p	True ("1") if financial item is a customer invoice or a provider bill. Both types are "hard costs" and require certain fields such as payment conditions.
invoice_or_quote_p	True ("1") if the document is related to a Customer (as opposed to Provider). Also true for "Delivery Note".
payment_method_id	ID that determines payment details
invoice_payment_method_id	Same as payment_method_id
invoice_payment_method	Short human readable text for payment method such as "Bank ABC"
invoice_payment_method_desc	Long description text for payment method detailing the how the money should be paid, typically including the bank name, SWIFT code, IBAN, account number, etc.
invoice_template_id	Rendering template for the cost item.
paid_amount	Registered payments for this cost item, converted into paid_currency.
paid_currency	Currency of payments, usually identical with default_currency.
vat	VAT (percentage)
vat_amount	VAT (percentage x invoice amount)
vat_amount_pretty	VAT (percentage x invoice amount) formatted
tax	TAX (percentage). This field can accommodate applicable tact, for example Spanish IRPF, or sales tax.
tax_amount	TAX (percentage x invoice amount)
tax_amount_pretty	TAX (percentage x invoice amount) formatted

7.2 Sample Invoice Code

Here is a source code of a simple template that is included in the **]project-open[** Windows installer:

```
<html>
<head>
<title>Invoice Template </title>
<link rel='stylesheet' href='http://www.project-open.com/css/invoice.css' type='text/css'>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>
<body text="#000000">
<table border="0" cellspacing="1" cellpadding="1" width="100%">
  <tr>
    <td>
      <img src="http://www.project-open.com/images/logos/logo.project-open.horiz.tra.gif"
width=230 height=52><br>
      <P><b><font size="5">INVOICE</font></b></P>
    </td>
```

```
    <td align="right"> <p><font size="6"><b>]project-open[</b></font><br>
        <font size="4"><b>Manage your projects online-<br>
        anytime, anywhere</b></font></p>
      <b><font size="3">www.project-open.com</font></b> </td>
  </tr>
</table>
<hr>
<table border="0" cellspacing="1" cellpadding="1" width="100%">
  <tr>
    <td valign="top">
      <table border="0" cellspacing="1" cellpadding="1">
       <tr class=rowtitle><td colspan="2" class=rowtitle>Client Details</td></tr>
       <tr>
         <td class="roweven">Company</td>
         <td class="roweven"><%=$company_name %></td>
       </tr>
<%
    set address1 ""
    if {![string equal "" $address_line1]} {
       set address1 "
        <tr>
          <td class=roweven>Address</td>
          <td class=roweven>$address_line1</td>
        </tr>"
    }
%>
       <%=$address1 %>
<%
    set address2 ""
    if {![string equal "" $address_line2]} {
       set address2 "
        <tr>
          <td class=roweven> </td>
          <td class=roweven>$address_line2</td>
        </tr>"
    }
%>
       <%=$address2 %>
        <tr><td class="roweven">Zip/City</td>
          <td class="roweven"><%=$address_postal_code %><%=$address_city %></td>
        </tr>
        <tr><td class="rowodd">Country</td><td class="rowodd"><%=$country_name %></td></tr>
        <tr><td class="roweven">Phone</td><td class="roweven"><%=$phone %></td></tr>
        <tr><td class="rowodd">Fax</td><td class="rowodd"><%=$fax %></td></tr>
        <tr><td class="rowodd"> </td><td class="rowodd"> </td></tr>
      </table>
    </td>
    <td align="left" valign="top">
      <table border="0" cellspacing="1" cellpadding="1">
        <tr><td colspan="2" class="rowtitle">Provider Details</td></tr>
        <tr><td class=roweven>Company</td><td class=roweven>]project-open[</td></tr>
        <tr><td class=roweven>Address</td><td class=roweven>Avda. Felix Millet 45</td></tr>
        <tr><td class=roweven>Zip/City</td><td class=roweven>08338 Barcelona</td></tr>
        <tr><td class=rowodd>Country</td><td class=rowodd>Spain</td></tr>
        <tr><td class=roweven>Phone</td><td class=roweven>+34 609 953 751</td></tr>
        <tr><td class=rowodd>Fax</td><td class=rowodd>+34 93 741 1235</td></tr>
        <tr><td class=roweven>E-Mail</td><td class=roweven>accounting@project-open.com</td>
        </tr>
      </table>
    </td>
  </tr>
</table><br>
<table border="0" cellspacing="1" cellpadding="1">
  <tr><td><b><font size=2>Date</font></b></td><td><font size=2><%=$invoice_date
%></font></td></tr>
  <tr><td><b><font size=2>Invoice No. </font></b></td><td><font size=2><%=$invoice_nr
%></font></td></tr>
</table><br>
```

```
<table border="0" cellspacing="2" cellpadding="2">
<%=$item_html %>
</table>
</body>
</html>
```

8 Parameters

The parameter administration page can be accessed via “Admin / Parameters”. The page shows a summary of all system parameters grouped by module. The parameters can be edited by clicking on the module link. Each parameter contains a brief description.

Most parameters are defined by the underlying OpenACS community system and are not relevant for **]project-open[**.

8.1 Necessary Parameters

Please make sure that the following parameters are set to the indicated values. Using different values can lead to serious security vulnerabilities or other undesired effects.

acs-subsite	Main Site
EmailChangedPasswordP	**1**
if the admin changes the password, should it be mailed to the user	
EmailForgottenPasswordP	**1**
Email users forgotten passwords	
EmailRegistrationConfirmationToUserP	**1**
Send confirmation email to user after registration	
MembersCanInviteMembersP	**0**
Set this to 1 if you want to allow members to invite other members.	
NotifyAdminOfNewRegistrationsP	**1**
Notify someone of new registrations?	
RegistrationProvidesRandomPasswordP	**0**
have the system generate a random password instead of the user	
RegistrationRequiresEmailVerificationP	**0**
Set this to 1 if the user has to receive and email and come back to the site. CSV-Import of user data will send out emails (NOT desired normally) to all users if this value is set to 1.	
RestrictEntireServerToRegisteredUsersP	**1**
Do we want to allow only registered users to visit this subsite?	
AllowPersistentLoginP	**1**
Do we allow persistent logins?	
RegistrationRequiresApprovalP	**1**
Set this to 1 if user do not go live immediately	

8.2 Optional Parameters

The following parameters are frequently used and can safely be modified. The table below contains example values from **]project-open[**. In particular, you will have to modify all path parameters (/web/…/…/) according to the setup of your computer.

acs-kernel	Kernel

	AdminOwner	**frank.bergmann@project-open.com**
	who signs the admin pages, e.g., a programmer who can fix/enhance them	
	HostAdministrator	**frank.bergmann@project-open.com**
	a person whom people can email with technical problems	
	OutgoingSender	**frank.bergmann@project-open.com**
	The email address that will sign outgoing alerts.	
	PublisherName	**]project-open[**
	for legal pages, full corporate entity	
	SystemName	**]project-open[Server**
	the name of your system	
	SystemOwner	**frank.bergmann@project-open.com**
	who signs the average user-visible pages	
	SystemURL	**http://www.projop.com/**
	URL to tell users to go to	
intranet-core		**]project-open[Core**
	ErrorReportURL	**http://www.projop.com/intranet-forum/new-system-incident**
	Error Report URL	
	SystemCSS	**/intranet/style/style.default.css**
	Global CSS	
	SystemLogo	**/intranet/images/projop-logo.gif**
	System logo that appears in all screens	
	SystemLogoLink	**http://www.project-open.org/**
	SystemLogoLink	
	SystemNavbarGifPath	**/intranet/images/navbar_default**
	Where are the GIFs located for the navbar?	
	BackupBasePathUnix	**/web/projop/filestorage/backup**
	Path for backup sets	

9 Categories

"Categories" are a general concept being used throughout the **]project-open[** system for several different purposes.

- Sometimes categories are used to hold values supposed to be modified by a knowledgeable user ("user").
- Sometime categories are supposed to be configurable by system administrators ("admin").
- Finally, categories are used as a kind of "internal system constant" that should never be touched, not even by a system administrator ("constant").

9.1 Category Hierarchy

Categories are can be ordered hierarchically using an "is-a" relationship. This allows defining category-subcategory relationships.

The "is-a" relationship represents a "transitive closure" of a "parent-child" relationship. "Transitive closure" means that *all* parents of a category need to be entered in an "is-a" field, not just the "direct parent".

This way of defining the category hierarchy has several advantages such as:

- "Multiple inheritance" – A category can have more then one parent.
- Fast "is subcategory" query – The SQL query to determine whether a category is a subcategory is very fast, because all cases are stored in the "is-a" relationship. In particular, this avoids any hierarchical/iterative sub queries.

However, there are also several disadvantages:

- Complex – This scheme is difficult to understand for non-administrators
- Error prone – Nothing prevents you from defining a cyclic "is-a" relationship, possibly leading to infinite loops in the system

Please make sure you understand the concept of a "transitive closure" before modifying categories yourself.

9.2 An Example – Company Types

The table below shows an example of the "Company Type" category. This category is supposed to be editable by a sysadmin and shows the general structure of a "category".

Id	Category	Is-A	Description
51	Unknown		Use this if the type of the company is not yet clear (to be clarified later).
52	Other		Use this for strange cases where you really don't know.

53	Internal	Customer	Use this type to denote your own company or companies belonging to you group or holding.
54	MLV Translation Agency Company	Customer	A "Multi-Language Vendor" translation agency.
55	Software Company	Customer	A software company as a customer.
56	Provider		Super class of all providers.
57	Customer		Super class of all customers.
58	Freelance Provider	Provider	A provider that consists of a single freelancer.
59	Office Equipment Provider	Provider	A provider for furniture and other office equipment.

You can identify the following fields:

- A human readable "Category" field
- An ID that is sometimes used as a constant for internal system purposes
- An "Is-A" field that defines a hierarchical tree (more precisely: directed acyclic graph) relationship
- A "Description field" to define the precise semantics of a category.

The "Company Type" category is designed to be extended by "knowledgeable users", so that new types of customers can be added during the lifetime of the system. However, such a "knowledgeable user" would need to know that she couldn't touch the "Internal", "Provider" or "Customer" fields, because their IDs are referenced as constants internally in the system.

9.3 Category Types

The following list describes the intended scope of modification of the current categories:

Module	**Category Type**	**Modifiable**	**Comment**
intranet-core			
	Intranet Annual Revenue	user	Constants for CRM
	Intranet Biz Object Role	constant	Role relationships between business objects and their members. Examples: Project Manager, full member (projects, offices, companies), Key Account.
	Intranet Company Status	admin	Used for CRM sales pipeline and partner acquisition pipeline. You could add values, but there are already too many of them.
	Intranet Company Type	admin	Used to distinguish different types of companies such as customers, providers, partners, … You can add new company types. Reserved types:: - "Internal": Refers to your own company - "Customer": Companies buying from you. Please use "Customer" as a super-type when adding a new type of customer - "Provider": Companies from whom you are buying. Super-type of all providers
	Intranet Office Status	admin	Constants for office, active or inactive.
	Intranet Office Type	admin	Main office or sales office. "Main Office" is uses as a constant, so please don't change.

	Intranet Project Status	admin	Project cycle completion state. Many states are used as constants by the system, with specific meaning. For example, “Delivered” is used by the invoicing module etc. Better don’t add anything.
	Intranet Project Type	admin	You can add your project types here. Reserved types: - “Translation Project”: Super-type for all translation projects. This type triggers certain specific components for translation projects Project types are currently also being used as types for translation tasks, which is going to change with the next major release
intranet-timesheet			
	Intranet Absence Type	admin	“Holiday”, “Vacation”, … No problem adding a new type
intranet-crm-tracking			
	Intranet CRM Interaction	constant	Types of interactions with a]project-open[site, such as login, registration, viewing static contents, …
intranet-cost			
	Intranet Invoice Payment Method	admin	
	Intranet Invoice Status	admin	Invoice lifecycle support.
	Intranet Invoice Template	admin	The category name is used as a filename in /web/projop/filestorage/ templates/ (default) to identify the filename of an invoice template (or quote, purchase order, …)
	Intranet Invoice Type	constant	The existing types are used as constants. However, you may add new ones which the corresponding supertype.
	Intranet Payment Type	admin	
	Intranet UoM	admin	Units of Measure. You can your own UoMs. Translation invoicing refer to these types in the “price list”. Other modules may in the future.
intranet-forum			
	Intranet Topic Status	constant	Used for incident resolution workflow on tasks and incidents.
	Intranet Topic Type	constant	
intranet-freelance			
	Intranet Employee Pipeline State	admin	Freelance and Employee recruitment lifecycle support
	Intranet LOC Tool	user	Skill Category: Localization tools of Freelancers
	Intranet Operating System	user	Skill Category: Operation Systems dominated by Freelancers
	Intranet Skill Type	user	This category contains the different skill types (such as LOC Tool, Operating System, …). Please specify the category type of the corresponding category in the “description” field (not very clean, but works).
	Intranet TM Tool	user	Skill Category: Translation Memories dominated by Freelancers
	…	user	You may add new categories here for skills. You need to add these categories to “Intranet Skill Type” to “activate” them
intranet-hr			
	Intranet Job Title	admin	Constants for employee lifecycle support
	Intranet Experience Level	admin	
	Intranet Hiring Source	admin	
	Intranet Prior Experience	admin	
	Intranet Qualification Process	constant	

intranet-translation			
	Intranet Translation Language	user	A list of all languages being used by a translation agency. You can add and delete new languages.
	Intranet Translation Subject Area	user	Subject areas for translation projects. You can add and delete.
	Intranet Translation Task Status	constant	Translation task workflow support. All states are used as constants in the program code.
	Intranet Quality	constant	Defines quality levels. Used as constants, you can't change them (yet)
intranet-riskmanagement			
	Intranet Risk Type	admin	
intranet-planning			
	Intranet Task Action Type	admin	
	Intranet Task Board Time Frame	admin	

ToDo: Describe each of these categories in detail.

10 Localization

You can translate the **]project-open[** user interface in any language (localization, “l10n”). This localization process mainly consists of a list of translations for each language, that can be modified by the user.

10.1 Supported Languages

Currently (V3.0.0), **]project-open[** is available in American English (“en_US”) and German (“de_DE”).

However, you will need to explicitly enable the non-en_US locales after a new installation at http://<your_server>/acs-lang/admin/.

Also, adding a new language is easy. Just enable the language and use the localization interface to “batch-edit” the texts and/or switch on the translation mode for the user interface.

10.2 Changing Default Languages

Go to http://<your_server>/acs-lang/. This is the page where you can select for user specific language options.

These options will be included in the standard **]project-open[** user configuration screens in one of the next versions.

10.3 Adding new Localization Message

If **]project-open[** can’t find a specific translation, it will display an error message such as this one:

MESSAGE KEY MISSING: ‘intranet-core.Hardware_Manufacturer’

These “errors” may also occur if you add new categories (see chapter below) to the system of if you customize the GUI.

You (the System Administrator) can remove such an error message by using the built-in localization mode of **]project-open[**:

- Go to http://<your_server>/acs-lang/admin/
- Click on the “on” of the first line: “Toggle translation mode: “On” | “Off”

Return to the initial page with the MESSAGE KEY ERROR. You will see a number of small green “o-handles” appear, indicating successful localizations. Red “@” symbols indicate missing translations. Clicking on them will lead you to a localization screen where you can register a translation.

10.4 Date, Time and Currency formats

]project-open[uses its own default date format “YYYY-MM-DD” in all modules. This format cannot be changed.

Time format is handled inconsistently between different modules. Please refer to the specific documentation. This situation is going to be improved in one of the next releases.

Currency format uses ISO three letter abbreviations such as “EUR” or “USD”. **]project-open[** is build to handle multiple currencies, so you will need to specify your currency every time you enter a money amount. The parameters section provides a system default currency that is used as a default where appropriate.

10.5 Unicode and Double-Byte Character Sets

]project-open[uses Unicode (UTF-8) as its default character set. All strings should be enabled for Unicode and Asian double-byte characters. However, this feature hasn’t yet been tested extensively (V3.0.0). Cyrillic and Latin 1 special characters are know to work.

10.6 Country Specific Accounting Rules

The **]project-open[** ‘Cost Module’ doesn’t use any country specific accounting rules. VAT and tax are fee-text fields in invoices and other cost items, allowing the user to add specific values.

]project-open[will support an export function of costs to country specific accounting formats in the future, such as KHK-Kaufmann (Germany), ContaPlus (Spain) and QuickBooks (US).

11 Error Reporting

11.1 Online Error Reporting

]project-open[includes an option to report errors online to a centralized error-reporting server.

> Example: http://<your_server>/intranet/admin/ttt is a sample file that contains an explicit error, suitable for testing the error reporting procedure. Entering this link, you will be shown a typical error message.

In order to configure online error reporting, please copy the following file:

```
/web/projop/packages/intranet-forum/www/page-error.adp ->
/web/projop/packages/acs-tcl/lib/page-error.adp
```

There are no limits for the time it might take to resolve an incident in Sourceforge. Please consider contracting a support contract if you need a deterministic service: http://www.project-open.com/product/services/support/

Note: The "page-error.adp" in V3.0.alpha2 contains a formatting error. Please revert to a newer version of **]project-open[**.

11.2 Reporting Errors at Sourceforge.Net

There exists a public **]project-open[** incident management application at Sourceforge.net:

- http://sourceforge.net/tracker/?atid=579555&group_id=86419&func=browse

Also, there is a generic "Open Discussion" board where you can as questions:

- http://sourceforge.net/forum/forum.php?forum_id=295937

You can use these web applications to post errors. You may have to register at Sourceforge before you can access these pages. Please help us by using a suitable Subject, by including the error message and by giving us details about the URL where the error occurred.

There are no limits for the time it might take to resolve an incident in Sourceforge. Please consider contracting a support contract if you need a deterministic service: http://www.project-open.com/product/services/support/

12 Online Software Updates

Software Updates always contain the risk that something goes wrong. We strongly suggest that you backup all system data before a software update, including at least:

- The **]project-open[** source code at /web/projop/packages/*
- The content of the PostgreSQL or Oracle database
- The content of the /web/projop/* folder in general

Disclaimer: **]project-open[** does not accept any liabilities for errors during online software updates (see the general disclaimer section above).

You need a valid "CVS user" in order to perform a successful online software update. Please consult your **]project-open[** support contract for your specific CVS user and password. There exists a publicly available CVS user called "anonymous" with an empty password. However, "anonymous" may not have the right to access all of your installed modules. A suitable CVS account will be created as part of a support contract.

12.1 Unix Online Software Updates

On Unix systems (Linux, Solaris, Apple OS X, …), please login as the user "projop" and use CVS to update your code:

```
# su - projop
# cd /web/projop/packages/
# cvs update
```

You should see a number of lines, detailing the subdirectories that have been updated.

In the case of an error please make sure that your CVS parameters are set correctly:

```
# su - projop
# set | grep CVS
```

You should see something like this:

```
CVSREAD=yes
CVSROOT=:pserver:anonymous@projop.dnsalias.com:/home/cvsroot
CVS_RSH=ssh
```

12.2 Windows Online Software Updates

On Windows systems (Win2k, Windows XP, Windows 2003), please use WinCVS (http://www.wincvs.org/) or a similar client to access the CVS repository. You need change to the C:\ProjectOpen\projop\packages\ directory and set the following parameters:

Authentication	pserver
Path	/home/cvsroot
Host Address	projop.dnsalias.com
User Name	anonymous (or your CVS user)

Please update the software by following the procedures below.

12.2.1 The First Software Update

When updating the software for the first time, you will need to "checkout" the **]project-open[** modules from the CVS server:

- Please delete all "intranet-*" folders in C:\ProjectOpen\projop\packages\" or move them into a temporary folder.
- Start WinCVS, log into the CVS server with the parameters above and issues the command "cvs checkout intranet-core" in the text window at the bottom. This will download the "intranet-core" module from the CVS server and setup versioning information.
- Repeat the "cvs checkout …" command for all "intranet-*" modules that you have removed.

12.2.2 Following Software Updates

The subsequent software updates can be executed using a single command:

- Start WinCVS and change to the C:\ProjectOpen\projop\packages\ folder (click on the corresponding folder icon)
- Issue the command "cvs update". This command should update all folders below "/packages/". You should see log messages detailing the subdirectories that have been updated.

13 Database Configuration

This chapter describes the configuration of the default **]project-open[** database "PostgreSQL". The configuration of the optional Oracle database is not subject of this manual.

13.1 Windows PostgreSQL Database Options

There are three different database configuration options to run **]project-open[**:

1. **PostgreSQL on CygWin - the default option for]project-open[:**
   The **]po[** installer by default installs a PostgreSQL database as part of the CygWin Unix environment. This configuration is convenient because everything works "out of the box". However, PostgreSQL on CygWin does not perform as well as the other options
2. **Native PostgreSQL**:
   The "native" version of PostgreSQL (starting with version 8.0) on Windows performs considerably better then the CygWin version. We highly recommend this option for any productive use of **]po[**. Please see www.postgre.org for details.
3. **PostgreSQL on a separate database server**:
   You can run the PostgreSQL database on a separate server computer, possibly even with a different operating system such as Linux or Solaris.

Please contact us for options 2 and 3.

13.2 PostgreSQL Security Configuration

PostgreSQL security is mainly controlled by the file C:\ProjectOpen\ cygwin\ var\ postgresql\ data\ pg_hba.conf. The figure below shows the default **]po[** configuration:

```
# TYPE  DATABASE    USER        IP-ADDRESS       IP-MASK          METHOD

local   all         all                                           trust
```

In this configuration, the database will allow full access to all data for all local users of the server computer while blocking the access for anybody not working locally on the computer.

This setup is very convenient for our **]po[** demo server where we can't predict the name of the local users. However, you may want to change these settings for a productive installation.

Please see the PostgreSQL documentation (http://www.postgresql.org/docs/7.3/static/client-authentication.html) for details or contact us for installation/ configuration / security consulting services.

13.3 PostgreSQL "Vacuum" Configuration

"Vacuuming" is the PostgreSQL name for performing database maintenance. Periodic maintenance is important for the overall performance of PostgreSQL, which can degrade considerably otherwise.

The default **]project-open[** Windows installation **does not include** a periodic scheduling of the "vacuum" command.

Please execute the CygWin "vacuumdb" command periodically:

- You can configure a Windows "Scheduled Task" to execute the included "ProjectOpen-vacuum.bat" every day
- You can configure the CygWin "cron" scheduler to execute the command.

Here is an excerpt from a Linux "Crontab":

```
# Full PostgreSQL vacuum every night
20 3 * * 0 su - postgres -c "/usr/bin/vacuumdb -a -f" >> /var/log/pg_vacuumdb.log
2>&1
```

13.4 PostgreSQL Database Backup

You can backup the PostgreSQL database manually via Admin / Backup / "Full PostgreSQL Database Backup". However, we recommend that you configure an automatic database backup.

Here is an excerpt from a Linux "Crontab":

```
# Backup PostgreSQL "projop" database every night
20 3 * * 0 su - projop -c "pg_dump -c -O -F p -f
/web/projop/filestorage/backup/pg_dump.`/bin/date +\%Y\%m\%d.\%H\%M`.sql " >
/var/log/pg_backup.log 2>&1
```

14 Menu Configuration

Menu configuration allows you to add and remove menus and to determine the visibility of menus to different user "profiles".

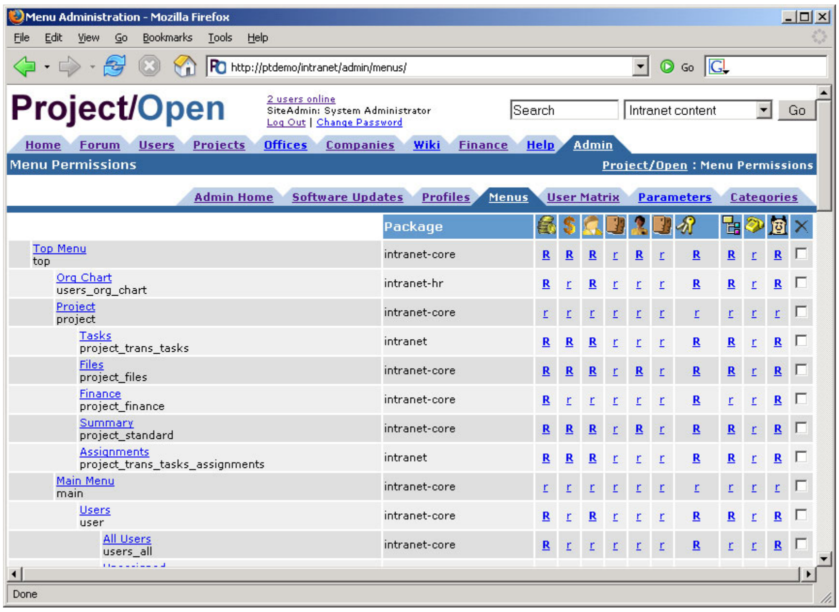

Figure 1: A sample menu configuration. A capital "R" stands for readable, while a lower case "r" stands for not readable.

Menu permissions only determine whether the **menu** is visible to a user. It does not affect the permissions of the page that is references by the menu.

The general idea of **]project-open[** is to keep the menu permissions aligned with the page permissions. However, certain mismatches can always happen:

- There can be pages without menu entries, which a user could see (hidden pages)
- There can be pages with menu entries, which a user is not allowed to see (forbidden pages)

15 Plug-in Component Configuration

Component configuration allows you to configure the location of a component and to determine the visibility of components to different user “profiles”.

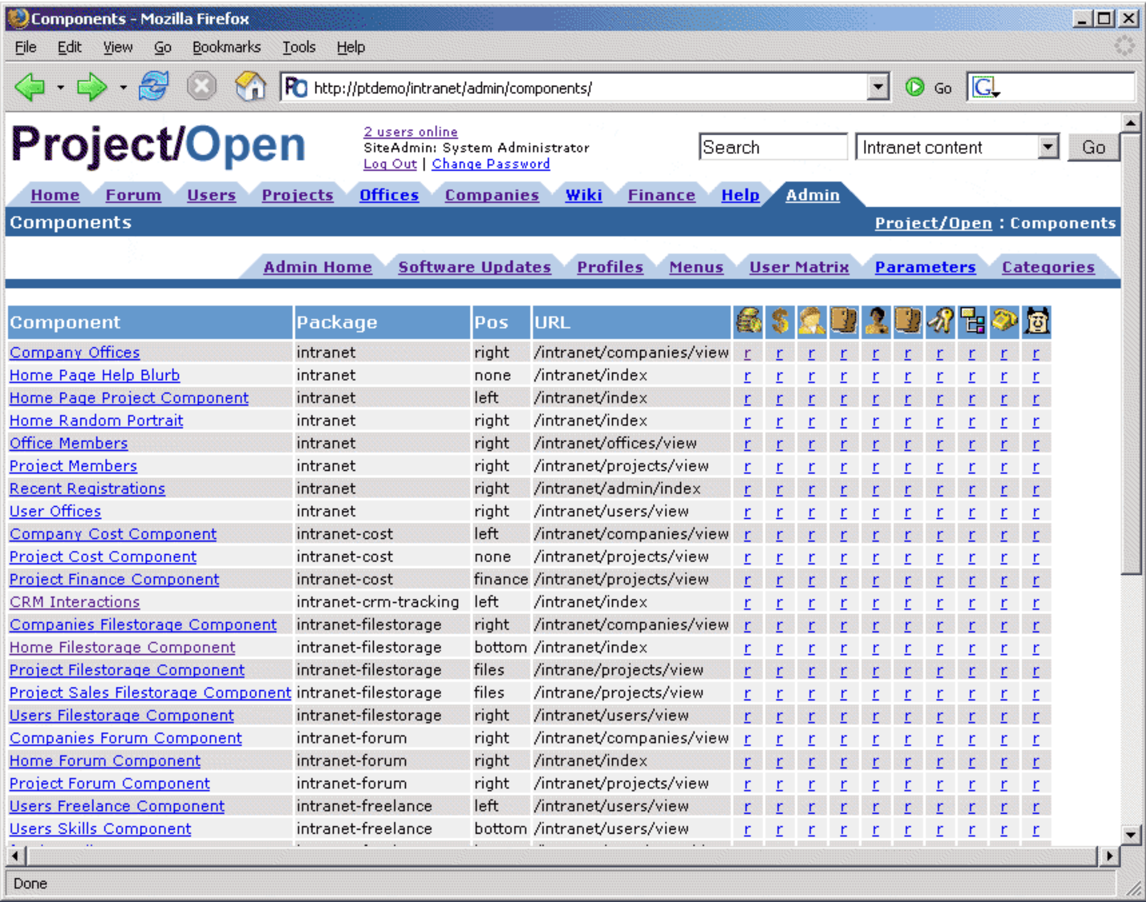

Figure 2: A sample component configuration. A capital “R” stands for readable, while a lower case “r” stands for not readable.

You can use component permissions to exclude certain user groups from certain information. For example, you may want to disable access to the customer’s forum and filestorage component for customers.

Please note that a completely empty permission field means that all components are visible to everybody, in order to maintain backward compatibility to earlier versions of **]project-open[**.

16 GUI Configuration

The following parameters are used to modify the GUI configuration:

intranet-core	]project-open[Core
SystemCSS	**/intranet/style/style.default.css**
Global CSS	
SystemLogo	**/intranet/images/projop-logo.gif**
System logo that appears in all screens	
SystemLogoLink	**http://www.project-open.org/**
SystemLogoLink	
SystemNavbarGifPath	**/intranet/images/navbar_default**
Where are the GIFs located for the navbar?	

- SystemCSS:
  We recommend that you copy-past-modify the original style.default.css to create a customized version.
- SystemLogo:
  To replace the default **]project-open[** logo by your company logo please add your logo to the /www/projop/packages/intranet-core/www/images/ directory (referred to via the /intranet/images/ URL) and modify this parameter accordingly.
- SystemLogoLink:
  The link behind the SystemLogo
- SystemNavbarGifPath:
  Contains a number of GIFs responsible to render the **]po[** navigation bar “triangles”. The colour of these GIFs corresponds to the colour of the system menus defined in the SystemCSS. You may have to copy-past-modify the default set of logos to create a new set if you want to modify the default system colours.

17 Start Page Configuration

17.1 Removing the "Welcome to]project-open[" Text

The "Home" page of the **]project-open[** demo systems contain a help text "Welcome to **]project-open[** ". This text is useful for demo systems but should be removed for a production system.

To remove this content please go to the "Admin" and follow the link "Plugin Components". In this page please select the "Home Text Help Blurb" and set its location to "none". Please see chapter "Plug-In Component Configuration" above for details.

17.2 Remove the "Default Login" Option

This section is very important if you have installed your **]project-open[** system used the Windows installer's "preconfiguration" option.

This "preconfiguration" (**Project/Translation**, **Project/Consulting**) installs a TCL page for the ***"Default Logins" that let's everybody log-in without a password***. You need to remove this page if you want to use the system for more then testing purposes. Please remove the file:

```
C:\ProjectOpen\projop\www\become.tcl
```

17.3 The]project-open[System Start Page

The **]project-open[** system start page with the URL: http://<your_server/ is located at `/web/projop/www/index.adp`. (Unix) or `C:\ProjectOpen\projop\www\index.adp` (Windows). This ADP page contains simple HTML code and is designed to be customized by a system administrator using any suitable HTML editor.

Also, you can create a TCL file in the same subdirectory. TCL and the ADP file normally work together to provide the content for a particular page. The TCL usually includes the business logic, while the ADP page is used to render the variables from the TCL file in HTML format. As an alternative, you can also use static HTML files with the extension .htm or .html. Please see the "Learning **]project-open[** section at www.project-open.org.

The `/web/projop/www/` subdirectory contains the publicly available pages of the web server or "page root". This is the right place to add HTML pages explaining your company etc.

17.3.1 Immediate Start Option

One option for the system home page is not to have any specific home page at all, but to redirect to the **]project-open[** core pages. In this case please create a TCL page at `/web/projop/www/index.tcl` with the following contents:

```
ad_page_contract {
    Empty system home page (redirects immediately to ]project-open[)

    @author frank.bergmann@project-open.com
    @creation-date Nov 2003
} { }

ad_returnredirect "/intranet/"
```

17.3.2 Home Page with Login Option

The following example shows a typical Intranet main screen from the **]project-open[** Intranet with some links and a login component.

/web/projop/www/index.tcl:

```
ad_page_contract {
    project-open Intranet index.tcl
    Provides the index.adp page with default values for
    the different login parameters
} {
    {authority_id ""}
    {username ""}
    {email ""}
    {return_url "/intranet/"}
}
```

/web/projop/www/index.adp:

```
<!— ]project-open[ Intranet index.adp page -->
<html><head><title>]project-open[ Intranet</title>
<meta http-equiv=Content-Type content="text/html; charset=iso-8859-1">
<link media=screen href="/intranet/style/style.default.css" type=text/css
rel=StyleSheet>
<body text=black bgColor=white>
<table cellSpacing=0 cellPadding=0 width="100%" border=0>
  <tr>
    <td><A href="http://www.project-open.com/">
      <img src=/intranet/images/projop-logo.gif border=0 width=230 height=52>
    </A></td>
    <td vAlign=center align=middle></td>
    <td vAlign=center align=right></td>
  </tr>
</table>
<table cellSpacing=0 cellPadding=0 width="100%" border=0>
  <tr>
    <td align=left>
      <table cellSpacing=0 cellPadding=0 border=0>
        <tr height=19>
          <td><img alt="" src="/intranet/images/navbar_default/left-sel.gif"
                   width=19 border=0 heigth="19"></td>
          <td class=tabsel>
            <A class=whitelink href="/intranet/index">Home</A>
```

```
          </td>
          <td>
          <td><img alt="" src="/intranet/images/navbar_default/right-sel.gif"
                   width=19 border=0 heigth="19"></td>
          </tr>
      </table>
    </td>
  </tr>
  <tr>
    <td class=pagedesriptionbar colSpan=2>
      <table cellPadding=1 width="100%">
        <tr><td class=pagedesriptionbar vAlign=center>
          ]project-open[ Intranet
        </td></tr>
      </table>
    </td>
  </tr>
</table><br>
<table cellSpacing=0 cellPadding=0 width="100%" border=0>
  <tr>
    <td vAlign=top>
      <table cellSpacing=0 cellPadding=5 border=0>
        <tr><td class=tableheader>]project-open[ Links</td></tr>
        <tr><td class=tablebody>
            <LI><A href="/intranet/">]project-open[ Intranet</a><br>
            <LI><A href="http://www.project-open.com/">]project-open[ Web Site
</a>
            <LI><A href="http://www.project-open.org/">]project-open[ Developer
Community</a>
            <LI><A href="http://www.project-open.org/doc/">Documentation Home</a>
        </td></tr>
      </table>
    </td>
    <td>
      <table cellSpacing=0 cellPadding=5 border=0>
        <tr><td class=tableheader>Intranet Login</td></tr>
        <tr><td class=tablebody>
<!-- Include the login widget -->
<include src="/packages/acs-subsite/lib/login" return_url="@return_url;noquote@"
no_frame_p="1" authority_id="@authority_id@" username="@username;noquote@"
email="@email;noquote@" &="__adp_properties">
         </td>
        </tr>
      </table>
    </td>
  </tr>
</table>
<table cellSpacing=0 cellPadding=5 width="100%" border=0>
  <tr><td>
    Comments? Contact:
    <A href="mailto:support@project-open.com">support@project-open.com</A>
  </td></tr>
</table>
</body>
</html>
```

17.4 The]project-open["Home" Page

The **]project-open[** "home" page with the URL: http://<your_server/intranet/ is located at `/web/projop/packages/intranet-core/www/index.adp`. (Unix) or `C:\ProjectOpen\projop\packages\intranet-core\www\index.adp` (Windows). This page is the default target of the "Home" menu tab.

The page contains a help text in **]project-open[** Version V3.0.betaX that can become annoying after a while. You can disable this help text in Admin / Manage Component Layout / Home Help Blurb by setting the "Location" to "none".

Also, you may want to modify this page to add company messages etc. However, you may have to make the file writable before doing so, because the file is normally under CVS control:

On Unix:

```
# cvs edit /web/projop/intranet-core/www/index.adp
# emacs /web/projop/www/index.adp /web/projop/intranet-core/www/index.adp
```

Or: simply make the file writable by "brute force" if you accept to loose your changes with the next system update:

```
# chmod ug+w /web/projop/www/index.adp
```

Windows: Please use WinCVS, change to the local directory and issue the same "cvs edit" as above. Or: Simply make the file writable in the Windows Explorer.

Another customization option is to modify the target for the "Home" menu tab. A system administrator can change this URL in the "Admin" / "Menus" page.

18 Multi-Currency Configuration

]project-open[in general supports all world currencies and multi-currency operations. Most of this functionality is covered in the "PO-Finance-User-Guide".

18.1 Available Currencies

]project-open[already includes a list of 162 currencies:

ADP AED AFA ALL AMD ANG AON ARP ATS AUD AWF AZM BAK BBD BDT BEF BGL BHD BIF BMD BND BOB BRR BSD BTN BUK BWP BYP BZD CAD CHF CLF CLP CNY COP CRC CSK CUP CVE CYP DDM DEM DJF DKK DOP DZD ECS EGP ESP ETB EUR FIM FJD FKP FRF GBP GHC GIP GMD GNF GRD GTQ GWP GYD HKD HNL HRK HTG HUF IDR IEP ILS INR IQD IRR ISK ITL JMD JOD JPY KES KHR KMF KPW KRW KWD KYD LAK LBP LKR LRD LSL LUF LYD MAD MGF MNT MOP MRO MTL MUR MVR MWK MXP MYR MZM NGN NIC NLG NOK NPR NZD OMR PAB PEI PGK PHP PKR PLZ PTE PYG QAR ROL RUR RWF SAR SBD SCR SDP SEK SGD SHP SLL SOS SRG STD SVC SYP SZL THB TND TOP TPE TRL TTD TWD TZS UAH UGS USD UYP VEB VND VUV WST YDD YER YUD ZAR ZMK ZRZ ZWD

These currencies are stored in the database in the table "currency_codes".

```
                Table "public.currency_codes"
   Column      |           Type          |      Modifiers
---------------+-------------------------+---------------------
 iso           | character(3)            | not null
 currency_name | character varying(200)  | not null
 supported_p   | character(1)            | default 'f'::bpchar
 symbol        | character varying(10)   |
```

18.2 Supported Currencies

However, not all of these currencies are usually needed in a company at the same time. This would lead to very big drop-down lists in the GUI. Instead, the system uses a list of "supported currencies". There are by default: AUD, CAD, EUR, JPY and USD. Supported currencies are marked using the "supported_p" flag. Please see the figure below for the default configuration.

```
projop=> select * from currency_codes where supported_p = 't';

 iso |   currency_name   | supported_p | symbol
-----+-------------------+-------------+--------
 AUD | US Dollar         | t           |
 CAD | US Dollar         | t           |
 EUR | Euro              | t           |
 JPY | Japanese Yen      | t           |
 USD | US Dollar         | t           |
(5 rows)
```

In order to add or remove a "supported" currency you will have to execute an SQL command manually. The following SQL command add Russian Rubles ("RUR") to the list of supported currencies:

```
ptdemo=> update currency_codes set supported_p='t' where iso='RUR';
```

18.3 Currency Conversion

*Please Note: The currency conversion functionality is still in **experimental** status and is **not supported** as part of our normal support packages (Basic, Silver or Gold support and free SourceForge support). Please contact us for other support options.*

The calculation of "Profit & Loss" of a project and other financial indicators require normalizing the amount of financial documents to a single currency, so that the amounts can be summed up.

In order to do so the system needs an up-to-date list of exchange rates of all "supported currencies" (see the subchapter "Currency Configuration" above for details). These currency rates and their maintenance are covered by the " intranet-exchange-rate" **]po[** package. This package defines a list of daily exchange rates between all "supported currencies" and the USD.

```
------------------------------------------------------------
-- Exchange rates of currencies with respect to the US dollar
------------------------------------------------------------

create table im_exchange_rates (
        day                     date
                                constraint im_exchange_rates_nn
                                not null,
        currency                char(3)
                                constraint im_exchange_rates_currency_fk
                                references currency_codes,
        rate                    numeric(12,6),
        manual_p                char(1)
                                constraint im_exchange_rates_manual_ck
                                check (manual_p in ('t','f')),
        constraint im_exchange_rates_pk
        primary key (day,currency)
);
```

The default **]po[** configuration already contains the exchange rates for the default currencies AUD, CAD, EUR, JPY and USD between 1999-01-01 and 2005-06-30.

Also, the package includes a maintenance screen that allows you to update the exchange rates for later dates.

18.4 Calculating Multi-Currency Sums

This package can be used to calculate multi-currency sums of financial items. This functionality will be completely integrated into the version V4.0 of **]po[**. Until then you will have to use this package manually for your reporting SQL queries.

Here is a sample SQL query that takes advantage of currency conversion to calculate the list of all cost items in EUR and USD:

```
select
    cost_nr,
    effective_date,
    im_category_from_id(cost_type_id) as cost_type,
    customer_id,
    amount,
    currency,
    amount * im_exchange_rate (effective_date::date, currency, 'EUR') as euros,
    amount * im_exchange_rate (effective_date::date, currency, 'USD') as dollars
from
    im_costs
order by
    customer_id,
    cost_nr;
```

18.5 Exchange Rates Details

The "im_exchange_rate" procedure (see example above) calculates the exchange rate between supported currencies at a given day.

```
im_exchange_rate(date, char(3), char(3)) -> float
```

This function uses the "im_exchange_rates" tables to lookup the exchange rates for both currencies on the given day. The conversion function will take the last available entries in the table if there is no value for the current day.

19 File Server Integration

This chapter describes how the “intranet-filestorage” module can be linked to a Windows or Linux file server. This integration allows users to access the **]project-open[** files from their Windows desktops using the “Windows Explorer”.

19.1 Configuring Filestorage Parameters

Members of the “**]po[** Administrators” profile can modify several parameters of the Filestorage module.

intranet-filestorage	Project/Open Filestorage
CompanyBasePathUnix	/web/projop/filestorage/companies
HomeBasePathUnix	/web/projop/filestorage/home
MaxNumberOfBytes	0
ProjectBasePathUnix	/web/projop/filestorage/projects
ProjectSalesBasePathUnix	/web/projop/project_sales
UserBasePathUnix	/web/projop/filestorage/users

Figure 3: Filestorage Parameters under Linux or Solaris

These above listed parameters allow mapping Filestorage base directories to specific locations in the file system of the underlying operating system. The figure above shows a sample from an Unix-ish operating system. Equivalent values for a Windows OS are “C:/Project-Open/filestorage/companies” for example (please note the forward slashes in Windows filenames).

The following table describes the parameters briefly:

Parameter	Description
CompanyBasePathUnix	The file system path for Filestorages related to companies.
HomeBasePathUnix	The file system path for the global “Home” Filestorage.
MaxNumberOfBytes	Allows configuring an upper limit of the size of files to be uploaded. “0” means that there is no upper limit.
ProjectBasePathUnix	The file system path for Filestorages related to projects.
ProjectSalesBasePathUnix	The file system path for Filestorages related to project sales activities. Please see the description

	below for more information.
UserBasePathUnix	The file system path for Filestorages related to users.

19.2 Integration With an Existing File Server

The **]po[** Filestorage is designed to be integrated with an existing Windows or Samba fileserver. This means that a file can be accessed theoretically not only using **]po[** but as well directly through file managers of the respective operating systems or other applications.

]po[Filestorage always synchronizes its list of files with the existing file server so that there are no conflicts or inconsistencies.
This mechanism allows users to access the files in two different ways: Staff members from “within” the office are able to access the local Fileserver directly using their Windows Explorer software. Users working “outside” the office (sales representatives, freelancers, customers, home users…) can access the same files via the Internet using **]po[** filestorage.

19.2.1 Understanding Access Permissions of Unix and Unix-like operating systems

Access permissions between **]project-open[** and the operating system may be an issue under Unix-ish operating systems (Linux and Solaris), because of the default behavior of Unix daemons. These processes create new files and subdirectories with the user-ID and group-ID of the daemon and only have read permissions for their user-ID and group-ID (even if you add the daemons user-ID to /etc/group).

This situation may lead to the case that users don’t have permissions to read the **]po[** files and the other way around.

The solution of this issue is to run the **]po[** daemon with the same group-ID as the default group-ID of the users who are accessing the file server directory (i.e. “users”).

19.2.2 Understanding Windows File Server Access Permissions

There should be no issues when integrating **]po[** with a MS-Windows based file server, because Windows files inherit access permissions from their parent directory by default.

19.2.3 Separating Sales Documents From Other Documents

Some corporate documents may be too sensitive to keep them in the same fileserver as the usual project documents. Therefore **]po[** facilitates a second Filestorage module that is only accessible by typing a particular URL.

The corresponding Filestorage is shown when executing the ProjectViewPage with the URL variable “view_name=sales”. You can enable the sales filestorage by adding a new menu entry in the Menu Administration page, similar to the “Files” entry.

20 System's Integration, APIs and "User Exits"

]project-open[supports the integration with 3rd party systems to allow customers and partners to create integrated process management solutions. There are several tools available to facilitate this integration:

20.1 Application API

The **]project-open[** application is different from many other application in terms of software architecture. **]po[** objects "are located" in the database, but not in the memory. Or to phrase it differently: **]po[** has an object-oriented database model, but not an object-oriented GUI (Graphical User Interface). In particular, there is no application state stored in memory. All transactions are immediately written back to the database.

This structure leads to a particularly simple API, consisting of:

- A "Read" API, consisting of SQL "select" statements and
- A "Write" API, consisting of PlPgSQL procedures to create new objects in the database.

Please consult the PO-API-Description for details about the API. This guide will be available around 7/2006. For a high-level description of the data model please see the **]project-open[** "Core" Architecture slides in the "White Papers" section of our web site.

20.2 User Exits

"User Exists" are a technique to inform 3rd party applications about "events" in the **]po[** system. Basically, **]po[** calls certain Unix shell scripts when special actions happen inside the **]po[** system.

Users:

- user_create(user_id): A new user has been created
- user_update(user_id): An existing user has been updated.
- user_delete(user_id): A user has been removed from the list of active users

Projects:

- project_create(project_id): A new project has been created
- project_update(project_id): An existing project's main data has been modified
- project_delete(project_id): A project has been marked with the status "deleted".

Tasks (**]project-translation[** and **]project-consulting[** only)

- task_create(task_id): A new task has been created
- task_assign(task_id, user_id): A task has been assigned to a user
- task_update(task_id, new_status_id): A task has been modified
- task_finish(task_id): A task has been finished
- task_delete(task_id): A task has been deleted.

21 System Administration

21.1 LDAP Authentication

]project-open[supports the integration into infrastructures of larger corporate environments via LDAP and in general via Unix or Linux "PAM" (Pluggable Authentication Modules). For installation details please refer to the OpenACS Administrator's Guide at: http://openacs.org/doc/openacs-5-1/acs-admin.html.

21.2 Backup and Recovery

Please Note:

> *Application backup is deprecated now and not supported anymore. Instead, we advise you to use the PostgreSQL database backup because it is more reliable and guarantees that certain new features of **]po[** are going to be included in the backup.*

For generic backup and recovery please refer to the OpenACS Administrator's Guide at: http://openacs.org/doc/openacs-5-1/acs-admin.html. Also, please refer to the **]project-open[** Operations-Maintenance-Guide for specific configurations.

21.2.1 Restoring Application Tables

The **]project-open[** application tables can be restored from a previous backup via the maintenance screens in "Admin" / "Backup and Restore Data". These screens will show you all previously existing backup file sets (make sure the paths for the backup/restore locations are correct in the "Parameters" admin section).

When restoring the files from a previous backup, they are loaded in a specific following order:

- Im_users
- Im_offices
- Im_companies
- Im_projects
- …

This is necessary because of the dependency between the different tables. Missing entries in one table may cause many errors in the following ones.

There are some cases where you can get database errors during the import. These errors are clearly shown in the import result screens. In such cases please edit the CSV file and check the respective lines for special characters, in particular double quotes and remove them or replace them by single quotes.

However, please not that you can import tables multiple times without getting duplicate entries, due to the specific table structure of **]project-open[**. So you can fix errors by editing a table and restart the restore process again.

21.2.2 Restoring Tables From V2.1.X

You will need to pre-process the backup when restoring from a V2.1.X version of **]po[**:

- Verify that im_categories doesn't contain entries that conflict with categories in the new version and change to category_id from these entries.
- Rename filenames from "*customers*" into "*companies*"
- Edit these files and replace all occurrences of "customers" by "companies" in the file header (the first two line of the file)
- Edit the file "im_projects.csv" and replace as above

The rest of the tables should enter without any change.

21.2.3 Restoring Tables From Earlier Versions

It is not possible to import tables from V1.0 and V1.1, due to incompatibilities of the data model.

22 Example Configuration Session

Sample Production Installation on Linux: The following is a transcript from a sample]po[configuration session on Linux. The transcript is held informally by intention.

22.1 Cleaning up an Existing Configuration

- Stopping the projop server (if there is one):
```
servidor:/web/projop/packages # less /etc/inittab
servidor:/web/projop/packages # emacs -nw /etc/inittab
servidor:/web/projop/packages # killall -HUP init
servidor:/web/projop/packages # ps aux | grep projop
```
- Drop the PostgreSQL DB (if there is one)
```
servidor:/web/projop/packages # su - projop
projop@servidor:~> dropdb projop
```
- Create a new database
```
projop@servidor:~> createdb projop
```
- Restart the server
```
- Enable projop in /etc/inittab
servidor:/web/projop/packages # emacs -nw /etc/inittab
servidor:/web/projop/packages # killall -HUP init
servidor:/web/projop/packages # ps aux | grep projop
...
```
- Starting the data model installation (=> Chapter 3)

22.2 Basic Configuration

- Login into the fresh server
- I go to /acs-admin/apm/ and install the Project/Translation packages:
```
intranet-core
intranet-cost
intranet-dw-light
intranet-filestorage
intranet-forum
intranet-hr
intranet-invoices
intranet-payments
intranet-timesheet
intranet-trans-invoices
intranet-translation
intranet-update-client
```
- At the end of the page I see:
  "Unable to get file list from 'C:/ProjectOpen/filestorage/home
  find_path=C:/ProjectOpen/filestorage/home
  /bin/mkdir: cannot create directory `C:': Permission denied"
  => This is still the Windows configuration, I need to change the parameters to Linux/Unix
- I go to /intranet/admin/parameters/ and copy the parameters from http://ptdemo.dnsalias.com/. I'm maintaining the default settings with

```
web/projop/filestorage/... for the moment. I create te following
filestorage directories:
   servidor:/web/projop/filestorage # mkdir project_sales
   servidor:/web/projop/filestorage # mkdir users
   servidor:/web/projop/filestorage # mkdir templates
   servidor:/web/projop/filestorage # chown -R projop:projop *
```

- I check the homepage again and not it's OK.
- I'm on the homepage and I'd remove the ugly "help blurb" in: /intranet/admin/components/ and setting the location of "Home Help blurb" to "none".
- I check "Companies" in order to create three sample companies: A customer, a provider and the "internal company" (=> Chapter 6)
- I see that "CustOrIntl" is visible as company type. This is a know bug from V3.0.0.0.7. So I modify the database to set this category as an "abstract class":

```
servidor:/web/projop/filestorage # su - postgres
postgres@servidor:~> psql projop projop
projop=# update im_categories set parent_only_p='t' where
         category='CustOrIntl';
projop=# \q
```

- I go to /intranet/users/ in order to add the administrator admin@<Company Name>.com to "]po[Admins" and "Employees". There is no user in the "Employees" view, so I change to "All Users".

22.3 Permission Configuration

- I do the "Profile" permission configuration with a relatively permissive setting, allowing PMs to see and add financial documents. "Employees" are just in-house translators then.
- I've done "User Matrix" permission configuration with the standard setting from PtDemo

	Acc-ounting	Cus-tomers	Employ-ees	Free-lancers	HR Managers	]po[Admins	Project Managers	Sales	Senior Managers
]po[Admins	vRwa	vRwa	vRwa	vRwa	vRwa	VRWA	vRwa	vRwa	vRwa
Customers	vRwa	vrwa	vrwa	vrwa	vrwa	VRWA	vRwa	VRWA	VRWA
Employees	vRwa	vRwa	vRwa	vRwa	VRWA	VRWA	vRwa	vRwa	VRWA
Freelancers	vRwa	vrwa	vRwa	vrwa	VRWA	VRWA	vRwa	vRwa	VRWA
Project Managers	vRwa	vRwa	vRwa	vRwa	VRWA	VRWA	vRwa	vRwa	VRWA
Senior Managers	vRwa	vRwa	vRwa	vRwa	vRwa	VRWA	vRwa	vRwa	VRWA
Accounting	vRwa	vRwa	vRwa	vRwa	VRWA	VRWA	vRwa	vRwa	VRWA
Sales	vRwa	vRwa	vRwa	vRwa	VRWA	VRWA	vRwa	vRwa	VRWA
HR Managers	vRwa	vRwa	vRwa	vRwa	vRwa	VRWA	vRwa	vRwa	VRWA

22.4 System and DB Configuration

- Checked error reporting
  => Working OK with the default values from V3.0.0.1.1

- Checked "Online Software Updates" with an update to V3.0.0.1.1.
  => Working OK
- Checking PostgreSQL "Full DB Backup"
  => Successful. The exported file looks OK.
- Security configuration seems already OK.
  The pg_hba.conf contains only a "local" entry, which is OK for a production server if users can'
- No "PostgreSQL Vacuum" contrab yet.
  => Root Crontab:
  ```
  # Full PostgreSQL vacuum every night
  20 3 * * 0 su - postgres -c "/usr/bin/vacuumdb -a -f" >>
  /var/log/vacuumdb.log 2>&1
  ```
- Database Backup: No backup configured yet
  => Root Crontab:
  ```
  # Backup PostgreSQL "projop" database every night
  20 3 * * 0 su - projop -c "pg_dump -c -O -F p -f
  /web/projop/filestorage/backup/pg_dump.
  `/bin/date +\%Y\%m\%d.\%H\%M`.sql " >
  /var/log/pg_backup.log 2>&1
  ```
  However, you will have to include the backup files in your daily server tape backup.
- File Server Integration:
  => You still have to modify the "intranet-filestorage" parameters in Admin / Parameters for your current "projects" directory.

22.5 Basic GUI Configuration

- I copy index.tcl and index.adp from the PtDemo system to /web/projop/www/ (=> Chapter 17).
  These pages still contains the default login ("Ben Bigboss"), so you still need to change them.

- I add the <Company Name> logo in /web/projop/packages/intranet-core/images/<company-name>-logo.gif. I've created this GIF using PhotoShop using a screenshot from <Company Name>'s website and removing the background using the "magic wand".
- I've copied the PtDemo invoice tempates to web/projop/filestorage/packages and checked that a sample invoice would show OK. However, you would have to adapt the templated you your corporate CD/CI

23 ToDo: Convert This Email Into Chapters

-----Ursprüngliche Nachricht-----
Von: Frank Bergmann [mailto:frank.bergmann@project-open.com]
Gesendet: Dienstag, 18. Oktober 2005 12:44
An: Udo Leinhäuser
Betreff: RE: Konfiguration ptlup.leinhaeuser.de

Hallo Herr Leinhäuser,

> Konfig-Marathon

Eine produktive Installation. Das muß eben nicht nur einmal laufen, sonder _immer_ ...

> Portnummerangabe

Die Portnummern sind komplett irrelevant für Sie. Die sind nur "intern".
Auf Port 80 (http) lauscht "Pound", ein "Reverse Proxy".
Pound erkennt am Namen mit welchem Server Sie arbeiten wollen und leitet die Anfrage weiter. Es ist auch Pound der die SSL-Verschlüsselung übernimmt.

Also: Sie konfigurieren die DNS-Addresse oder tragen "ptlup" in Ihre "hosts" Datei ein und geben dann ein:
http://ptlup/ (ohne Port) oder http://lupdev/ (Demo Server).
Einfach ausprobieren.

Diese Technik ermöglicht es, eine große Anzahl von Web- Servern auf einem einzigen physikalischen Server zu hosten und wurde während der "IP-Krise" (als es mit der Anzahl der IP-Adressen eng wurde vor 2-4 Jahren) entwickelt.

> andere Editoren

Überhaupt kein Problem. Es sind nur im HTML ein paar "ASP-Tags" drin, die der Editor nicht modifizieren darf, sonst kämen die Kundendaten nicht rein.

Ich hatte ja den "ptlupconf" Share erstellt, damit Sie das von Ihrem PC aus machen können.

> Der Fileserver scheint zu laufen

Ok, das könnte die Password-Encryption sein. Probieren Sie mal das:

Windows 95/98 =============

Using the registry editor (regedit), create the registry setting HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\VxD\VNETSUP Add a new DWORD value: Value Name: EnablePlainTextPassword Data: 0x01.

```
  Windows NT ==========

  Using the registry editor (regedit), create the registry setting
  HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\Rdr\Parameters
  Add a new DWORD value: Value Name:  EnablePlainTextPassword Data:
  0x01

  Windows 2000 ============

  Using the registry editor (regedit), create the registry setting

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\LanmanWorkStation\Pa
ram
eters
  Add a new DWORD value: Value Name: EnablePlainTextPassword Data: 0x01

  Once these registry changes have been made, reboot the Windows machine
  and try to map a network drive on the Samba server again.  It should
  work as long as the Samba server is using plain text passwords.


> - Ich gehe davon aus, dass Sie das Backup und Vacuum testen.

Richtig. Gerade gemacht. Die Backups stehen in
/web/lup/filestorage/backup/ wo Sie sie regelmäßig auf einen anderen
Server spielen sollten.
Das können Sie mit einem automatisierten Windows-Task machen, z.B.

Ich habe die Email des Systems umkonfiguriert, so daß Sie und ich (im
Moment) Nachrichten an "root" empfangen. Solche Nachrichten kommen, wenn
etwas z.B. am Backup nicht läuft.
Ich werde mich da wieder herausnehmen wenn alles läuft.

> Heißt der Rechner jetzt "erplup"?

"erplup" ist der Servername (den hatten Sie so gesetzt).
"ptlup" ist ein HTTP-Name. Wenn sie "ping ptlup" oder "ping
ptlup.leinhaeuser.de" machen, dann sollte 10.0.1.2 antworten wenn Sie von
"innen" pingen und Ihre externe IP-Addresse sollte antworten, wenn sie
von "außen" pingen.

Das hat alles nichts mit dem Watchguard zu tun (der arbeitet auf IP-
Ebene). Hier geht es nur um "alias".

> Funktioniert das Zertifikat oder nicht ?

Das Zertifikat funktioniert. Der Server dahinter aber (noch) nicht.


> Auftragsnummern und Quotenummern doppelt vergeben.

Hier würde ich gerne das System so lassen wie es ist, aber die
Fehlermeldung verbessern (kein "Systemfehler", sondern eine Hübsche
```

Nachricht, daß man eine andere Nummer wählen sollte). Das vermeidet das "Nummernlücken"-Problem. Das ist ein Spanien und anderen Ländern rechtlich vorgeschrieben (Lückenlose Invoice-Nummern)...

> Invoice & Quote

Wird gefixed.

> wie war's mit Novell???

Für ihr internes Intranet wollen sie mehr so etwas wie OpenACS, aber "out-of-the-box". Da passen wir nicht so gut rein.
Abe das mit der SuSE-Distro sieht gut aus, daß wir da aufgenommen werden. Jetzt müssen wir uns "nur noch" an einen Linux-Installer mache mit RPM und so. Nur noch...

Die ausstehenden Punkte fixen wir Anfang November nach der L10n World, ist das OK? Ansonsten ist das System fertig für die Arbeit, ich müßte dann noch die Demo-Informationen löschen, was mit unserem neuen Tool dafür in wenigen Minuten gehen sollte (sobald es fertig ist, auch bis Anfang November...).

Viele Grüße,
Frank

-----Original Message-----
From: Udo Leinhäuser [mailto:UL@leinhaeuser.de]
Sent: martes, 18 de octubre de 2005 10:28
To: Frank Bergmann
Subject: AW: Konfiguration ptlup.leinhaeuser.de

Hallo Herr Bergmann,

Das sieht mir aber wirklich nach einem Konfig-Marathon aus, so eine Art Linux-Ironman :-)

Hier noch ein paar Fragen und Kommentare meinerseits:

- Muss die Portnummerangabe immer erfolgen, wenn man die Kiste nicht unter den Hosts eingetragen hat oder geht es auch ohne? Und was passiert beim Zugriff von außen? Mit oder ohne Portnummern?

- Gibt es auch andere Editoren, mit denen man die .ADPs anpassen kann oder muss es DreamWeaver sein. Ich habe z.B. Macromedia Contribute 3, würde das auch gehen.

- Der Fileserver scheint zu laufen, zumindest antwortet er, wenn ich ein Netzlaufwerk verbinden will und macht eine Abfrage als welcher user ich mich verbinden will. Dazu poppt dann so ein Fensterchen auf, in dem standardmäßig mein Username im Format domänenname\username auftaucht. Ich sowohl versucht einfach als user lup mit dem pwd als auch als "erplup\lup" und pwd mich anzumelden, aber nimmt es nicht an...

- Ich gehe davon aus, dass Sie das Backup und Vacuum testen.

- Umlaut-Normalisierung ist vorerst kein major issue.

- "Konfiguration von "ptlup.leinhaeuser.com":

- Das wollten Sie selber machen mit Ihrem DNS-System.
  Was wichtig ist: Der Name muß auf "erplup" zeigen."

Was bedeutet das? Ich kann ja im Dnydns nur auf eine IP-Adresse pointen und ich denke bei der Watchguard geht es auch auf IP-Adressebene. Heißt der Rechner jetzt "erplup"?

- "Security Configuration:

- Ich habe bereits ein Zertifikat angelegt für "ptlup.leinhaeuser.de" und in den "Pound Reverse-Proxy" integriert.
  Das läuft auch soweit schon. Allerdings macht der Server einen falschen "Redirect" zu einer nicht sicheren Seite. Das sieht aus wie ein "URL not found", hat aber andere Ursachen."

Verstehe ich auch nicht ganz. Funktioniert das Zertifikat oder nicht ?

- "Invoice Value" - Fehler:

Ich hatte mir in diesem Zusammenhang 2 Sachen notiert: 1) Es wurden Auftragsnummern und Quotenummern doppelt vergeben. Das sollte auf keinen Fall passieren. Bei LTC ist das so geregelt, dass eine Nummer sobald sie vergeben wurde nicht erneut vergeben werden kann, egal ob das Projekt jetzt schon fertig angelgt wurde oder nicht, alleine das Anfordern einer Nummer setzt den Zähler um 1 höher. Das hat den Nachteil, dass wenn man mitten im Projektanlegen abbricht, muss man den Zähler zurücksetzen oder hat eine Lücke, aber das ist im Zweifelsfall besser als eine doppelte Nummer.
2) Wenn man auf Quote geklickt hat, kam man auf Seiten, auf denen Invoice stand. Das finde ich verwirrend. Au wenn es wahrscheinlich vom Modul her identisch zugeht, wäre ich für eine Seite auf der dann auch Quote steht.

Ich denke mal das wärs fürs Erste.

Ach ja, wie war's mit Novell???

Viele Grüße,

Udo Leinhäuser

-----Ursprüngliche Nachricht-----
Von: Frank Bergmann [mailto:frank.bergmann@project-open.com]
Gesendet: Montag, 17. Oktober 2005 19:49
An: Udo Leinhäuser
Cc: frank.bergmann@project-open.com; Klaus Hofeditz
Betreff: Konfiguration ptlup.leinhaeuser.de

```
Hallo Herr Leinhäuser,

folgende Punkte habe ich heute konfiguriert. Ich habe dabei auch noch
ausstehende Punkte erwähnt.

Viele Grüße,
Frank

---

Server Installation

- "ptlup" läuft jetzt auf Port 30032. Sie können
  aber auch in Ihrer "hosts"- Datei (in
  C:\Winnt\system32\drivers\etc) den Namen eintragen,
   dann brauchen Sie den Port nicht.

- "lupdev" (der Entwicklungs-Server) läuft auf
  Port 30033. Selbiges wie oben.
  Ich habe einen roten Balken im CSS 'reinkonfiguriert,
  damit man sieht, daß es ein anderer Server ist.


Invoice Templates:

- Ich habe 6 Templates konfiguriert
  (invoice, quote und PO mit EN und DE).
  Ich habe in "invoice.de.adp" schon ein paar
  Änderungen für Sie gemacht, weiß aber nicht
  genau, wie Sie das Design haben wollen.
  Ich empfehle Ihnen, diese Datei zu nehmen
  (/web/filestorage/templates/invoice.de.adp),
  mit DreamWeaver zu bearbeiten und dann die
  anderen 5 Versionen zu machen.


Samba Fileserver (/etc/samba/smb.conf):

Ich habe 4 "Shares" configuriert:

erplup:~ # smbclient -L localhost

        Sharename       Type      Comment
        ---------       ----      -------
        ptlup           Disk      LuP Projects
        ptlupdev        Disk      LuP-Dev Projects
        ptlupconf       Disk      LuP Configuration
        ptlupdevconf    Disk      LuP-Dev Configuration

"ptlup" ist das Share, in dem sämtliche Firmen und Projekte stehen. Das
ist der Ort, wo Ihre Mitarbeiter arbeiten sollten
```

"ptlupdev" ist "zwei Folder-Ebenen" darüber und erlaubt auch den Zugriff auf Config-Dateien. Das sollten nur Sie (und auch nur mit großer Vorsicht) ändern.

Und dann gibt es dieselben Verzeichnisse noch einmal für "lupdev", den "Testserver". Sie sollten niemals Änderungen an LuP machen, ohne ein Backup gemacht zu haben UND sie auf LupDev auspobiert zu haben...

Die 4 Shares sind vorhanden, allerdings ist nicht klar, mit welcher Authentifizierung Ihre User darauf zugreifen sollen. Wollen Sie nur einen Sammel-Account (etwas unsicherer aber einfacher zu administrieren) oder einen Account pro User. Ich würde die einfache Variante vorschlagen, weil da sowieso keine (besonders) geheimen Daten drauf liegen und Benutzer-Administration unter Linux etwas umständlicher ist.

Ich habe folgenden Account konfiguriert:

User: lup
Password: lup

Jetzt müßten Sie allerdings noch testen, ob Sie von einem Windows-System da draufkommen.

Falscher "more costs..." Link

- fixed.

Hilfetexte werden nicht angezeigt

- Das ist wohl ein Problem meines FireFox browsers.
  Es functioniert auf IE5 und Opera.

Search-Engine

- Installiert. Es ist wichtig, das "tsearch2.sql"-File zu nehmen aus /usr/share/postgresql/contrib/ und nicht aus dem lokalen Directory "intranet-search-pg".

- Ihr Logo ist ganz schön lang. Deshalb wird das Search-Formular an den Rand gequetscht. Köntte man das Logo schmaler machen?

- Die Umlaut-Normalisierung funktioniert unter PostgreSQL V 8.0 irgendwie noch nicht. D.h., daß Sie tatsächlich "leinhäuser" eingeben müssen um sich selber zu finden, statt "leinhauser" in PtDemo. Ich hoffe, daß das nicht tragisch ist. Das fixen wir, wenn wir hier eine eigene PG V8.0 laufen haben.

Backup

- Ich habe ein Backup konfiguriert, daß um 3:00 nachts läuft und die Daten unverschlüsselt in das /filestorage/backup/-Verzeichnis schreibt. Dieses Verzeichnis ist vom Share lupconf zugänglich und kann so gebackupt werden.

- Muß aber noch gecheckt werden, ob das Backup tatsächlich läuft.

"Vacuum"

- Die Datenbank wird nächtlich "gesaugt" (entfernen von überflüssigen Speicherblöcken).

- Muß aber noch gecheckt werden, ob Vacuum tatsächlich läuft.

Konfiguration von "ptlup.leinhaeuser.com":

- Das wollten Sie selber machen mit Ihrem DNS-System. Was wichtig ist: Der Name muß auf "erplup" zeigen. Es ist auch schon konfiguriert, daß alles was mit "ptlup", "lup" und "intranet" anfängt auf den Server umgeleitet wird.

Security Configuration:

- Ich habe bereits ein Zertifikat angelegt für "ptlup.leinhaeuser.de" und in den "Pound Reverse-Proxy" integriert. Das läuft auch soweit schon. Allerdings macht der Server einen falschen "Redirect" zu einer nicht sicheren Seite. Das sieht aus wie ein "URL not found", hat aber andere Ursachen.

- Ich habe übrigens geschaut: Sie können auch auf den Server mit einem anderen Namen zugreifen. Das gibt auch (vor allem beim IE5) keinen größeren Fehler, halt ein "Ausrufezeichen" mehr.

Löschen von Demo-Daten:

- Wir haben schon häufiger Anfragen zum löschen der Demo-Daten bekommen, so daß wir das jetzt etwas gründlicher angehen. Bis morgen haben wir hoffentlich einen "komplett-Tigerpond-löschen"-Button...

```
SystemURL   http://lup.dnsalias.com/
      URL to tell users to go to
```

Uff, nach diesem Config-Marathon müßte dringend ein Backup gemacht werden...

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