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PMC Guide

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tomcat	4.1.24
apache	2.0.46
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pmc db	3.0.007
pmc admin	3.0.003_20031120
pmc client	3.0.008.1_20031123
pmc esr	2.2.003_20030612
pmc mail	3.0.002_20031106
pmc oms	3.0.003_20031121
pmc eww	2.3.001_20030701
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1. Documentation overview

2:DocOverview.html

03_pmc_doc_ov.fm

list all docs.

2. Concepts

[3: Concepts.html](#)

[04_pmc_concepts.fm](#)

[2.1. General \(page 19\)](#)

[2.2. PMC \(page 21\)](#)

[2.3. ESR \(page 23\)](#)

[2.4. OMS \(page 25\)](#)

[2.5. HRM \(page 27\)](#)

[2.6. EWW \(page 29\)](#)

[2.7. LIBRARY \(page 31\)](#)

2.1. General

4:ConceptsGeneral.html

04_pmc_concepts_0_general.fm

Project Management Center is actually a suite, which includes two applications: Project Management Center (PMC itself) and Project Management Center Administration Console (PMC AdminConsole). First application is designed for managing business activity; the second one is to administer this activity. Both applications are smoothly integrated.

PMC applications use a Web-based architecture, so only a Web browser is required on each user's workstation or personal computer.

The PMC AdminConsole interface allows the system administrator to customize and maintain the organization structure.

The PMC AdminConsole application resides on a server or on a computer in your organization's network. The features defined in the PMC AdminConsole are reflected accordingly in the end-user's browser interface of the main PMC application.

The user will access the tracking system and perform tasks through the browser.

2.2. PMC

5:ConceptsPmc.html

04_pmc_concepts_1_pmc.fm

2.2.1. PMC ADMIN

2.2.2. PMC CLIENT

2.3. ESR

6:ConceptsEsr.html
04_pmc_concepts_2_esr.fm

2.4. OMS

7:ConceptsOms.html

04_pmc_concepts_3_oms.fm

Target Audience

The target user for the Opportunity Management System is a corporate salesperson. The functionality of the Opportunity Management System will allow the salesperson to track their Opportunities, Contacts, Accounts, and related information. The salesperson is typically working in a team-selling environment, with other members of the sales team to secure a deal. Each member of the sales team is assigned one or more roles, which governs what types of activities they are responsible for on the team. The sales cycles for the sales teams are typically long in duration and include many steps to win an opportunity.

Overview

The EPAm Opportunity Management System is designed to assist the sales professional with their time away from customers. The Opportunity Management System provides event driven automation of administrative and redundant tasks while presenting the sales professional with information enabling them to better formulate selling strategies..

The Opportunity Management System (time away from the customer) enriches the time spent with the customer by extending the abilities of sales professionals to manage and make decisions before, during, and after the sale. The Opportunity Management System assists the sales professional with Contact, Opportunity, and Customer management.

The Opportunity Management System also allows the salesperson to concentrate on the Customer instead of a single Opportunity. The ability to track the complete customer history, for each customer, will allow the salesperson to develop customer relationship strategies

Introduction

Concepts

OMS (Opportunity Management System) uses the following notions:

- OMS Account (later Account) - an organization, using EPAm resources. Account stores short information (list of contacts). In scope of Account, Opportunities and Activities are being created, according to which EPAm resources are being planned and scheduled, and expenses are calculated etc.
 - o Account Team - a list of EPAm employees, performing tasks in scope of all created Opportunities for Account.
- OMS Opportunity (later Opportunity) - describes area of relationship with Account, i.e. Opportunity is a project, being realized for Account and including all, from the idea itself till satisfaction of Account's needs and benefit from developments for Account. Opportunity unites development status, necessary effort and EPAm resources, business- anticipation, marketing information and performance analysis. Opportunity is always being created for one concrete Account.
 - o Sales Team (Opportunity Team) - a list of EPAm employees, performing the tasks, described by Activities, created in scope of Opportunity.
- OMS Activity (later Activity) - is a concrete task, given to an EPAm employee, performed in scope of a concrete Opportunity. Activity serves to control time of EPAm employee, spent for Activity's fulfillment, to manage EPAm human resources, to calculate expenses, and to draw a bill to Account. Activity always relates to one concrete Opportunity, and accordingly to a concrete Account.
- OMS Contact (later Contact) - is a person, a contact, related to concrete Account, Opportunity, Activity. Contact is an independent person - i.e. he/she is not an EPAm employee. Formally it can be an external consultant, representative of Account, former EPAm employee. Yet, the process of assignment supposes that Contact which we would like to attach (assign), be a Contact for instances of one level higher. The same for Opportunity (Contact for Opportunity can be only a person from the list of Contacts Account). Contact for Account can become a Contact, not assigned to any existing Account (some exception here). In the list Contacts for every OMS instance there can be only one Contact, which is Primary for this instance.

OMS is developed in GUI-like style, so that users work with it as with a "Desktop", not "Web-based", application. The navigational model is designed to provide an intuitive user interface for a wide range of users. Users of the system will range in ability from novice to experienced power user. The interface of the Opportunity Management System is intuitive for first time users, while maintaining the functionality that experienced users will need

2.5. HRM

8: ConceptsHrm.html

04_pmc_concepts_4_hrm.fm

2.5.1. HRM Workload

2.5.1.1. architecture

The application is based on Java technologies (Servlet Technology, JSP, JDBC), that are a perfect solution for enterprise level web-applications.

Also the following technologies were used:

Open-source MVC framework (Struts)

A set of custom tags and reusable components developed for other EPAM applications

A set of components for users authentication via the centralized enterprise access and internal resources management system.

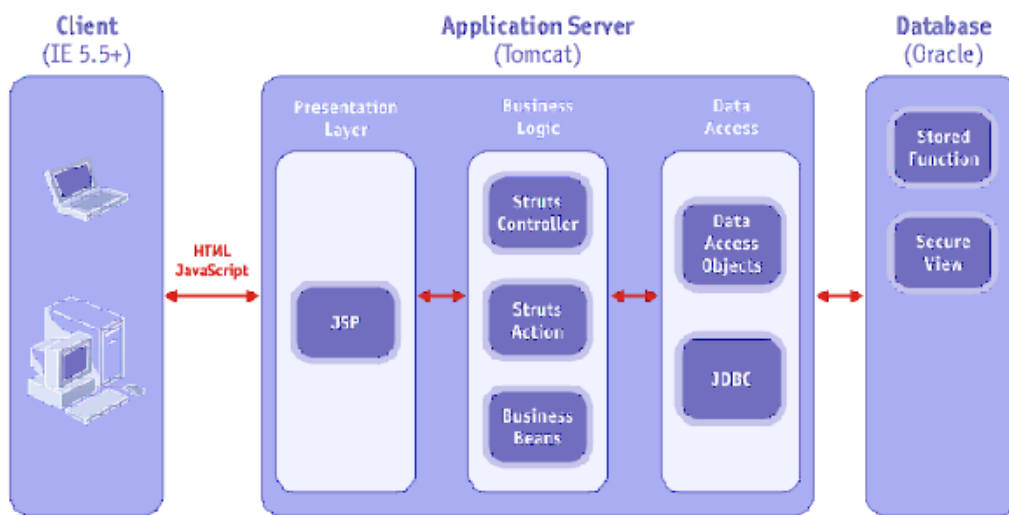


Figure 1. xxx

2.5.1.2. xxx

EPAM Utilization and Project Staffing Analyzer is a proven Web-based solution designed by EPAM Systems to support successful and efficient human resource management in a project-centered corporate environment. EPAM Utilization and Project Staffing Analyzer is ideally suited for software development companies with globally dispersed project teams.

EPAM Utilization and Project Staffing Analyzer is a powerful tool that allows you to:

- forecast resource demands (skills, positions and locations)
- facilitate resource planning
- quickly build optimal project teams and delivery scenarios
- streamline resource management
- generate project-related reports
- optimize resource utilization
- ensure project visibility

2.5.1.3. Project Staffing and Resource Management

The success of a project depends on effective project management and most efficient use of available human resources. Typically project staffing and resource management involves the following stages:



Figure 2. xxx

EPAM Utilization and Project Staffing Analyzer allows you to efficiently manage human resources during each of these stages.

2.5.2. HRM Applicants

2.5.3. HRM Survey

2.6. EWW

9:ConceptsEww.html

04_pmc_concepts_5_eww.fm

2.7. LIBRARY

10:ConceptsLibrary.html
04_pmc_concepts_6_library.fm

3. System requirements

11:SysReq.html

05_pmc_sysreqs.fm

4. Installation

[12:Install.html](#)

06_pmc_install.fm

installation files available at \\epgsa002\Projects\Pmc\Files

the installation files used in this chapter are available at \\epmw284\Welcome\PmcInstallers (terry taylor computer).

this chapter is currently very rough, and describes installation within EPAm.

This chapter describes installation of the following components:

- [4.1. JDK \(page 37\)](#)
- [4.2. TOMCAT \(page 39\)](#)
- [4.3. APACHE \(page 41\)](#)
- [4.4. ORACLE \(page 43\)](#)
- [4.5. PMC DB \(page 65\)](#)
- [4.6. PMC ADMIN \(page 73\)](#)
- [4.7. PMC CLIENT \(page 83\)](#)
- [4.8. PMC ESR \(page 99\)](#)
- [4.9. PMC MAIL \(page 107\)](#)
- [4.10. PMC OMS \(page 111\)](#)
- [4.11. GENTRACK \(page 117\)](#)
- [4.12. PMC DATA \(page 119\)](#)
- [4.13. PMC OIAI \(page 121\)](#)
- [4.14. PMC PIAI \(page 123\)](#)
- [4.15. EWW \(page 125\)](#)
- [4.16. LIBRARY \(page 131\)](#)

4.1. JDK

[13: InstallJdk.html](#)

06_pmc_install_01_jdk.fm

available at \\Epmwu7\Archive\Java\1.4.1\j2sdk-1_4_1_05-windows-i586.exe ?

this section uses \\epmw284\Welcome\PmcInstallers\01_JVM_j2sdk-1_4_1_05-windows-i586.exe

install to defaults.

set java_home, path, etc.

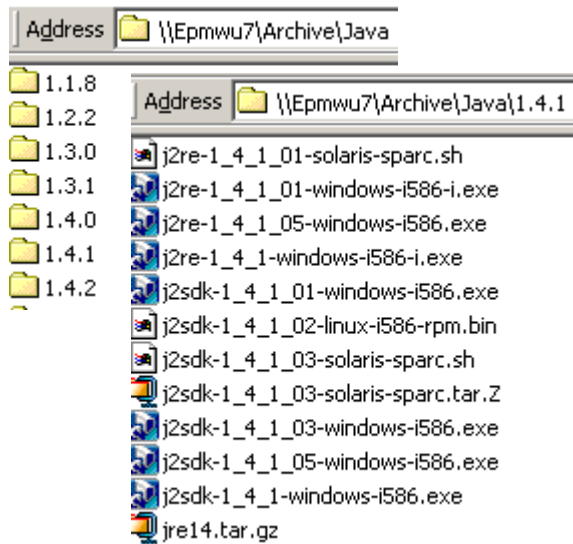


Figure 3. jdk installation dirs

4.2. TOMCAT

[14: InstallTomcat.html](#)

06_pmc_install_02_tomcat.fm

available at \\Epmwu7\Archive\Apache\jakarta-tomcat-4.1.24.exe

this section uses \\epmw284\Welcome\PmcInstallers\02_TOMCAT_jakarta-tomcat-4.1.24.exe
install to defaults.

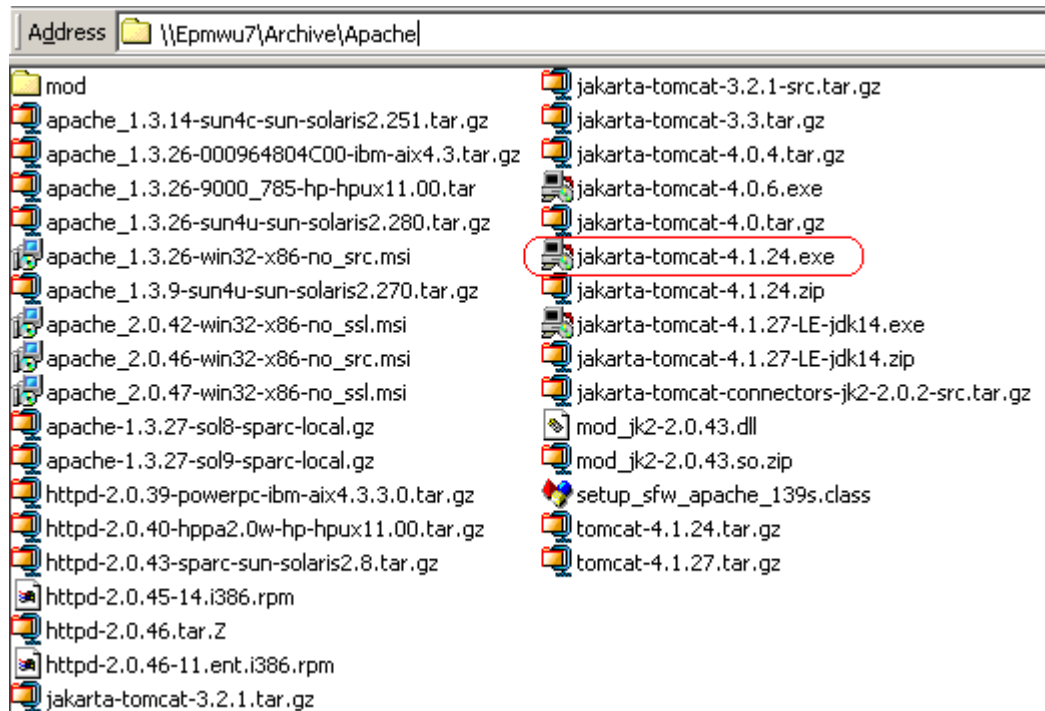


Figure 4. tomcat installation dirs

4.3. APACHE

15: InstallApache.html

06_pmc_install_03_apache.fm

this is optional... the rest of the installation description assumes that apache has not been installed.
available at \\Epmwu7\Archive\Apache\apache_2.0.46-win32-x86-no_src.msi
this section uses \\epmw284\Welcome\PmcInstallers\03_APACHE_2.0.46-win32-x86-no_src.msi
install to defaults.

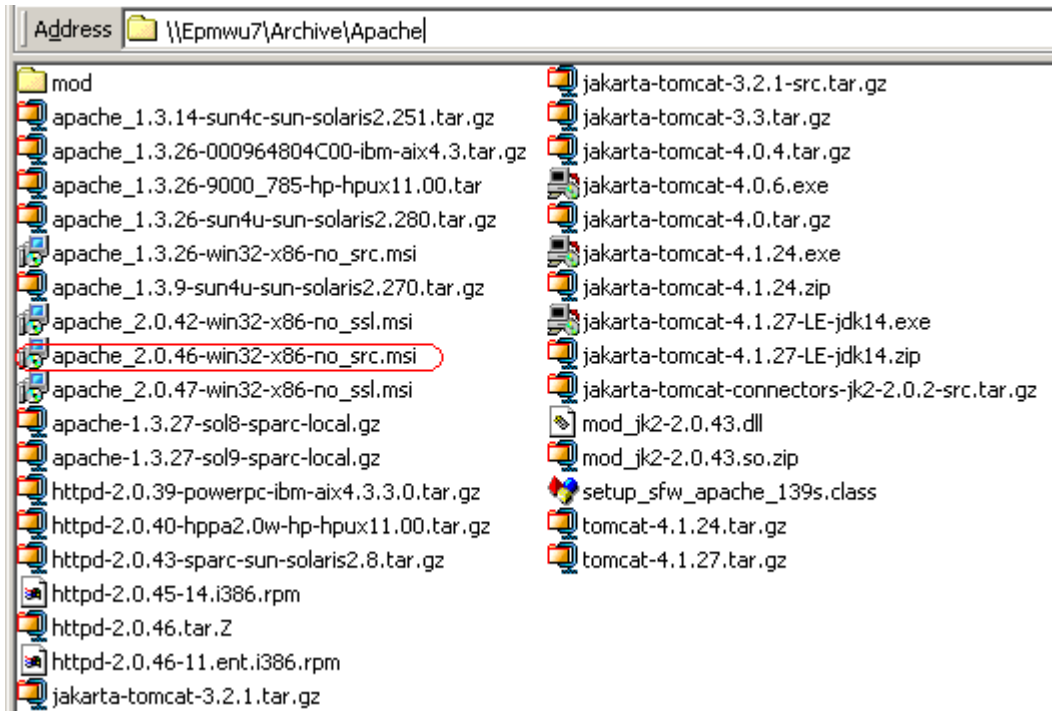


Figure 5. apache installation dirs

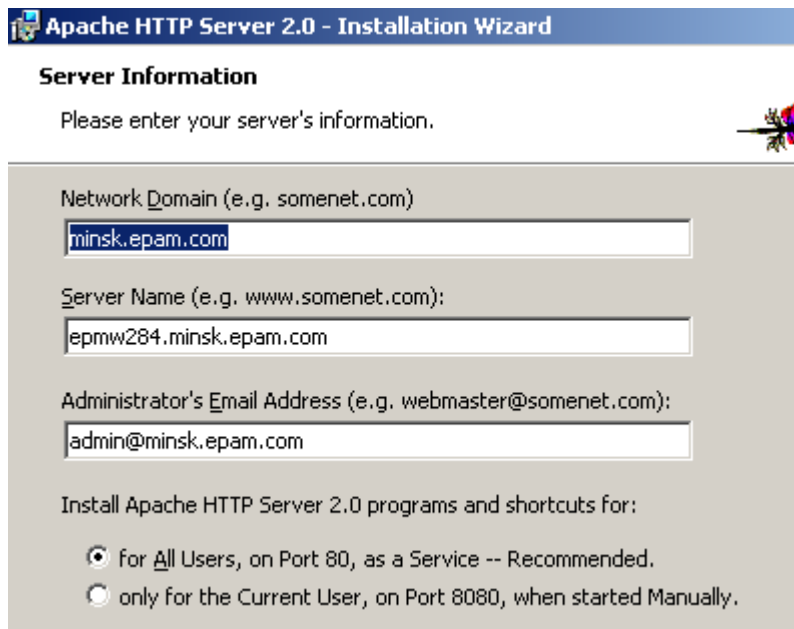


Figure 6. apache server information

4.4. ORACLE

16:InstallOracle.html

06_pmc_install_04_oracle.fm

available at \\Epmwu7\Archive\Oracle\Oracle9i DB\Oracle9i DB (v9.2.0.1)\Disk1\install\win32\setup.exe

this section uses \\epmw284\Welcome\PmcInstallers\04_ORACLE_setup.exe

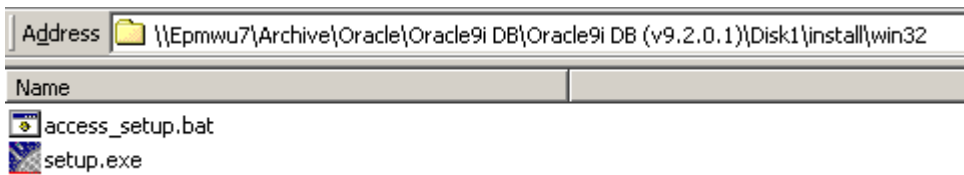


Figure 7. oracle installation dirs

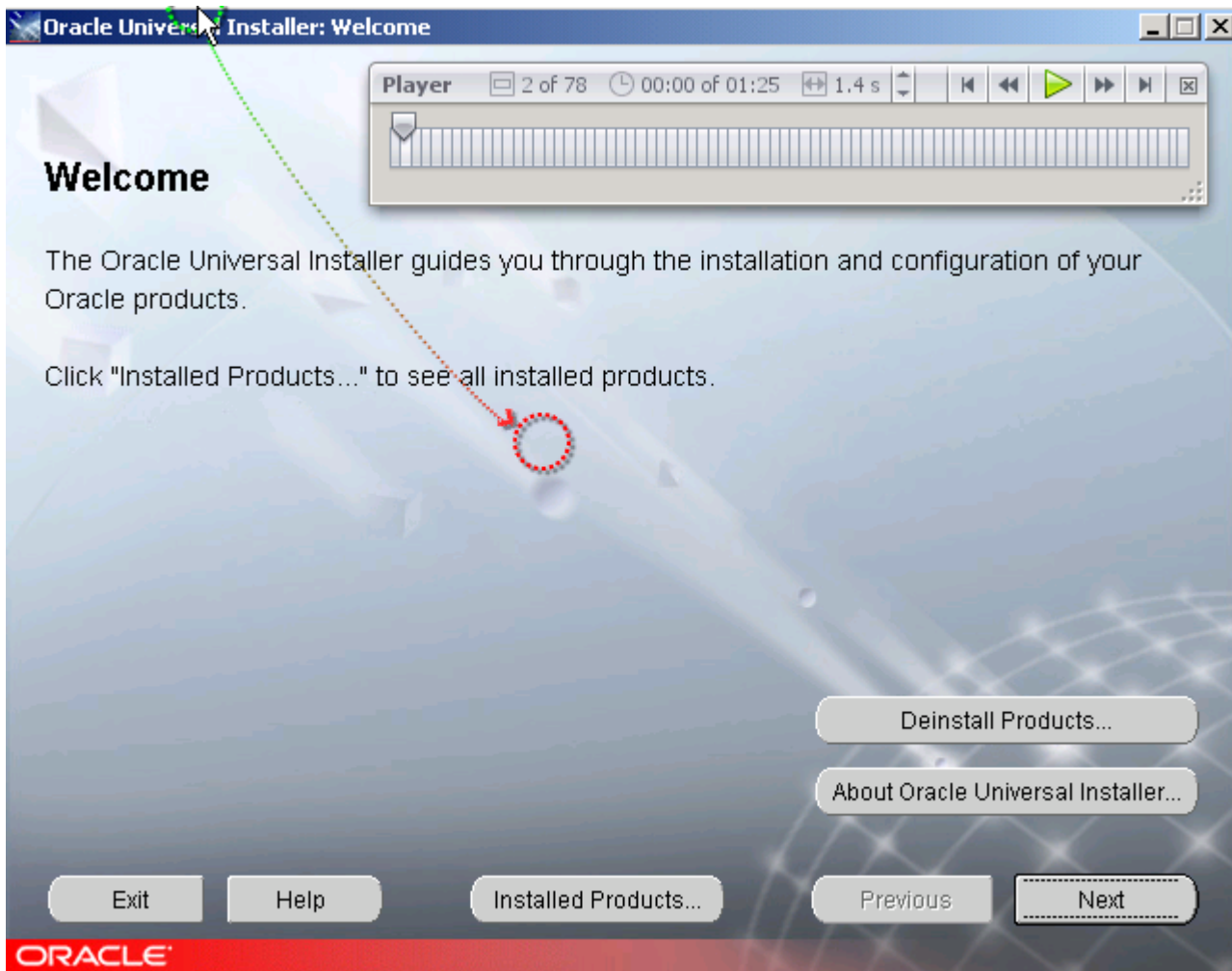


Figure 8. x

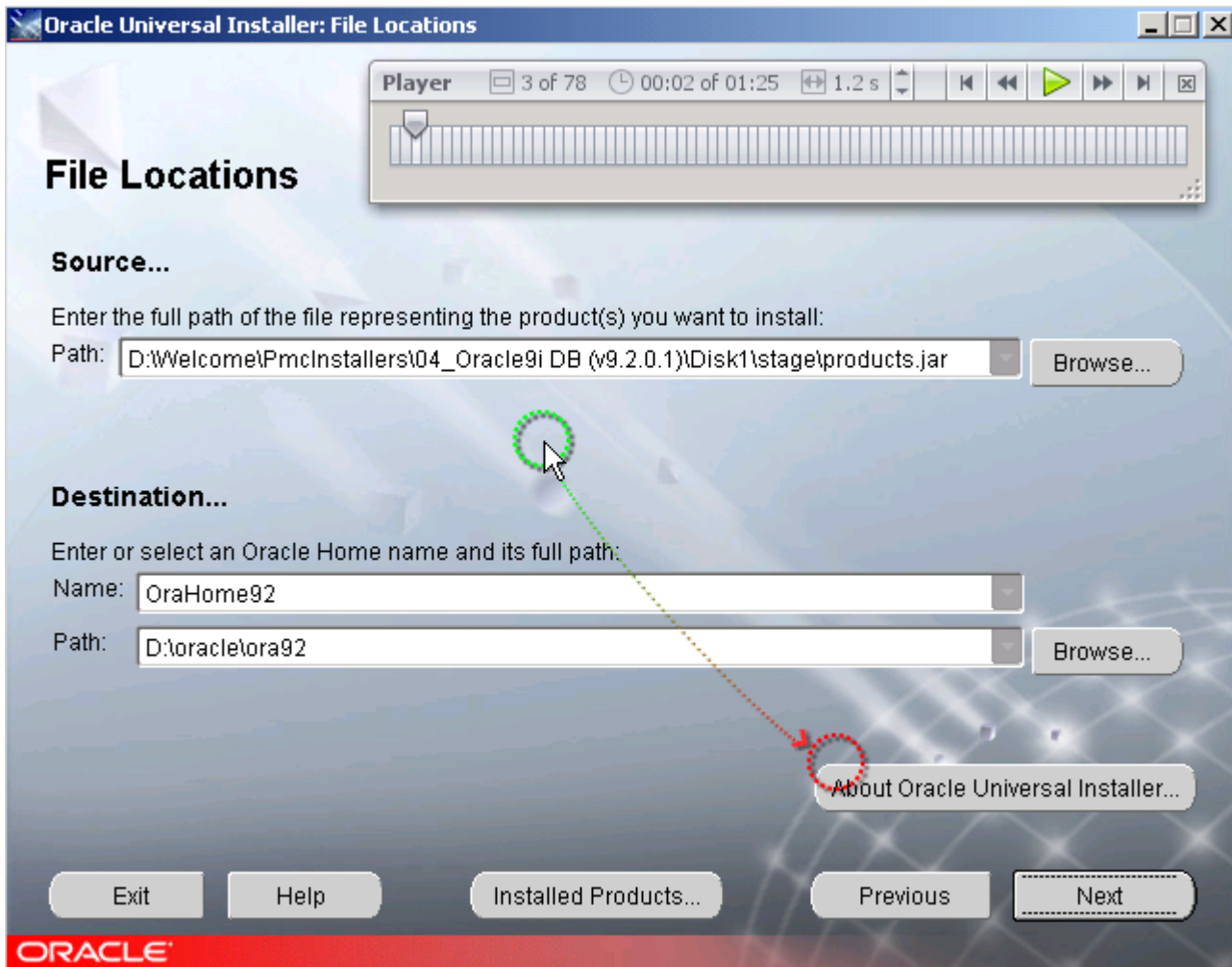


Figure 9. x

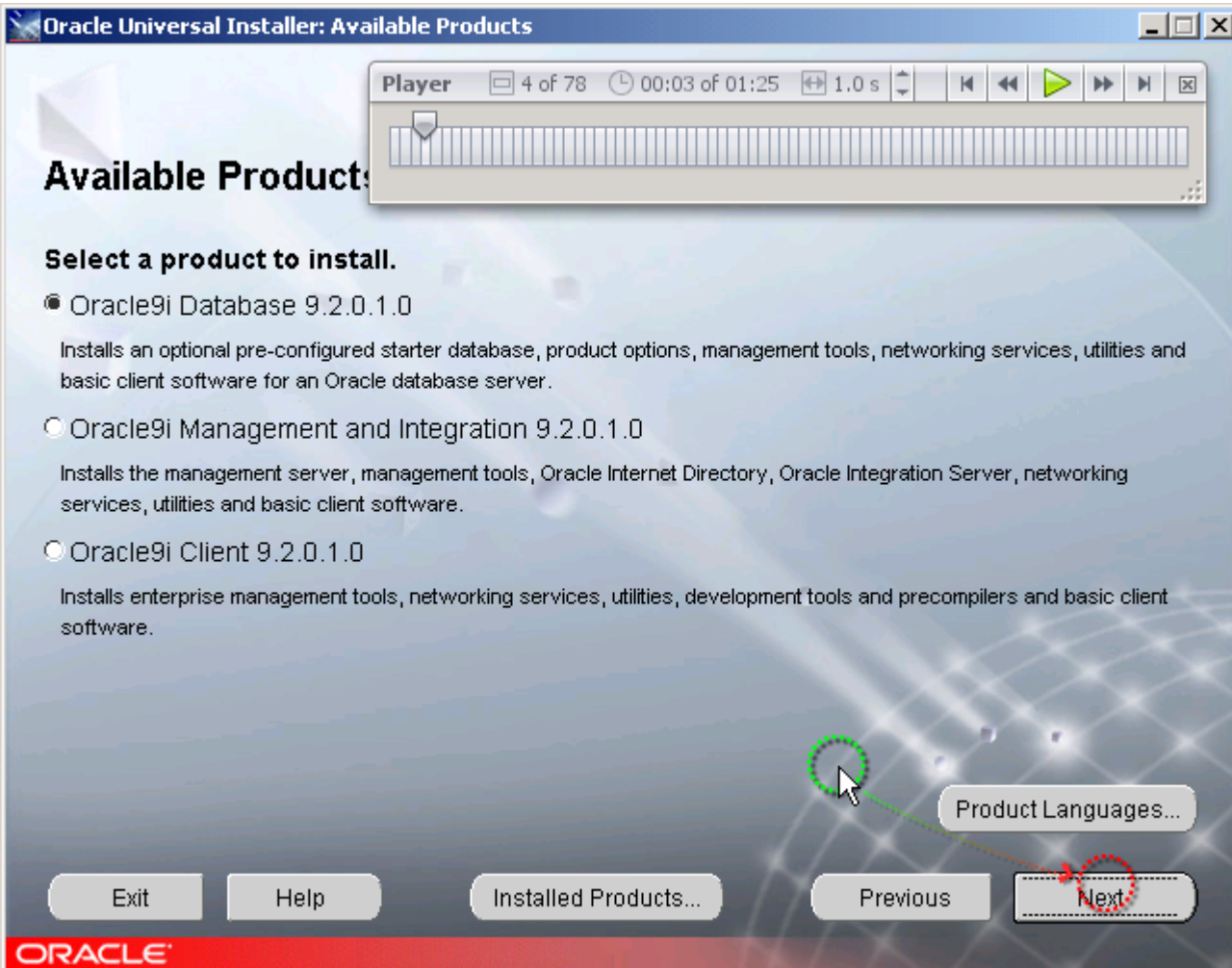


Figure 10. x

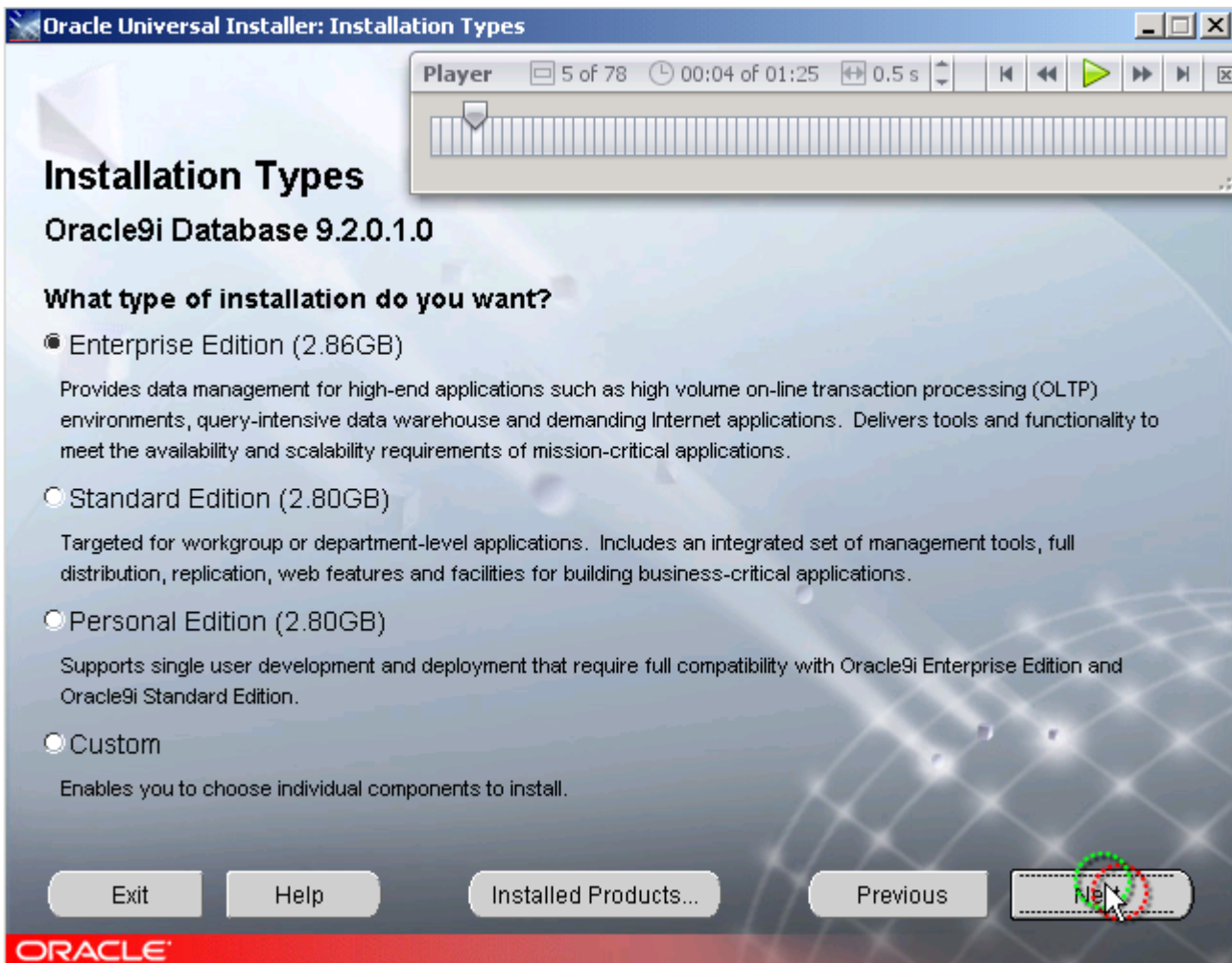


Figure 11. x

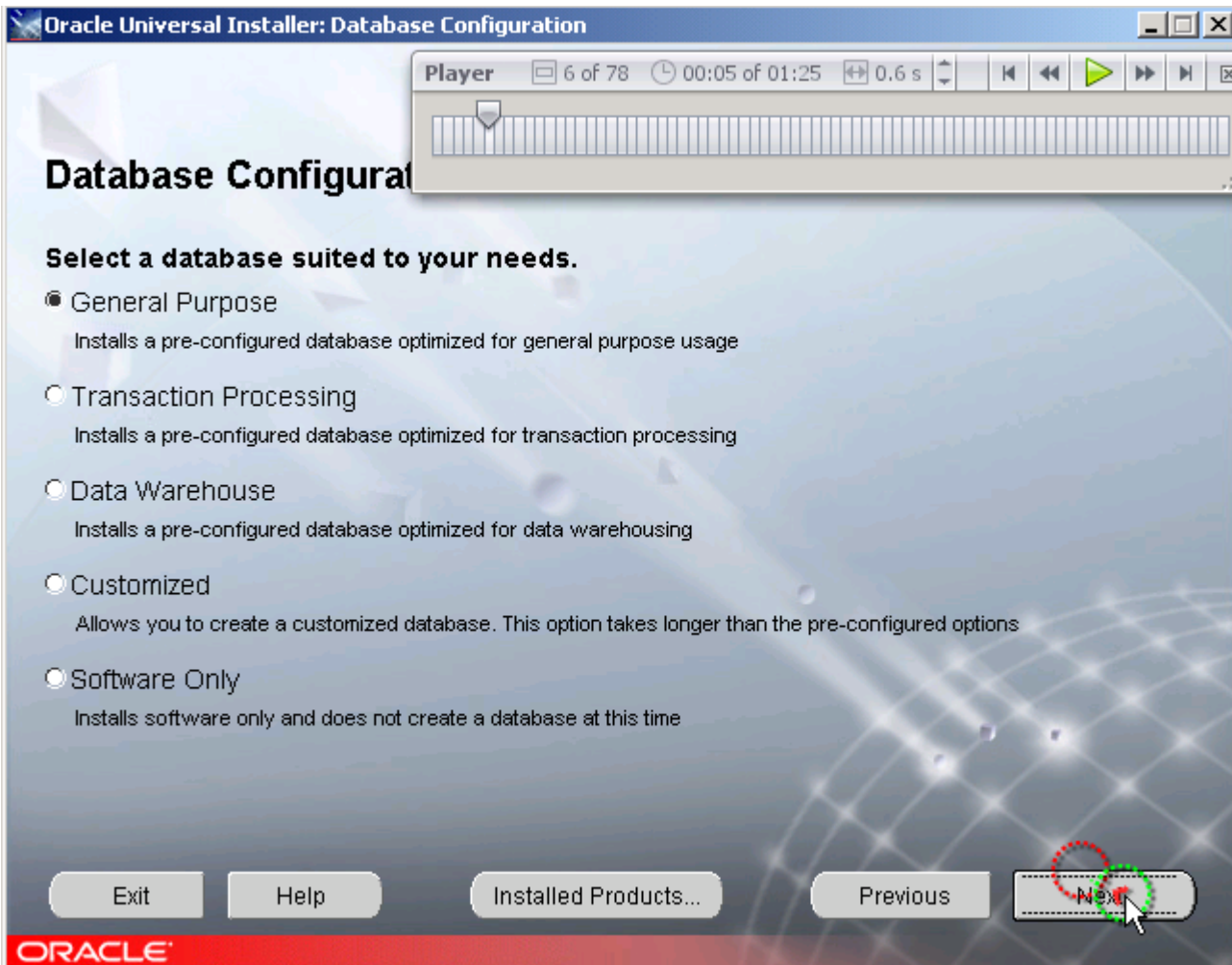


Figure 12. x

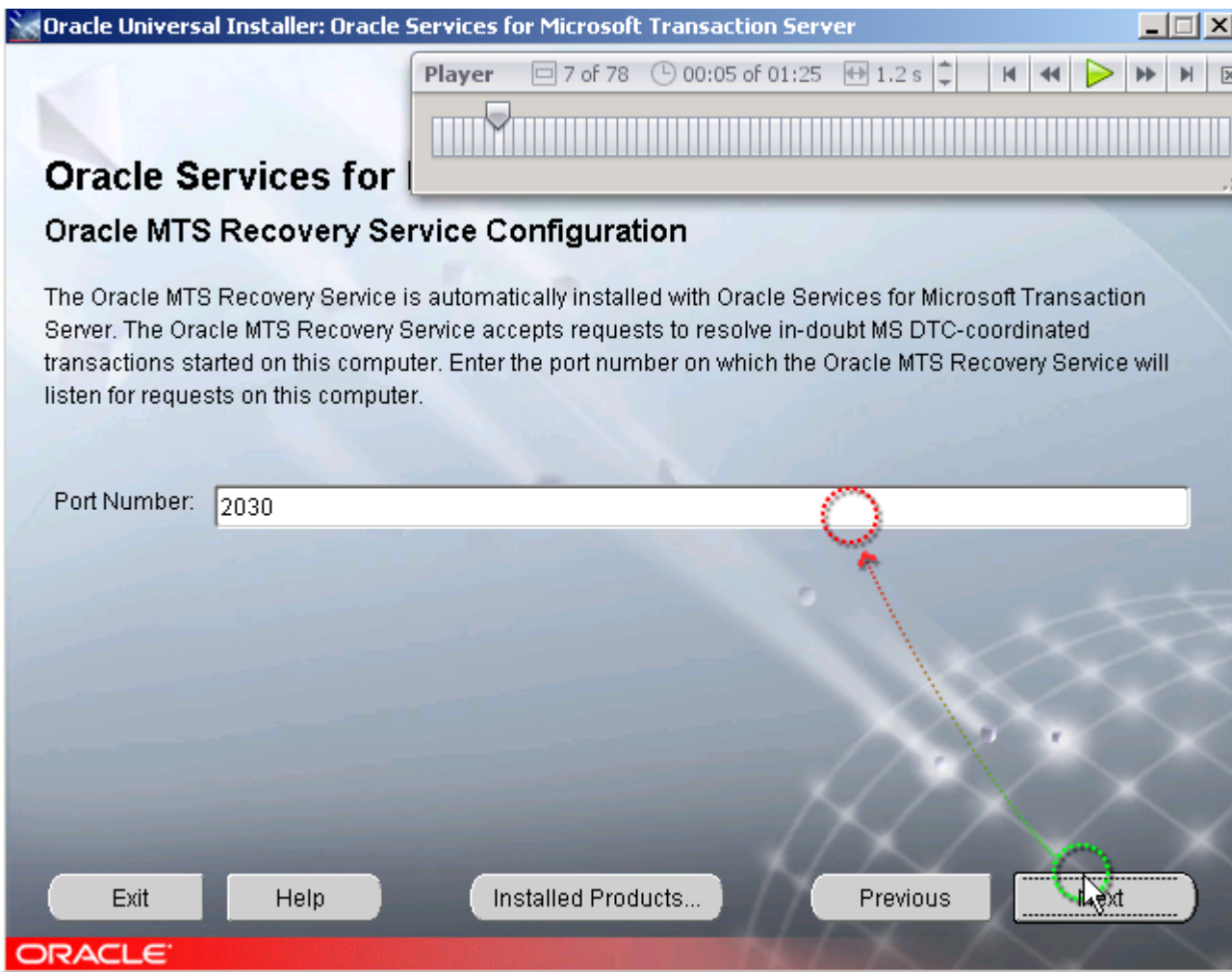


Figure 13. x

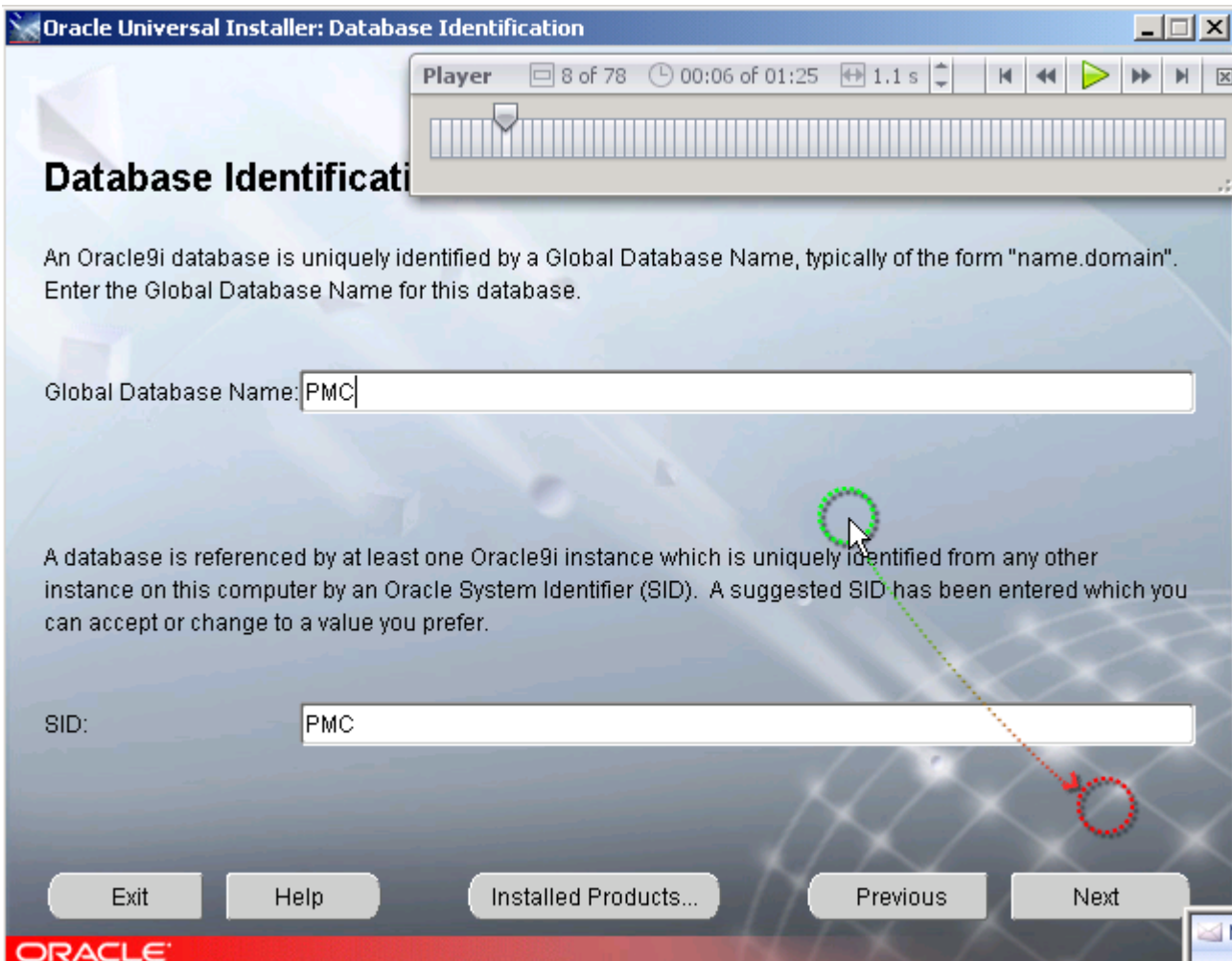


Figure 14. x

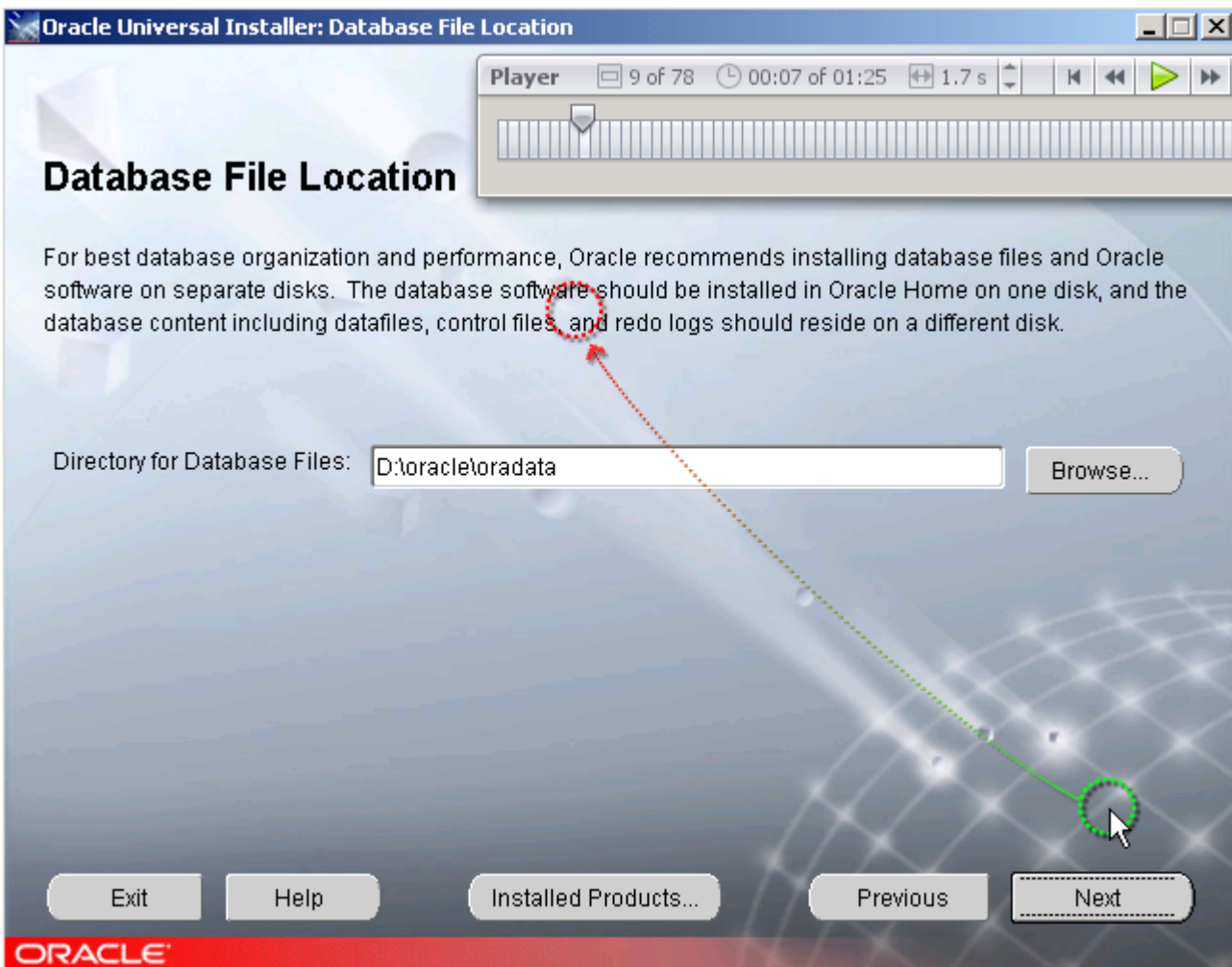


Figure 15. x

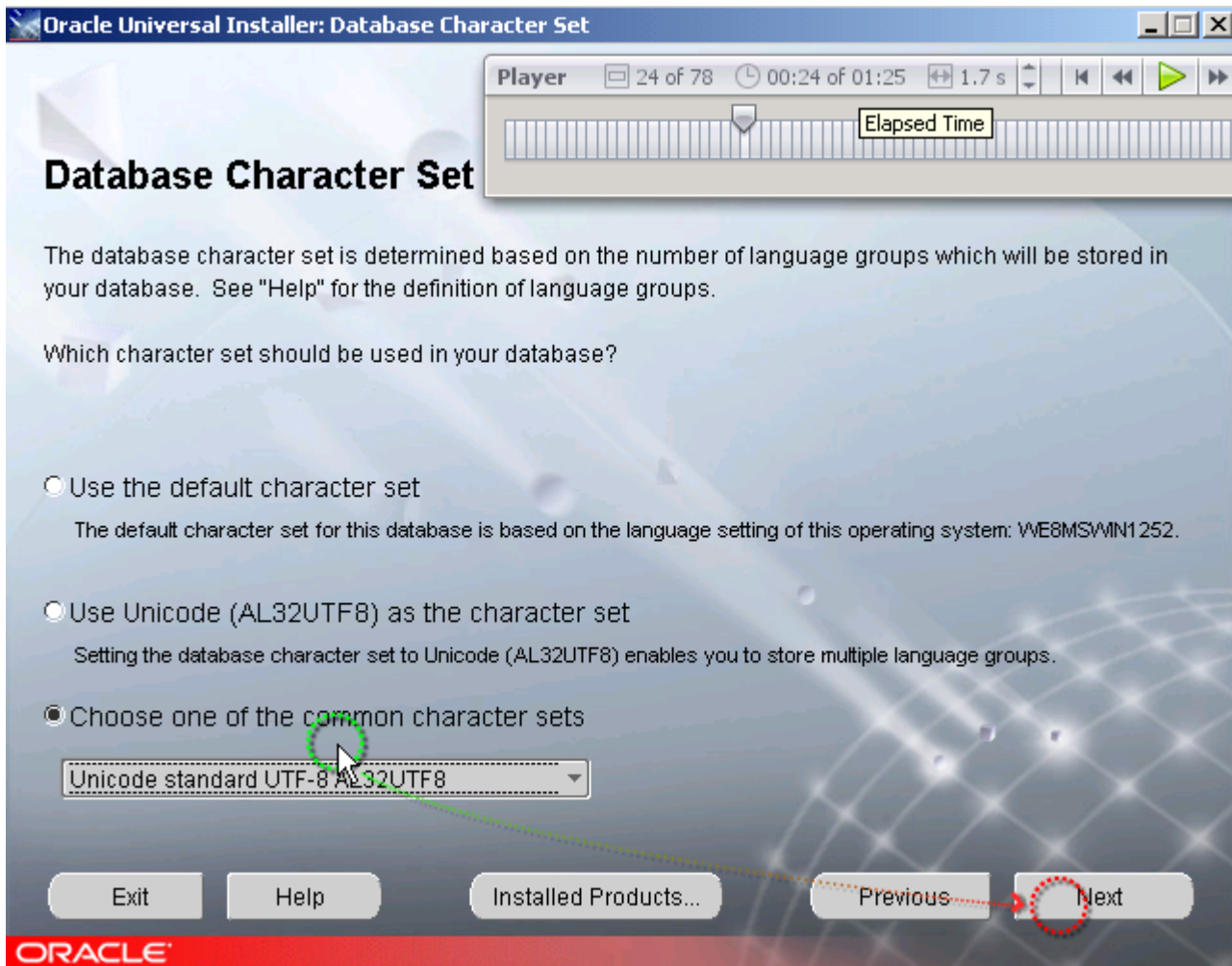


Figure 16. x

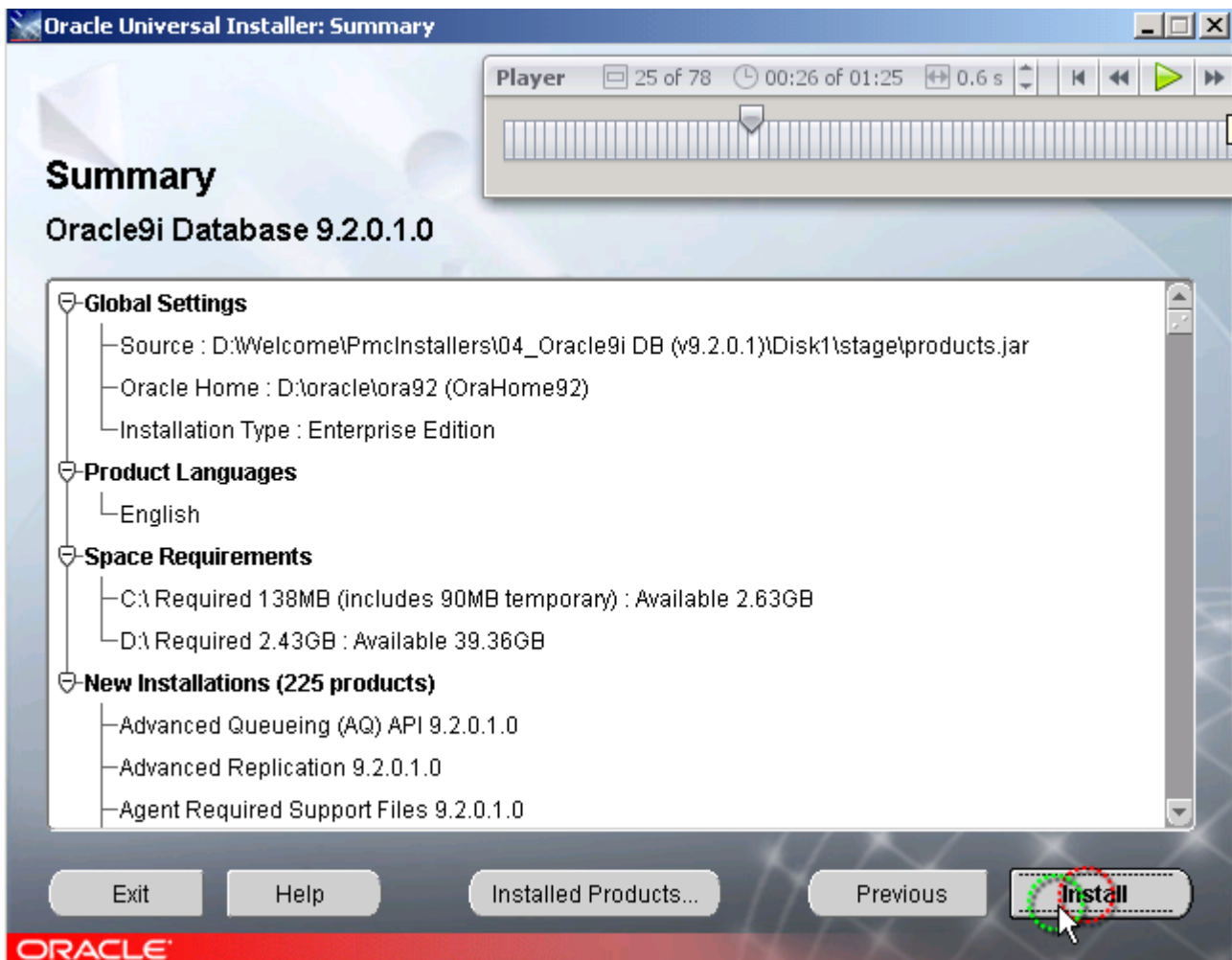


Figure 17. x

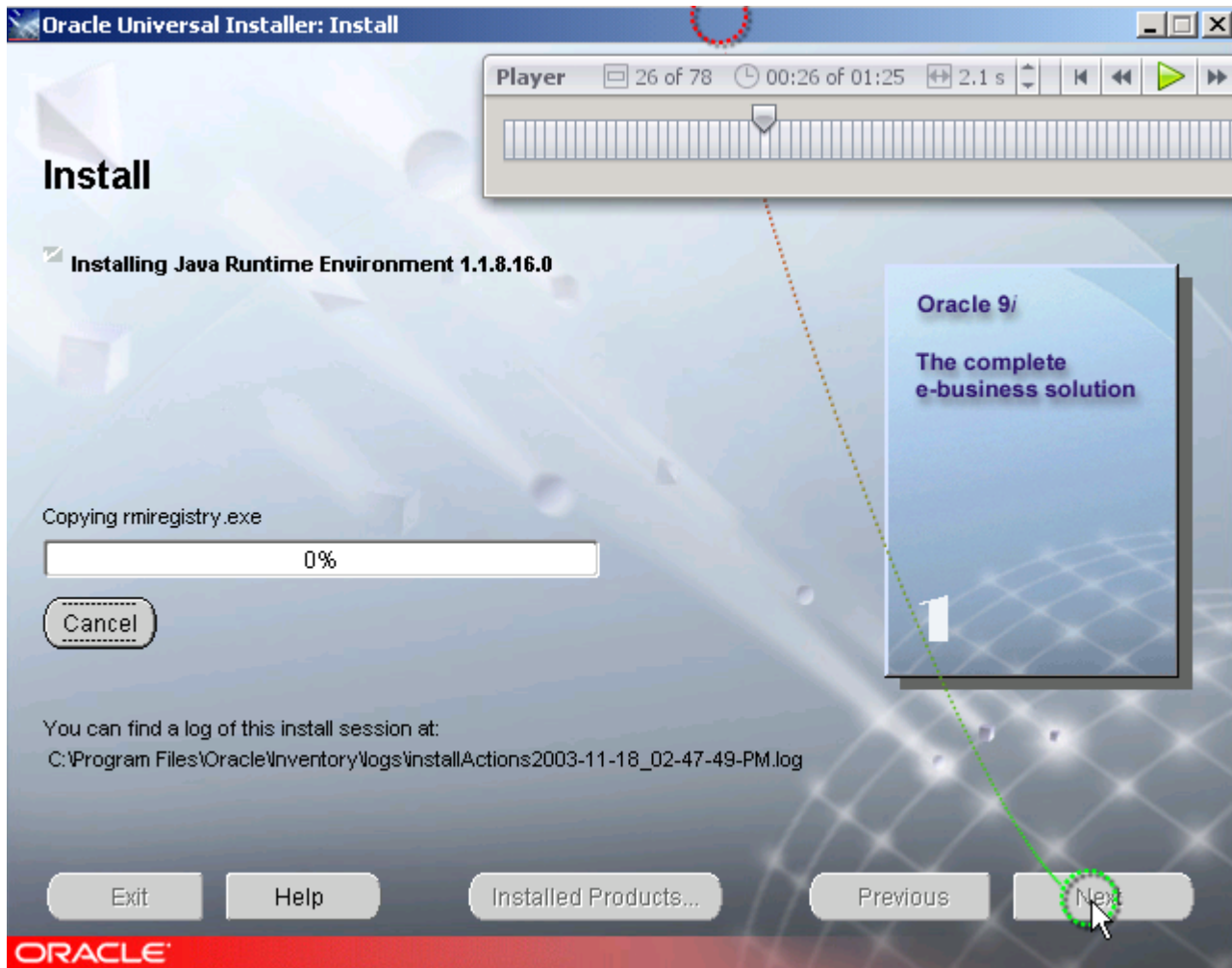


Figure 18. x

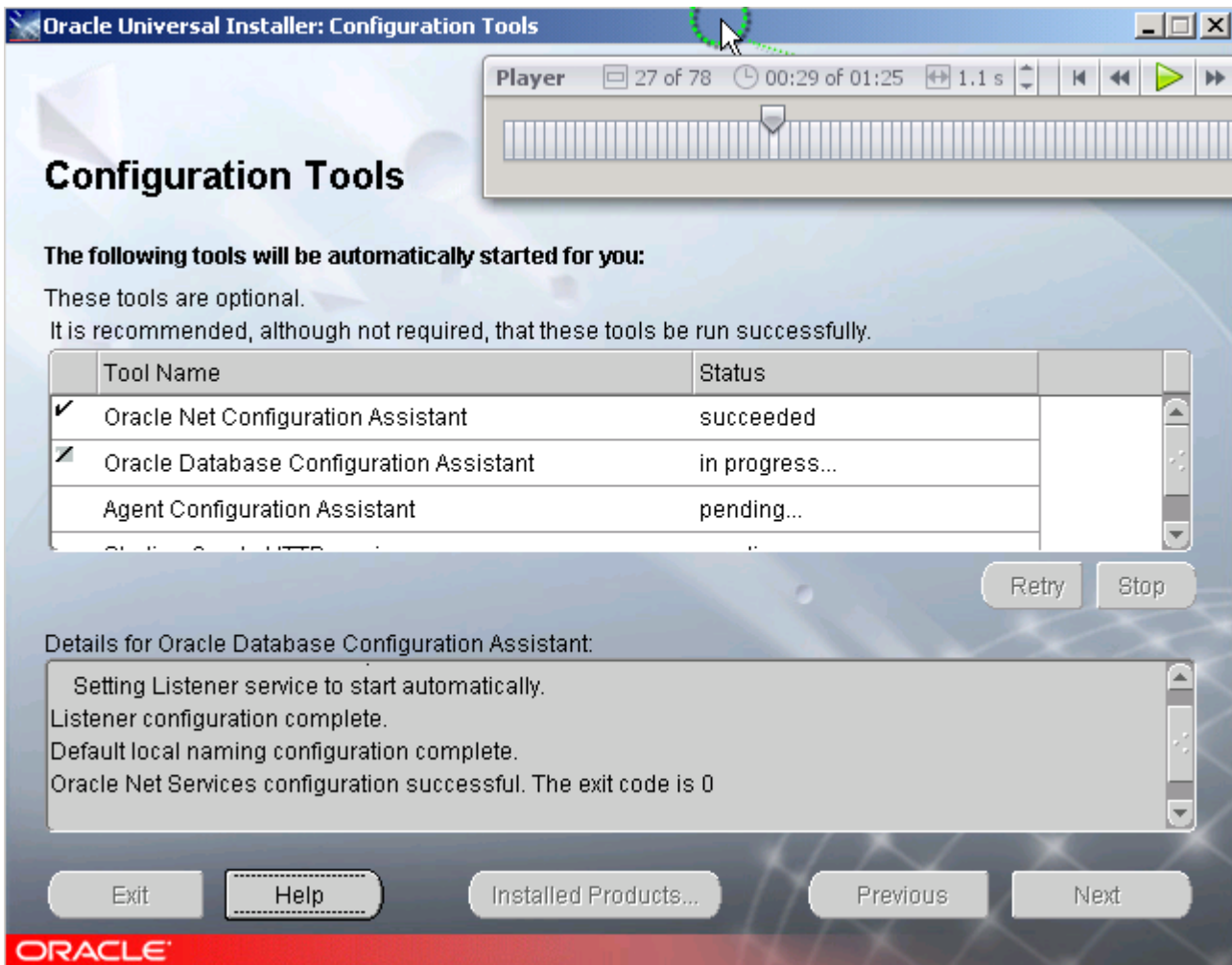


Figure 19. x

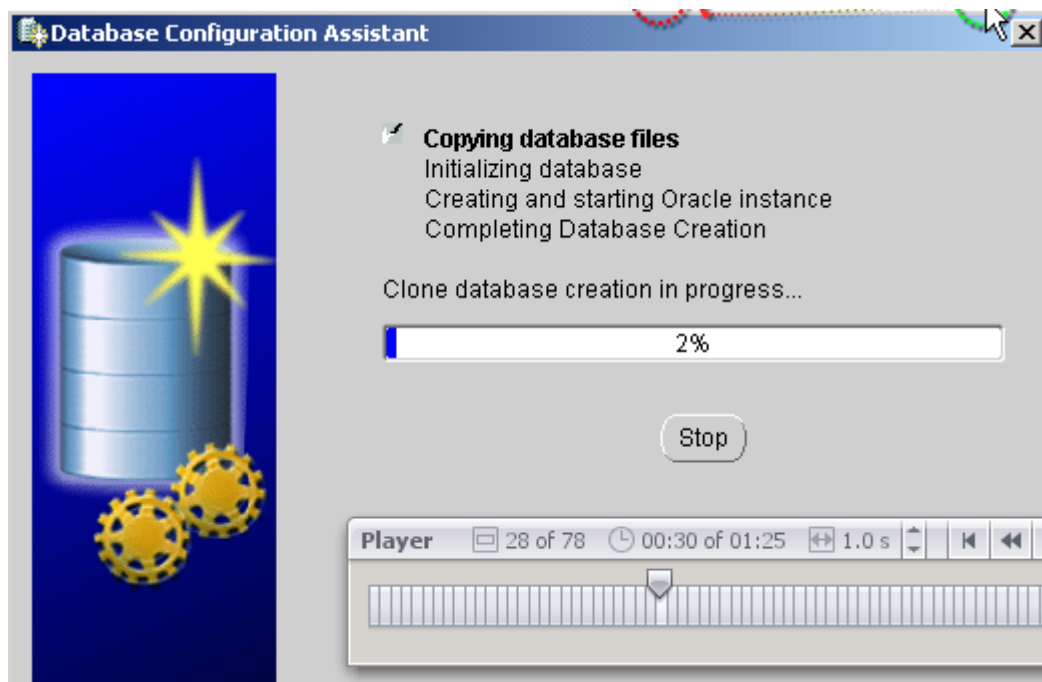


Figure 20. x

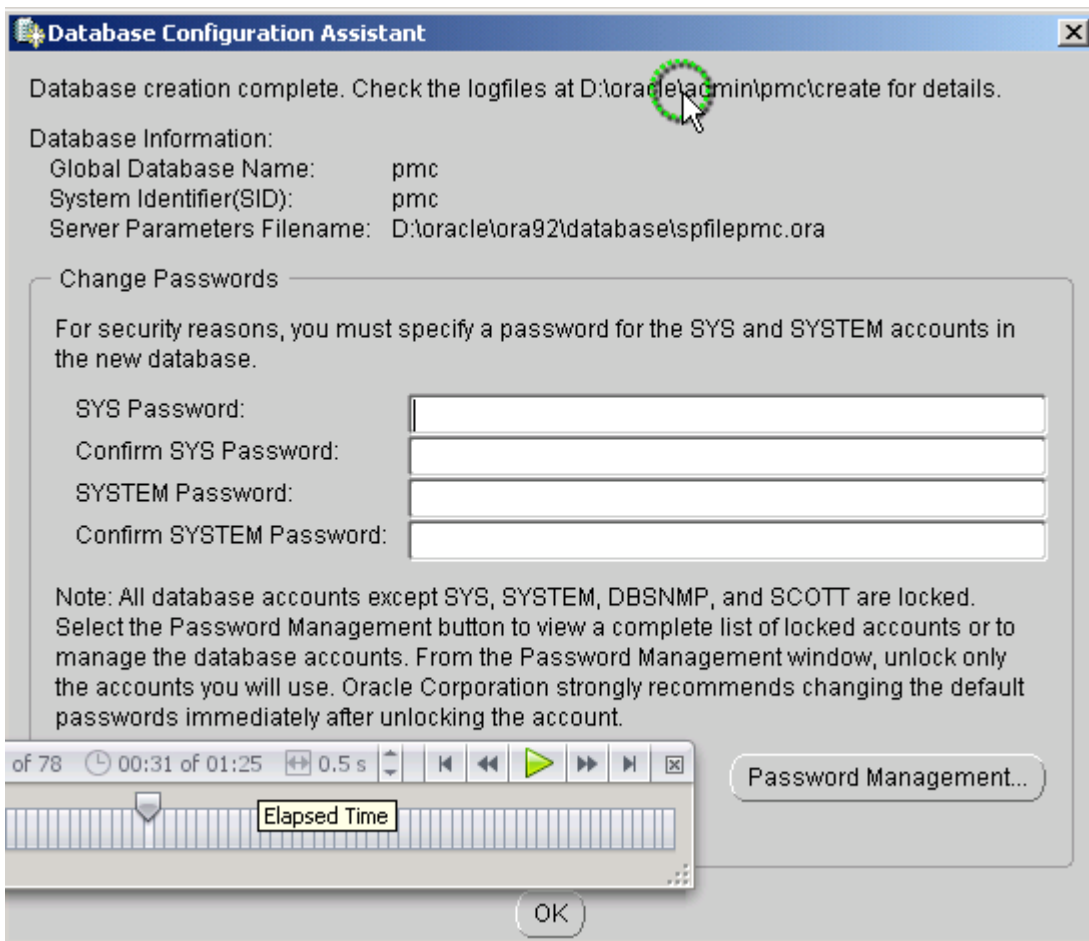


Figure 21. x

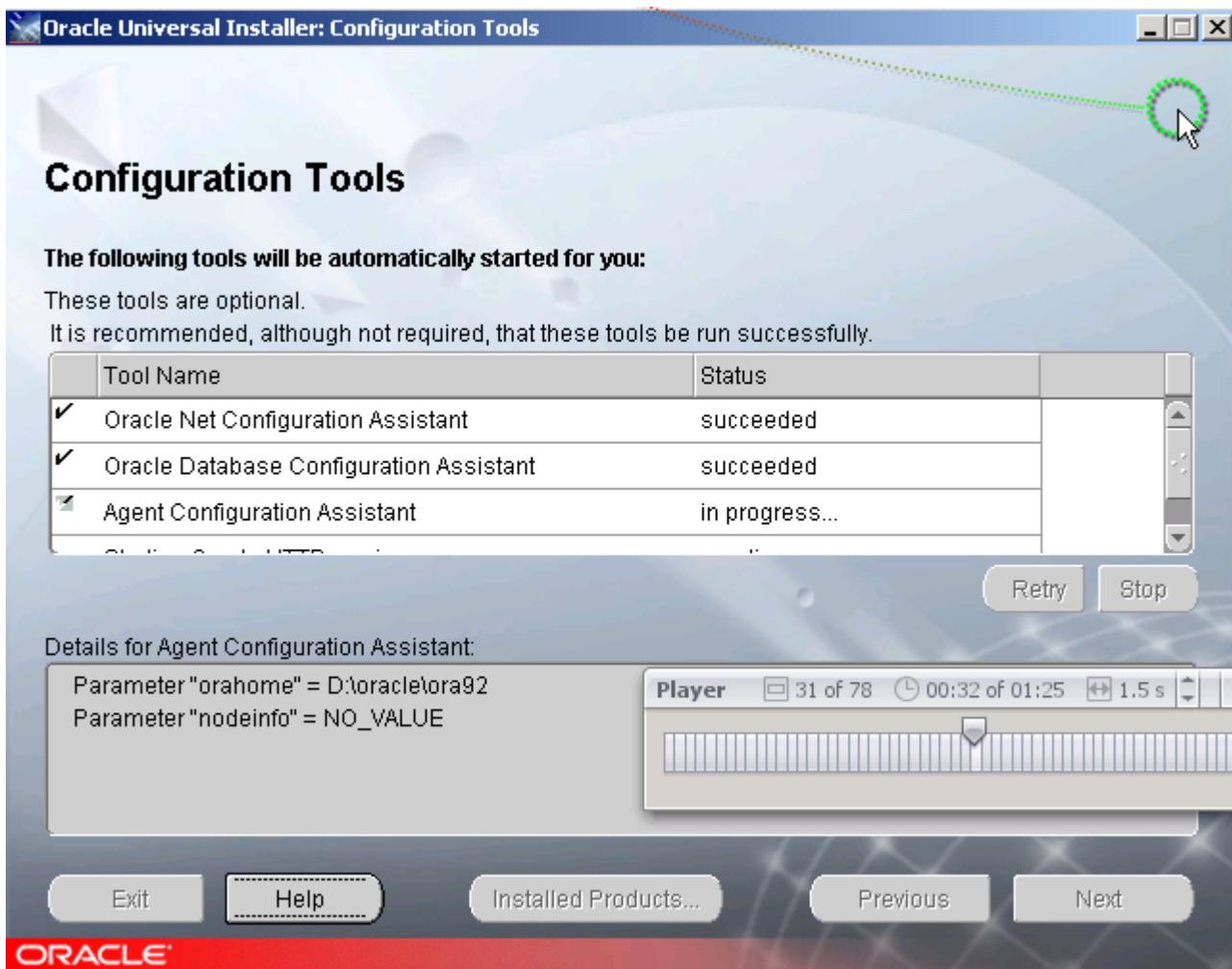


Figure 22. x

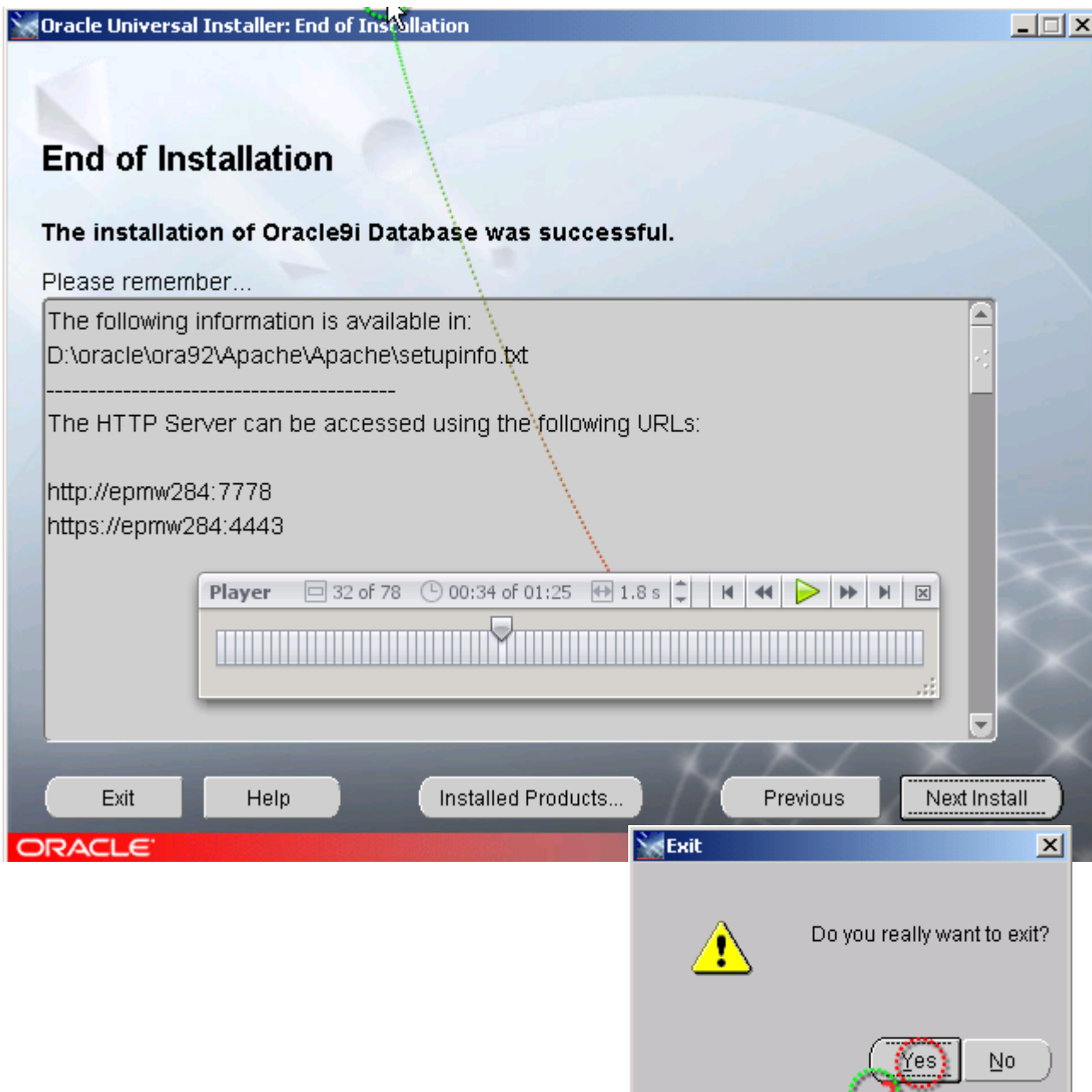


Figure 23. x

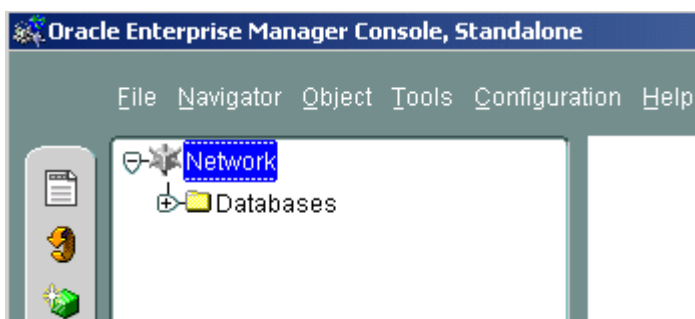


Figure 24. x

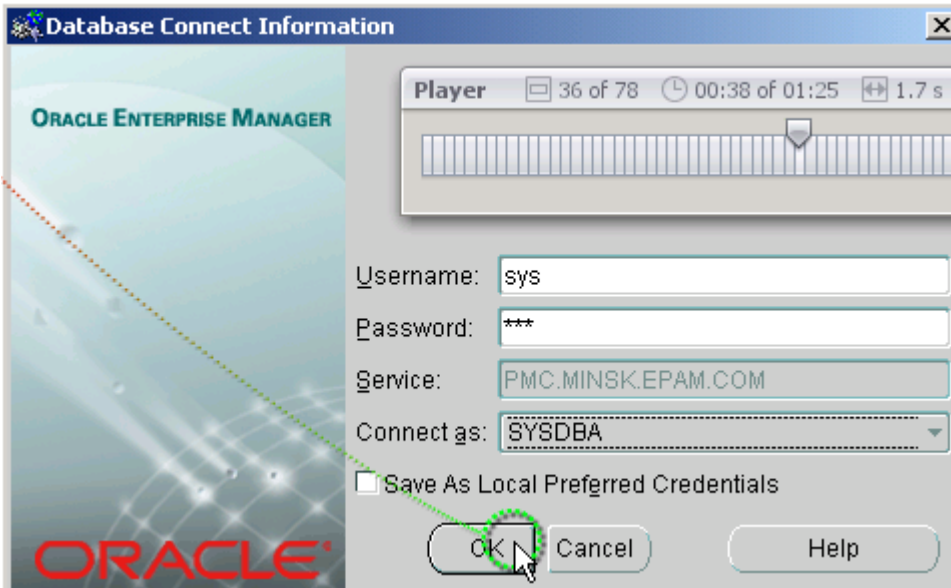


Figure 25. x

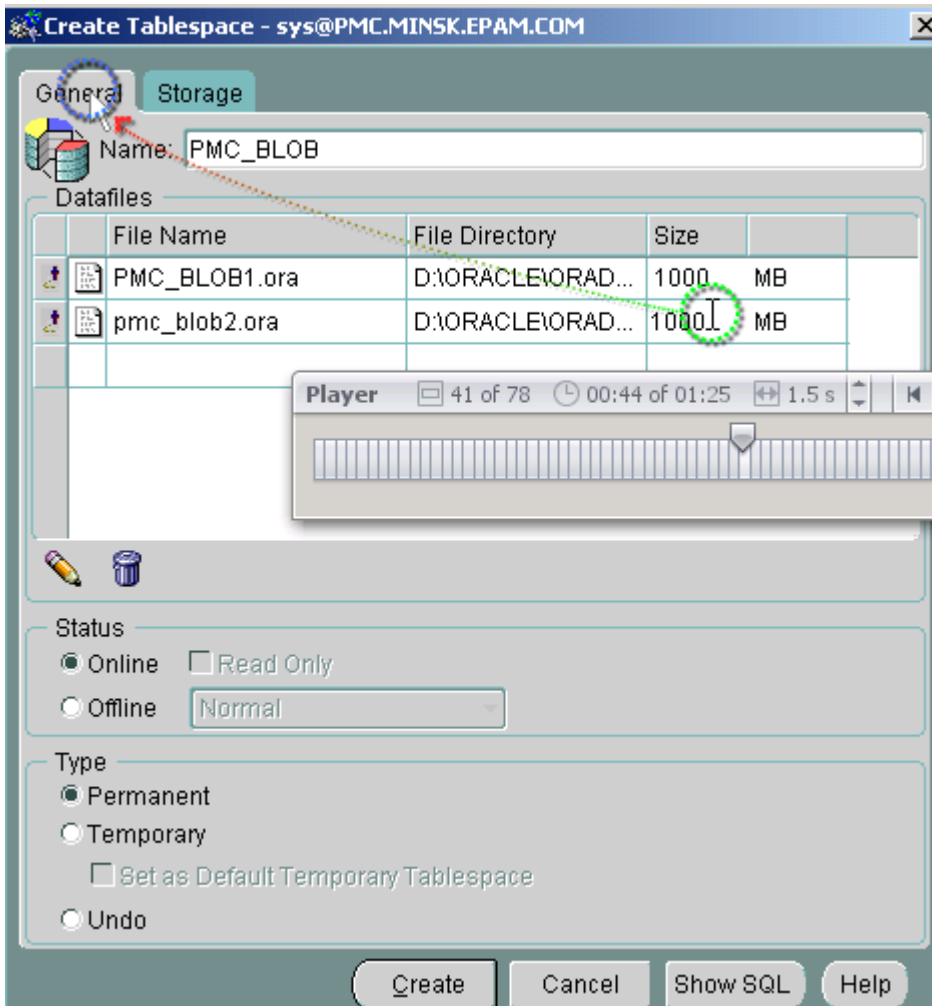


Figure 26. x

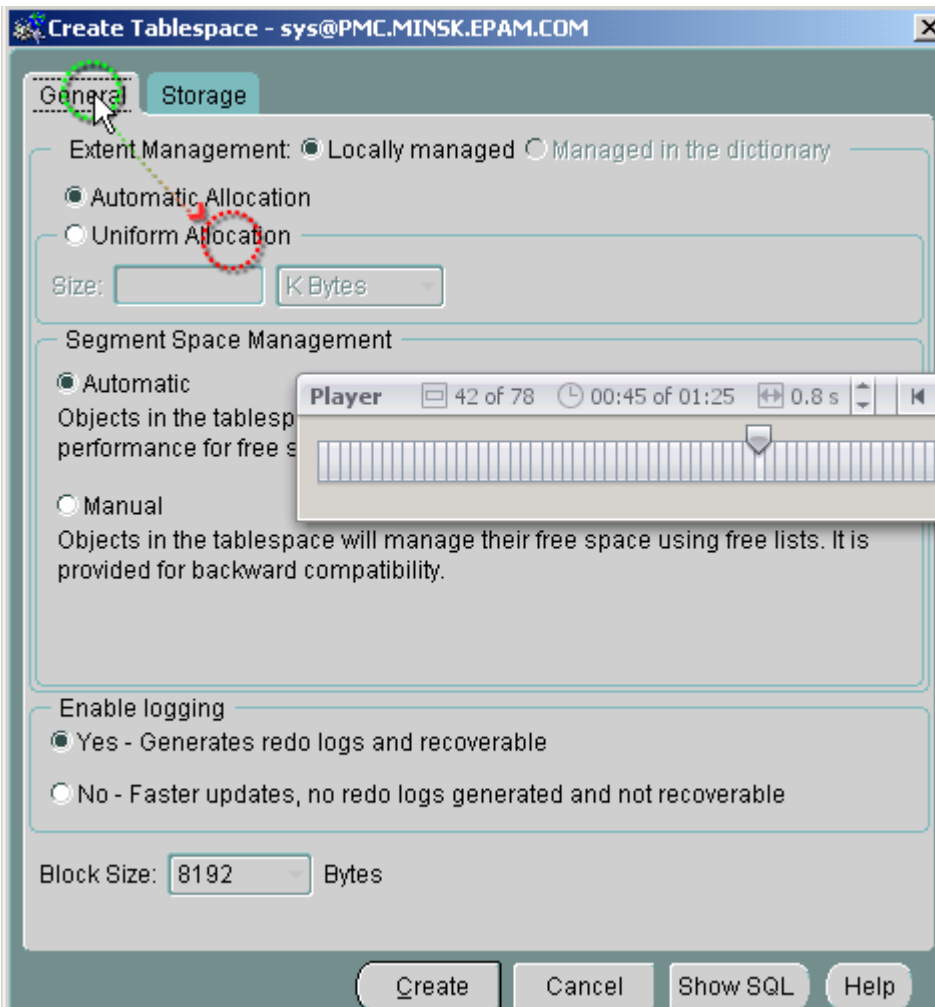


Figure 27. x

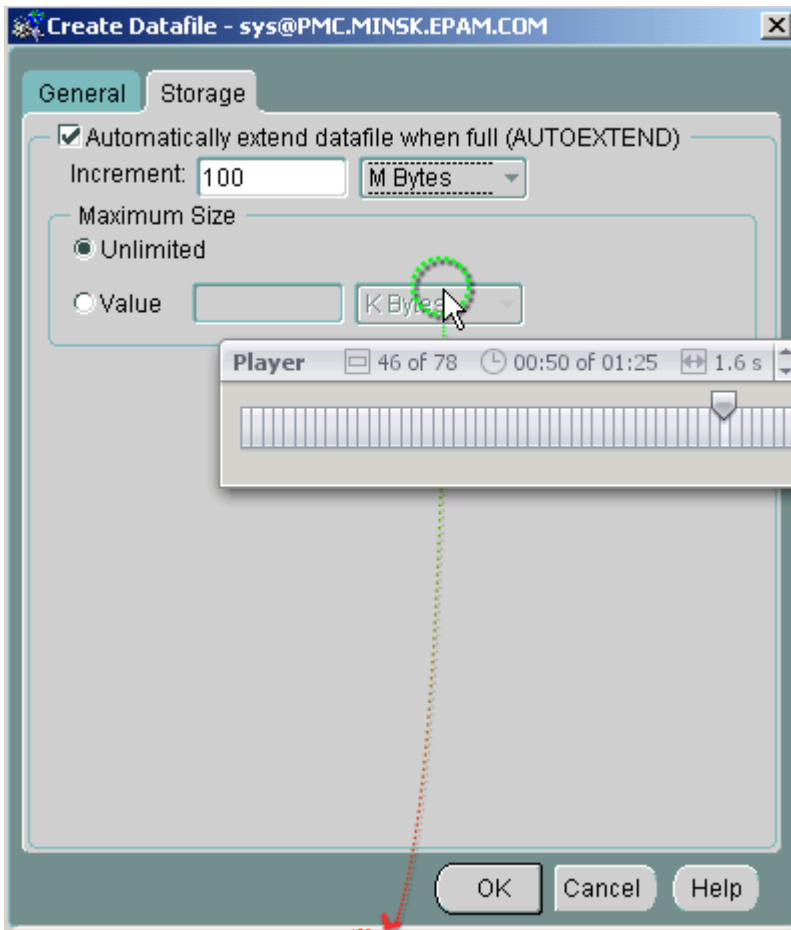


Figure 28. x

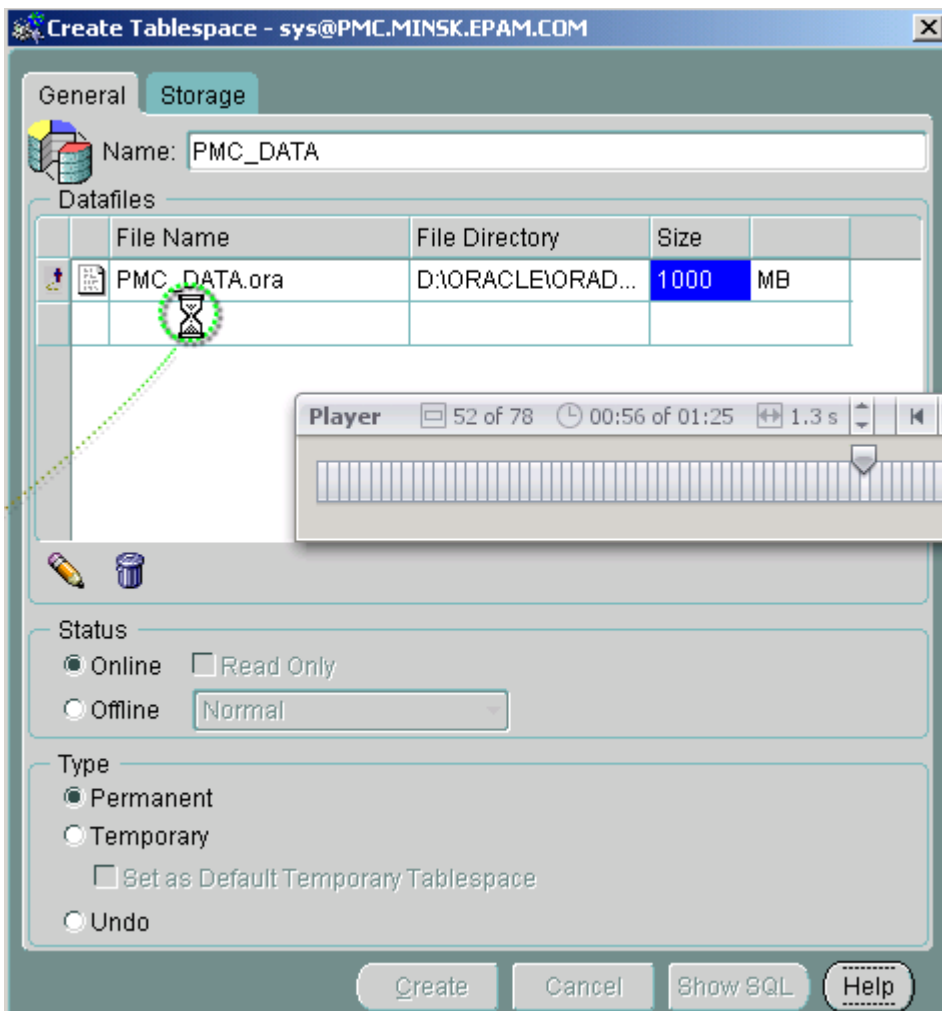


Figure 29. x

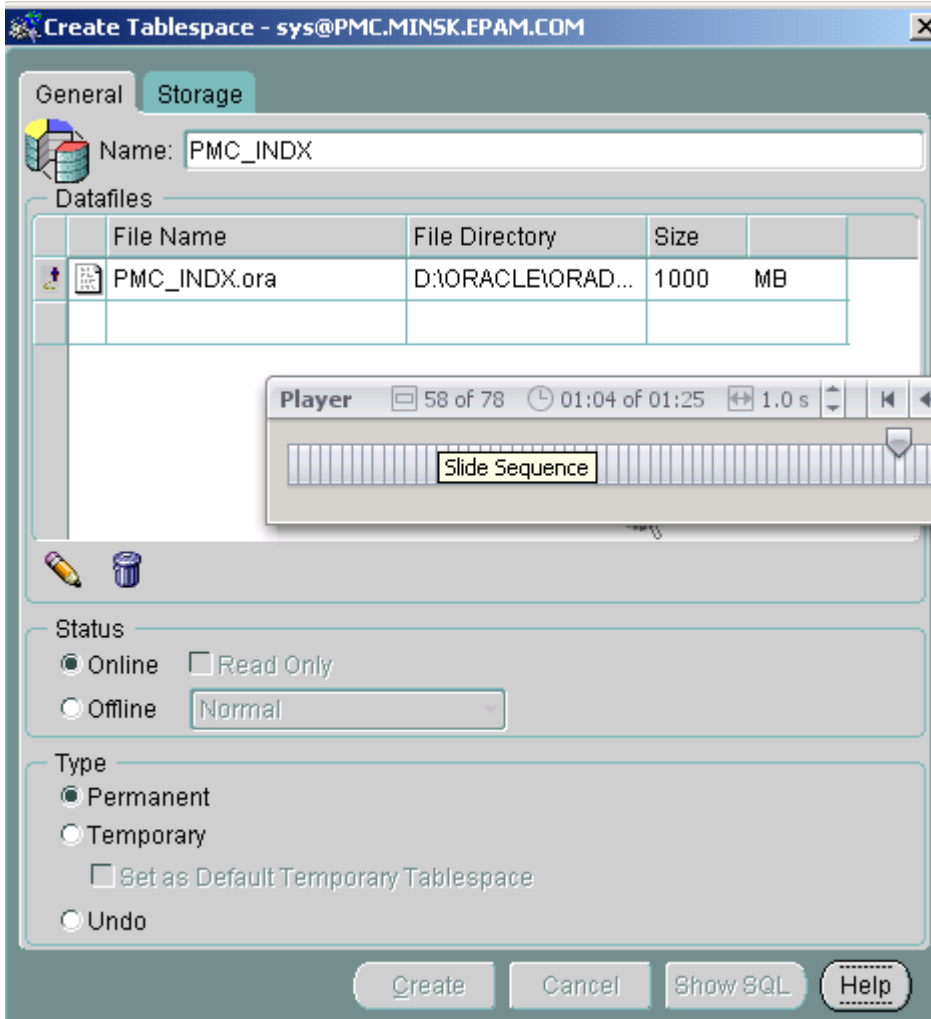


Figure 30. x

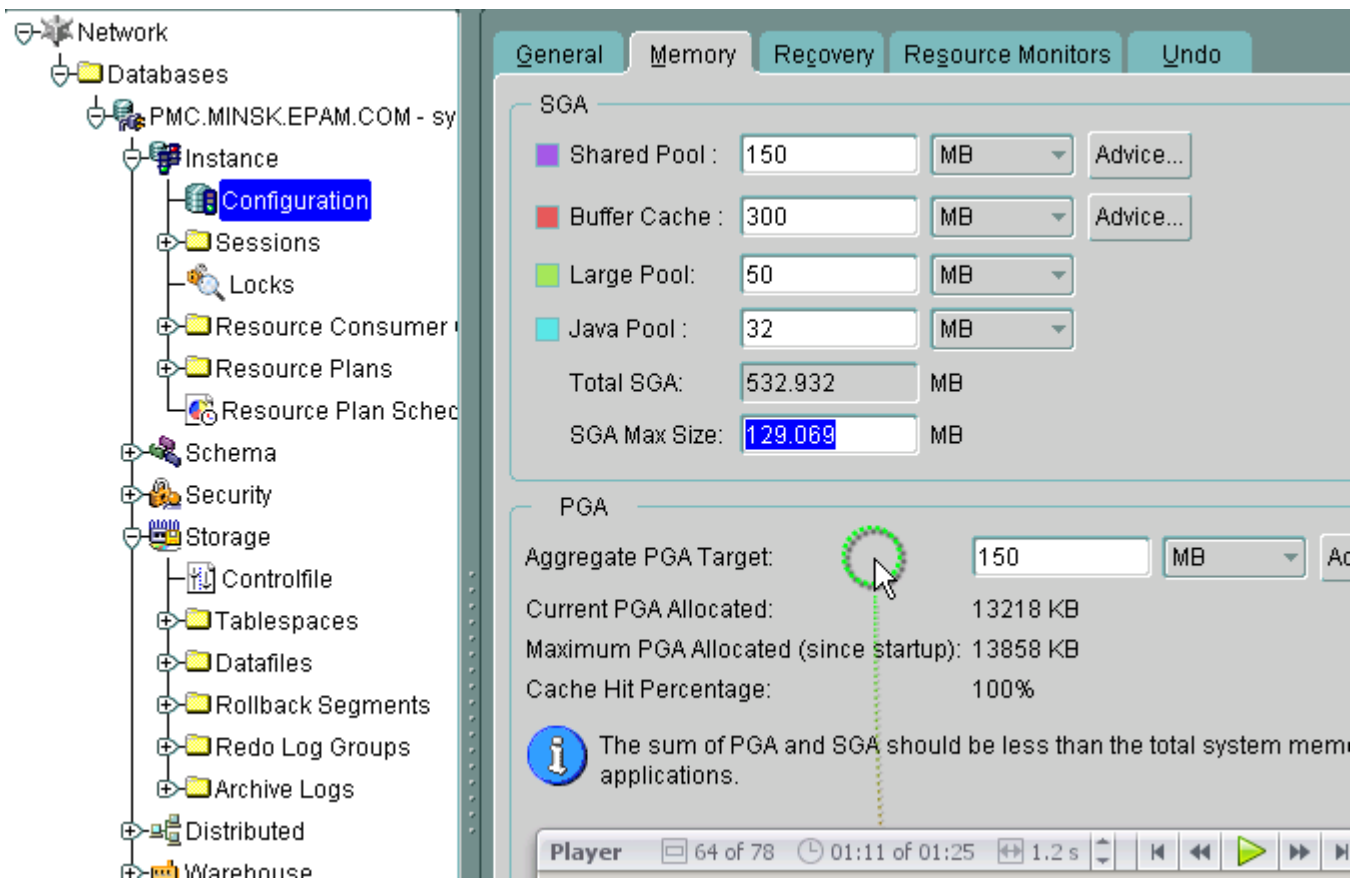


Figure 31. x

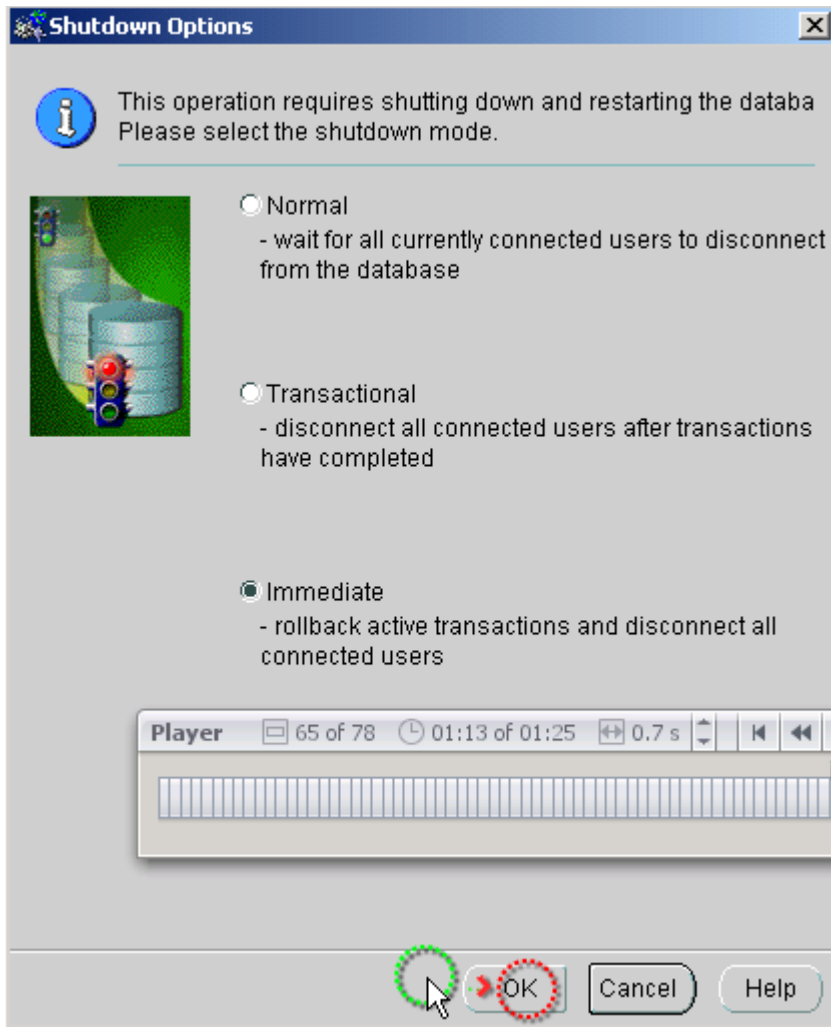


Figure 32. x

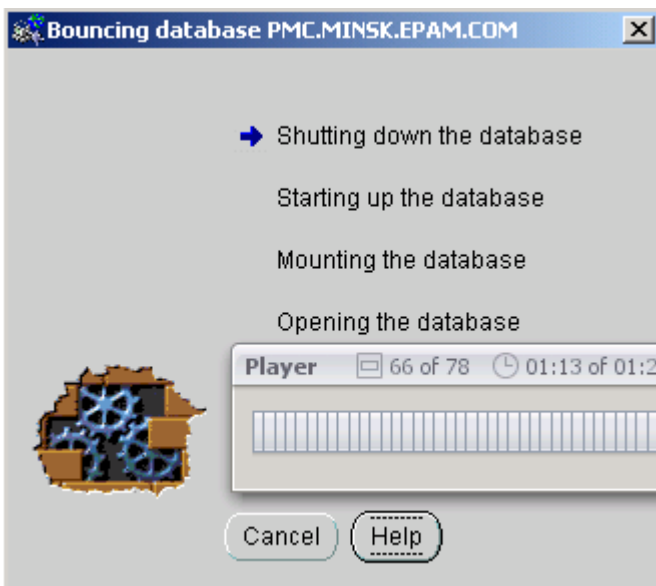


Figure 33. x

4.5. PMC DB

[17: InstallPmcDb.html](#)

06_pmc_install_05_db.fm

available at \\Epgsa002\Projects\Pmc\Files\Database\Build\Released\
this section uses

- \\epmw284>Welcome\PmcInstallers\05_pmc_db_3.0.007.zip

- \\epmw284>Welcome\PmcInstallers\05_update_pmc_db_3.0.007.zip

This section describes installation and updated of the PMC DB:

- [4.5.1. 1st time install \(page 65\)](#)
- [4.5.2. Patch DB \(page 66\)](#)
- [4.5.3. Update PMC DB \(page 71\)](#)

4.5.1. 1st time install

README.txt:

requirements:

- Oracle database server version 9.2.0.4.0 or greater with bitmap indexes support and partitioning options enabled.
- Existing installation of PMC database version 2.3.027 - 3.0.006 if upgrading.
- NLS_LANG registry variable at the database site recommended value is 'AMERICAN_AMERICA.UTF8'.
- For proper applications work database server time zone must be equal UTC.
- Database instance must be created with unicode database character set (UTF-8 character set recommended for the european locations). National character set may be any (this version of the PMC don't use NCHAR - like column types).
- Ensure that 400 Mb free space is available for the PMC_SYSTEM tablespaces when installing on the new database. SGA recommended size is equal ~60Mb, hash_area_size and sort_area_size is desirable to set greater than 1Mb or use appropriate parameter value for PGA, calculate buffer cache size and PGA according to whole system configuration requirements and available hardware.
- Set job_queue_processes parameter greater than 0.

installation:

- BACKUP production database if updating.
- Unzip pmc_db_3.0.007.zip or update_pmc_db_3.0.007.zip if updating.
- Disconnect all database PMC-users from database.
- Execute command: 'start_update.cmd TNS_NAME [PMC_SYSTEM_SCHEMA_PASSWORD]' or 'start_install.cmd TNS_NAME' correspondingly. By default PMC_SYSTEM_SCHEMA_PASSWORD parameter value is equal 'manager' (without quotes), this is the optional parameter.
- Check pmc_db_3.0.007_update.log or pmc_db_3.0.007_install.log files for the details.
- Copy file \$ORACLE_HOME/jdbc/lib/ojdbc14.jar to the \$JRE_HOME/lib/ext. Use OCI JDBC connection string to access database from PMC applications. See Oracle documentation for the details.

1. Disconnect all PMC-database users from database.

2. unzip update_pmc_db_3.0.007.zip.

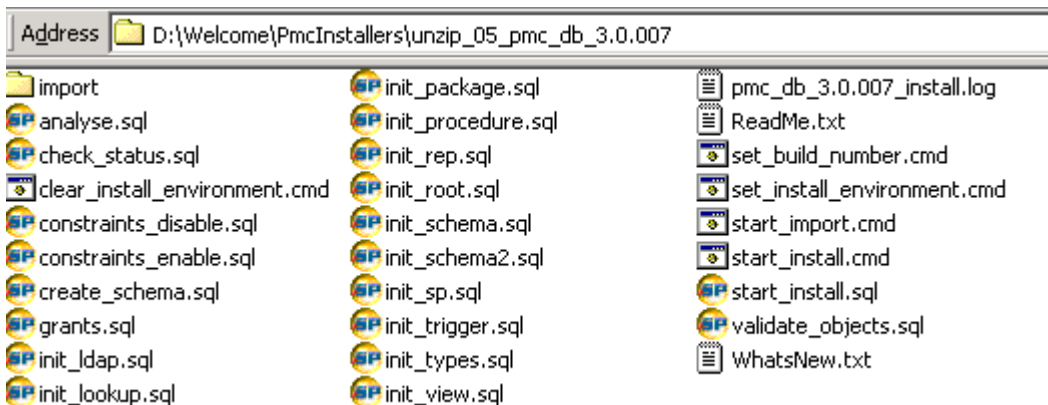


Figure 34. pmc db zip contents

3. Execute:

```
start_install.cmd PMC
username: sys
password: sys
```

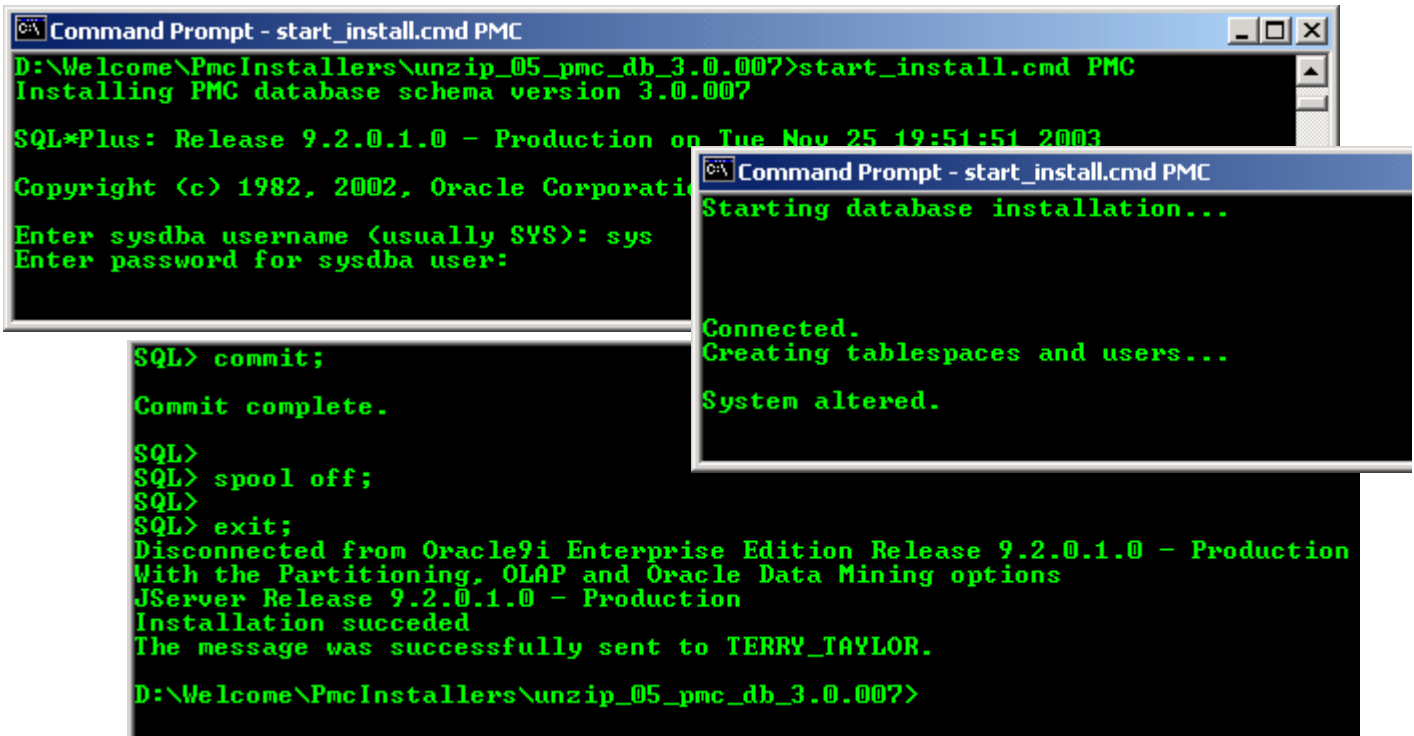


Figure 35. x

4.5.2. Patch DB

4. logon to database

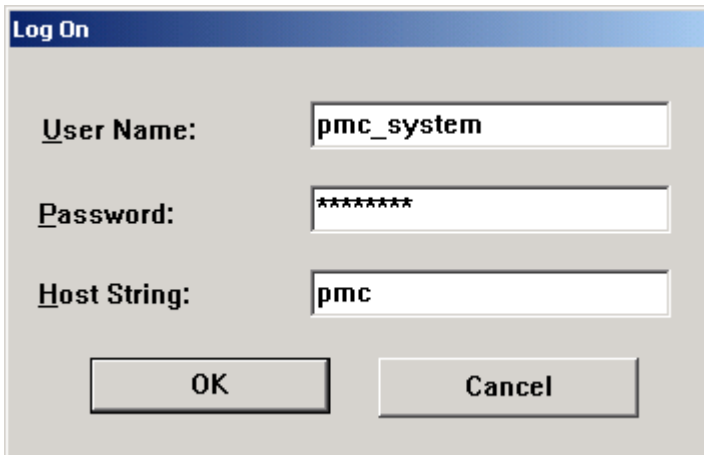


Figure 36. xxx

execute following:

@ D:\Welcome\PmcInstallers\init_schema_fix.sql
 init_schema_fix.sql contents

```

/*=====*/
/* View: mv_bug_stat */
/*=====*/
create MATERIALIZED view mv_bug_stat tablespace pmc_data
build immediate
refresh
complete
start with sysdate
next trunc(sysdate,'dd')+1
as select distinct
trunc(nvl(ri.changed,ri.created),'d')+7 time_stamp,
count(rb.bug_id) over (partition by rb.build_id, ri.state_id, trunc(nvl(ri.changed,ri.created),'d')) bugs_by_st_build_id,
count(rb.bug_id) over (partition by rb.build_id, trunc(nvl(ri.changed,ri.created),'d')) bugs_total_in_build_id,
count(rb.bug_id) over (partition by ma.app_id, ri.state_id, trunc(nvl(ri.changed,ri.created),'d')) bugs_by_st_app_id,
count(rb.bug_id) over (partition by ma.app_id, trunc(nvl(ri.changed,ri.created),'d')) bugs_total_in_app_id,
count(rb.bug_id) over (partition by ma.project_id, ri.state_id, trunc(nvl(ri.changed,ri.created),'d')) bugs_by_st_project_id,
count(rb.bug_id) over (partition by ma.project_id, trunc(nvl(ri.changed,ri.created),'d')) bugs_total_in_project_id,
ri.state_id,
rb.build_id,
ma.app_id,

```

```

    ma.project_id
from
r_bug rb, r_item ri, m_application ma
where ri.item_id = rb.bug_id and
ma.app_id = rb.app_id
/
create index uk_mvbug_stat on mv_bug_stat(build_id, time_stamp, state_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvbug_bug_stat_project_id_bmp on mv_bug_stat(project_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvbug_bug_stat_app_id_bmp on mv_bug_stat(app_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvbug_bug_stat_state_id_bmp on mv_bug_stat(state_id)
tablespace pmc_indx pctfree 0
/
analyze table mv_bug_stat estimate statistics
/
analyze table mv_bug_stat estimate statistics for all indexes
/
/*=====*/
/* View: mv_bug_stat_on_audit */
/*=====*/
create MATERIALIZED view mv_bug_stat_on_audit tablespace pmc_data
build immediate
refresh
complete
start with sysdate
next trunc(sysdate,'dd')+1
as select distinct
trunc(timestamp,'d')+7 time_stamp,
count(bug_id) over (partition by build_id, post_state_id, trunc(timestamp,'d')) bugs_by_st_build_id,
count(bug_id) over (partition by build_id, severity_id, trunc(timestamp,'d')) bugs_by_severity_in_build_id,
count(bug_id) over (partition by build_id, trunc(timestamp,'d')) bugs_total_in_build_id,
count(bug_id) over (partition by app_id, post_state_id, trunc(timestamp,'d')) bugs_by_st_app_id,
count(bug_id) over (partition by app_id, trunc(timestamp,'d')) bugs_total_in_app_id,
count(bug_id) over (partition by project_id, post_state_id, trunc(timestamp,'d')) bugs_by_st_project_id,
count(bug_id) over (partition by project_id, trunc(timestamp,'d')) bugs_total_in_project_id,
severity_id,
post_state_id state_id,
build_id,
app_id,
project_id
from
(select rb.bug_id,
timestamp,
post_state_id,
rb.severity_id,
first_value(ra.post_state_id) over (partition by rb.bug_id, post_state_id order by rb.bug_id, post_state_id, a.timestamp desc) last_state,
lag(null,1,'Y') over (partition by rb.bug_id, post_state_id order by rb.bug_id, post_state_id, a.timestamp desc) is_last,
rb.build_id,
ma.app_id,
ma.project_id
from r_audit a,
r_audit_action ra,
r_bug rb,
m_application ma
where rb.bug_id = a.item_id and
ra.audit_id = a.audit_id and
(ra.post_state_id != ra.prec_state_id or (prec_state_id is null)) and
ma.app_id = rb.app_id)
where is_last = 'Y'
/
create index mvbug_stat_on_audit on mv_bug_stat_on_audit(build_id, time_stamp, state_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvbug_stat_on_audit_p_id_bmp on mv_bug_stat_on_audit(project_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvbug_stat_on_audit_app_id_bmp on mv_bug_stat_on_audit(app_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvbug_stat_on_audit_st_id_bmp on mv_bug_stat_on_audit(state_id)
tablespace pmc_indx pctfree 0
/
analyze table mv_bug_stat_on_audit estimate statistics
/
analyze table mv_bug_stat_on_audit estimate statistics for all indexes
/
/*=====*/
/* View: mv_graph_req_change_count */
/*=====*/
create MATERIALIZED view mv_graph_req_change_count tablespace pmc_data
build immediate
refresh
complete
start with sysdate
next sysdate+1
as select
trunc(ri.created,'d')+7 time_stamp,
count(1) value,
rr.project_id
from
r_requirement rr,
r_requirement_version rv,
r_item ri,
r_audit ra,
r_audit_trail rat

```

```

where
  rv.req_version_id = ri.item_id
  and rv.req_version_id = ra.item_id
  and ra.audit_id = rat.audit_id
  and rat.trail_item_id = 22525
  and rr.req_id = rv.req_id
group by trunc(ri.created,'d'), project_id
/
analyze table mv_graph_req_change_count estimate statistics
/
analyze table mv_graph_req_change_count estimate statistics for all indexes
/
/*=====*/
/* View: mv_graph_req_clarif_count */
/*=====*/
create MATERIALIZED view mv_graph_req_clarif_count tablespace pmc_data
build immediate
refresh
  complete
  start with sysdate
  next sysdate+1
as select
  trunc(ri.created,'d')+7 time_stamp,
  count(1) value,
  rr.project_id
from
  r_requirement rr,
  r_requirement_version rv,
  r_item ri,
  r_audit ra,
  r_audit_trail rat
where
  rv.req_version_id = ri.item_id
  and rv.req_version_id = ra.item_id
  and ra.audit_id = rat.audit_id
  and rat.trail_item_id = 22524 -- clarification_count
  and rr.req_id = rv.req_id
group by trunc(ri.created,'d'), project_id
/
analyze table mv_graph_req_clarif_count estimate statistics
/
analyze table mv_graph_req_clarif_count estimate statistics for all indexes
/
/*=====*/
/* View: mv_issue_stat_on_audit */
/*=====*/
create MATERIALIZED view mv_issue_stat_on_audit tablespace pmc_data
build immediate
refresh
  start with sysdate
  next trunc(sysdate,'dd')+1
as select distinct
  trunc(timestamp,'d')+7 time_stamp,
  count('x') over (partition by project_id, app_id, priority_id, trunc(timestamp,'d')) issues_by_priority,
  count('x') over (partition by project_id, app_id, post_state_id, trunc(timestamp,'d')) issues_by_st_app_id,
  count('x') over (partition by project_id, app_id, trunc(timestamp,'d')) issues_tot_in_app_id,
  count('x') over (partition by project_id, post_state_id, trunc(timestamp,'d')) issues_by_st_project_id,
  count('x') over (partition by project_id, trunc(timestamp,'d')) issues_total_in_project_id,
  priority_id,
  post_state_id state_id,
  app_id,
  project_id
from
  (select ri.issue_id,
         timestamp,
         ra.post_state_id,
         ri.priority_id,
         first_value(ra.post_state_id) over (partition by ri.issue_id, post_state_id order by ri.issue_id, post_state_id, a.timestamp desc) last_state,
         lag(null,1,'Y') over (partition by ri.issue_id, post_state_id order by ri.issue_id, post_state_id, a.timestamp desc) is_last,
         ri.app_id,
         ri.project_id
   from r_audit a,
        r_audit_action ra,
        r_issue ri
  where ri.issue_id = a.item_id and
        ra.audit_id = a.audit_id and
        (ra.post_state_id != ra.prec_state_id or (prec_state_id is null)))
  where is_last = 'Y'
/
analyze table mv_issue_stat_on_audit estimate statistics
/
analyze table mv_issue_stat_on_audit estimate statistics for all indexes
/
/*=====*/
/* View: mv_item_state_stat_on_audit */
/*=====*/
create MATERIALIZED view mv_item_state_stat_on_audit build immediate
refresh
  complete
  start with sysdate
  next trunc(sysdate,'dd')+1
as select
distinct
  ra.item_id item_id,
  trunc(ra.timestamp,'d') time_stamp_week,
  last_value(post_state_id) over (partition by ra.item_id, trunc(timestamp,'d') order by ra.item_id, timestamp rows between current row and
  unbounded following) last_state_id_on_week,
  post_state_id state_id
from
  r_audit ra,
  r_audit_action rac

```

```

where
ra.audit_id = rac.audit_id and
rac.post_state_id != rac.prec_state_id
/
create bitmap index mv_item_stat_last_state_bmp on mv_item_state_stat_on_audit (
last_state_id_on_week asc
)
pctfree 10
tablespace pmc_indx
/
create bitmap index mv_item_stat_state_id_bmp on mv_item_state_stat_on_audit (
state_id asc
)
pctfree 10
tablespace pmc_indx
/
alter table mv_item_state_stat_on_audit add (constraint pkmv_item_state_stat_on_audit primary key
(item_id, time_stamp_week, state_id) using index pctfree 0 tablespace pmc_indx)
/
analyze table mv_item_state_stat_on_audit estimate statistics
/
analyze table mv_item_state_stat_on_audit estimate statistics for all indexes
/
/*=====*/
/* View: mv_item_state_week */
/*=====*/
create MATERIALIZED view mv_item_state_week tablespace pmc_data
build immediate
refresh
complete
start with sysdate
next trunc(sysdate,'dd')+1
as select /*+ */
item_id,
item_type_id,
trunc(timestamp,'d') timestamp,
prec_state_id,
post_state_id state_id,
lead(post_state_id,1) over (partition by item_id order by item_id, timestamp) next_transition_state_id,
nvl(trunc(lead(timestamp,1) over (partition by item_id order by item_id, timestamp),'d'),trunc(first_value(timestamp) over (order by timestamp
desc range between unbounded preceding and current row,'d'))) next_transition_timestamp,
(nvl(trunc(lead(timestamp,1) over (partition by item_id order by item_id, timestamp),'d'),
trunc(first_value(timestamp) over (order by timestamp desc range between unbounded preceding and current row),'d')) - trunc(timestamp,'d'))
duration,
nvl(trunc(first_value(timestamp) over (order by timestamp desc range between unbounded preceding and current row),'d') -
trunc(lead(timestamp,1) over (partition by item_id order by item_id, timestamp),'d'),0) dur_bef_last_transition,
trunc(first_value(timestamp) over (order by timestamp asc range between unbounded preceding and current row),'d') first_date,
trunc(first_value(timestamp) over (order by timestamp desc range between unbounded preceding and current row),'d') last_date
from
(select /*+ use_hash(ra rac ri)*/
ri.item_id,
ri.item_type_id,
ra.audit_id,
ra.timestamp,
rac.prec_state_id,
rac.post_state_id,
lag(null,1,'Y') over (partition by ri.item_id, trunc(timestamp,'d') order by ri.item_id asc, timestamp desc) is_last_state
from r_item ri,
r_audit ra,
r_audit_action rac
where
ra.audit_id = rac.audit_id and
ri.item_id = ra.item_id and
(post_state_id != prec_state_id or prec_state_id is null)
)
where is_last_state='Y'
/
lock table mv_item_state_week in exclusive mode
/
create unique index mv_item_state_week_ts_id_btree on mv_item_state_week(timestamp, item_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mv_item_state_week_it_bmp on mv_item_state_week(item_type_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mv_item_state_week_st_bmp on mv_item_state_week(state_id)
tablespace pmc_indx pctfree 0
/
analyze table mv_item_state_week estimate statistics
/
analyze table mv_item_state_week estimate statistics for all indexes
/
/*=====*/
/* View: mv_req_stat_on_audit */
/*=====*/
create MATERIALIZED view mv_req_stat_on_audit tablespace pmc_data
build immediate
refresh
start with sysdate
next trunc(sysdate,'dd')+1
as select distinct
trunc(timestamp,'d')+7 time_stamp,
req_type_id,
post_state_id state_id,
count('x') over (partition by project_id, post_state_id, req_type_id, trunc(timestamp,'d')) req_state_type_tot_prj_week,
count('x') over (partition by project_id, post_state_id, trunc(timestamp,'d')) req_tot_state_prj_week,
count('x') over (partition by project_id, req_type_id, trunc(timestamp,'d')) req_tot_type_prj_week,
count('x') over (partition by project_id, trunc(timestamp,'d')) req_tot_prj_week,
count('x') over (partition by project_id) req_tot_prj,
project_id

```

```

from
(select rq.req_id,
      rqv.req_type_id,
      timestamp,
      post_state_id,
      first_value(ra.post_state_id) over (partition by rq.req_id, post_state_id order by rq.req_id, post_state_id, a.timestamp desc) last_state,
      lag(null,1,'Y') over (partition by rq.req_id, post_state_id order by rq.req_id, post_state_id, a.timestamp desc) is_last,
      rq.project_id
from r_audit a,
      r_audit_action ra,
      r_requirement rq,
      r_requirement_version rqv
where rqv.req_version_id = a.item_id and
      ra.audit_id = a.audit_id and
      (ra.post_state_id != ra.prec_state_id or (prec_state_id is null)) and
      rqv.req_id = rq.req_id
)
  where is_last = 'Y'
/
create index mvreq_stat_on_audit_ts_btree on mv_req_stat_on_audit(time_stamp)
tablespace pmc_indx pctfree 0
/
create bitmap index mvreq_stat_on_audit_p_id_bmp on mv_req_stat_on_audit(project_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvreq_stat_on_audit_app_id_bmp on mv_req_stat_on_audit(req_type_id)
tablespace pmc_indx pctfree 0
/
create bitmap index mvreq_stat_on_audit_st_id_bmp on mv_req_stat_on_audit(state_id)
tablespace pmc_indx pctfree 0
/
analyze table mv_req_stat_on_audit estimate statistics
/
analyze table mv_req_stat_on_audit estimate statistics for all indexes
/
/*=====*/
/* View: mv_task_actual_vs_planned */
/*=====*/
create MATERIALIZED view mv_task_actual_vs_planned tablespace pmc_data
build immediate
refresh
  complete
  start with sysdate
  next trunc(sysdate,'dd')+1
as select distinct
      trunc(nvl(p.time_stamp,a.time_stamp),'d') + 7 time_stamp,
      nvl(p.value,0) - nvl(a.value,0) diff_value,
      nvl(p.value,0) planned_value,
      sum(nvl(p.value,0)) over (partition by trunc(nvl(p.time_stamp,a.time_stamp),'d')) total_planned_value_by_week,
      nvl(a.value,0) actual_value,
      nvl(p.project_id,a.project_id) project_id,
      nvl(nvl(p.category_id,a.category_id),0) category_id,
      nvl(nvl(p.item_type_id,a.item_type_id),0) item_type_id
from
      (select count('x') value,
            trunc(rt.actual_complete_date,'d') time_stamp,
            rt.project_id,
            nvl(ri.category_id, 0) category_id,
            decode(ri.item_type_id,32,0,ri.item_type_id) item_type_id
from
      r_task rt,
      r_item ri
where
      rt.task_id = ri.item_id and
      ((trunc(rt.planned_complete_date,'dd')-trunc(rt.actual_complete_date,'dd')) >= 0 or rt.planned_complete_date is null) and not
      rt.actual_complete_date is null) and
      not (rt.planned_complete_date is null and rt.actual_complete_date is null)
group by
      trunc(rt.actual_complete_date,'d'),
      nvl(ri.category_id, 0),
      rt.project_id,
      decode(ri.item_type_id,32,0,ri.item_type_id)) a,
      (
      select count('x') value,
            trunc(nvl(planned_complete_date,actual_complete_date),'d') time_stamp,
            project_id,
            item_type_id,
            nvl(category_id,0) category_id
from
      r_task rt,
      r_item ri
where ri.item_id = rt.task_id and not (rt.actual_complete_date is null and rt.planned_complete_date is null)
group by
      trunc(nvl(planned_complete_date,actual_complete_date),'d'), project_id, item_type_id, category_id) p
where
a.time_stamp(+) = p.time_stamp and
a.project_id(+) = p.project_id and
a.category_id(+) = p.category_id and
a.item_type_id(+) = p.item_type_id
/
create index mvtask_act_pln_ts_btree on mv_task_actual_vs_planned(time_stamp, project_id) tablespace pmc_indx pctfree 0
/
create bitmap index mvtask_act_pln_prj_id_bmp on mv_task_actual_vs_planned(project_id) tablespace pmc_indx pctfree 0
/
create bitmap index mvtask_act_pln_cat_id_bmp on mv_task_actual_vs_planned(category_id) tablespace pmc_indx pctfree 0
/
create bitmap index mvtask_act_pln_it_id_bmp on mv_task_actual_vs_planned(item_type_id) tablespace pmc_indx pctfree 0
/
analyze table mv_task_actual_vs_planned estimate statistics
/
analyze table mv_task_actual_vs_planned estimate statistics for all indexes

```

```
/
/*=====*/
/* View: mv_week_grid */
/*=====*/
create MATERIALIZED view mv_week_grid tablespace pmc_data
build immediate
refresh
  complete
  start with sysdate
  next trunc(sysdate,'dd')+1
as
select distinct
  trunc(timestamp,'d') timestamp
  from r_audit ra
/
create unique index mv_week_grid_ts_btree on mv_week_grid (timestamp)
tablespace pmc_indx pctfree 0
/
analyze table mv_week_grid estimate statistics
/
analyze table mv_week_grid estimate statistics for all indexes
```

4.5.3. Update PMC DB

Don't forget to make backup of the production database before updating. more or less the same.

Backup PRODUCTION database if updating.

5. unzip update_pmc_db_2.3.030.zip

6. Execute command: start_update.cmd PMC

4.6. PMC ADMIN

18:InstallPmcAdmin.html

06_pmc_install_06_admin.fm

available at \\Epgsa002\Projects\Pmc\Files\Application_PMC_Admin\Build\Released

this section uses \\epmw284\Welcome\PmcInstallers\06_PMC_Admin_3.0.003_20031120.zip

README

Installation:

1. Unpack PMC_Admin_3.0.003_20031120.zip in separate folder hereinafter referred to as <workfolder>.

2. Adjust Database connection settings in WEB-INF\classes\shell.xml.

For example:

```
<database>
  <driver>oracle.jdbc.driver.OracleDriver</driver>
  <URL>jdbc:oracle:thin:@epmst011:1521:PMC</URL>
  <user>PMC_ADMIN</user>
  <PASS>adm</PASS>
  <START_COUNT>5</START_COUNT>
  <MAX_COUNT>10</MAX_COUNT>
  <TIMEOUT>600</TIMEOUT>
</database>
```

Attention! Do not set <START_COUNT> parameter less than 5 and <MAX_COUNT> parameter less than 10.

3. Adjust settings for "Simplified Employee Registration" page in the WEB-INF\classes\runcmd.xml

```
<parameterscount>3</parameterscount>
<par1>cmd.exe</par1>
<par2>/c</par2>
<par3>c:\\Createuserinad.cmd</par3>
<maildomen>grodno.epam</maildomen>
<defaultproject>GENPRD</defaultproject>
<defaultprojectpart>Member</defaultprojectpart>
```

4. Adjust DbgOut service settings in WEB-INF\classes\dbgout.props.

Recommended <trace level>;<log level> values for all debug sources during testing are the following:

```
...
admin.dbgout.source.MISC=4;4;Miscellaneous
admin.dbgout.source.DB=4;4;Data access
admin.dbgout.source.BIND=3;3;Data binding
admin.dbgout.source.CONN=3;3;Data connections
admin.dbgout.source.JSP=4;4;JSP Pages
admin.dbgout.source.JBEAN=4;4;Java beans
admin.dbgout.source.USER=4;4;User
admin.dbgout.source.SHLL=4;4;Shell
admin.dbgout.source.CRON=4;4;CRON
admin.dbgout.source.SVLT=4;4;Servlets
...
```

5. Adjust welcome message template settings in WEB-INF\classes\props.xml.

ATTENTION! Do not change, or delete text, closed in %% symbols, such as "%login%" or "%user_name%" and others.

6. Run upwar.cmd (to update the file "shell.xml" in pmc_admin.war).

7. Delete previous "pmc_admin.war" file (if exists) in <Tomcat>\webapps\.

8. Delete folder (if exists) "pmc_admin" in <Tomcat>\webapps\.

9. Deploy (copy) pmc_admin.war to <Tomcat>\webapps\.

10. Clear folder <Tomcat>\work\.

11. Check up servlet mapping for Apache in mod_jk.conf. Actual state is:

```
JkMount /pmc_admin/.jsp ajp13
JkMount /pmc_admin/upload ajp13
JkMount /pmc_admin/logon ajp13
```

12. Deploy Oracle JDBC driver. For this copy the file

<Oracle home>\jdbc\lib\classes12.jar (maybe *.zip)

to one of the following locations:

- <Java home>\jre\lib\ext\classes12.jar

or

- <Tomcat dir>\lib\apps\classes12.jar

First location is preferred if all applications in the JDK will use the same

Oracle JDBC driver.

13. Create file "apps-pmc_admin.xml" in the folder <Tomcat>\conf\.

Simple content of this file is:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<webapps>
  <Context path="/pmc_admin"
    docBase="webapps/pmc_admin"
    reloadable="false"
    trusted="false" >
  </Context>
</webapps>
```

This section describes installation of PMC Admin:

- [4.6.1. Config / deploy pmc_admin.war \(page 74\)](#)
- [4.6.2. ?? Config servlet mapping \(mod_jk.conf\) \(page 76\)](#)
- [4.6.3. classes12.jar \(page 78\)](#)
- [4.6.4. ?? apps-pmc_admin.xml \(page 79\)](#)
- [4.6.6. Login \(page 81\)](#)

4.6.1. Config / deploy pmc_admin.war

This section describes:

- 4.6.1.1. Unzip PMC_Admin_xxx.zip (page 74)
- 4.6.1.2. shell.xml (page 74)
- 4.6.1.3. runcmd.xml (page 74)
- 4.6.1.4. dbgout.props (page 74)
- 4.6.1.5. props.xml (page 75)
- 4.6.1.6. ?? acwe.xml (page 75)
- 4.6.1.7. Update WAR (updwar.cmd) (page 75)
- 4.6.1.8. deploy pmc_admin.war (page 75)
- 4.6.1.9. ?? Install hotfixes (page 75)

4.6.1.1. Unzip PMC_Admin_xxx.zip

7. Unpack PMC_Admin_xxx.zip in separate folder hereinafter referred to as <workfolder>.

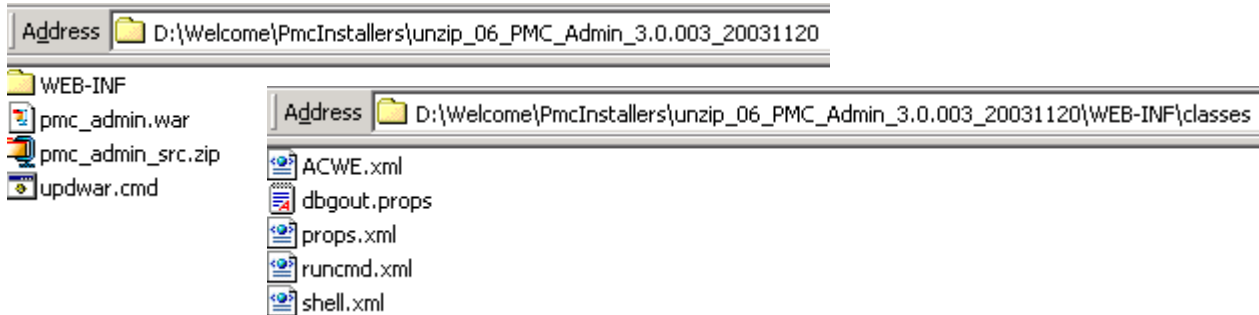


Figure 37. xxx

4.6.1.2. shell.xml

Config DB connect

8. Adjust Database connection settings in WEB-INF/classes/shell.xml. For example:

```
<database>
<driver>oracle.jdbc.driver.OracleDriver</driver>

<URL>jdbc:oracle:thin:@(description=(address=(host=EPMW284)(protocol=tcp)(port=1521))(connect_data=(sid=PMC)))</URL>
<user>PMC_ADMIN</user>
<PASS>adm</PASS>
<START_COUNT>3</START_COUNT>
<MAX_COUNT>10</MAX_COUNT>
<TIMEOUT>5</TIMEOUT>
</database>
```

4.6.1.3. runcmd.xml

9. xxx

```
<props>
<parameterscount>3</parameterscount>
<par1>cmd.exe</par1>
<par2>/c</par2>
<par3>c:\Createuserinad.cmd</par3>
<maildomen>epam.com</maildomen>
<defaultproject>GENPRD</defaultproject>
<defaultprojectid>313937192</defaultprojectid>
<defaultprojectpart>Member</defaultprojectpart>
<defaultprojectpartid>272357</defaultprojectpartid>
</props>
```

4.6.1.4. dbgout.props

10. config service

```
http-server.dbgout.format.enable=true
http-server.dbgout.log.append=false
http-server.dbgout.log.enable=true
http-server.dbgout.trace.enable=true
http-server.dbgout.simplelog.enable=true
http-server.dbgout.maillog.enable=false
http-server.dbgout.log.filename=c:/logs/pmc_admin.log
#maximum file size (e.g. 1GB, 5MB, 100KB)
http-server.dbgout.log.filesize=5MB
http-server.dbgout.log.filescount=5
```

```
#http-server.dbgout.log.mailhost=epgsd002
#http-server.dbgout.log.mailsubject=Super Error
#http-server.dbgout.log.mailto=Aliaksandr_yuzafovich@grodno.epam
#http-server.dbgout.log.mailfrom=Aliaksandr_yuzafovich@grodno.epam
```

4.6.1.5. props.xml

11. config message template

12. Adjust welcome message template settings in WEB-INF\classes\props.xml.

ATTENTION! Do not change, or delete text, closed in %% symbols, such as "%login%" or "%user_name%" and others.

```
<props>
<pmc_server>http://epmw284/pmc</pmc_server>
<pmc_server_login>http://%login%:%password%@epmw284/pmc/modules/workplace/home</
  pmc_server_login>
<help_desk_mail>help_desk@epam.com</help_desk_mail>
<welcome_subject>Your EPAM PMC login details (%pmc_server%)</welcome_subject>
<welcome_body>
<![CDATA[
<HTML><BODY style="font-size:10pt;font-family:Tahoma,sans-serif">
Welcome, %user_name%!
<BR><BR>Your EPAM PMC login details are below:<BR><BR>Login:&nbsp;%login%<BR>Password:&nbsp;%password%
<BR><BR><A href=%pmc_server_login%>%pmc_server_login%</A>
<BR><BR>You are the member of the following projects in this PMC:<BR>%projects%
<BR><BR>Please, change this password at first login to PMC!
<BR><BR>In case you have any problems please refer to <A HREF=mailto:%helpdesk_mail%>%helpdesk_mail%</A>
<BR><BR><FONT color="gray">This message was auto generated by PMC software on
<A href=%pmc_server%>%pmc_server%</A></FONT>
</BODY></HTML>
]]>
</welcome_body>
<repl_can_start>no</repl_can_start>
<repl_root_url>http://host:port/</repl_root_url>
</props>
```

4.6.1.6. ?? acwe.xml

access control workflow engine

13. Adjust ACWE (Access Control Workflow Engine) settings in WEB-INF\classes\ACWE.xml.

4.6.1.7. Update WAR (updwar.cmd)

14. Run updwar.cmd.

4.6.1.8. deploy pmc_admin.war

15. 15. Deploy (copy) <workfolder>\<app name>.war to TomCat webapps dir.

The <app name> equals "pmc" by default.

4.6.1.9. ?? Install hotfixes

4.6.2. ?? Config servlet mapping (mod_jk.conf)

16. 16. Check up servlet mapping for Apache in mod_jk.conf. Actual state is:

```
JkMount /pmc_admin/*.jsp ajp13
JkMount /pmc_admin/upload ajp13
JkMount /pmc_admin/logon ajp13
D:\Tomcat_4.1.2.4\conf\jk\mod_jk.conf

#
# The following line instructs Apache to load the jk module
#
LoadModule jk_module modules/mod_jk.dll
<IfModule mod_jk.c>
JkWorkersFile "D:/Tomcat_4.1.2.4/conf/jk/workers.properties"
JkLogFile "D:/Tomcat_4.1.2.4/logs/mod_jk.log"
#
# Log level to be used by mod_jk
#
JkLogLevel error
</IfModule>
#####
# SSL configuration #
#
# By default mod_jk is configured to collect SSL information from
# the apache environment and send it to the Tomcat workers. The
# problem is that there are many SSL solutions for Apache and as
# a result the environment variable names may change.
#
# The following (commented out) JK related SSL configuration
# can be used to customize mod_jk's SSL behaviour.
#
# Should mod_jk send SSL information to Tomact (default is On)
#JkExtractSSL On
#
# What is the indicator for SSL (default is HTTPS)
#JkHTTPSIndicator HTTPS
#
# What is the indicator for SSL session (default is SSL_SESSION_ID)
#JkSESSIONIndicator SSL_SESSION_ID
#
# What is the indicator for client SSL cipher suit (default is SSL_CIPHER)
#JkCIPHERIndicator SSL_CIPHER
#
# What is the indicator for the client SSL certificated (default is SSL_CLIENT_CERT)
#JkCERTSIndicator SSL_CLIENT_CERT
#
#
#####
# Configuration for the /pmc, /pmc_admin
# contexts starts (HTTPS).
#####
<VirtualHost epmsa006.minsk.epam.com:80>
#SSLEngine Off
#mod_gzip on Yes
Alias /pmc "D:/Tomcat_4.1.2.4/webapps/pmc"
<Directory "D:/Tomcat_4.1.2.4/webapps/pmc">
Options Indexes FollowSymLinks
</Directory>
Alias /pmc_admin "D:/Tomcat_4.1.2.4/webapps/pmc_admin"
<Directory "D:/Tomcat_4.1.2.4/webapps/pmc_admin">
Options Indexes FollowSymLinks
</Directory>
Alias /oms "D:/Tomcat_4.1.2.4/webapps/oms"
<Directory "D:/Tomcat_4.1.2.4/webapps/oms">
Options Indexes FollowSymLinks
</Directory>
JkMount /pmc/auth ajp13
JkMount /pmc/modules/* ajp13
JkMount /pmc/redirect/* ajp13
JkMount /pmc/attachment/* ajp13
JkMount /pmc/export/* ajp13
JkMount /pmc/logon/* ajp13
JkMount /pmc/icons/* ajp13
JkMount /pmc/zero/* ajp13
JkMount /pmc/js/ace/Shell.js ajp13
JkMount /pmc/*.jsp ajp13
JkMount /pmc/QBTimeExport/* ajp13
JkMount /pmc/MSProject/* ajp13
JkMount /pmc/MSConnector ajp13
JkMount /pmc/res/* ajp13
JkMount /pmc/js/res/* ajp13
JkMount /pmc/xmldata/* ajp13
JkMount /pmc/QBExpenseExport/* ajp13
JkMount /pmc/app/* ajp13
JkMount /pmc/resources/* ajp13
JkMount /pmc_admin/*.jsp ajp13
JkMount /pmc_admin/upload ajp13
JkMount /pmc_admin/logon ajp13
JkMount /oms/*.jsp ajp13
JkMount /oms/res/* ajp13
JkMount /oms/localize ajp13
JkMount /oms/m_pg_progress ajp13
JkMount /oms/m_sys_showreport ajp13
JkMount /oms/Funnel ajp13
JkMount /oms/m_GifEncoder ajp13
JkMount /oms/m_sys_openpopupwindow ajp13
JkMount /oms/m_pg_navigation.html ajp13
JkMount /oms/m_sys_appframe_toolbarmaker ajp13
JkMount /oms/m_sys_appframe_shortcutbar ajp13
JkMount /oms/m_sys_topframe ajp13
JkMount /oms/mainframe ajp13
JkMount /oms/m_sys_bottomframe ajp13
JkMount /oms/m_sys_appframe_shortcutbar_page ajp13
JkMount /oms/m_sys_top_shortcutbar ajp13
JkMount /oms/m_sys_showCustomDialog ajp13
JkMount /oms/m_sys_getDBUpdates ajp13
JkMount /oms/getFileAttach/* ajp13
JkMount /esr/init ajp13
JkMount /esr/show ajp13
JkMount /esr/commandshandler ajp13
JkMount /esr/refresh ajp13
```

```
JkMount /esr/pgRVReport.xls ajp13
JkMount /esr/chart.jpg ajp13
JkMount /esr/*.jsp ajp13
JkMount /esr/*.html ajp13
JkMount /esr/scripts/* ajp13
JkMount /esr/styles/* ajp13
JkMount /esr/help/* ajp13
JkMount /esr/images/* ajp13
# The following line prohibits users from directly accessing WEB-INF
#
<Location "/pmc/WEB-INF/">
  AllowOverride None
  deny from all
</Location>
<Location "/pmc_admin/WEB-INF/">
  AllowOverride None
  deny from all
</Location>
<Location "/oms/WEB-INF/">
  AllowOverride None
  deny from all
</Location>
# Use Directory too. On Windows, Location doesn't work unless case matches
#
<Directory "D:/Tomcat_4.1.2.4/webapps/pmc/WEB-INF/">
  AllowOverride None
  deny from all
</Directory>
<Directory "D:/Tomcat_4.1.2.4/webapps/pmc_admin/WEB-INF/">
  AllowOverride None
  deny from all
</Directory>
<Directory "D:/Tomcat_4.1.2.4/webapps/oms/WEB-INF/">
  AllowOverride None
  deny from all
</Directory>
# The following line prohibits users from directly accessing META-INF
#
</VirtualHost>
```

4.6.3. classes12.jar

D:\oracle\ora92\jdbc\lib / D:\Tomcat_4.1.2.4\shared\lib

17. 17. Deploy Oracle JDBC driver. For this copy the file

<Oracle home>\jdbc\lib\classes12.jar (maybe *.zip)

to one of the following locations:

<Java home>\jre\lib\ext\classes12.jar (preferred if all applications in the JDK will use the same Oracle JDBC driver).

<Tomcat dir>\lib\apps\classes12.jar

4.6.4. ?? apps-pmc_admin.xml

D:\Tomcat_4.1x\conf\apps-pmc_admin.xml

```
<?xml version="1.0" encoding="ISO-8859-1"?>
  <webapps>
    <Context path="/pmc_admin"
      docBase="webapps/pmc_admin"
      reloadable="false"
      trusted="false" >
    </Context>
  </webapps>
```

4.6.5. Fix password

D:\Welcome\PmcInstallers\zero

```
cfcd208495d565ef66e7dff9f98764da
```

in oracle execute

```
update m_user set password='cfcd208495d565ef66e7dff9f98764da' where  
Upper(login_name)='ROOT';
```

COMMIT!!!!!!

```
SQL> update m_user set password='cfcd208495d565ef66e7dff9f98764da' where Upper(login_name)='ROOT';
```

```
1 row updated.
```

```
SQL> commit;
```

```
Commit complete.
```

```
SQL> |
```

Figure 38. xxx

4.6.6. Login

18. Open the admin console

```
http://localhost/pmc_admin
Username root
Password 0
```

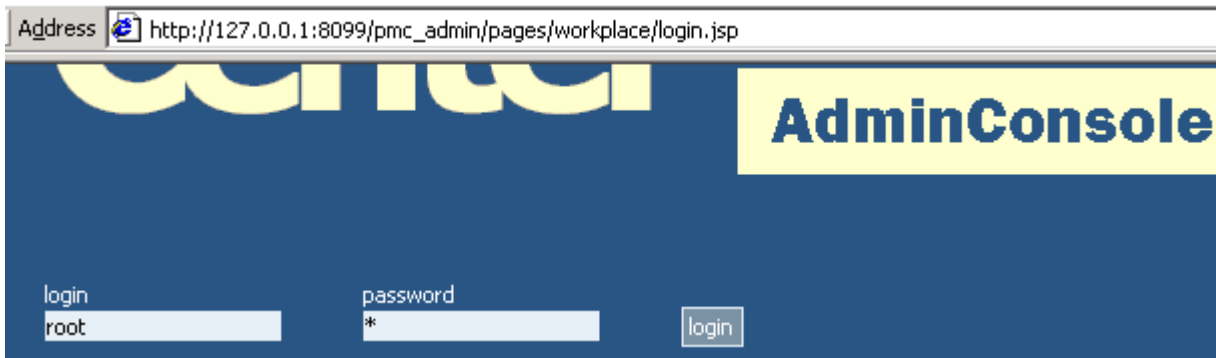


Figure 39. pmc admin login screen

19. Click login. appears:

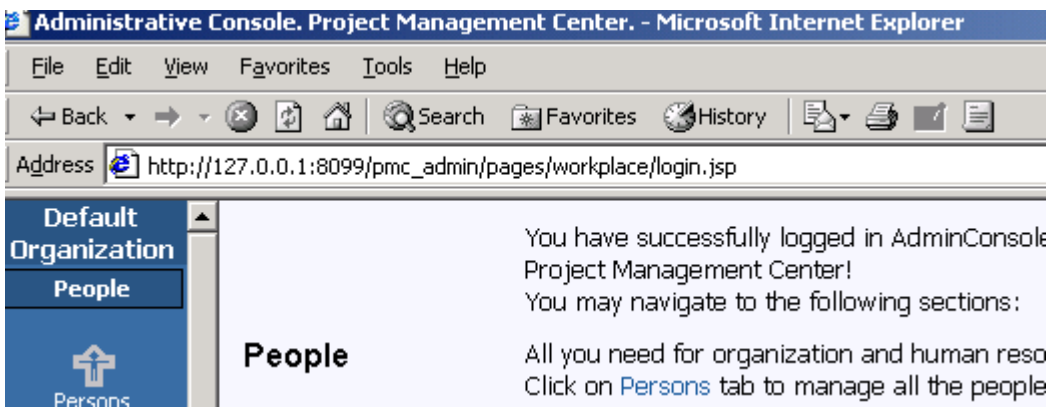


Figure 40. pmc admin initial screen

4.7. PMC CLIENT

19:InstallPmcClient.html

06_pmc_install_07_client.fm

available at \\Epgsa002\Projects\Pmc\Files\Application_PMC\Build\Released

this section uses \\epmw284\Welcome\PmcInstallers\07_PMC_3.0.008.1_20031123.zip

README

PART 1. Application deployment.

NOTE: Please, read comments inside of configuration files - all parameters are thoroughly commented. Please, don't modify parameters if you do not know exactly their meaning and comments do not help.

1. Unpack PMC_3.0.008.1_20031123.zip in separate folder hereinafter referred to as <workfolder>.
2. Adjust Database connection settings in
 - *) change content of the "<url>" tag in <workfolder>\WEB-INF\classes\data.xml
 - *) change content of the "<attribute id='url'>" tag in <workfolder>\WEB-INF\classes\com\epam\pmc\d_oracle.xml.
 See PART 3 for details.
3. Adjust application settings in <workfolder>\WEB-INF\classes\shell.xml. Also, see PART 5 for some other configuration files description.
4. Adjust TSA settings in <workfolder>\WEB-INF\classes\trust.xml. See PART 4 for details.
5. Adjust debug logging settings in the file <workfolder>\WEB-INF\classes\dbgout.props;
6. Run updwar.cmd
7. Delete Tomcat's work folder for PMC application if exists.
8. Deploy (copy) <workfolder>\<app name>.war to TomCat webapps dir. The <app name> equals "pmc" by default.

PART 2. Apache configuration.

1. Check up servlet mapping for Apache in mod_jk.conf. Actual state is:

```
Alias /<app name> "<Tomcat dir>/webapps/<app name>"
<Directory "<Tomcat dir>/webapps/<app name>"
  Options Indexes FollowSymLinks
</Directory>
JkMount /<app name>/auth ajp13
JkMount /<app name>/modules/* ajp13
JkMount /<app name>/redirect/* ajp13
JkMount /<app name>/attachment/* ajp13
JkMount /<app name>/export/* ajp13
JkMount /<app name>/logon/* ajp13
JkMount /<app name>/icons/* ajp13
JkMount /<app name>/zero/* ajp13
JkMount /<app name>/js/ace/Shell.js ajp13
JkMount /<app name>/* jsp ajp13
JkMount /<app name>/QBTimeExport/* ajp13
JkMount /<app name>/MSProject/* ajp13
JkMount /<app name>/MSConnector/* ajp13
JkMount /<app name>/QBExpenseExport/* ajp13
JkMount /<app name>/WeeklyStatusReport/* ajp13
JkMount /<app name>/res/* ajp13
JkMount /<app name>/res1/* ajp13
JkMount /<app name>/js/res/* ajp13
JkMount /<app name>/js/res1/* ajp13
JkMount /<app name>/xmldata/* ajp13
JkMount /<app name>/app/* ajp13
JkMount /<app name>/resources/* ajp13
```

The <app name> equals "pmc" by default.

PART 3. Database related settings.

1. Deploy Oracle JDBC driver. For this copy file <Oracle home>\jdbc\lib\ojdbc14.jar to <Java home>\jre\lib\ext.
2. If order to use OCI driver then change parameter HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME0\NLS_LANG in registry on the application server machine. Set last part of it (after dot) to "UTF8". Example: "AMERICAN_CIS.UTF8".
3. Set appropriate time zone on Oracle server machine. Under Windows NT open "Date/Time Properties" applet and:
 - select "(GMT) Greenweech Mean Time ..." time zone;
 - clear checkbox "Automatically adjust clock for daylight saving changes".
 Refer to OS documentation under other operating systems.
4. You may want to modify default NLS_TERRITORY value used in all connections. For this enter appropriate country ISO code into this tag <country>GB</country> This default value sets week start to Monday.

PART 4. Security related settings.

PMC supports the following security related features:

- secure user login through HTTPS.
- Trusted Security Authentication (TSA) between multiple servers.

For this you need to configure appropriate virtual hosts in Apache: configure hosts for HTTPS and install certificates.

There is a possibility to turn secure logon on/off. Use the "secure_login" property the shell.xml file.

Rest of part 4 can be skipped if you don't use secure login and TSA.

PART 4.1. SSL configuration in JDK and Apache.

This part is required only for:

- TSA;
- accessing PMC through HTTPS on Tomcat only without Apache.

I.e. you can skip this part at all if you are running PMC in Tomcat+Apache environment and aren't using TSA.

1. SSL tuning for using Trust Security Authorization.

1.1. In "jre/lib/security/java.security" file following lines must present:
`security.provider.3=com.sun.net.ssl.internal.ssl.Provider`

1.2. Add SSL certificates of each server to SSL trusted certificates store of all other servers participating in TSA. For this on each server run:
`cd /<JAVA_HOME>/jre/lib/security`
`keytool -import -keystore cacerts -alias <server name> -file <certificate file>`
 Where <server name> and <certificate file> must be taken from all other servers in series.

2. SSL tuning in Apache.

Describe 2 virtual hosts for HTTP and HTTPS in <Tomcat home>conf\mod_jk.conf file.

3. SSL tuning for Tomcat only configuration.

This configuration is deprecated and can be user ONLY for development.

3.1. Execute this from command line:

```

%JAVA_HOME%\bin\keytool -genkey -alias tomcat -keyalg RSA
    
```

For certificate generation:

- enter password "changeit";
- fill other attributes with some fake information.

3.2. Open file <Tomcat home>\conf\server.xml. Go to section Server\ContextManager.

```

Uncomment these lines:
<Http10Connector
  port="8443"
  secure="true"
/>>
    
```

PART 4.2. Trust security authorization (TSA) configuration.

Settings for Trust Security Authorization (TSA) engine are placed in file
 <workfolder>\WEB-INF\classes\trust.xml

1. Set actual values for hostname and port for default server.
2. Add/remove additional servers for launching other applications (Admin Console, PMC Reporter, EWW) from PMC taskbar. See comments in trust.xml for details.
3. Ensure that "ProjectList.required_modules" parameter in properties.xml contains what you really want.

=====

PART 5. Miscellaneous settings.

=====

1. Build module settings are placed in the file

```

<Tomcat dir>\Tomcat\webapps\<app name>\WEB-INF\classes\com\epam\pmc\build\properties.xml
    
```

Application URL for build release notification MUST be changed to a real value:

```

<property id="server.name">http://epgsd002/pmc</property>
    
```

Format mask for build number validation is placed in:

```

<property id="build.number.mask">^%d+(%.%d+)*(%.%d+)$</property>
    
```

See comments inside properties.xml for details.

This section describes:

- [4.7.1. config/deploy pmc.war \(page 85\)](#)
- [4.7.2. ?? install hotfixes \(page 89\)](#)
- [4.7.3. ?? Config Apache \(mod_jk.conf\) \(page 90\)](#)
- [4.7.4. ?? Config database \(page 91\)](#)
- [4.7.5. ?? Config SSL \(not required in our situation\) \(page 92\)](#)
- [4.7.6. ?? Config TSA \(trust.xml\) \(page 93\)](#)
- [4.7.7. ?? Config build \(properties.xml\) \(page 95\)](#)
- [4.7.8. Login \(page 96\)](#)

4.7.1. config/deploy pmc.war

- 4.7.1.1. unzip PMC_xxx.zip (page 85)
- 4.7.1.2. data.xml (page 85)
- 4.7.1.3. d_oracle.xml (page 85)
- 4.7.1.4. shell.xml (page 86)
- 4.7.1.5. dbgout.props (page 87)
- 4.7.1.6. ?? trust.xml (page 88)
- 4.7.1.7. ?? application.xml (page 88)
- 4.7.1.8. run updwar.cmd (page 88)
- 4.7.1.9. deploy pmc.war (page 88)

4.7.1.1. unzip PMC_xxx.zip

20. Unpack PMC_2.3.034_20030909.zip into <workfolder> (any folder).

4.7.1.2. data.xml

config db connect

21. Adjust Database connection settings. change content of the “<url>” tag in

```
<?xml version="1.0" encoding="UTF-8"?>
<datasource-list>
<!-- PMC_Oracle through [OCI] driver -->
<datasource id="pmc" class="com.epam.ace2.db.DataSource_Oracle" default="true">
<!-- database URL -->

    <url>jdbc:oracle:oci:@(description=(address=(host=epmw284)(protocol=tcp)(port=1521))(co
nnect_data=(sid=PMC)))/</url>
<!-- login -->
<user>PMC</user>
<password>sql</password>
<!-- connection pool tuning -->
<!-- start size of pool -->
<min_limit>1</min_limit>
<!-- "pool over" when size equals max_limit -->
<max_limit>30</max_limit>
<!-- "pool over" reaction: 1 - no max limit; 2 - wait for free one; 3 - return null; -->
<pooling_sheme>3</pooling_sheme>
<!-- check version of database -->
<db-version>3.0.007</db-version>
<chk_version_statement>{? = call PMC_SYSTEM.PMC_COMMON.GET_VERSION()}</chk_version_statement>
<!-- connection life-time -->
<connection_init_statement>
BEGIN DBMS_SESSION.RESET_PACKAGE; PMC_SYSTEM.PMC_COMMON.CLEAR_CONTEXT; END;
</connection_init_statement>
<user_init_statement>
{call PMC_SYSTEM.PMC_COMMON.SET_USER_ID(?, ?, 'U')}
<parameter_names>
<parameter_name>USER_ID</parameter_name>
<parameter_name>LANG_ID</parameter_name>
</parameter_names>
</user_init_statement>
<commit_statement>{call PMC_SYSTEM.PMC_COMMON.PMC_COMMIT(1)}</commit_statement>
<rollback_statement>{call PMC_SYSTEM.PMC_COMMON.PMC_ROLLBACK(1)}</rollback_statement>
<!-- other features -->
<timeout>120</timeout>
<DEFAULT_ROW_PREFETCH>100</DEFAULT_ROW_PREFETCH>
<!-- NLS_TERRITORY initialization. Default JVM locale will be altered.
If empty then default locale isn't changed. -->
<country>GB</country>
</datasource>
<!-- PMC_Oracle through [thin] driver
<datasource id="pmc_thin" class="com.epam.ace2.db.DataSource_Oracle">
<url>jdbc:oracle:thin:@EPGSD001:1521:PMC</url>
<user>PMC</user>
<password>sql</password>
<min_limit>1</min_limit>
<max_limit>10</max_limit>
<timeout>1</timeout>
<pooling_sheme>1</pooling_sheme>
<DEFAULT_ROW_PREFETCH>100</DEFAULT_ROW_PREFETCH>
<db-version>PMC-010608-004.0025.001</db-version>
<chk_version_statement>{? = call PMC_SYSTEM.PMC_COMMON.GET_VERSION()}</chk_version_statement>
<init_statement>{call PMC_SYSTEM.PMC_COMMON.SET_USER_ID(?)}</init_statement>
<commit_statement>{call PMC_SYSTEM.PMC_COMMON.PMC_COMMIT(1)}</commit_statement>
<rollback_statement>{call PMC_SYSTEM.PMC_COMMON.PMC_ROLLBACK(1)}</rollback_statement>
</datasource>
<datasource id="mssql" class="com.epam.ace.db2.DataSource_EPDA">
<driver>com.firepond.jdbc.mssql7.Driver</driver>
<database>jdbc:firepond:mssql7?host=EPGSD001 &amp; database=HT_FPDataPMS &amp; nullPlusNonNullIsNull=false</
database>
<user>FSTHIN_READ</user>
<password>FSTHIN_READ</password>
<min_limit>1</min_limit>
<max_limit>10</max_limit>
<timeout>1</timeout>
</datasource>
-->
</datasource-list>
```

4.7.1.3. d_oracle.xml

config db connect

WEB-INF\classes\com\epam\pmc

22. Adjust Database connection settings. change content of the “<attribute id="url">” tag in

```

<?xml version="1.0" encoding="UTF-8"?>
<unit id="oracle" class="com.epam.atom.sql.ext.DataSource_Oracle">
<attributes>
<attribute
  id="url">jdbc:oracle:oci:@(description=(address=(host=epmw284)(protocol=tcp)(port=1521)
  )(connect_data=(sid=PMC)))</attribute>
<attribute id="login">PMC</attribute>
<attribute id="password">sql</attribute>
<!--
<attribute
  id="url">jdbc:oracle:oci:@(description=(address=(host=EPGSD001)(protocol=tcp)(port=1521))(connect_data=(sid=P
  MC)))</attribute>
<attribute id="login">PMC_SYSTEM</attribute>
<attribute id="password">manager</attribute>
-->
<!--attribute id="login">PMC_PORTAL</attribute>
<attribute id="password">FKGLSDSDLJF</attribute-->
<!-- connection pool tuning -->
<attribute id="min_limit">1</attribute>
<attribute id="max_limit">10</attribute>
<attribute id="pooling_sheme">2</attribute><!-- "pool over" reaction: 1 - no max limit; 2- wait for free one; 3 -
  return null; -->
<!-- checking for version of database -->
<attribute id="db-version">PMC-010608-004.0027.001</attribute>
<!-- other driver-specific features -->
<attribute id="timeout">1</attribute>
<attribute id="row_prefetch">100</attribute>
</attributes>
<units default_class="com.epam.atom.app.EntitySQLCall">
<unit id="GET_VERSION" name="GET_VERSION">
<sql>{ ? = call PMC_SYSTEM.PMC_COMMON.GET_VERSION() }</sql>
<parameters>
<parameter id="VERSION" type="NUMERIC" status="OUT"/>
</parameters>
</unit>
<unit id="CONN_CLEAR" name="ConnectionReset">
<sql>BEGIN dbms_session.reset_package; pmc_system.pmc_common.clear_context; END;</sql>
</unit>
<unit id="CONN_INIT" name="ConnectionInit">
<sql>{ call PMC_SYSTEM.PMC_COMMON.SET_USER_ID(?, ?, 'U') }</sql>
<parameters>
<parameter id="USER_ID" type="NUMERIC"/>
<parameter id="LANG_ID" type="NUMERIC"/>
</parameters>
</unit>
<unit id="CONN_COMMIT" name="ConnectionCommit">
<sql>{ call PMC_SYSTEM.PMC_COMMON.PMC_COMMIT(1) }</sql>
</unit>
<unit id="CONN_ROLLBACK" name="ConnectionRollback">
<sql>{ call PMC_SYSTEM.PMC_COMMON.PMC_ROLLBACK(1) }</sql>
</unit>
</units>
</unit>

```

4.7.1.4. shell.xml

config application

23. Adjust application settings in

```

<?xml version="1.0" encoding="UTF-8"?>
<web-ace>
<!--
ATTENTION: put text with special characters inside <![CDATA[text goes here]]> tag !!!
-->
<attributes>
<!-- Global -->
<attribute id="app_short_name">PMC</attribute>
<attribute id="app_long_name">Project Management Center</attribute>
<attribute id="app_version">3.0.008.1</attribute>
<attribute id="user_class">com.epam.bl.user.AppUser</attribute>
<!--
User type used by application to log in PMC_SYSTEM DB.
-->
<attribute id="db_user_type">U</attribute>
<!-- in milliseconds -->
<attribute id="alive_session_interval">60000</attribute>
<!--
E-mail address of PMC administrator, used on login and summary pages
if empty, there are no "contact administrator" links anywhere.
-->
<attribute id="app_admin">Terry_Taylor@epam.com</attribute>
<!--
true or false if user must authorize via secure protocol.
-->
<attribute id="secure_login">>false</attribute>
<!--
Row count in "data portion" on list pages,
if zero - there is no "data portion" navigation buttons.
Strongly recommended leave it in predefined value!
-->
<attribute id="list.sqlRowCount">100</attribute>
<attribute id="quickbooks.company.createtime">1006173620</attribute>
<!-- Attachments upload/download settings. -->
<!--
Maximum value for multipart request (in Mb).
Optional. Default 10 Mb.
Defines maximal allowed cumulative request size
(including all uploaded files + HTML form content)
when files are uploaded to server.
Usecases in PMC: item attachments, documents.
-->
<attribute id="http.max.request.size">2</attribute>
<!--
Max count simultaneously downloaded attachments. (Default - 30)
-->
<attribute id="download.max.connection.limit">30</attribute>
<!--
If:
- this parameter is true and

```

```

- attachment type not enumerated in value of
  'noncompressing.file.types' parameter
then attachment body will be compressed before storing it into DB.
-->
<attribute id="support.compression">true</attribute>
<!--
If:
- this parameter is true and
- attachment is compressed and
- client supports content compression
then attachments will be send to client in compressed state.
Default value is true.
-->
<attribute id="client.compression">true</attribute>
<!--
Attachments of this types will be stored in DB without compression.
-->
<attribute id="noncompressing.file.types">
zip;gzip;gif;tif;jpeg;arj;
</attribute>
<!-- End of attachments upload/download settings. -->
<!-- Misc -->
<!--
Specify here the list of modules which must be present on PMC taskbar.
Separate module IDs by ";".
-->
<attribute id="ProjectList.required_modules">
summary;eww;esr;ac;user_guide;whats_new_2_3_021;whats_new_2_3_015_1;getting_started
</attribute>
<!--
Specify here the list of languages supported in
PMC application and PMC_SYSTEM database.
-->
<attribute id="LookupCache.supported_languages">
1:en;2:ru;
</attribute>
</attributes>
<workplace resource="com/epam/PMC/workplace/module.xml">
<login-view>start</login-view>
<error-view>error</error-view>
</workplace>
<load-on-startup>
<!-- Ace resources -->
<class name="VersionRegistry" resource="versionregistry.xml">com.epam.ace.shell.VersionRegistry</class>
<class name="dataConnector" resource="data.xml">com.epam.ace.db.DataConnector</class>
<class resource="errors.xml">com.epam.ace.shell.GlitchList</class>
<class resource="trust.xml">com.epam.ace.http.Request</class>
<class name="Localizer" resource="com/epam/ace/res.xml">com.epam.ace.util.Localizer</class>
<class name="Localizer" resource="com/epam/ace/res_calendar.xml">com.epam.ace.util.Localizer</class>
<class name="Localizer" resource="com/epam/ace/res_actions.xml">com.epam.ace.util.Localizer</class>
<class name="Localizer" resource="com/epam/ace2/res.xml">com.epam.ace.util.Localizer</class>
<class name="ClientLocalizerStorage" resource="shell.xml">com.epam.ace.localizer.ClientLocalizerStorage</class>
<!-- bl resources -->
<class name="Localizer" resource="com/epam/bl/res.xml">com.epam.ace.util.Localizer</class>
<class name="LookupCache" resource="com/epam/bl/glossary.xml">com.epam.bl.meta.LookupCache</class>
<class name="MetaSchema" resource="com/epam/bl/db_meta.xml">com.epam.bl.meta.MetaSchema</class>
<class name="Toolbar" resource="com/epam/bl/toolbars.xml">com.epam.bl.control.toolbar.XmlToolbar</class>
<!-- PMC resources -->
<class name="Toolbar" resource="com/epam/PMC/toolbars.xml">com.epam.bl.control.toolbar.XmlToolbar</class>
<class name="Localizer" resource="com/epam/PMC/res.xml">com.epam.ace.util.Localizer</class>
<class name="LookupCache" resource="com/epam/PMC/glossary.xml">com.epam.bl.meta.LookupCache</class>
<class name="Disposer" resource="gc.xml">com.epam.ace2.shell.disposer.Disposer</class>
<class name="Scheduler" resource="schedule.xml">com.epam.ace2.shell.scheduler.SchedulerMain</class>
<class name="css" resource="com/epam/PMC/css_tokens.xml">com.epam.ace2.shell.customizer.CSSHandler</class>
<!-- Module Risk resources -->
<class name="Toolbar" resource="com/epam/PMC/risk/toolbars.xml">com.epam.bl.control.toolbar.XmlToolbar</class>
<class name="LookupCache" resource="com/epam/PMC/risk/glossary.xml">com.epam.bl.meta.LookupCache</class>
</load-on-startup>
<module-list>
<!-- System modules, invisible -->
<module resource="com/epam/bl/module.xml"/>
<!-- Main -->
<module resource="com/epam/PMC/summary/module.xml"/>
<module resource="com/epam/PMC/message/module.xml"/>
<module resource="com/epam/PMC/task/module.xml"/>
<module resource="com/epam/PMC/document/module.xml"/>
<module resource="com/epam/PMC/bug/module.xml"/>
<module resource="com/epam/PMC/build/module.xml"/>
<module resource="com/epam/PMC/requirement/module.xml"/>
<module resource="com/epam/PMC/tsup/request/module.xml"/>
<module resource="com/epam/PMC/tsup/problem/module.xml"/>
<module resource="com/epam/PMC/tsup/config/module.xml"/>
<module resource="com/epam/PMC/risk/module.xml"/>
<module resource="com/epam/PMC/issue/module.xml"/>
<module resource="com/epam/PMC/test/module.xml"/>
<!-- Info -->
<module resource="com/epam/PMC/external/project_module.xml"/>
<module resource="com/epam/PMC/external/eww_module.xml"/>
<module resource="com/epam/PMC/external/esr_module.xml"/>
<!-- Manage -->
<module resource="com/epam/PMC/group/module.xml"/>
<module resource="com/epam/PMC/subscriptions/module.xml"/>
<module resource="com/epam/PMC/external/ac_module.xml"/>
<!-- Accounting -->
<module resource="com/epam/PMC/business/tr/module.xml"/>
<module resource="com/epam/PMC/business/er/module.xml"/>
<module resource="com/epam/PMC/business/po/module.xml"/>
<module resource="com/epam/PMC/external/whats_new_module_2_3_021.xml"/>
<module resource="com/epam/PMC/external/whats_new_module_2_3_015_1.xml"/>
<module resource="com/epam/PMC/external/getting_started_module.xml"/>
<module resource="com/epam/PMC/external/user_guide_module.xml"/>
</module-list>
</web-ace>

```

4.7.1.5. dbgout.props

config log

24. Adjust debug logging settings in:

```

http-server.dbgout.format.enable=true
http-server.dbgout.log.append=false
http-server.dbgout.log.enable=true

```

```

http-server.dbgout.trace.enable=true
http-server.dbgout.simplelog.enable=true
http-server.dbgout.maillog.enable=false
http-server.dbgout.log.filename=c:/logs/pmc.log
#maximum file size (e.g. 1GB, 5MB, 100KB)
http-server.dbgout.log.filesize=5MB
http-server.dbgout.log.filescount=5
#http-server.dbgout.log.mailhost=epgsd002
#http-server.dbgout.log.mailsubject=Super Error
#http-server.dbgout.log.mailto=Aliaksandr_yuzafovich@grodno.epam
#http-server.dbgout.log.mailfrom=Aliaksandr_yuzafovich@grodno.epam
http-server.dbgout.source.MISC=3;5;Miscellaneous
http-server.dbgout.source.DB=3;6;Data access
http-server.dbgout.source.BIND=3;5;Bind
http-server.dbgout.source.PAGE=3;5;Pages
http-server.dbgout.source.SVLT=3;5;Servlets
http-server.dbgout.source.CTRL=3;5;Page Controls
http-server.dbgout.source.TAGX=3;5;Tag Extension Library
http-server.dbgout.source.SHLL=3;5;Web Application Shell
http-server.dbgout.source.USER=3;5;User context
http-server.dbgout.source.DOC=3;5;Document and DocWrapper
http-server.dbgout.source.ATOM=3;5;Atoms, Kernels etc.
http-server.dbgout.source.CRON=3;5;Cron scheduler

```

4.7.1.6. ?? trust.xml

config log

25. Adjust debug logging settings in:

```
<workfolder>\WEB-INF\classes\trust.xml.
```

26. Change the "sink" attribute of the tag

```
<logger class="" sink="c:\tomcat\logs\pmc-trust.log">
```

4.7.1.7. ?? application.xml

config log

27. Adjust debug logging settings in:

```
<workfolder>\WEB-INF\classes\com\epam\pmc\application.xml.
```

28. Change content of the tag

```
<attribute id="logfile">c:/tomcat/logs/pmc_project.log</attribute>
```

4.7.1.8. run updwar.cmd

29. Run updwar.cmd

4.7.1.9. deploy pmc.war

30. Deploy (copy) <workfolder>\<app name>.war to TomCat webapps dir.

The <app name> equals "pmc" by default.

4.7.2. ?? install hotfixes

for the current build hotfixes are not necessary ? but in general you should always install.

```
\\Epgsa002\Projects\Pmc\Files\Application_PMC\Build\Released\Archive\2.3\PMC_2.3.034_20030909.production\hotfixes
```

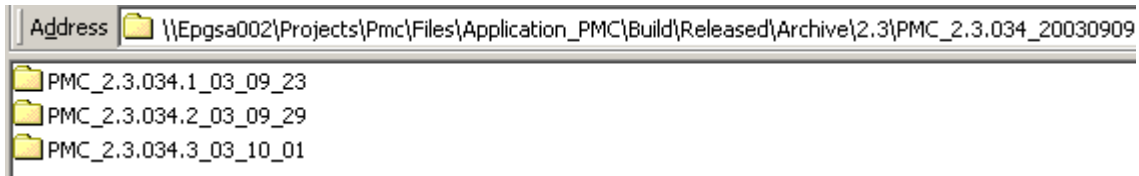


Figure 41. pmc war hotfix dirs

4.7.3. ?? Config Apache (mod_jk.conf)

The <app name> equals "pmc" by default.

31. Verify Apache servlet mappings in mod_jk.conf. Default:

```
Alias /<app name> "<Tomcat dir>/webapps/<app name>"
<Directory "<Tomcat dir>/webapps/<app name>"
Options Indexes FollowSymLinks
</Directory>
JkMount /<app name>/auth ajp13
JkMount /<app name>/modules/* ajp13
JkMount /<app name>/redirect/* ajp13
JkMount /<app name>/attachment/* ajp13
JkMount /<app name>/export/* ajp13
JkMount /<app name>/logon/* ajp13
JkMount /<app name>/icons/* ajp13
JkMount /<app name>/zero/* ajp13
JkMount /<app name>/js/ace/Shell.js ajp13
JkMount /<app name>/* .jsp ajp13
JkMount /<app name>/QBTimeExport/* ajp13
JkMount /<app name>/MSProject/* ajp13
JkMount /<app name>/MSConnector/* ajp13
JkMount /<app name>/QBExpenseExport/* ajp13
JkMount /<app name>/res/* ajp13
JkMount /<app name>/js/res/* ajp13
JkMount /<app name>/xmldata/* ajp13
JkMount /<app name>/app/* ajp13
JkMount /<app name>/resources/* ajp13
```

4.7.4. ?? Config database

4.7.4.1. change registry to utf8 for oci driver

32. To use OCI driver: Change in registry on the application server machine

```
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME0\NLS_LANG
```

Last part (after dot) to

```
UTF8
```

Example:

```
?AMERICAN_AMERICA.UTF8"
```

4.7.4.2. set time zone for oracle server

33. Set appropriate time zone on Oracle server machine. Open "Date/Time Properties" applet and:

- *select "(GMT) Greenweech Mean Time ..." time zone;
- *clear checkbox "Automatically adjust clock for daylight saving changes".

Refer to OS documentation under other operating systems.

4.7.4.3. ?? copy classes12.jar (deploy oracle jdbc driver)

34. Deploy Oracle JDBC driver: Copy

```
<Oracle home>\jdbc\lib\classes12.jar (or maybe *.zip)
```

to 1 of the following locations:

```
<Java home>\jre\lib\ext\classes12.jar
```

```
(preferred if all applications are to use the same Oracle JDBC driver)
```

```
<Tomcat dir>\lib\apps\classes12.jar
```

4.7.4.4. modify NLS_TERRITORY

35. (optional) Modify default NLS_TERRITORY value used in all connections: Enter country ISO code into tag

```
<country>GB</country>
```

By default Monday is first day of week.

4.7.5. ?? Config SSL (not required in our situation)

Part of this is not necessary when working with apache. only required when workign only with tomcat.

This part is required only for:

- TSA
- accessing PMC through HTTPS on Tomcat only without Apache.

you can skip this part at all if you are running PMC in Tomcat+Apache environment and aren't using TSA.

4.7.5.1. java.security

SSL tunng for using Trust Security Authorization.

36. In "jre/lib/security/java.security" file following lines must present:

```
security.provider.3=com.sun.net.ssl.internal.ssl.Provider
```

4.7.5.2. Add SSL certificates

37. Add SSL certificates of each server to SSL trusted certificates store of all other servers participating in TSA. For this on each server run in <JAVA_HOME>/jre/lib/security

```
keytool -import -keystore cacerts -alias <server name> -file <certificate file>
```

Where <server name> and <certificate file> must be taken from all other servers in series.

4.7.5.3. Adjust Apache SSL (modify mod_jk.conf)

SSL tuning in Apache.

38. Describe 2 virtual hosts for HTTP and HTTPS in <Tomcat home>conf/mod_jk.conf file.

4.7.5.4. Adjust Tomcat SSL (keytool)

SSL tuning for Tomcat only configuration. This configuration is deprecated and can be user ONLY for development.

39. Execute from command line

```
%JAVA_HOME%\bin\keytool -genkey -alias tomcat -keyalg RSA
```

For certificate generation:

- enter password "changeit"
- fill other attributes with some fake information

4.7.5.5. Adjust Tomcat SSL (edit server.xml)

40. In file <Tomcat home>\conf\server.xml section Server\ContextManager uncomment these lines:

```
<Http10Connector
port="8443"
secure="true"
/>
```

4.7.6. ?? Config TSA (trust.xml)

Trust Security Authorization (TSA) engine settings are specified in

```
<workfolder>\WEB-INF\classes\trust.xml
```

41. Set actual values for default server

```
hostname
port
```

42. Add/remove from PMC taskbar additional servers for launching other applications

- Admin Console
- PMC Reporter
- EWW

See comments in trust.xml for details.

D:\Tomcat_4.1.2.4\webapps\pmc\WEB-INF\classes

```
<?xml version="1.0" encoding="ISO-8859-1" ?>
- <!--
In this sample file all servers have two virtual hosts: "intranet" and "internet".
In production environment you should set appropriate
dns-name, ip, client-ip-mask parameters for internal and external virtual hosts
and delete unused servers/hosts.
Actual relationship between servers when calling them from PMC taskbar
can be altered by "type" attribute of a "view" element in module.xml files.
Possible types concerning external views:
trusted - TSA is used;
known_server - no TSA, but server entry URL is resolved correctly
for internal/external subnets using information from trust.xml;
link - "path" attribute of "view" element is ABSOLUTE URL,
trust.xml isn't used at all.
Currently only EWW2 supports TSA. Admin Console, ESR, OMS don't!
If you modify server IDs in the trust.xml file then make appropriate changes in
<app root>\WEB-INF\classes\com\epam\pmc\external\*_module.xml.
The "server_id" attribute for views described there MUST match "id" for
some <server> element in this file.
-->
- <trust>
- <logger class="" sink="c:\logs\pmc-trust.log">
<log sink="false" console="false" />
<trace sink="false" console="false" />
<audit sink="false" console="false" />
- <!--
<log sink="true" console="true" />
<trace sink="true" console="true" />
<audit sink="true" console="true" />
-->
</logger>
- <servers default="SERVER_PMC">
- <server id="SERVER_PMC">
- <virtual-hosts>
- <virtual-host id="intranet">
<dns-name>EPMW284</dns-name>
<ip>10.6.2.78</ip>
<client-ip-mask>255.0.0.0</client-ip-mask>
</virtual-host>
- <virtual-host id="internet">
<dns-name>epgw005</dns-name>
<ip>00.00.00.00</ip>
<client-ip-mask>000.000.000.000</client-ip-mask>
</virtual-host>
</virtual-hosts>
<port>80</port>
<secure-port>443</secure-port>
<app-name>pmc</app-name>
<entry-uri scheme="http">/modules/workplace/home</entry-uri>
<secure-uri>/auth</secure-uri>
</server>
- <server id="SERVER_EWW">
- <virtual-hosts>
<virtual-host id="intranet">
<dns-name>epmsa007</dns-name>
<ip>10.6.0.7</ip>
<client-ip-mask>255.0.0.0</client-ip-mask>
</virtual-host>
- <virtual-host id="internet">
<dns-name>epgsd002</dns-name>
<ip>00.00.00.00</ip>
<client-ip-mask>000.000.000.000</client-ip-mask>
</virtual-host>
</virtual-hosts>
<port>80</port>
<secure-port>443</secure-port>
<app-name>eww2</app-name>
<entry-uri scheme="http" />
<secure-uri>/auth</secure-uri>
</server>
- <server id="SERVER_AC">
- <virtual-hosts>
- <virtual-host id="intranet">
<dns-name>EPMW284</dns-name>
<ip>10.6.2.78</ip>
<client-ip-mask>255.0.0.0</client-ip-mask>
</virtual-host>
- <virtual-host id="internet">
<dns-name>epgsd002</dns-name>
<ip>00.00.00.00</ip>
<client-ip-mask>000.000.000.000</client-ip-mask>
</virtual-host>
</virtual-hosts>
<port>80</port>
<secure-port>443</secure-port>
<app-name>pmc_admin</app-name>
<entry-uri scheme="http" />
<secure-uri />
</server>
- <server id="SERVER_ESR">
- <virtual-hosts>
```

```
- <virtual-host id="intranet">
<dns-name>EPMW284</dns-name>
<ip>10.6.2.78</ip>
<client-ip-mask>255.0.0.0</client-ip-mask>
</virtual-host>
- <virtual-host id="internet">
<dns-name>epgsd002</dns-name>
<ip>00.00.00.00</ip>
<client-ip-mask>000.000.000.000</client-ip-mask>
</virtual-host>
</virtual-hosts>
<port>80</port>
<secure-port>443</secure-port>
<app-name>esr</app-name>
<entry-uri scheme="http" />
<secure-uri />
</server>
</servers>
</trust>
```

4.7.7. ?? Config build (properties.xml)

D:\Tomcat_4.1.2.4\webapps\pmc\WEB-INF\classes\com\epam\pmc\build\properties.xml

4.7.7.1. Edit ProjectList.required modules

43. Verify file properties.xml parameter "ProjectList.required_modules" is correct.

4.7.7.2. Change application url

44. Change application URL for build release notification in file

<Tomcat dir>/Tomcat/webapps/<app name>/WEB-INF/classes/com/epam/pmc/build/properties.xml
to

```
<property id="server.name">http://epgsd002/pmc</property>
```

4.7.7.3. Format mask for build # validation

45. Format mask for build number validation is placed in:

```
<property id="build.number.mask">^%d+(%.%d+)*(%.%d+)$</property>
```

See comments inside properties.xml for details.

4.7.8. Login

4.7.8.1. create user (pmc admin)

46. xxx

The image shows a 'Web Page Dialog' titled 'Add person -- Web Page Dialog'. The main dialog has a title bar with a close button and contains a form with several tabs: Personal, Employee, Children, Login, Membership, Custom fields, and Contact. The 'Personal' tab is active, showing fields for First name, Middle name, Last name (containing 'tt'), Nickname, Birthday, and Language (set to 'English (US)'). There is a 'Photo upload' section with a 'Browse...' button and an 'Upload' button. Below these are fields for 'Category' (set to 'Contractor'), 'Org. ID Number' (set to '1'), 'Native full name', 'Manager', 'Geographical location', and 'Location phones'. An 'OK' button and a 'Cancel' button are located on the right side of the dialog.

Overlaid on the bottom right of the main dialog is a smaller 'Add person' dialog with the 'Login' tab selected. This smaller dialog contains three input fields: 'User ID' (containing 'tt'), 'New password' (containing three asterisks), and 'Confirm password' (containing three asterisks).

Figure 42. xxx

47. xxx

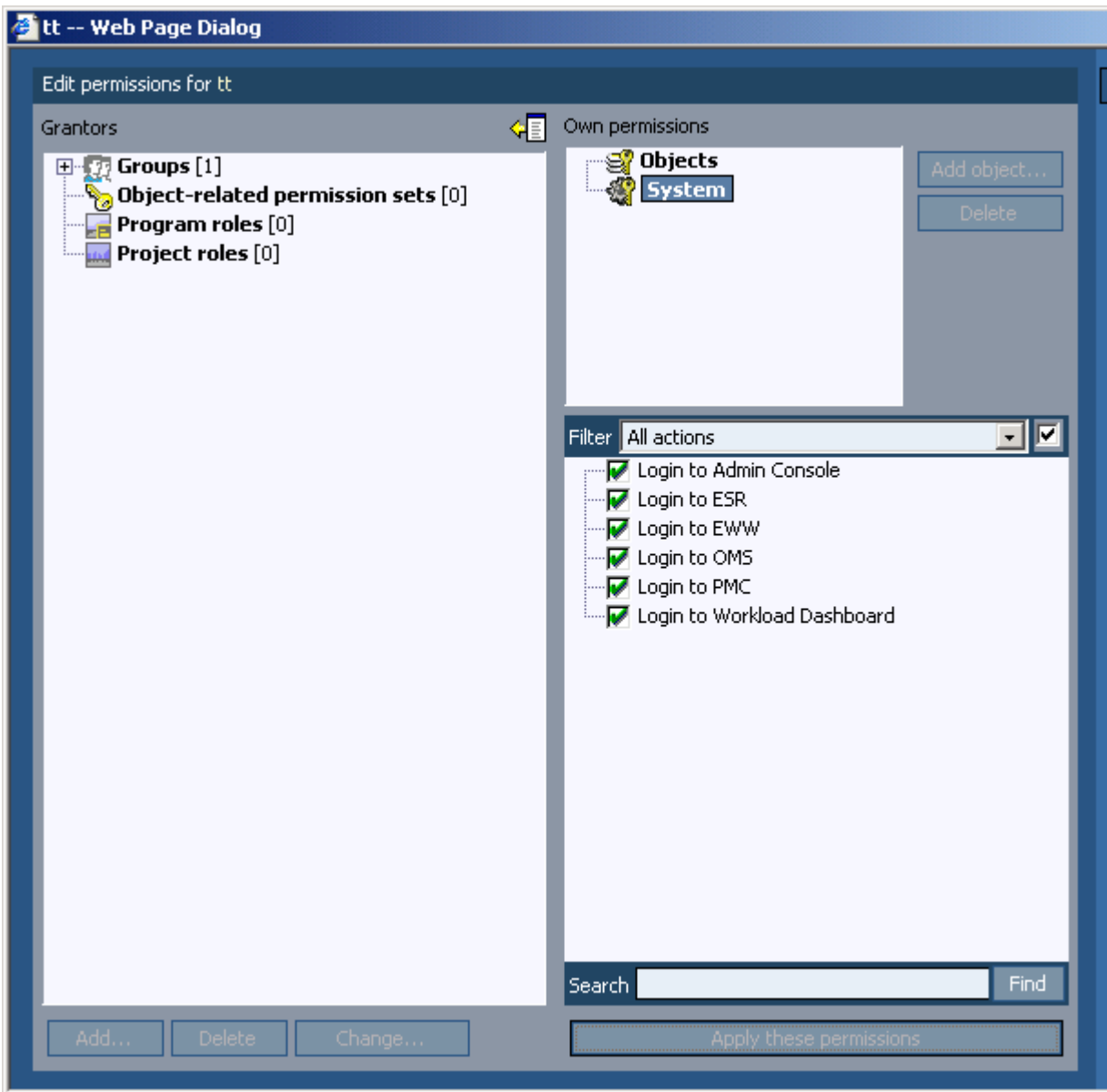


Figure 43. xxx

4.7.8.2. Login (PMC client)

48. <http://localhost/PMC>

49. enter username password

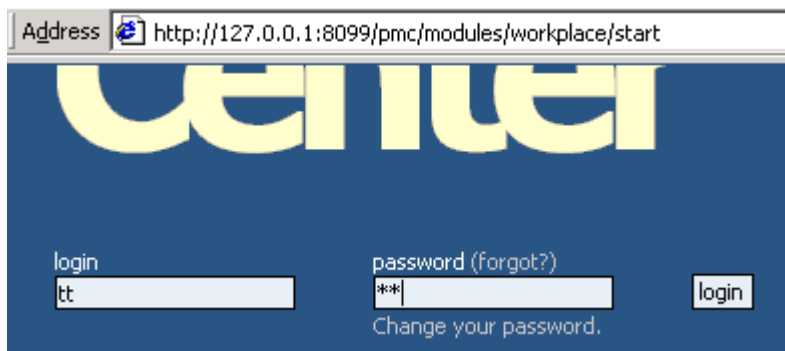


Figure 44. PMC client logon screen

50. click logon

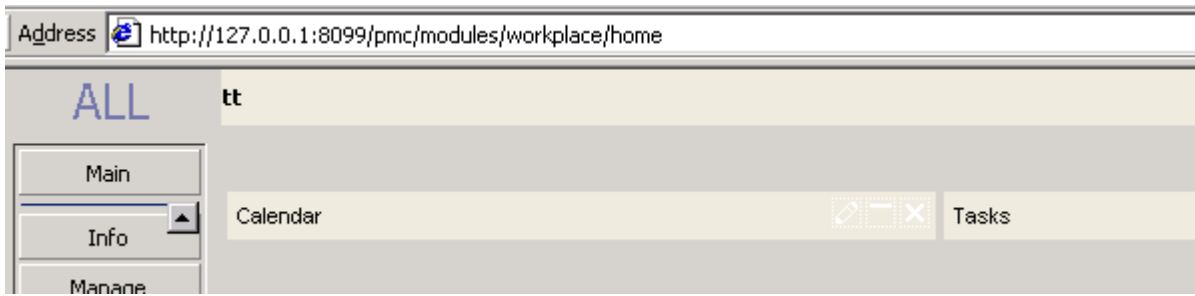


Figure 45. pmc client initial screen

4.8. PMC ESR

[20:InstallEsr.html](#)

06_pmc_install_08_esr.fm

available at \\Epgsa002\Projects\Pmc\Files\ESR\build\released

this section uses

- \\epmw284\Welcome\PmcInstallers\09_ESR_WebApplication_2.2.003_20030612.zip

- \\epmw284\Welcome\PmcInstallers\09a_ESR_Cron_Patch.zip

README

EPAM Star Reporter Web Application (PMC Implementation)

Version: 1.0

06/12/2003 Build #2.2.003

Following components should be installed before:

1. Application server: TomCat v.3.3a
2. Web server: Apache v.1.3.22
3. SQL server: Oracle Database server v.8.1.7
4. PMC business database #2.3.015

The following actions should be performed in next order:

- first of all complete db setup.

- then application setup.

- then complete application server setup.

DB Setup

- 1 Create Oracle TNS "ESR" for your instance of Oracle where PMC DB is reside.

Application Setup

1. Properly set all properties in [ROOT_FOLDER]\installation\install.properties file.

properties is :

resource_folder - folder where uploaded images resides.

log_folder - folder where application writes its logs.

admin_account - DB manager account (system).

admin_password - DB manager password.

* resource_folder and log_folder properties must point to already existing folders. All '\' character in log_folder property must be escaped by '\\', but in

resource_folder property these character must be escaped by '\\'. All

folder must end with escaped '\\

For example :

"ResourceFolder=C:\\ESR\\images\\" is valid

"ResourceFolder=C:\\ESR\\images" is invalid

"LogFolder=C:\\\\ESR\\\\log\\" is valid

"LogFolder=C:\\ESR\\log\\" is invalid

2. Modify "PMCBusinessDSO" resource in

[ROOT_FOLDER]\proto\xml\application.xml

properties "Password" and "User" -

must hold correct values of Login\Password to PMC database.

3. Run [ROOT_FOLDER]\installation\bin\install.cmd

!NOTE! - be sure that there is no current Oracle sessions connected by

user ESR, this user will be dropped

4. Result of actions above is DB ready for application deployment

and [ROOT_FOLDER]\installation\esr.war file.

This file is ready for deployment on target application server.

Apache Tomcat setup.

1. Copy esr.war to [TomcatHome]\webapps\
2. Modify [TomcatHome]\conf\jkwrapper.properties (add ocijdbc8.dll from [OracleHome]\bin to wrapper.Id_path)
3. delete 'esr' folder under [TomcatHome]\webapps\ if it was.
4. Check up servlet mapping for Apache in [TomcatHome]\conf\jkmod_jk.conf. Actual state is:

 JkMount /esr/init ajp13

 JkMount /esr/show ajp13

 JkMount /esr/commandshandler ajp13

 JkMount /esr/refresh ajp13

 JkMount /esr/pgRVReport.xls ajp13

 JkMount /esr/chart.jpg ajp13

 JkMount /esr/*.jsp ajp13

 JkMount /esr/*.html ajp13

 JkMount /esr/scripts/* ajp13

 JkMount /esr/styles/* ajp13

 JkMount /esr/help/* ajp13

 JkMount /esr/images/* ajp13

5. Copyb classes12.jar from [ROOT_FOLDER]\lib to [TomcatHome]\lib\apps.

6. Restart tomcat server. In case of Tomcat Server is already started as

service service must be stopped and started again.

7. Restart Apache web server.

8. Run application in web browser

 http://<WEB_SERVER>/esr/init

Login & Password for application is you PMC login/password

combination.

This section describes installation of the PMC Admin:

- [4.8.1. Application setup \(page 100\)](#)
- [4.8.2. Application server \(apache tomcat\) setup \(page 103\)](#)
- [4.8.3. Restart Tomcat / Apache \(page 105\)](#)
- [4.8.5. Login \(page 105\)](#)

4.8.1. Application setup

- 4.8.1.1. install.properties (page 100)
- 4.8.1.2. application.xml (page 100)
- !install.cmd (page 101)

4.8.1.1. install.properties

51. Properly set all properties in

[ROOT_FOLDER]\installation\install.properties
for

- resource_folder - folder where uploaded images resides.
- log_folder - folder where application writes its logs.
- admin_account - DB manager account (system).
- admin_password - DB manager password.

Note: resource_folder and log_folder properties must point to already existing folders. All '\' character in log_folder property must be escaped by '\\', but in resource_folder property these character must be escaped by '\\'. All folder must end with escaped '\. For example :

```
"ResourceFolder=C:\\ESR\\images\\" is valid
"ResourceFolder=C:\\ESR\\images" is invalid
"LogFolder=C:\\\\ESR\\\\log\\" is valid
"LogFolder=C:\\ESR\\log\\" is invalid
```

D:\newpmc\esr\esr\install.properties

```
# ESR Installation properties v1.0
# resource_folder - directory where uploaded images resides
# NOTE! '\' must be escaped by '\\\\'
# Valid Example : ResourceFolder=D:\\ESR\\RESOURCE\\
# Invalid Example: ResourceFolder=D:\\ESR\\RESOURCE
# Invalid Example: ResourceFolder=D:\\ESR\\RESOURCE\
resource_folder=D:\\ESR\\images\\
# log_folder - directory where logs resides
# NOTE! '\' must be escaped by '\\\\'
# Valid Example : ResourceFolder=D:\\\\ESR\\\\LOG\\\\
# Invalid Example: ResourceFolder=D:\\ESR\\LOG
# Invalid Example: ResourceFolder=D:\\ESR\\RESOURCE\\
log_folder=D:\\\\ESR\\\\log\\\\
#DATABASE SECTION
# admin_account - Administrator UserName
# admin_password - Administrator Password
# tns_name - TNS name of database
admin_account=system
admin_password=sys
esr_user=esr
esr_pwd=sql
tns_name=pmc
deftspace=pmc_data
temptspace=temp
idxtspace=pmc_indx
```

4.8.1.2. application.xml

52. Modify "PMCBusinessDSO" resource in

[ROOT_FOLDER]\proto\xml\application.xml

properties "Password" and "User" - must hold correct values of Login\Password to PMC database.

D:\newpmc\esr\esr\proto\xml\application.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Created by Alexey Kruchenok on December 9, 2001, 11:44 AM -->
<application>
  <resources>
    <resource code="com.epam.starreporter.impl.pmc.security.PMCThreadSecurityManager" name="PMCThreadManager" />
    <resource code="com.epam.starreporter.impl.pmc.database.oracle.PMCResourceCleaner"
name="PMCDDBResourceCleaner" />
    <resource code="com.epam.starreporter.impl.pmc.database.PMCResultTableFactory" name="PMCTableFactory" />
    <resource code="com.epam.starreporter.impl.pmc.database.oracle.PMCOraObjectStorage"
name="PMCDDBObjectStorage" />
    <resource code="com.epam.starreporter.impl.pmc.security.PMCActionSecurityManager"
name="PMCActionSecurityMgr" />
    <resource code="com.epam.starreporter.servlet.request.ETomcatParamsFactory" name="RequestFactory" />
  <!-- Weblogic JNDI Section, Comment this if you using tomcat
  <resource code="com.epam.starreporter.datasource.JNDIAdapter" name="PMCBusinessDSO">
    <property name="JNDIName" value="java:comp/env/jdbc/ESR_BusinessData" />
  </resource>
  <resource code="com.epam.starreporter.datasource.JNDIAdapter" name="MetaDataDSO">
    <property name="JNDIName" value="java:comp/env/jdbc/ESR_MetaData" />
  </resource>
  End of Weblogic JNDI Section -->
  <!-- Tomcat section, uncomment this if you using tomcat-->
  <resource code="com.epam.starreporter.datasource.EDataSourceAdapter"
name="PMCBusinessDSO">
    <property name="URL" value="jdbc:oracle:oci:@PMC" />
    <property name="Driver" value="oracle.jdbc.driver.OracleDriver" />
    <property name="User" value="pmc_report" />
    <property name="Password" value="rpt" />
```

```

    <property name="MinConnection" value="3"/>
    <property name="MaxConnection" value="30"/>
    <property name="Timeout" value="60000"/>
  </resource>
  <resource code="com.epam.starreporter.datasource.EDataSourceAdapter" name="MetaDataDSO">
    <property name="URL" value="jdbc:oracle:oci:@PMC"/>
    <property name="Driver" value="oracle.jdbc.driver.OracleDriver"/>
    <property name="User" value="esr"/>
    <property name="Password" value="sql"/>
    <property name="MinConnection" value="3"/>
    <property name="MaxConnection" value="30"/>
    <property name="Timeout" value="60000"/>
  </resource>
<!-->
  <resource code="com.epam.starreporter.impl.pmc.security.PMCDataSecurityManager" name="PMCBusinessManager">
    <property name="ThreadManagerResourceRef" value="PMCThreadManager"/>
    <property name="DataSourceResourceRef" value="PMCBusinessDSO"/>
  </resource>
  <resource code="com.epam.starreporter.impl.pmc.security.PMCStorageSecurityManager"
name="PMCObjectStorageManager">
    <property name="ThreadManagerResourceRef" value="PMCThreadManager"/>
    <property name="DataSourceResourceRef" value="PMCBusinessDSO"/>
  </resource>
  <resource code="com.epam.starreporter.impl.pmc.security.PMCAuthenticationManager" name="PMCSessionManager">
    <property name="ThreadManagerResourceRef" value="PMCThreadManager"/>
    <property name="DataSourceResourceRef" value="PMCBusinessDSO"/>
    <property name="DataManagerResourceRef" value="PMCBusinessManager"/>
  </resource>
</resources>

  <configuration>
  <BuisnessDataSource refname="PMCBusinessManager"/>
  <MetaDataDataSource refname="MetaDataDSO"/>
  <ObjectsDataSource refname="PMCObjectStorageManager"/>
  <AuthenticationModule refname="PMCSessionManager"/>
  <DBResourceCleaner refname="PMCDBResourceCleaner"/>
  <ResultTableFactory refname="PMCTableFactory"/>
  <DBObjectStorage refname="PMCDBObjectStorage"/>
  <ActionSecurityMgr refname="PMCActionSecurityMgr"/>
  <RequestWrapperFactory refname="RequestFactory"/>
  <ServerInfo name="PMC Star Reporter"/>
  </configuration>
</application>
!install.cmd

```

53. stop tomcat. !NOTE! - be sure that there is no current Oracle sessions connected by user ESR, this user will be dropped

54. Run

```
[ROOT_FOLDER]\installation\bin\!install.cmd
D:\newpmc\esr\bin
```

```
set ANT_HOME=
ant -buildfile ..\install.xml
```

Result of actions above is

- DB ready for application deployment
- [ROOT_FOLDER]\installation\esr.war file. D:\newpmc\esr. This file is ready for deployment on target application server.

```

C:\WINNT\system32\cmd.exe
Buildfile: ..\install.xml

init:
db:
init:
[echo] starting DB PART
[echo] driver classpath=${driver_classpath}

db:
[sql] Executing commands
[sql] 1 of 1 SQL statements executed successfully
[sql] Executing file: D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\database\sql\owner.sql
[sql] 2 of 2 SQL statements executed successfully
[exec] The command attribute is deprecated. Please use the executable attribute and nested arg elements.

all:
directory:
[mkdir] Created dir: D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp

patchDSO:
[copy] Copying 1 file to D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp\WEB-INF\classes\com\epam\starreporter\xml
[copy] Copying 1 file to D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp\WEB-INF\lib

patch:
[unwar] Expanding: D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\proto\war\proto.war into D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp
[move] Moving 1 files to D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp\WEB-INF
[move] Moving 1 files to D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp\WEB-INF
[move] Moving 1 files to D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp\WEB-INF\classes\com\epam\starreporter\xml
[move] Moving 1 files to D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp\WEB-INF\classes\com\epam\starreporter\xml
[jar] Building jar: D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\esr.war

fail:

cleanup:
[echo] performing cleanup
[delete] Deleting directory D:\Welcome\PmcInstallers\unzip_09_ESR_ESRWebApplication_2.2.003_20030612.zip\tmp

all:

BUILD SUCCESSFUL

Total time: 26 seconds

```

Figure 46. run of !install.cmd

4.8.2. Application server (apache tomcat) setup

- 4.8.2.1. esr.war to \webapps (page 103)
- 4.8.2.2. ?? ocijdbc8.dll to wrapper.ld_path (page 103)
- 4.8.2.3. ?? Modify wrapper.properties (page 103)
- 4.8.2.4. ?? Copy classes12.jar (page 104)

4.8.2.1. esr.war to \webapps

51. Copy

esr.war

to

[TomcatHome]\webapps\

4.8.2.2. ?? ocijdbc8.dll to wrapper.ld_path

55. Add ocijdbc8.dll from [OracleHome]\bin to wrapper.ld_path)

4.8.2.3. ?? Modify wrapper.properties

56. Modify

[TomcatHome]\conf\jk\wrapper.properties

D:\Tomcat_4.1.2.4\conf\jk\wrapper.properties

```
#
# $Header: /home/cvpublic/jakarta-tomcat/src/etc/jk/wrapper.properties,v 1.4 2002/03/13 03:40:07 larryi Exp $
# $Revision: 1.4 $
# $Date: 2002/03/13 03:40:07 $
#
# jk_service.properties - a bootstrap file for the Tomcat NT service.
# This file provides jk_nt_service with the needed information to
# start tomcat at a different process.
# As a general note, the characters $( and ) are used internally to define
# macros. Do not use them!!!
# Whenever you see a set of lines such as:
# x=value
# y=$(x)\something
# the final value for y will be value\something
# Normally all you will need to modify is the first two properties, i.e.
# wrapper.tomcat_home and wrapper.java_home. Most of the configuration
# is derived from these two.
#
# wrapper.tomcat_home should point to the location where you
# installed tomcat. This is where you have your conf, webapps and lib
# directories.
wrapper.tomcat_home=D:\Tomcat_4.1.2.4
#
# wrapper.java_home should point to your Java installation. Normally
# you should have a bin and lib directories beneath it.
wrapper.java_home=C:\j2sdk1.4.2
#
#----- ADVANCED MODE -----
# Make sure that you read the how-to before making too many changes.
#-----
#
# Defining where the service is going to put the standard
# output of Tomcat. This is where System.out.println and
# System.err.println goes to.
wrapper.stdout=$(wrapper.tomcat_home)\logs\jvm.stdout
wrapper.stderr=$(wrapper.tomcat_home)\logs\jvm.stderr
#
# Additions to the path. put here directories where you store DLLs for
# native methods etc.
wrapper.ld_path=$(wrapper.java_home)\jre\bin
wrapper.ld_path=c:\
#
# Defining the classpath. All the rows that belongs to the class_path
# property are concatenated to create the classpath for Tomcat.
#
# If you have additional locations that you would like to add to the
# claspath you should add a new wrapper.class_path=<location> line.
#
wrapper.class_path=$(wrapper.tomcat_home)\lib\tomcat.jar
#
# and a tribute to JDK1.1.x
#
wrapper.class_path=$(wrapper.java_home)\lib\classes.zip
#
# This is the Java interpreter used for running Tomcat
#
wrapper.javabin=$(wrapper.java_home)\bin\java.exe
#
# This is Tomcat's startup class (the class that contains Tomcat's
# starting point.
#
wrapper.startup_class=org.apache.tomcat.startup.Main
#
# This is the location where tomcat's policy file
# is located
#
wrapper.tomcat_policy=$(wrapper.tomcat_home)\conf\tomcat.policy
```

```

#
# This is the location where tomcat's server.xml configuration file
# is located.
#
wrapper.server_xml=$(wrapper.tomcat_home)\conf\server.xml
#
# The NT service uses AJP12/AJP13 to shutdown Tomcat. The
# wrapper.shutdown_port tells the service the identity of the port that
# is used by AJP12/AJP13.
#
# AJP12
wrapper.shutdown_port=8009
# AJP13
# wrapper.shutdown_port=8009
#
# Can either be ajp12 or ajp13 depending on your configuration.
#
# Note: If you use ajp13, be sure to enable shutdown on the Ajp13Connector.
#       For Tomcat 3.3 add: shutDownEnable="true"
#       For Tomcat 3.3.1 add: shutdownEnable="true" or shutDownEnable="true"
#
# Note: Use of a shutdown "secret" (i.e. password) is not supported.
#
# Default value is ajp12
#
wrapper.shutdown_protocol=ajp13
#
# JVM Options
#
# Useful Options:
# -Xms256m = Initial heap size, modify for desired size
# -Xmx512m = Maximum heap size, modify for desired size
# -Xrs = Available in Jdk1.3.1 to avoid JVM termination during logoff
#
wrapper.jvm.options=-Xrs
#
# This is the command line that is used to start Tomcat. You can *add* extra
# parameters to it but you can not remove anything.
#
wrapper.cmd_line="$(wrapper.javabin)" $(wrapper.jvm.options) -Djava.security.policy=="$(wrapper.tomcat_policy)"
-Dtomcat.home="$(wrapper.tomcat_home)" -classpath $(wrapper.class_path) $(wrapper.startup_class) -config
$(wrapper.server_xml)

```

57. delete

```
[TomcatHome]\webapps\esr
```

58. Check up servlet mapping for Apache in [TomcatHome]\conf\jk\mod_jk.conf. Actual state is:

```

JkMount /esr/init ajp13
JkMount /esr/show ajp13
JkMount /esr/commandshandler ajp13
JkMount /esr/refresh ajp13
JkMount /esr/pgRVReport.xls ajp13
JkMount /esr/chart.jpg ajp13
JkMount /esr/*.jsp ajp13
JkMount /esr/*.html ajp13
JkMount /esr/scripts/* ajp13
JkMount /esr/styles/* ajp13
JkMount /esr/help/* ajp13
JkMount /esr/images/* ajp13

```

4.8.2.4. ?? Copy classes12.jar

59. Copy

```
[ROOT_FOLDER]\lib\classes12.jar
```

to

```
[TomcatHome]\lib\apps
```


4.8.3. Restart Tomcat / Apache

60. Restart tomcat server. In case of Tomcat Server is already started as service service must be stopped and started again.

61. Restart Apache web server.

4.8.4. CRON patch

09a_ESR_Cron_Patch.zip

62. stop tomcat

63. unzip

64. copy contents to webapps/esr

65. restart

4.8.5. Login

66. http://localhost/esr/init

67. enter username password

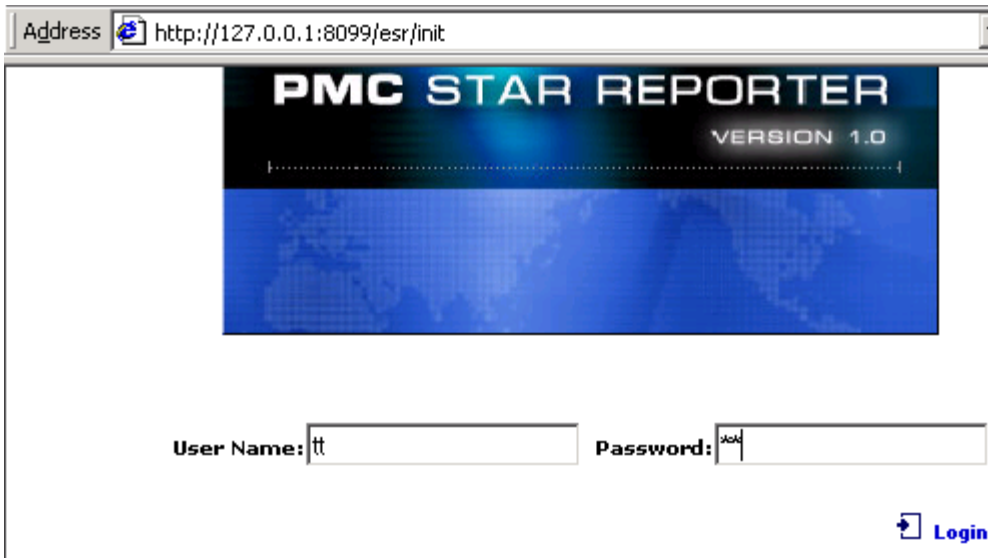


Figure 47. esr login screen

68. click login

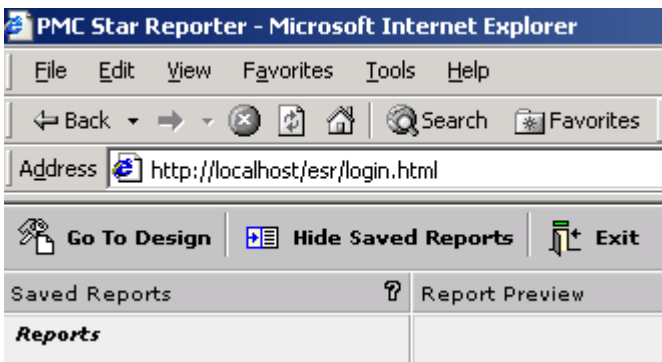


Figure 48. esr intial screen

4.9. PMC MAIL

21:InstallPmcMail.html

06_pmc_install_09_mail.fm

PMC Mail application V3.0 Build # 3.0.001

\\Epgsa002\Projects\Pmc\Files\PMC_MAIL_3.0\Released

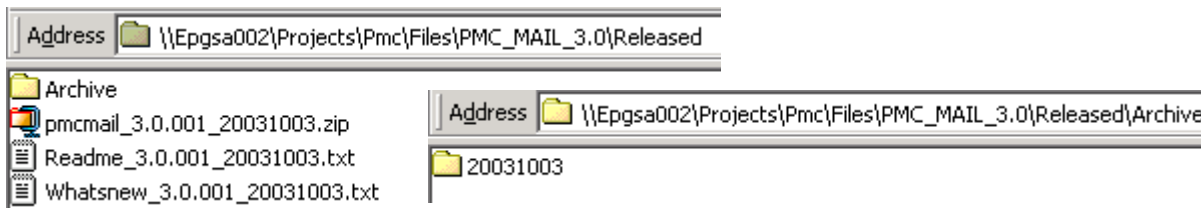


Figure 49. pmc mail files

- [4.9.1. Requirements \(page 107\)](#)
- [4.9.2. Installation \(page 107\)](#)
- [4.9.3. Start \(page 108\)](#)
- [4.9.4. Test \(page 109\)](#)

4.9.1. Requirements

Following components should be installed and configured before:

- JDK 1.4
- Database server: Oracle Database server v.9.2.0
- PMC business database PMCDB-3.0.001

4.9.2. Installation

- [4.9.2.1. Unpack zip \(page 107\)](#)
- [4.9.2.2. Adjust db \(page 107\)](#)
- [4.9.2.3. Adjust mail \(page 107\)](#)
- [4.9.2.4. Adjust scheduler \(page 108\)](#)
- [4.9.2.5. Adjust mail.xml \(page 108\)](#)
- [4.9.2.6. Adjust meta.xml \(page 108\)](#)
- [4.9.2.7. Adjust Star Reporter application.xml \(page 108\)](#)
- [4.9.2.8. Adjust dbgout.props \(page 108\)](#)
- [4.9.2.9. PMC Mail home dir \(page 108\)](#)
- [4.9.2.10. Apply \(updjar.bat\) \(page 108\)](#)

4.9.2.1. Unpack zip

69. Unpack archive pmcmail_x.x.xxx_XXXXXXX.zip in separate folder (see <workfolder>). This folder will be the PMC Mail working directory.

4.9.2.2. Adjust db

70. Adjust Database connection settings in file <workfolder>\data.xml: Parameter “<datasource><url>” contains connection string.

4.9.2.3. Adjust mail

Adjust mail settings in file <workfolder>\mail.xml (see section <SMTP>):

71. Parameter “<mailer-address>” contains mail address from which messages will send.

72. Parameter “<mailer-name>” contains mail name from which messages will send (Header of each message contains field “X-Mailer” with mail name. It is useful for messages filtering in mail client).

73. Parameter “<from>” contains ‘from name’ string

74. Parameter “<subject>” contains ‘subject’ string

Both strings (‘from name’ and ‘subject’) composed of static text and macroses (%USER%, %PROJECT%, %SUBJECT%).

Example:

```
<from>%USER%</from>
```

```
<subject>Project %PROJECT%:%SUBJECT%</subject>
```

Macroses replaces by corresponding strings depending on current message.

Each message contains ‘from’ field with ‘from name’ string and ‘subject’ field with ‘subject’ string.

75. Parameter “<server-name>” contains name of SMTP mail server.

76. Parameter “<server-port>” contains port of SMTP mail server.

4.9.2.4. Adjust scheduler

More descriptive help information about cron row you can find in file doc\Crontab.txt

Adjust scheduler (tasks specific) settings in file <workfolder>\mail.xml (if need). For each task the following must be specified:

77. Parameter “<task id=>” - the unique task ID.

78. Parameter “<task name=>” - the task symbolic name.

79. Parameter “<task active=>” - is the task active (“true”) or not (“false”).

80. Parameter “<cron>” contains information about cron row.

Example for cron row=”* * 1-4,6-31/2 8 *”:

```
<cron>
<minutes first="*" />
<hours first="*" />
<day-of-month first="1" last="4" />
<day-of-month first="6" last="31" period="2" />
<month first="8" />
<day-of-week first="*" />
</cron>
```

81. Parameter “<class-listener>” contains invoked class name for task. May be any quantity of “<class-listener>” parameters for each task.

4.9.2.5. Adjust mail.xml

Adjust administrator settings in file <workfolder>\mail.xml (see section <administrator>):

82. Parameter “<admin-name>” contains administrator name.

83. Parameter “<admin-address>” contains administrator email address.

Note: You have to create email accounts in your email server. Accounts created for message folders should has password same as <POP3><server-password> parameter.

4.9.2.6. Adjust meta.xml

84. Adjust PMC settings in file <workfolder>\meta.xml: Parameter “<itemtype-list pmc_server=>” contains server name of PMC web application.

4.9.2.7. Adjust Star Reporter application.xml

Adjust Star Reporter settings in file <workfolder>\application.xml:

85. Parameter <resource name=”PMCBusinessDSO”> contains connection parameters to business database.

86. Parameter <resource name=”MetaDataDSO”> contains connection parameters to meta data of database.

4.9.2.8. Adjust dbgout.props

87. Adjust DbgOut service settings in file <workfolder>\dbgout.props.

4.9.2.9. PMC Mail home dir

88. Adjust PMC Mail working directory (environment variable “_PM_HOME”) in files <workfolder>\service_install.bat, <workfolder>\service_run.bat. Environment variable “JAVA_HOME” must point to real JDK 1.3 home place.

4.9.2.10. Apply (updjar.bat)

89. Apply settings by simply launching the BAT-file <workfolder>\updjar.bat.

4.9.3. Start

90. Launch <workfolder>\run.bat.

91. Start PMC mail as an NT service: Use:

- <workfolder>\service_install.bat - Install PMC Mail as an NT service;
- <workfolder>\service_remove.bat - Remove PMC Mail from NT services;
- <workfolder>\service_stop.bat - Stop the running PMC Mail NT service;
- <workfolder>\service_run.bat - Run PMC Mail as console application.

More descriptive Help information you can obtain by running “pmcmailserv.exe” directly with the “-?” command line option.

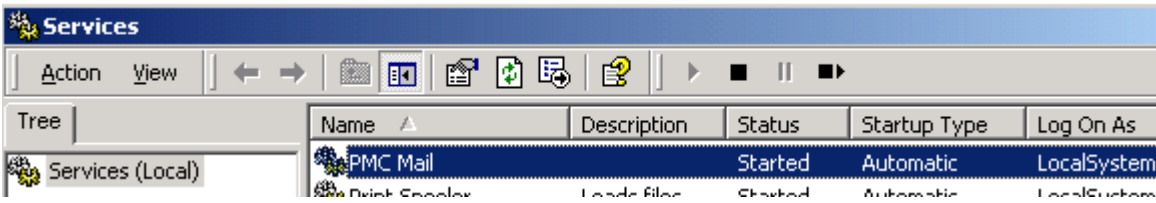


Figure 50. pmc mail services

4.9.4. Test

(must setup user first)
 must assign email address first

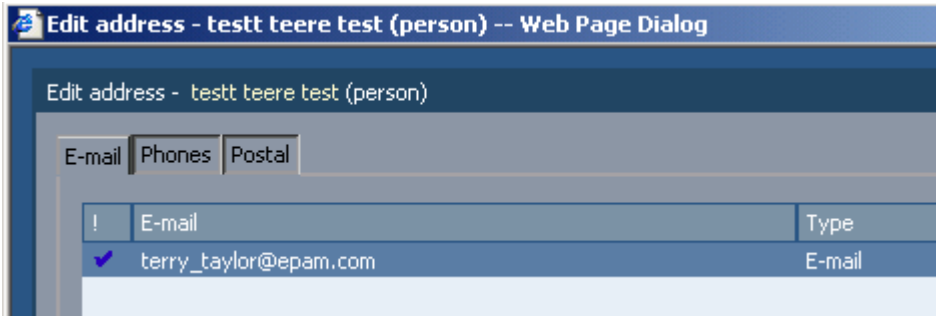


Figure 51. email setup

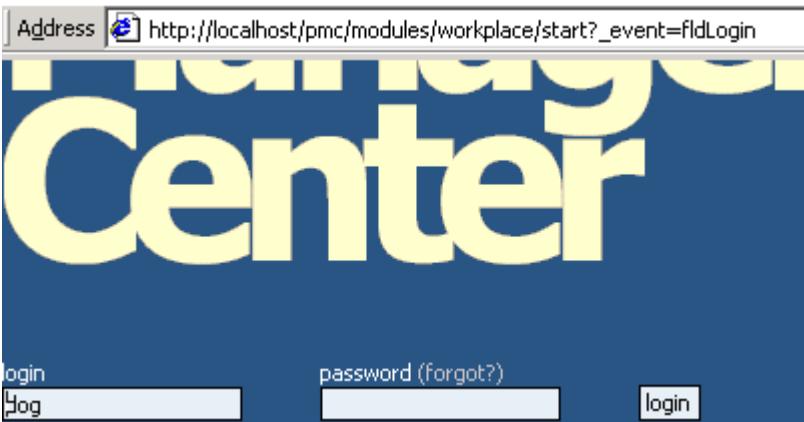


Figure 52. pmc login

click forgot

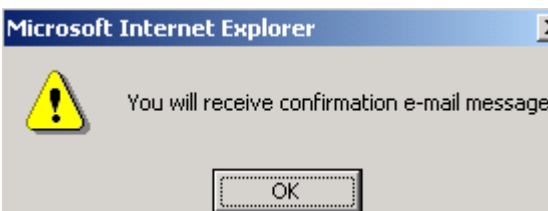


Figure 53. receive email message

4.10. PMC OMS

[22:InstallOms.html](#)

06_pmc_install_10_oms.fm

available at \\Epgsa002\Projects\Pmc\Files\OMS\OMS2\Build\Daily

this section uses \\epmw284\Welcome\PmcInstallers\12_OMS_3.0.003_20031121.zip

README

Following components should be installed and configured before:

1. JDK 1.4.1
2. J2EE server: Jakarta TomCat. Version: 4.1
3. Web server: Apache. Version: 1.3.22
4. SQL server: Oracle Database server. Version: 9.2.0
5. PMC business database PMCDDB-3.0.007
6. PMC Admin Console. Version: 3.0.002

Installation:

1. Set appropriate time zone on Oracle DB server.
Under Windows NT: open "Date/Time Properties" applet and:
 - select "(GMT) Greenweech Mean Time ..." time zone;
 - clear checkbox "Automatically adjust clock for daylight saving changes".
 Refer to OS documentation under other operating systems.
2. Install PMC Admin Console (see appropriate "readme.txt")
or if you already have it installed - skip this step.
3. Login to PMC Admin Console ("root"/"0") and create permissions to login to OMS for account:
 - click "Permissions";
 - click "Granting";
 - choose user;
 - click "Edit";
 - at the window "Own permissions" click on the "System" tree item;
 - check "Login to OMS" checkbox below;
 - press "Apply these permissions" button;
 - add permissions "Create Customer", "Change Customer", "Delete Customer" for the "EPAM (Organization)" object for appropriate user;
 - similarly, add permissions to Create/Modify/Delete OMS objects: OMS Activity (Task), OMS Opportunity (Project), OMS Contact, Time report for appropriate user. For the simplicity you can add appropriate permissions for the "EPAM (Organization)" object.
 See PMC Admin Console documentation for more exact steps.
4. Unpack OMS_x.x.xxx_yyyymmdd.zip with internal directory structure into separate folder hereinafter referred to as <WorkFolder>.
5. Adjust Database connection settings (see <database> section) and common OMS properties in file <WorkFolder>\WEB-INF\classes\shell.xml.
6. Adjust logger service settings in file <WorkFolder>\WEB-INF\classes\dbgout.props. Recommended <trace level>;<log level> values for all debug sources during testing are the following:

```

...
http-server.dbgout.source.MISC=3;3;Miscellaneous
http-server.dbgout.source.DB=4;4;Data access
http-server.dbgout.source.BIND=3;3;Data binding
http-server.dbgout.source.CONN=5;5;Data connections
http-server.dbgout.source.PAGE=4;4;Pages
http-server.dbgout.source.SVLT=4;4;Servlets
http-server.dbgout.source.CTRL=3;3;Page Controls
http-server.dbgout.source.TAGX=3;3;Tag Extension Library
http-server.dbgout.source.SHLL=4;4;Web Application Shell
...

```

7. Run "updwar.cmd" to apply adjusted settings.
8. Check servlet mappings for Apache in "mod_jk.conf" file.
We suppose here that TomCat server is installed in "C:\Tomcat".
Please, check the following lines presence in "mod_jk.conf":

```

JkMount /oms/*.*.jsp ajp13
JkMount /oms/res/* ajp13
JkMount /oms/localize ajp13
JkMount /oms/progress ajp13
JkMount /oms/export_excel/* ajp13
JkMount /oms/report ajp13
JkMount /oms/funnel ajp13
JkMount /oms/GIF_encoder ajp13
JkMount /oms/popup ajp13
JkMount /oms/toolbar ajp13
JkMount /oms/shortcutbar ajp13
JkMount /oms/bottom_shortcutbar ajp13
JkMount /oms/top_shortcutbar ajp13
JkMount /oms/top_frame ajp13
JkMount /oms/main_frame ajp13
JkMount /oms/bottom_frame ajp13
JkMount /oms/custom_dialog ajp13
JkMount /oms/reminder ajp13
JkMount /oms/attachment/* ajp13
Alias /oms "C:/Tomcat/webapps/oms"
<Directory "C:/Tomcat/webapps/oms">
    Options Indexes FollowSymLinks
</Directory>
<Location "/oms/WEB-INF/">
    AllowOverride None
    deny from all
</Location>
<Directory "C:/Tomcat/webapps/oms/WEB-INF/">
    AllowOverride None
    deny from all
</Directory>
<Location "/oms/META-INF/">

```

```

        AllowOverride None
        deny from all
    </Location>
    <Directory "C:/Tomcat/webapps/oms/META-INF/">
        AllowOverride None
        deny from all
    </Directory>

```

9. Ensure that the following libraries are shared inside JRE and Tomcat:

- servlet.jar
- activation.jar
- commons-collections.jar
- mail.jar
- xercesImpl.jar
- xmlParserAPIs.jar
- ojdbc14.jar (Oracle JDBC driver)

OMS uses it all and assumes that they are already existing in CLASSPATH. Most of them may be found in the following paths:

- %JAVA_HOME%\jre\lib\ext\
- %TOMCAT_HOME%\common\lib\
- %TOMCAT_HOME%\common\lib\endorsed\

First location (%JAVA_HOME%-based) is preferred for Oracle JDBC driver

10. Delete TomCat's work folder for OMS application if exists (usually a "work" subdirectory in the TomCat's home directory).
11. Delete previously deployed OMS: for that delete "oms" directory content from TomCat's "webapps" subdirectory.
12. Deploy (copy) <WorkFolder>\oms.war to TomCat's "webapps" subdirectory.
13. Start TomCat.
14. Start Internet Explorer. Default OMS URI is http://SERVERNAME/oms/index.html. Use login name and password of the account you've given permission to login to OMS.

- [4.10.1. Requirements \(page 112\)](#)
- [4.10.2. deploy webapp \(page 112\)](#)
- [4.10.3. ?? Servlet mappings \(page 113\)](#)
- [4.10.4. ?? Russian text support \(delete?\) \(page 114\)](#)
- [4.10.5. ?? Deploy Oracle JDBC driver \(page 114\)](#)
- [4.10.6. ?? Set time zone DB \(page 114\)](#)
- [4.10.7. Start Tomcat \(page 114\)](#)
- [4.10.8. Create OMS login permissions in PMC Admin \(page 114\)](#)
- [4.10.9. login \(page 114\)](#)

4.10.1. Requirements

- [JDK 1.3.1_06](#)
- [J2EE server: Jakarta TomCat. Version: 3.3.1](#)
- [Web server: Apache. Version: 1.3.22](#)
- [SQL server: Oracle Database server. Version: 9.2.0](#)
- [PMC business database PMCDB-2.3.026](#)
- [PMC Admin Console. Version: 2.3.009](#)

4.10.2. deploy webapp

- [4.10.2.1. Unpack ZIP \(page 112\)](#)
- [4.10.2.2. shell.xml \(page 112\)](#)
- [4.10.2.3. dbgout.props \(page 113\)](#)
- [4.10.2.4. Update / deploy oms.war \(page 113\)](#)

4.10.2.1. Unpack ZIP

92. Unpack OMS_x.x.xxx_yyyymmdd.zip with internal directory structure into separate folder hereinafter referred to as <WorkFolder>.

4.10.2.2. shell.xml

Adjust db settings

93. Adjust Database connection settings (see <database> section) and common OMS properties in file <WorkFolder>\WEB-INF\classes\shell.xml.

```

<?xml version="1.0" encoding="UTF-8"?>
<web-OMS>
<app-name>OMS</app-name>
<app-version>3.0</app-version>
<app-build>3.0.002</app-build>
<!-- E-mail address of OMS administrator (used on login and summary pages, alert messages etc.)
If empty then no "contact administrator" links anywhere -->
<app-admin>Andrei_Urbanovich@epam.com</app-admin>
<!-- Maximum request size supported by OMS, in MB -->
<maximum-request-size>4</maximum-request-size>
<!-- If this parameter is true and attachment type is not enumerated in value of
<noncompressing-file-types> parameter, attachment body will be compressed
before storing it into DB -->
<support-compression>true</support-compression>
<!-- Attachments of these types will be stored in DB without compression -->
<noncompressing-file-types>zip;qzip;rar;jar/gif/tif/jpg/jpeg/arj/mp3/wma</noncompressing-file-types>
<!-- If this parameter is true and attachment is compressed
and client supports content compression, attachments will be send to client in

```



```

compressed state. Default value is true -->
<client-compression>true</client-compression>
<!-- Max number of simultaneously downloaded attachments. Default=30 -->
<download-max-connection-limit>30</download-max-connection-limit>
<!-- "true" = decode request parameter from request encoding, false= use parameter "as is".
"false" is useful under Tomcat 3.x when <DecodeInterceptor defaultEncoding="UTF-8"/> is used. -->
<decode-request-parameters>false</decode-request-parameters>
<!-- Database configuration -->
<database>
<!-- JDBC driver name -->
<driver>oracle.jdbc.driver.OracleDriver</driver>
<!-- JDBC driver URL -->

<url>jdbc:oracle:thin:@(description=(address=(host=pmcdb)(protocol=tcp)(port=1521))(connect_data=(sid=PMC)))</url>
<!-- OCI driver: JDBC driver URL -->
<!--<url>jdbc:oracle:oci8
(description=(address=(host=EPGSD001)(protocol=tcp)(port=1521))(connect_data=(sid=PMC)))</url> -->
<!-- Database user on whose behalf the connection is being made -->
<user>PMC_OMS</user>
<!-- Database user's password -->
<password>sql</password>
<!-- Number of connections to open at Connection Manager initialization -->
<start-connections-count>3</start-connections-count>
<!-- Maximum number of connections that can be opened simultaneously -->
<max-connections-count>100</max-connections-count>
<!-- Time to wait for a released connection (milliseconds),
if all connections are busy -->
<release-connection-timeout>10</release-connection-timeout>
</database>
</web-OMS>

```

4.10.2.3. dbgout.props

94. Adjust DbgOut service settings in file <WorkFolder>\WEB-INF\classes\dbgout.props. Recommended <trace level>;<log level> values for all debug sources during testing are the following:

```

http-server.dbgout.format.enable=true
http-server.dbgout.log.append=false
http-server.dbgout.log.enable=true
http-server.dbgout.trace.enable=true
http-server.dbgout.simplelog.enable=false
http-server.dbgout.maillog.enable=true
http-server.dbgout.log.filename=C:/Tomcat41/logs/oms2.log
#maximum file size (e.g. 1GB, 5MB, 100KB)
http-server.dbgout.log.filesize=5MB
http-server.dbgout.log.filescount=3
http-server.dbgout.log.mailhost=epgsd002
http-server.dbgout.log.mailsubject=Fatal Error
http-server.dbgout.log.mailto=Aliaksandr_Yuzafovich@epam.com
http-server.dbgout.log.mailfrom=Aliaksandr_Yuzafovich@epam.com
http-server.dbgout.source.MISC=3;3;Miscellaneous
http-server.dbgout.source.DB=3;3;Data access
http-server.dbgout.source.BIND=3;3;Data binding
http-server.dbgout.source.CONN=3;3;Data connections
http-server.dbgout.source.PAGE=3;3;Pages
http-server.dbgout.source.SVLT=3;3;Servlets
http-server.dbgout.source.CTRL=3;3;Page Controls
http-server.dbgout.source.TAGX=3;3;Tag Extension Library
http-server.dbgout.source.SHLL=3;3;Web Application Shell

```

4.10.2.4. Update / deploy oms.war

95. Run "updwar.cmd" to apply adjusted settings.

96. Deploy (copy) <WorkFolder>\oms.war to TomCat's "webapps" subdirectory.

4.10.3. ?? Servlet mappings

97. Check servlet mappings for Apache in "mod_jk.conf" file. We suppose here that TomCat server is installed in "C:\Tomcat". Please, check the following lines presence in "mod_jk.conf":

```

JkMount /oms/*.jsp ajp13
JkMount /oms/res/* ajp13
JkMount /oms/localize ajp13
JkMount /oms/m_pg_progress ajp13
JkMount /oms/m_sys_showreport ajp13
JkMount /oms/Funnel ajp13
JkMount /oms/m_GifEncoder ajp13
JkMount /oms/m_sys_openpopupwindow ajp13
JkMount /oms/m_pg_navigation.html ajp13
JkMount /oms/m_sys_appframe_toolbarmaker ajp13
JkMount /oms/m_sys_appframe_shortcutbar ajp13
JkMount /oms/m_sys_topframe ajp13
JkMount /oms/mainframe ajp13
JkMount /oms/m_sys_bottomframe ajp13
JkMount /oms/m_sys_appframe_shortcutbar_page ajp13
JkMount /oms/m_sys_top_shortcutbar ajp13
JkMount /oms/m_sys_showCustomDialog ajp13
JkMount /oms/m_sys_getDBUpdates ajp13
JkMount /oms/getFileAttach/* ajp13
Alias /oms "C:/Tomcat/webapps/oms"
<Directory "C:/Tomcat/webapps/oms">
Options Indexes FollowSymLinks
</Directory>
<Location "/oms/WEB-INF/">
AllowOverride None
deny from all
</Location>
<Directory "C:/Tomcat/webapps/oms/WEB-INF/">

```

```

AllowOverride None
deny from all
</Directory>
<Location "/oms/META-INF/">
AllowOverride None
deny from all
</Location>
<Directory "C:/Tomcat/webapps/oms/META-INF/">
AllowOverride None
deny from all
</Directory>

```

4.10.4. ?? Russian text support (delete?)

98. To support a russian text input in OMS the following line should be added to Tomcat's configuration file

```

"C:\Tomcat\conf\server.xml" :
...
<DecodeInterceptor defaultEncoding="UTF-8" />
...

```

Otherwise <decode-request-parameters> parameter value in OMS file "shell.xml" should be set to "true".

4.10.5. ?? Deploy Oracle JDBC driver

99. Deploy Oracle JDBC driver. For that copy file

```
<Oracle home>\jdbc\lib\classes12.jar (maybe classes12.zip)
```

to one of the following locations:

```
<Java home>\jre\lib\ext\classes12.jar
```

or

```
<Tomcat dir>\lib\apps\classes12.jar
```

First location is preferred if all Java applications will use the same Oracle JDBC driver.

100. Delete TomCat's work folder for OMS application if exists (usually a "work" subdirectory in the TomCat's home directory).

101. Delete previously deployed OMS: for that delete "oms" directory content from TomCat's "webapps" subdirectory.

4.10.6. ?? Set time zone DB

102. Set appropriate time zone on Oracle DB server. Under Windows NT: open "Date/Time Properties" applet and:

- Select "(GMT) Greenweech Mean Time ..." time zone;
- Clear checkbox "Automatically adjust clock for daylight saving changes".

Refer to OS documentation under other operating systems.

4.10.7. Start Tomcat

103. Start TomCat.

4.10.8. Create OMS login permissions in PMC Admin

See PMC Admin Console documentation for more exact steps.

104. Login to PMC Admin Console ("root"/"0").

105. click "Permissions";

106. click "Granting";

107. choose user;

108. click "Edit";

109. at the window "Own permissions" click on the "System" tree item;

110. check "Login to OMS" checkbox below;

111. press "Apply these permissions" button;

112. add permissions "Create Customer", "Change Customer",

113. "Delete Customer" for the "EPAM (Organization)" object for appropriate user;

114. similarly, add permissions to Create/Modify/Delete OMS objects:

- OMS Activity (Task)
- OMS Opportunity (Project)
- OMS Contact

115. Time report for appropriate user. For the simplicity you can add appropriate permissions for the "EPAM (Organization)" object.

4.10.9. login

116. localhost/oms

117. enter username password

Address http://127.0.0.1:8099/oms/m_pg_loginpage.jsp Go

Manager [? help](#)

Contact

User Name:

Password:

[Change password](#)

Language: ▼

Figure 54. omc login screen

118. click submit

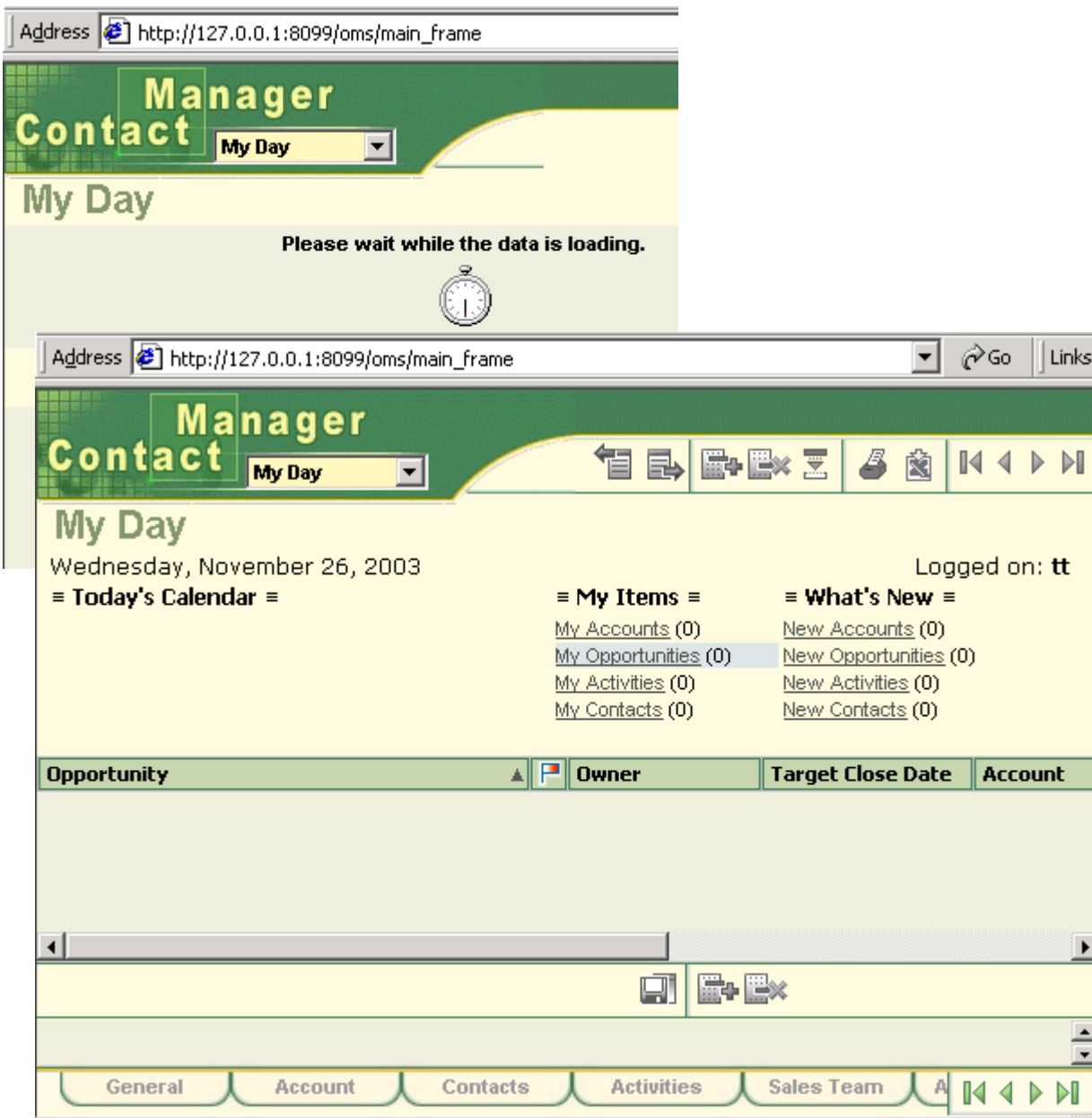


Figure 55. oms initial screen

4.11. GENTRACK

23: InstallGentrack.html

06_pmc_install_11_upsa.fm

20031021... installation is currently not ready to describe.

4.11.1. system requirements

CPU - Pentium 600 MHz or higher

RAM - 256 MB or higher

JDK Version 1.4.x

Servlet Container version 2.3 compatible (e.g. Tomcat 4.x.x)

Backend - Oracle (tested under 7, 8, 9 ver.)

4.11.2. install

119. <http://hrm/workload/>



Figure 56. gentrack logon screen



Figure 57. gentrack initial screen

4.12. PMC DATA

24: [InstallPmcData.html](#)

06_pmc_install_12_data.fm

4.13. PMC OIAI

25:InstallOiai.html

06_pmc_install_13_oiai.fm

(MS Outlook Integration Add-In)

from

\\epgsa002\Projects\Pmc\Files\Integration_MSOutlook\Build\Readme.txt

4.13.1. requirements

Following components should be installed and configured before:

- Project Management Center __version build # __PMC_build
- Microsoft Outlook 2002

Minimum System Requirements

- __PRODUCT_SHORT_NAME __version requires Microsoft Windows 2000

4.13.2. Application installation

IMPORTANT:

Before installing, you must un-install any previously installed version of __PRODUCT_SHORT_NAME

120. Unpack __product_short_name__version.__build__DSTAMP.zip in separate folder

121. Run setup.exe and follow the instructions that appear on the screen

4.13.3. Uninstallation

To remove __PRODUCT_SHORT_NAME __version from your computer, follow the directions below.

WINDOWS 2000

122. Close Microsoft Outlook

123. Open the Control Panel folder, and double-click the Add/Remove Programs icon.

124. Select EPAM PMC MS Outlook Add-in from the list displayed, then click the Change/Remove button. Follow the instructions that appear on the screen.

4.14. PMC PIAI

26:InstallPiai.html

06_pmc_install_14_piai.fm

(MS Project Integration Add-In)

from

\\epgsa002\Projects\Pmc\Files\Integration_MSProject\Build\Readme.txt

4.14.1. requirements

Following components should be installed and configured before:

- Project Management Center __version build # __PMC_build
- Microsoft Project 2002

Minimum System Requirements

- __PRODUCT_SHORT_NAME __version requires Microsoft Windows 2000

4.14.2. Application installation

IMPORTANT:

Before installing, you must un-install any previously installed version of __PRODUCT_SHORT_NAME

125. Unpack __product_short_name__version.__build__DSTAMP.zip in separate folder

126. Run setup.exe and follow the instructions that appear on the screen

4.14.3. Uninstallation

To remove __PRODUCT_SHORT_NAME __version from your computer, follow the directions below.

WINDOWS 2000

127. Close Microsoft Project

128. Open the Control Panel folder, and double-click the Add/Remove Programs icon.

129. Select EPAM PMC MS Project Add-in from the list displayed, then click the Change/Remove button. Follow the instructions that appear on the screen.

4.15. EWW

27:InstallEww.html

06_pmc_install_15_eww.fm

README

EWW2. EPAm Information System.

Version 2.3

Build # 2.3.001

EPAm Information System - EWW2.
(c)EPAm,2002

Installation guide

==== Components.

Following components should be installed and configured before:

1. Operating system: WinNT 4.0 Server
2. Java development kit: JDK 1.4
3. Web server: Apache v.1.3.22
4. Application server: TomCat v.4.1.25
5. SQL server: Oracle Database server v.9.1
6. SQL client: Oracle Client [Runtime] v.9.1
7. PMC business database \${DB_build}

Included or used components:

1. EPAm Information System 2.3 build # 2.3.001
2. DB updates (if exists)

==== Configuration of Components.

***** Operating System on Application host.

- check access permission to remote resources on other hosts.
- Map each remote resource directory to logical drive

***** JDK

- check Java SSE 1.0.2 libraries
- check up SSL settings (If you turn on Trust Security Authorization).
In "jre/lib/security/java.security" file following lines must present:
security.provider.3=com.sun.net.ssl.internal.ssl.Provider

***** Oracle client (if used OCI driver for data access)

- check Windows-registry parameter HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME0\NLS_LANG
last part of it after dot must be "UTF8".
Example: "AMERICAN_AMERICA.UTF8".

***** Apache web-server(check httpd.conf):

Section 1: Global Environment

```
ServerType standalone
ServerRoot "<apache>"
PidFile logs/httpd.pid
Timeout 300
KeepAlive On
MaxKeepAliveRequests 100
KeepAliveTimeout 15
MaxRequestsPerChild 0
ThreadsPerChild 50
```

Section 2: 'Main' server configuration

```
Port 80
ServerAdmin you@your.address
Listen 443
Listen 80
LoadModule ssl_module modules/mod_ssl.so
DocumentRoot "<TomCat webapps dir>"
#AddDefaultCharset ISO-8859-1
```

Section 3: Virtual Hosts

```
<VirtualHost *>
Include "<tomcat>/conf/jk/mod_jk.conf"
***** JK Apache/Tomcat connectors
- <tomcat>/conf/jk/mod_jk.conf and check up
  .servlet mapping for AJP13:
      JkMount /eww/auth ajp13
      JkMount /eww/app/* ajp13
      JkMount /eww/resources/* ajp13
  . secure <VirtualHost *:443>
- <tomcat>/conf/jk/workers.properties
  workers.tomcat_home=<tomcat>
  workers.java_home=<JAVA_HOME>
```

***** Tomcat

- minimal server.xml configuration

```
<Server port="8005" shutdown="SHUTDOWN" debug="0">
<Service name="Tomcat-Standalone">
  <Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8080"
    minProcessors="5" maxProcessors="75"
    enableLookups="true" redirectPort="8443"
    acceptCount="100" debug="0" connectionTimeout="20000"
    useURValidationHack="false" disableUploadTimeout="true" />
  <!-- Define a SSL Coyote HTTP/1.1 Connector on port 8443 -->
  <Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8443"
    minProcessors="5" maxProcessors="75"
    enableLookups="true"
    acceptCount="100" debug="0" scheme="https" secure="true"
    useURValidationHack="false" disableUploadTimeout="true">
    <Factory className="org.apache.coyote.tomcat4.CoyoteServerSocketFactory" clientAuth="false" protocol="TLS" />
  </Connector>
  <!-- Define a Coyote/JK2 AJP 1.3 Connector on port 8009 -->
  <Connector className="org.apache.coyote.tomcat4.CoyoteConnector"
    port="8009" minProcessors="5" maxProcessors="75"
    enableLookups="true" redirectPort="8443"
    acceptCount="10" debug="0" connectionTimeout="20000"
    useURValidationHack="false"
    protocolHandlerClassName="org.apache.jk.server.JkCoyoteHandler"/>
</Engine name="Standalone" defaultHost="localhost" debug="0">
```

```
<Logger className="org.apache.catalina.logger.FileLogger"
  prefix="catalina_log." suffix=".txt"
  timestamp="true"/>
<Host name="localhost" debug="0" appBase="webapps"
  unpackWARs="true" autoDeploy="true">
<!-- <Context path="" docBase="ROOT" debug="0"/> -->
</Host>
</Engine>
</Service>
</Server>
```

- <tomcat>/conf/jk/wrapper.properties (a bootstrap file for the Tomcat NT service)
 - workers.tomcat_home=<tomcat>
 - workers.java_home=<JAVA_HOME>
- SSL tuning
 - Execute this from command line:
 - %JAVA_HOME%\bin\keytool -genkey -alias tomcat -keyalg RSA
 - For certificate generation:
 - enter password "changeit";
 - fill other attributes with some fake information.
 - Uncomment these lines in <Tomcat home>\conf\server.xml (if standalone configuration).
 - <Http10Connector port="8443" secure="true"/>
 - By first access to EWW through HTTPS browser will alert you about secure connection.
 - Install certificate for automatically launching EWW through SSL later.

***** Operating System on Oracle host.

- check time zone on Oracle server machine.
 - Under Windows NT open "Date/Time Properties" applet and:
 - select "(GMT) Greenweech Mean Time ..." time zone;
 - clear checkbox "Automatically adjust clock for daylight saving changes".
 - Refer to OS documentation under other operating systems.

***** EPAM Information System (<eww>=<TomCat webapps dir>/eww)

```
-- <eww>\WEB-INF\web.xml
<web-app>
<context-param>
<param-name>app</param-name>
<param-value>com/epam/eww/application.xml</param-value>
</context-param>
<context-param>
<param-name>resources</param-name>
<param-value>com/epam/eww/h_fileresources_map.xml</param-value>
</context-param>
```

```
<servlet>
<servlet-name>HttpEventDispatcher</servlet-name>
<servlet-class>com.epam.atom.http.HttpEventDispatcher</servlet-class>
<load-on-startup>1</load-on-startup>
</servlet>
<servlet>
<servlet-name>HttpResourceDispatcher</servlet-name>
<servlet-class>com.epam.atom.http.HttpResourceDispatcher</servlet-class>
<load-on-startup>1</load-on-startup>
</servlet>
```

```
<servlet-mapping>
<servlet-name>HttpEventDispatcher</servlet-name>
<url-pattern>/app/*</url-pattern>
</servlet-mapping>
<servlet-mapping>
<servlet-name>HttpResourceDispatcher</servlet-name>
<url-pattern>/resources/*</url-pattern>
</servlet-mapping>
```

```
</web-app>
-- <eww>\WEB-INF\classes\com\epam\eww\application.xml
<attribute id="mnemocode">eww</attribute>
<attribute id="entity_default">login</attribute>
<attribute id="urlCSS">app/sys/css.css</attribute>
<attribute id="logfile">c:/Program Files/Apache Group/Tomcat 4.1/logs/eww.log</attribute>
<attribute id="hr_manager">;<login_name>*</attribute>
<attribute id="help_desk_manager">;<login_name>*</attribute>
<attribute id="arhivarius">;<login_name>*</attribute>
<attribute id="person_admin">;<login_name>*</attribute>
<attribute id="developer">;<login_name>*</attribute>
<attribute id="policy_manager_email">mailto:WFAP@ep.minsk.by</attribute>
<attribute id="policy_local_root">c:/policies</attribute>
```

```
-- <eww>\WEB-INF\classes\com\epam\eww\dataconnector.xml
<unit resource="com/epam/eww/d_oracle.xml"/>
<unit resource="com/epam/eww/d_mssql.xml"/>
```

```
-- <eww>\WEB-INF\classes\com\epam\eww\d_oracle.xml
<attribute
id="url">jdbc:oracle:oci:@(description=(address=(host=<HOST>)(protocol=tcp)(port=1521))(connect_data=(sid=PMC)))</attribute-->
<attribute id="login">PMC_PORTAL</attribute>
<attribute id="password"><PASS></attribute>
```

```
-- <eww>\WEB-INF\classes\com\epam\eww\d_mssql.xml
<driver>com.inet.tds.TdsDriver</driver>
<database>jdbc:inetdae7:epmsa007?database=EPIS</database>
<user>episuser</user>
<password><PASS></password>
```

```
-- <eww>\WEB-INF\classes\com\epam\eww\h_resource_map.xml
<resource id="MSSeminars">//EPMSA007/MSSeminars</resource>
<resource id="seminar">//EPMSA007/MSSeminars</resource>
<resource id="ITLibrary">//EPMSA007/ITLibrary</resource>
<resource id="methodology">//EPMSA007/methodology</resource>
<resource id="onlineinfo">//EPMSA007/OnLineInfo</resource>
<resource id="casestudies">//EPMSA007/Case Studies</resource>
<resource id="news">//EPMSA007/First Page</resource>
<resource id="policies">//EPMSA007/Policies</resource>
<resource id="ForVisitors">//EPMSA007/For Visitors</resource>
<resource id="COBOL">//EPMSA007/Cobol</resource>
<resource id="GENBUS_Files">//EpmSa012/Projects/ENBUS/Files</resource>
```

- [4.15.1. operating System on Application host \(page 127\)](#)
- [4.15.2. JDK \(page 127\)](#)

- 4.15.3. Oracle client (if used OCI driver for data access) (page 127)
- 4.15.4. Apache web-server(check httpd.conf): (page 127)
- 4.15.5. JK Apache/Tomcat connectors (page 127)
- 4.15.6. minimal server.xml configuration (page 127)
- 4.15.7. <tomcat>/conf/jk/wrapper.properties (page 128)
- 4.15.8. SSL tuning (page 128)
- 4.15.9. check time zone on Oracle server machine. (page 128)
- 4.15.10. Adjust <eww>\WEB-INF\files (page 128)
- 4.15.11. alter_portal.sql (page 130)
- 4.15.12. deploy (page 130)
- 4.15.13. open (page 130)

4.15.1. operating System on Application host

- check access permission to remote resources on other hosts.
- Map each remote resource directory to logical drive

4.15.2. JDK

- check Java SSE 1.0.2 libraries
- check up SSL settings (If you turn on Trust Security Authorization).
In "jre/lib/security/java.security" file following lines must present:
security.provider.3=com.sun.net.ssl.internal.ssl.Provider

4.15.3. Oracle client (if used OCI driver for data access)

- check Windows-registry parameter HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\HOME0\NLS_LANG
last part of it after dot must be "UTF8".
Example: "AMERICAN_AMERICA.UTF8".

4.15.4. Apache web-server(check httpd.conf):

Section 1: Global Environment

```
ServerType standalone
ServerRoot "<apache>"
PidFile logs/httpd.pid
Timeout 300
KeepAlive On
MaxKeepAliveRequests 100
KeepAliveTimeout 15
MaxRequestsPerChild 0
ThreadsPerChild 50
```

Section 2: 'Main' server configuration

```
Port 80
ServerAdmin you@your.address
Listen 443
Listen 80
LoadModule ssl_module modules/mod_ssl.so
DocumentRoot "<TomCat webapps dir>"
#AddDefaultCharset ISO-8859-1
```

Section 3: Virtual Hosts

```
<VirtualHost *>
Include "<tomcat>/conf/jk/mod_jk.conf"
```

4.15.5. JK Apache/Tomcat connectors

```
- <tomcat>/conf/jk/mod_jk.conf and check up
.servlet mapping for AJP13:
JkMount /eww/auth ajp13
JkMount /eww/app/* ajp13
JkMount /eww/resources/* ajp13
. secure <VirtualHost *:443>
- <tomcat>/conf/jk/workers.properties
workers.tomcat_home=<tomcat>
workers.java_home=<JAVA_HOME>
```

4.15.6. minimal server.xml configuration

```
<Server port="8005" shutdown="SHUTDOWN" debug="0">
```

```

<Service name="Tomcat-Standalone">
  <Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8080"
    minProcessors="5" maxProcessors="75"
      enableLookups="true" redirectPort="8443"
      acceptCount="100" debug="0" connectionTimeout="20000"
      useURISValidationHack="false" disableUploadTimeout="true" />
  <!-- Define a SSL Coyote HTTP/1.1 Connector on port 8443 -->
  <Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8443"
    minProcessors="5" maxProcessors="75"
      enableLookups="true"
      acceptCount="100" debug="0" scheme="https" secure="true"
      useURISValidationHack="false" disableUploadTimeout="true">
    <Factory className="org.apache.coyote.tomcat4.CoyoteServerSocketFactory"
      clientAuth="false" protocol="TLS" />
  </Connector>
  <!-- Define a Coyote/JK2 AJP 1.3 Connector on port 8009 -->
  <Connector className="org.apache.coyote.tomcat4.CoyoteConnector"
    port="8009" minProcessors="5" maxProcessors="75"
      enableLookups="true" redirectPort="8443"
      acceptCount="10" debug="0" connectionTimeout="20000"
      useURISValidationHack="false"
      protocolHandlerClassName="org.apache.jk.server.JkCoyoteHandler" />
  <Engine name="Standalone" defaultHost="localhost" debug="0">
    <Logger className="org.apache.catalina.logger.FileLogger"
      prefix="catalina_log." suffix=".txt"
      timestamp="true" />
    <Host name="localhost" debug="0" appBase="webapps"
      unpackWARs="true" autoDeploy="true">
      <!-- <Context path="" docBase="ROOT" debug="0" /> -->
    </Host>
  </Engine>
</Service>
</Server>

```

4.15.7. <tomcat>/conf/jk/wrapper.properties

(a bootstrap file for the Tomcat NT service)

```

workers.tomcat_home=<tomcat>
workers.java_home=<JAVA_HOME>

```

4.15.8. SSL tuning

- Execute this from command line:

```
%JAVA_HOME%\bin\keytool -genkey -alias tomcat -keyalg RSA
```

For certificate generation:

- enter password "changeit";
- fill other attributes with some fake information.
- Uncomment these lines in <Tomcat home>\conf\server.xml (if standalone configuration).

```
<Http10Connector port="8443" secure="true"/>
```

- By first access to EWW through HTTPS browser will alert you about secure connection.

Install certificate for automatically launching EWW through SSL later.

4.15.9. check time zone on Oracle server machine.

Under Windows NT open "Date/Time Properties" applet and:

- select "(GMT) Greenweech Mean Time ..." time zone;
- clear checkbox "Automatically adjust clock for daylight saving changes".

Refer to OS documentation under other operating systems.

4.15.10. Adjust <eww>\WEB-INF\ files

Unpack EWW_2.3.001_20030701.zip in separate folder

- 4.15.10.1. web.xml (page 129)
- 4.15.10.2. \classes\com\epam\eww\application.xml (page 129)
- 4.15.10.3. \classes\com\epam\eww\dataconnector.xml (page 129)
- 4.15.10.4. \classes\com\epam\eww\d_oracle.xml (page 129)
- 4.15.10.5. \classes\com\epam\eww\d_mssql.xml (page 129)
- 4.15.10.6. \classes\com\epam\eww\h_resource_map.xml (page 129)

4.15.10.1. web.xml

```
<eww>=<TomCat webapps dir>/eww)
<web-app>
  <context-param>
    <param-name>app</param-name>
    <param-value>com/epam/eww/application.xml</param-value>
  </context-param>
  <context-param>
    <param-name>resources</param-name>
    <param-value>com/epam/eww/h_fileresources_map.xml</param-value>
  </context-param>
  <servlet>
    <servlet-name>HttpEventDispatcher</servlet-name>
    <servlet-class>com.epam.atom.http.HttpEventDispatcher</servlet-class>
    <load-on-startup>1</load-on-startup>
  </servlet>
  <servlet>
    <servlet-name>HttpResourceDispatcher</servlet-name>
    <servlet-class>com.epam.atom.http.HttpResourceDispatcher</servlet-class>
    <load-on-startup>1</load-on-startup>
  </servlet>
    <servlet-mapping>
      <servlet-name>HttpEventDispatcher</servlet-name>
      <url-pattern>/app/*</url-pattern>
    </servlet-mapping>
  <servlet-mapping>
    <servlet-name>HttpResourceDispatcher</servlet-name>
    <url-pattern>/resources/*</url-pattern>
  </servlet-mapping>
</web-app>
```

4.15.10.2. \classes\com\epam\eww\application.xml

```
<attribute id="mnemocode">eww</attribute>
<attribute id="entity_default">login</attribute>
<attribute id="urlCSS">app/sys/css.css</attribute>
<attribute id="logfile">c:/Program Files/Apache Group/Tomcat 4.1/logs/eww.log</attribute>
<attribute id="hr_manager">;<login_name>*</attribute>
<attribute id="help_desk_manager">;<login_name>*</attribute>
<attribute id="arhivarius">;<login_name>*</attribute>
<attribute id="person_admin">;<login_name>*</attribute>
<attribute id="developer">;<login_name>*</attribute>
<attribute id="policy_manager_email">mailto:WFAP@ep.minsk.by</attribute>
<attribute id="policy_local_root">c:/policies</attribute>
```

4.15.10.3. \classes\com\epam\eww\dataconnector.xml

```
<unit resource="com/epam/eww/d_oracle.xml"/>
<unit resource="com/epam/eww/d_mssql.xml"/>
```

4.15.10.4. \classes\com\epam\eww\d_oracle.xml

```
<attribute
  id="url">jdbc:oracle:oci:@(description=(address=(host=<HOST>)(protocol=tcp)(port=1521))
  (connect_data=(sid=PMC)))</attribute-->
<attribute id="login">PMC_PORTAL</attribute>
<attribute id="password"><PASS></attribute>
```

4.15.10.5. \classes\com\epam\eww\d_mssql.xml

```
<driver>com.inet.tds.TdsDriver</driver>
<database>jdbc:inetdae7:epmsa007?database=EPIS</database>
<user>episuser</user>
<password><PASS></password>
```

4.15.10.6. \classes\com\epam\eww\h_resource_map.xml

```
<resource id="MSSeminars">//EPMSA007/MSSeminars</resource>
<resource id="seminar">//EPMSA007/MSSeminars</resource>
<resource id="ITLibrary">//EPMSA007/ITLibrary</resource>
<resource id="methodology">//EPMSA007/methodology</resource>
<resource id="onlineinfo">//EPMSA007/OnLineInfo</resource>
<resource id="casestudies">//EPMSA007/Case Studies</resource>
```

```
<resource id="news">//EPMSA007/First Page/</resource>  
<resource id="policies">//EPMSA007/Policies/</resource>  
<resource id="ForVisitors">//EPMSA007/For Visitors/</resource>  
<resource id="COBOL">//EPMSA007/Cobol/</resource>  
<resource id="GENBUS_Files">//Epmsa012/Projects/ENBUS/Files/</resource>
```

4.15.11. alter_portal.sql

- Check if Oracle server is running
- Apply db updates (if exists) Login into database as PMC_PORTAL user and execute script from file alter_portal.sql

4.15.12. deploy

- Stop Tomcat.
- Delete Tomcat's webapps folder for EWW application if exists.
- Delete Tomcat's work folder for EWW application if exists.
- Deploy(copy) eww.war to <TomCat webapps dir>
- Start Tomcat.
- check if Apache is configured and running
- check apache&tomcat&application logs for properly installation messages without exceptions and errors.

4.15.13. open

open www

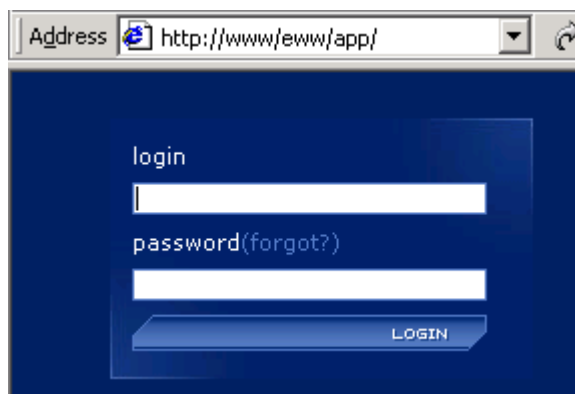


Figure 58. eww login screen

4.16. LIBRARY

28:InstallLibrary.html
06_pmc_install_16_library.fm

5. Quick start

29:Qs.html

07_pmc_qs.fm

This chapter describes how to quickly start using PMC for the following types of users

- 5.1. PMC ADMIN (page 135)
- 5.2. PMC CLIENT (page 183)
- 5.3. ESR (page 185)
- 5.4. OMS (page 187)
- 5.5. HRM Workload (page 189)
- 5.6. HRM Applicant (page 199)
- 5.7. HRM Survey (page 201)
- 5.8. EWW (page 203)
- 5.9. LIBRARY (page 205)

5.1. PMC ADMIN

30:QsPmcAdmin.html

07_pmc_qs_1_admin.fm

This chapter describes how to do the following:

- 5.1.1. Create / open organization (page 136)
- 5.1.2. Resources (page 139)
- 5.1.3. Customers/programs/projects (page 154)
- 5.1.4. Authorization (page 163)
- 5.1.5. Processes (page 177)
- 5.1.6. ACWE (page 181)

5.1.1. Create / open organization

5.1.1.1. Add organization

1. Open the admin console http://localhost/pmc_admin.
2. Username root.
3. Password 0.

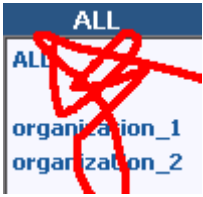


Figure 59. username/password

click login. appears:

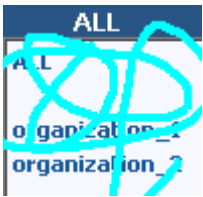


Figure 60. login window



Figure 61. list of orgs

4. [click all]
5. [click projects]
6. [click organizations]
7. click add.
8. in Name: enter organization_1.

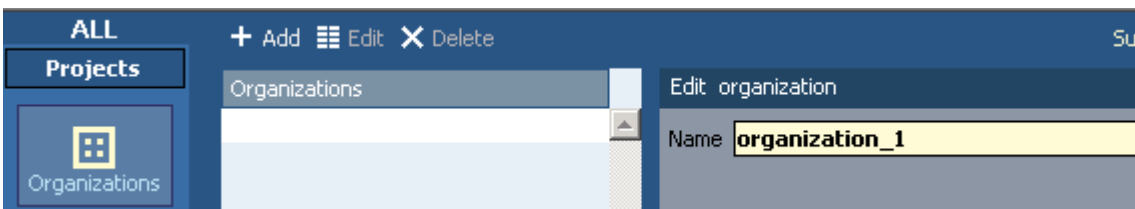
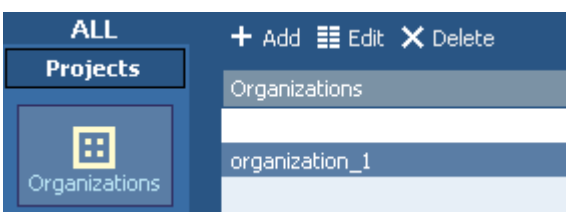


Figure 62. enter organization name

9. click save. added to list.



new organization added to list

10. add organization_2.

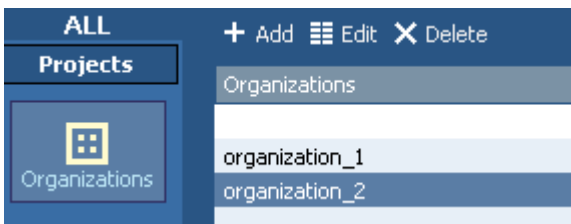


Figure 63. second organization added

5.1.1.2. Open an organization

11. click on all.



Figure 64. display all organizations

the list of organizations appears.

12. click on organization_1. pmc for the organization opens.

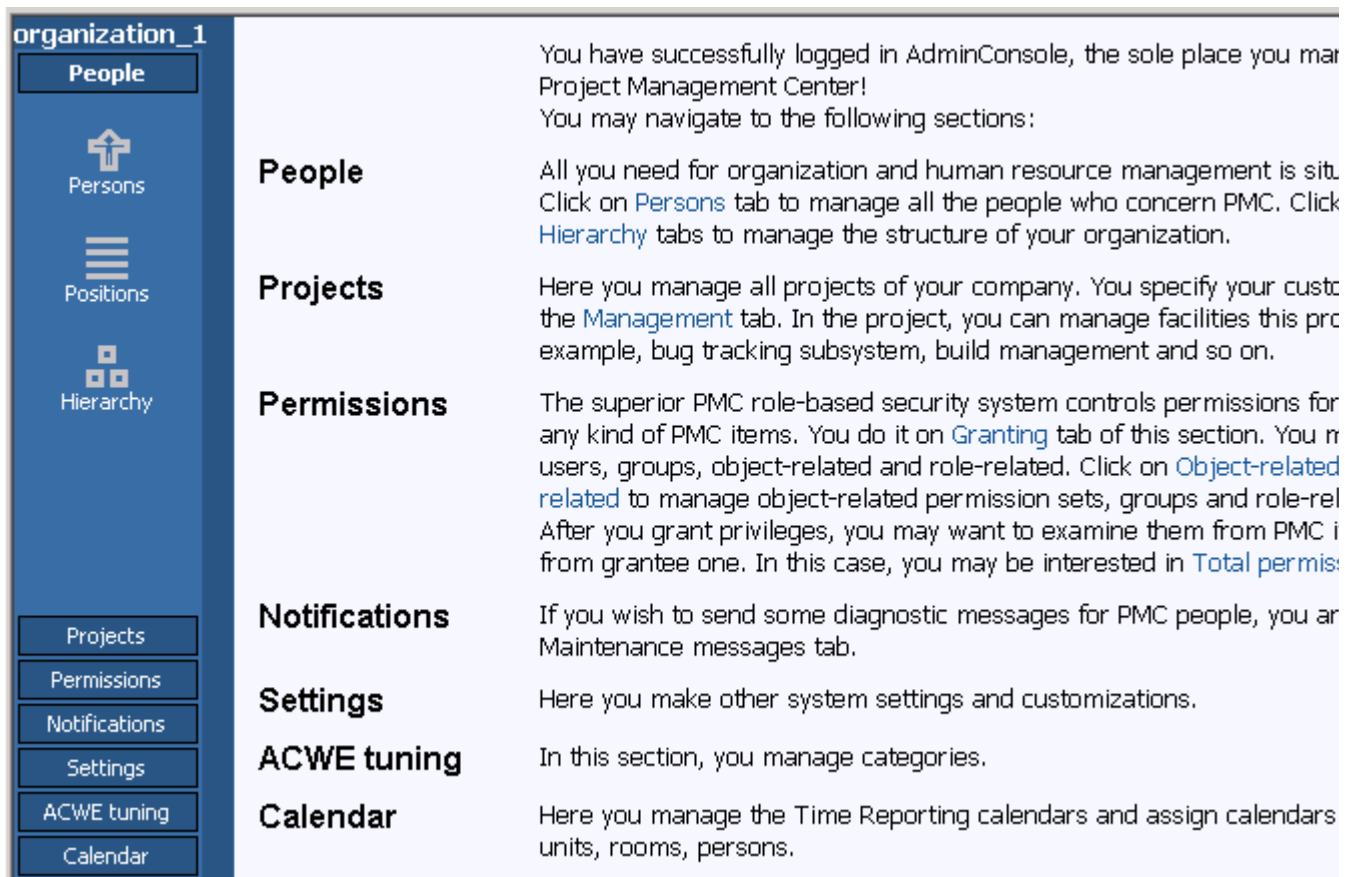


Figure 65. organization displayed

13. click on organization_1. again the list of organizations appears.

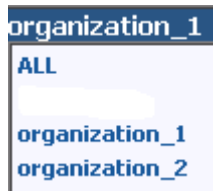


Figure 66. list of organizations

14. reopen organization_1.

5.1.2. Resources

You will now define the resources within your company:

- [5.1.2.1. Departments \(hierarchy subunits\) \(page 140\)](#)
- [5.1.2.2. Groups \(page 142\)](#)
- [5.1.2.3. Locations \(geographic\) \(page 143\)](#)
- [5.1.2.4. Roles \(with permission set\) \(page 145\)](#)
- [5.1.2.5. Positions \(page 146\)](#)
- [5.1.2.6. Persons \(users\) \(page 147\)](#)
- [5.1.2.7. Calendar \(page 150\)](#)

5.1.2.1. Departments (hierarchy subunits)

15. click on Hierarchy.
16. click on New subunit.
17. For Name enter subunit_1.

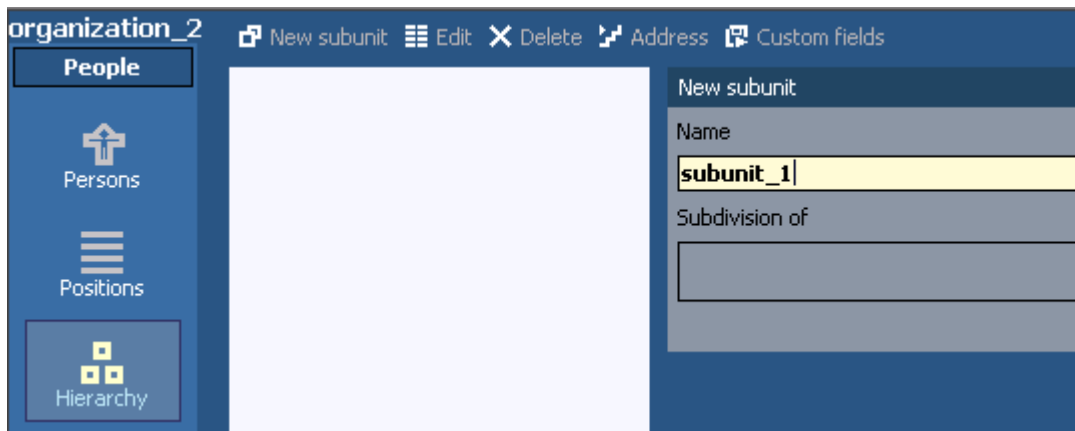


Figure 67. new subunit

18. click save.

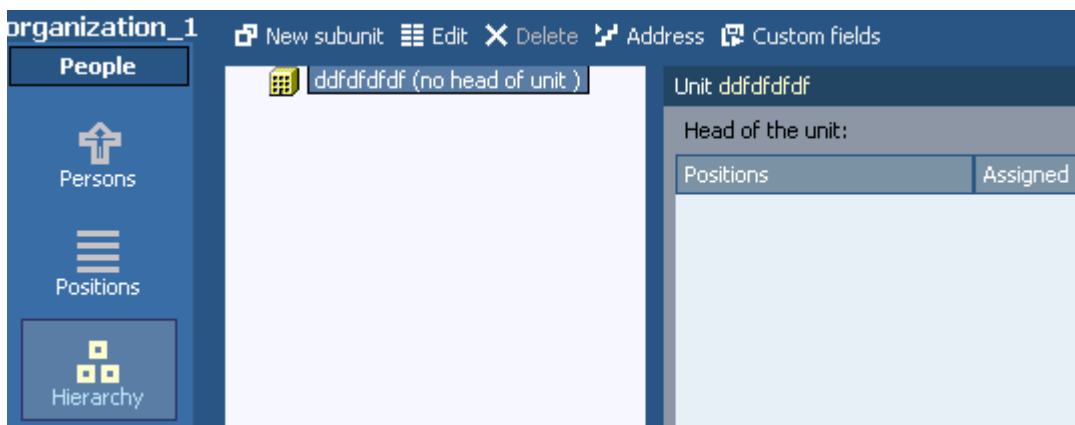


Figure 68. new subunit in hierarchy

19. click on subunit_1.
20. Click new subunit.
21. For name enter subunit_1a.
22. Click save.

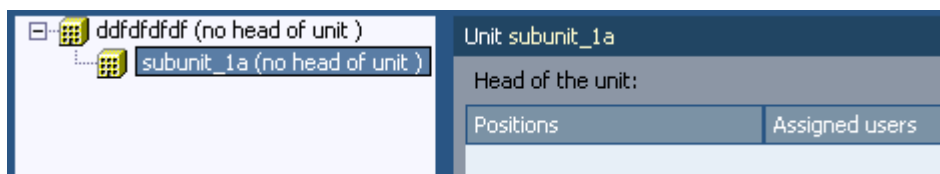


Figure 69. new subunit

23. create subunit_1b as shown below.

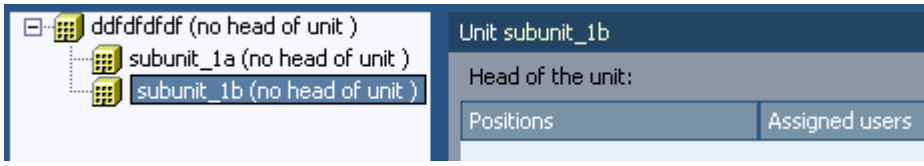


Figure 70. second subunit

5.1.2.2. Groups



Figure 71. groups

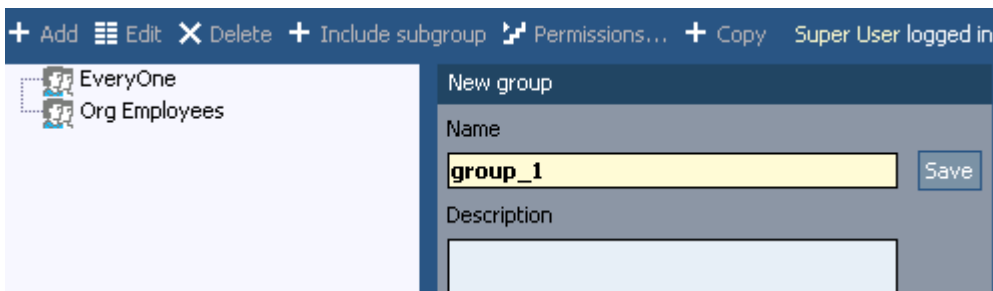


Figure 72. add new group

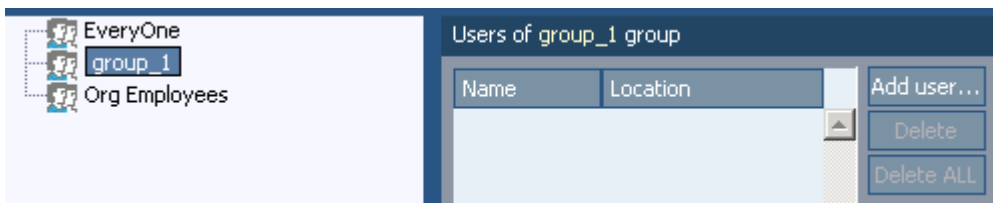


Figure 73. group users

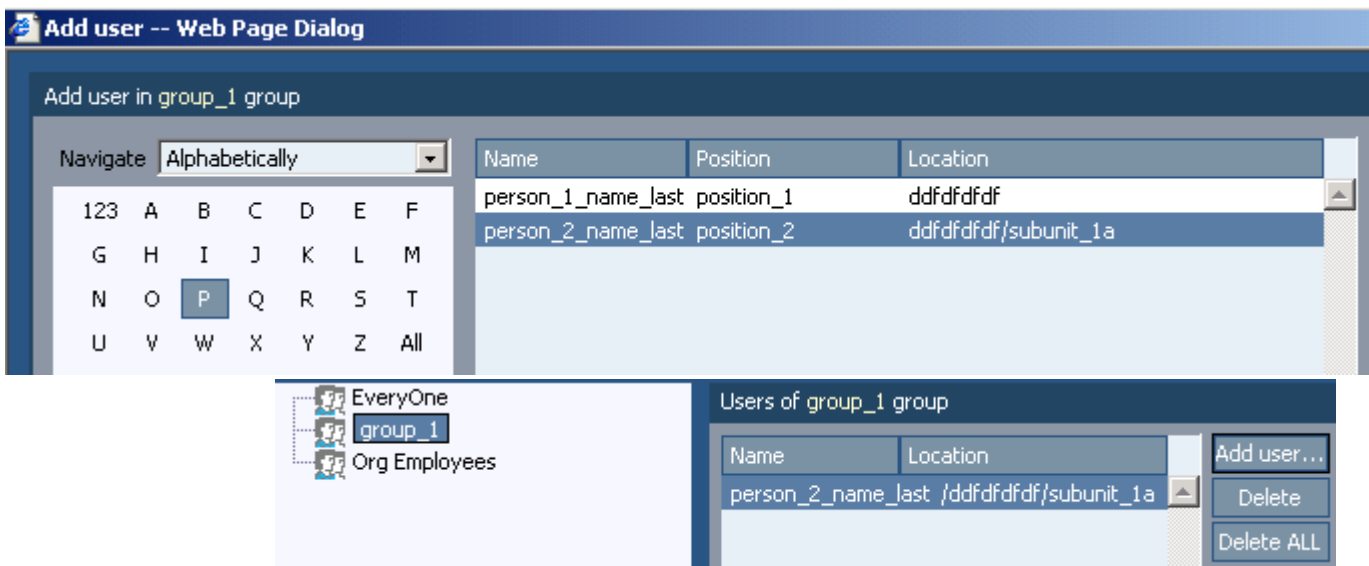


Figure 74. add group user

5.1.2.3. Locations (geographic)

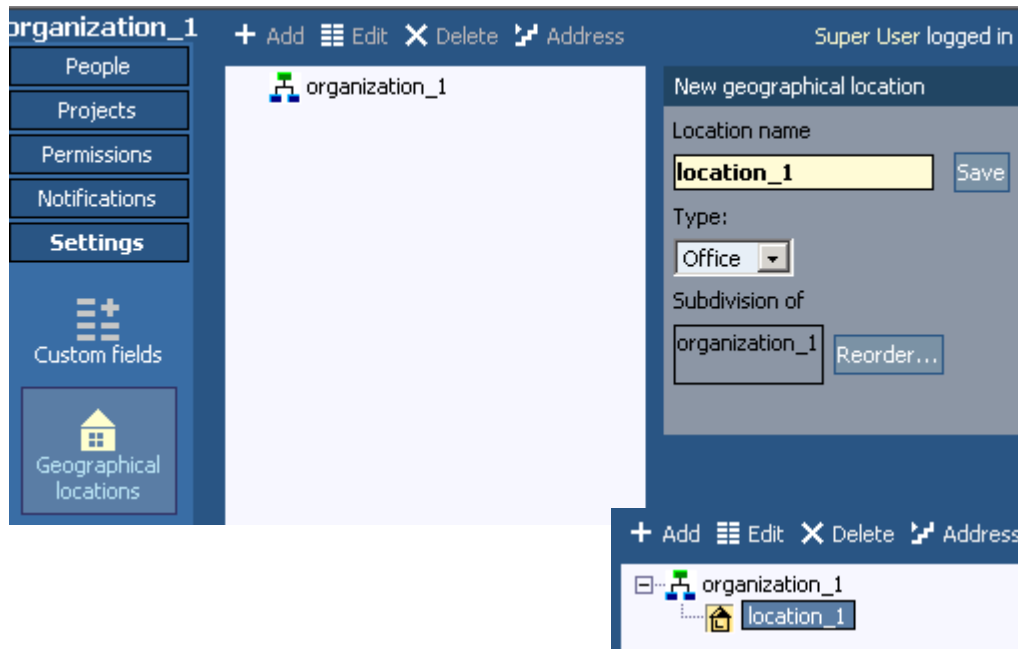


Figure 75. add geographic location

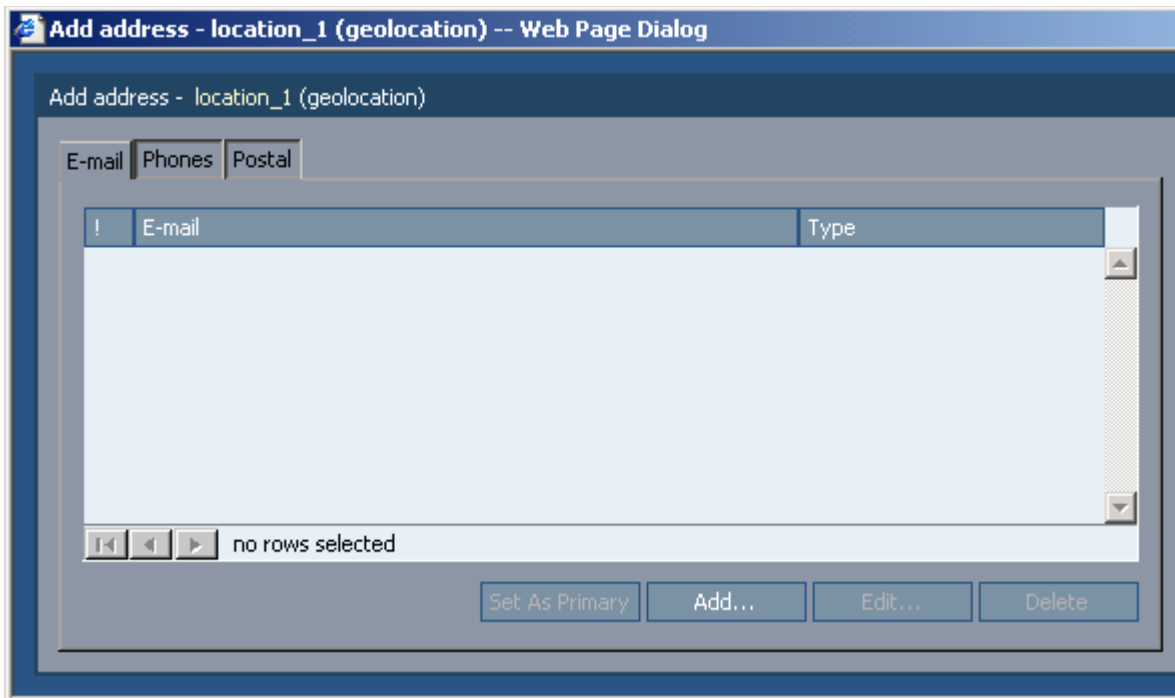


Figure 76. address required for geographical location

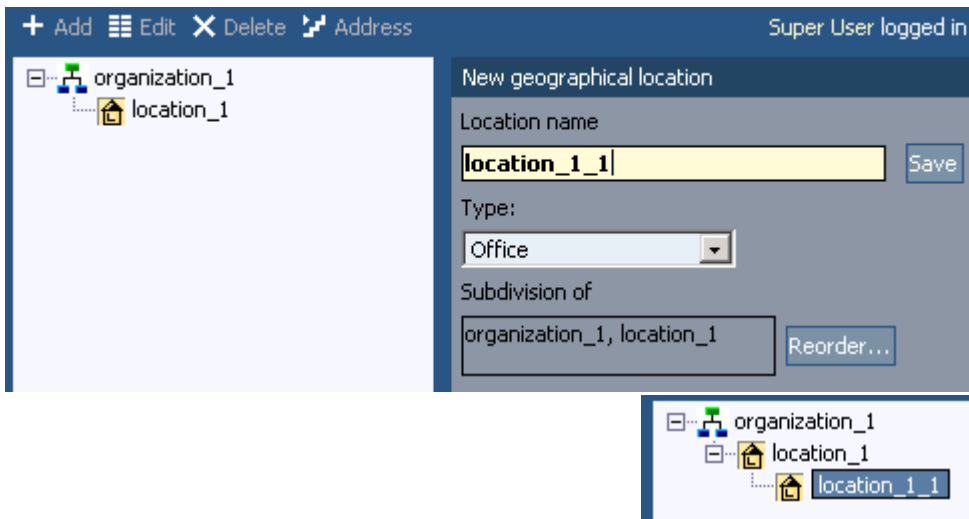


Figure 77. adding second geographical location

5.1.2.4. Roles (with permission set)

24. projects / roles.

25. click add.

26. For name enter role_1_name.

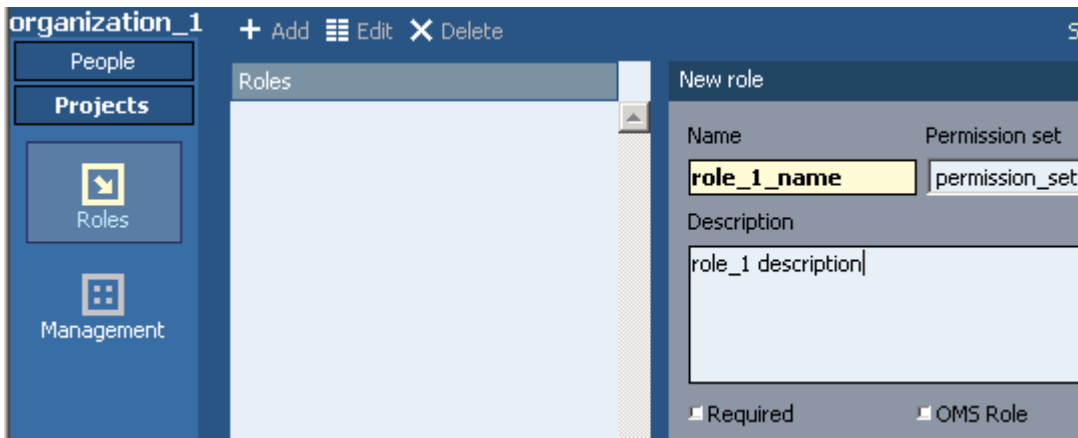


Figure 78. new role

27. click save.

28. Create role_2_name.

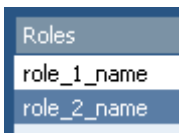


Figure 79. second role

5.1.2.5. Positions

29. click on positions.

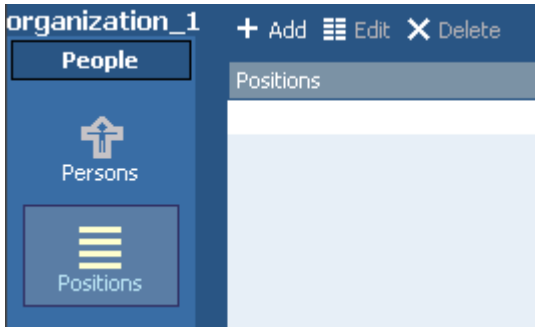


Figure 80. positions

30. click Add.

31. For Name enter position_1.

32. For Description enter position_1 description.

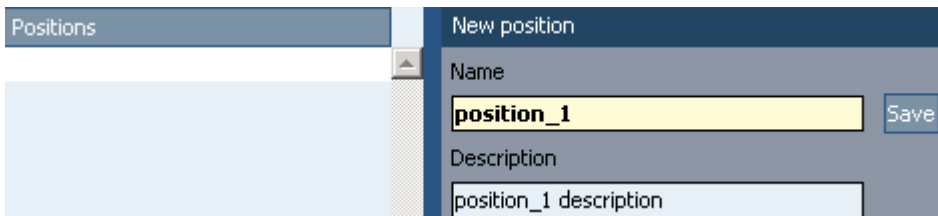


Figure 81. new position entry

33. click save.

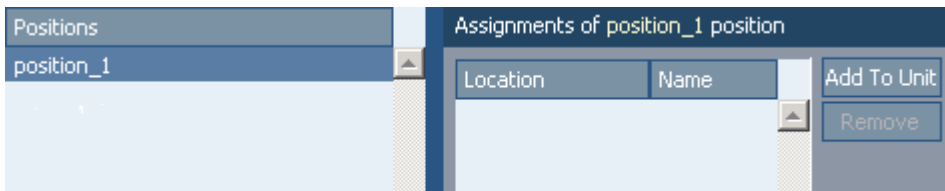


Figure 82. new position

34. Create another position with

- Name enter position_2.
- Description enter position_2 description.



Figure 83. 2 positions

5.1.2.6. Persons (users)

35. click on Persons.

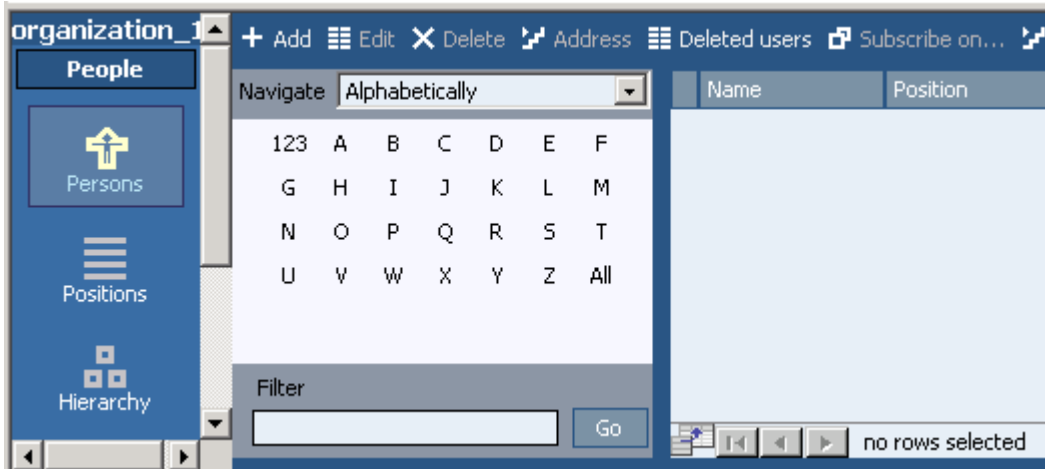


Figure 84. persons

36. click add. the dialog ?add persons? appears.

37. In tab Personal: for Last name enter person_1_name_last.

38. In tab Personal: for Org ID Number enter 1.

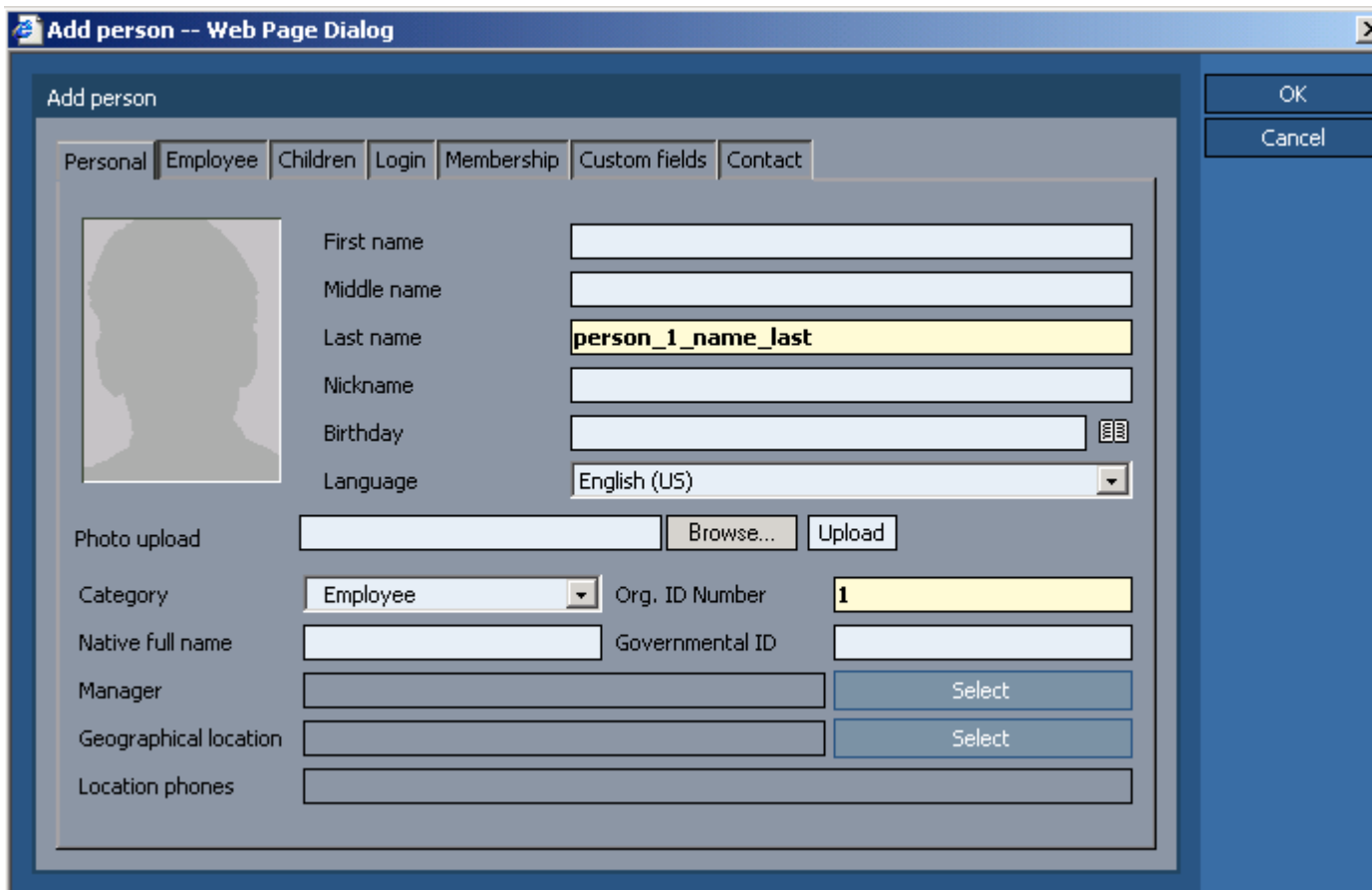


Figure 85. add person

39. click OK.

40. click on letter P. the new user is shown.

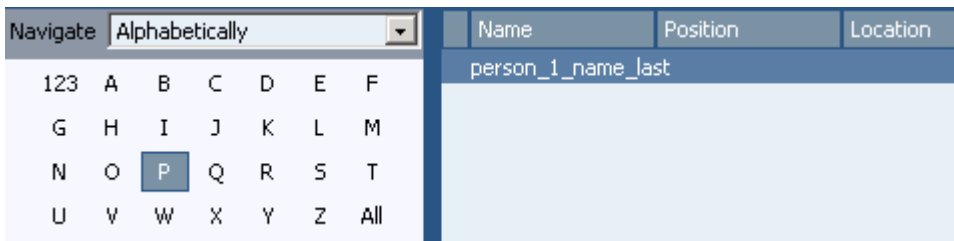


Figure 86. new person in list

41. create a person with

- Last name enter person_2_name_last.
- Org ID Number enter 2.

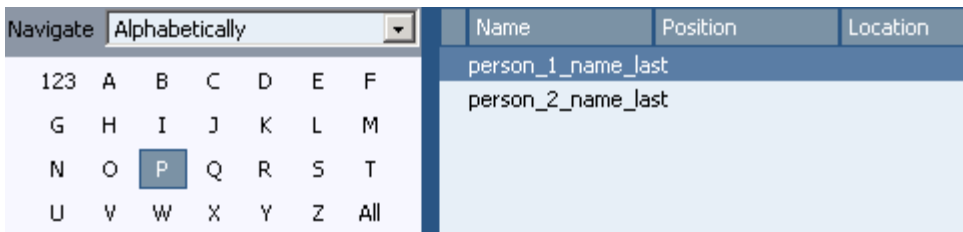


Figure 87. second person

42. set person userid/password

43. select person_1_name_last.

44. Click edit.

45. Select tab Login.

46. For User ID enter user_1.

47. For password enter 1111.

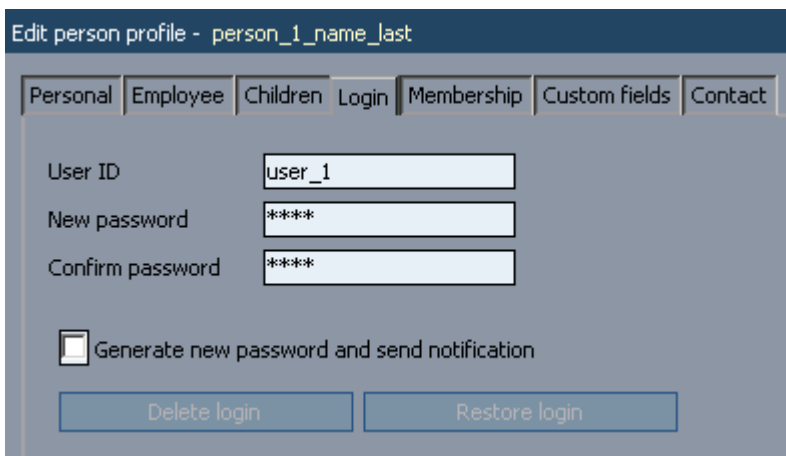


Figure 88. person login

48. click OK. note the key icon beside the person name.

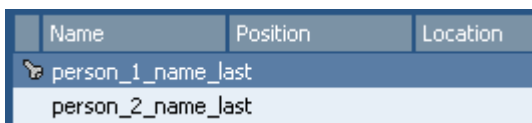


Figure 89. person list with key icon

49. create for person_2_name_last:

- User ID enter user_2
- Password enter 2222

Name	Position	Location
person_1_name_last		
person_2_name_last		

Figure 90. 2 persons in list

5.1.2.7. Calendar

You will now define the calendar:

- [5.1.2.7.1. Create \(page 151\)](#)
- [5.1.2.7.2. Fill out \(page 152\)](#)
- [5.1.2.7.3. Calendar mapping \(page 153\)](#)

5.1.2.7.1. Create

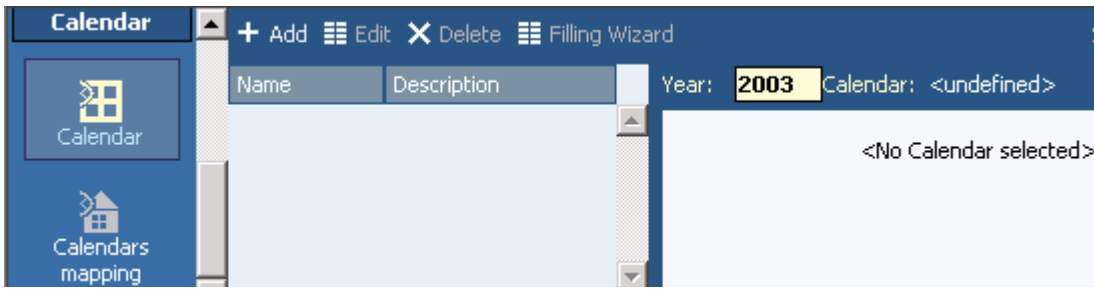


Figure 91. calendar

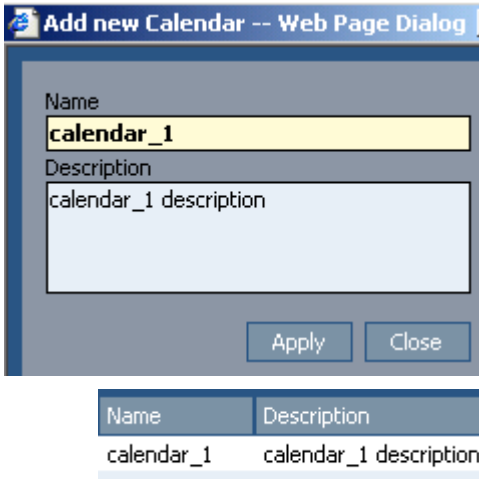


Figure 92. new calendar

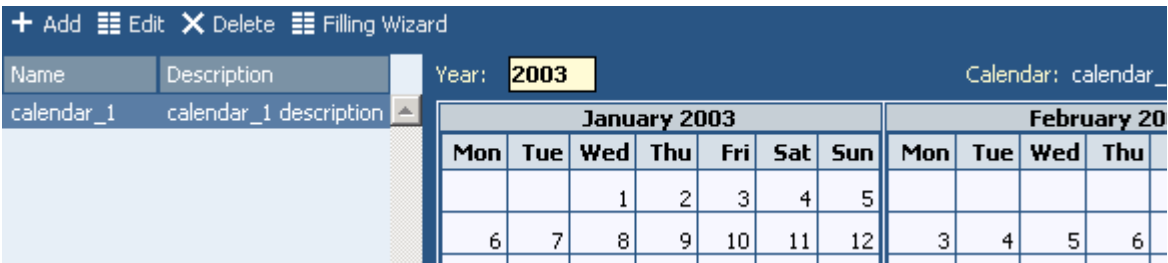


Figure 93. calendar content

5.1.2.7.2. Fill out

Calendar filling Wizard -- Web Page Dialog

Days of week:

Mon Fri
 Tue Sat
 Wed Sun
 Thu

Month:

January July
 February August
 March September
 April October
 May November
 June December

Set all Clear all Set all Clear all

Set to: Apply Close

Year: **2003** Calendar: calendar_1

January 2003							February 2003							Mon	Tu
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tu
		8	1	2	3	4						1	2		
8	6	8	7	8	8	9	8	10	11	12	8	3	8	8	3
8	13	8	14	8	15	16	8	17	18	19	8	10	8	10	8
8	20	8	21	8	22	23	8	24	25	26	8	17	8	17	8
8	27	8	28	8	29	30	8	31			8	24	8	24	8
														8	31
April 2003							May 2003							Mon	Tu
Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tu
	8	1	8	2	8	3	8	4	5	6					
8	7	8	8	8	9	10	8	11	12	13	8	5	8	6	8
									8	1	8	2	3	4	
							8	5	8	6	8	7	8	8	9
														8	2

Figure 94. fill out calendar

5.1.2.7.3. Calendar mapping

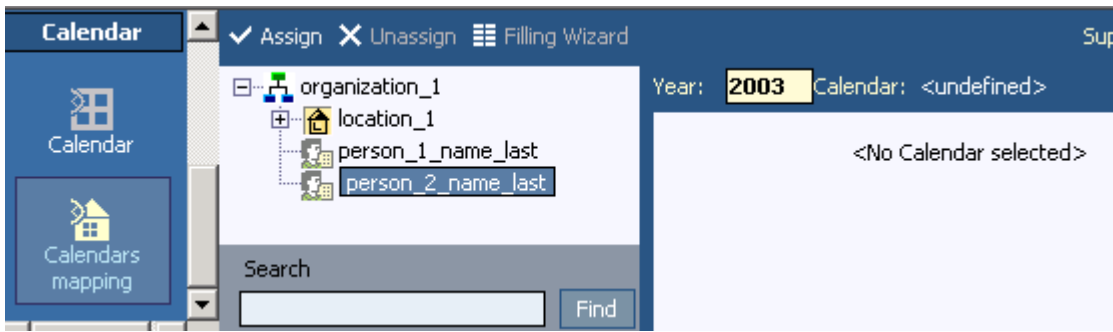


Figure 95. calendar mapping

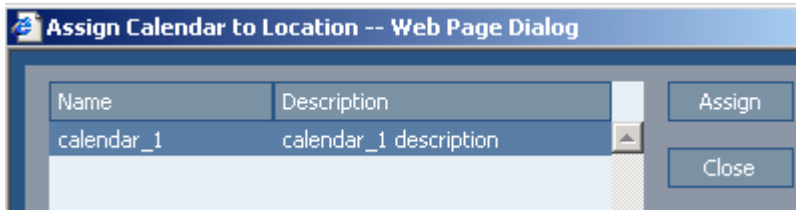


Figure 96. assign calendar to location



Figure 97. calendar for person

5.1.3. Customers/programs/projects

You will now define customers and associated programs, etc.:

- [5.1.3.1. Customers \(page 155\)](#)
- [5.1.3.2. Programs \(page 156\)](#)
- [5.1.3.3. Projects \(page 157\)](#)
- [5.1.3.4. Team members \(to project\) \(page 159\)](#)
- [5.1.3.5. Applications \(page 161\)](#)
- [5.1.3.6. Folders \(page 162\)](#)

5.1.3.1. Customers

50. click on Management.

51. Select organization_1.

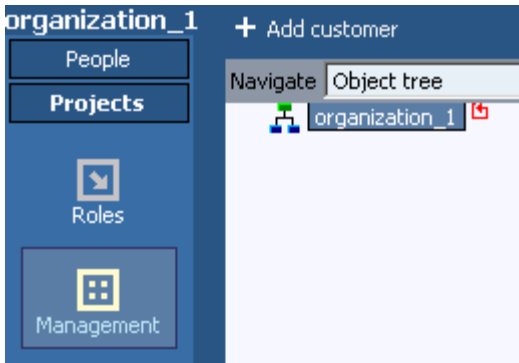


Figure 98. customers

52. click add customer.

53. For name enter customer_1_name.

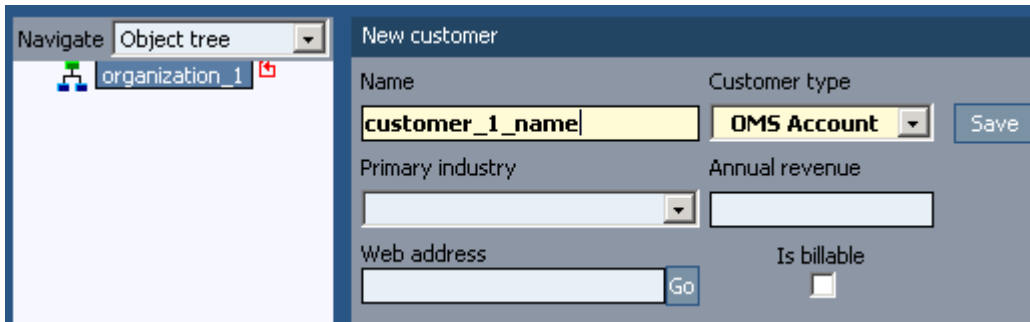


Figure 99. new customer

54. click save.

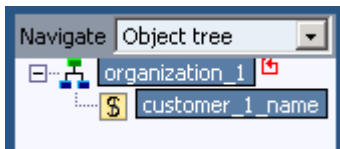


Figure 100. customer in object tree

55. create customer_2_name.

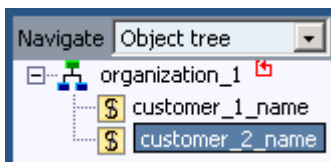


Figure 101. 2nd customer

5.1.3.2. Programs

56. select customer_1_name.

57. click add program.

58. For name enter program_1.

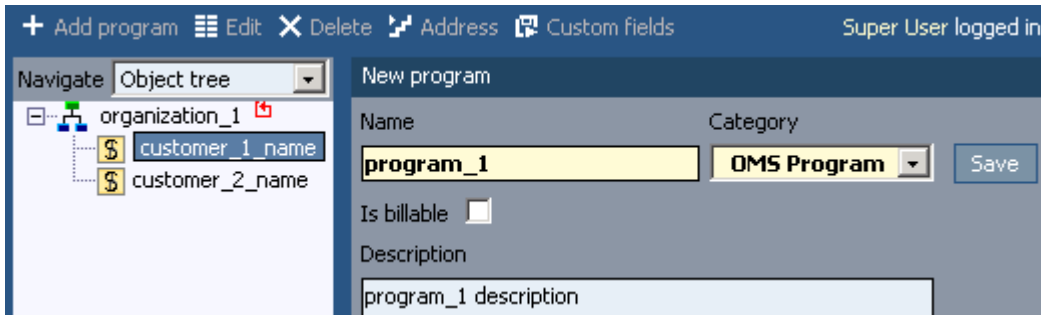


Figure 102. new program

59. click save.

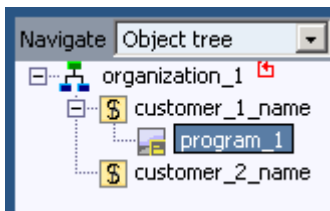


Figure 103. new program in tree

60. create for customer_1_name program_2.

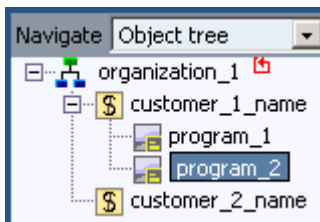


Figure 104. 2nd new program

5.1.3.3. Projects

61. select program_1.
62. click add project.
63. For code enter project_1_code.
64. For name enter project_1_name.

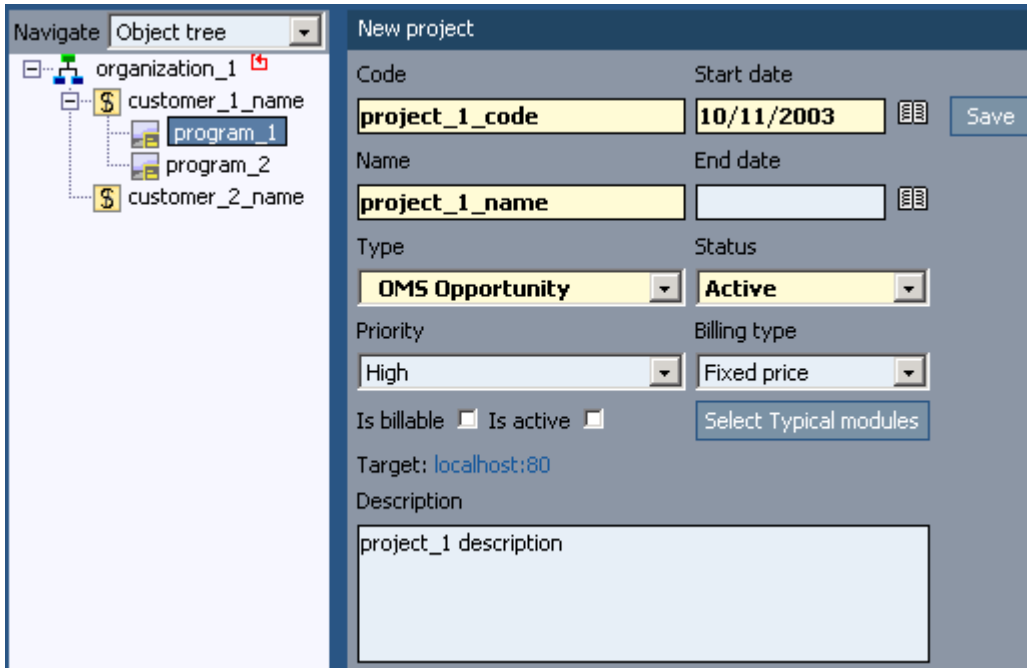


Figure 105. new project

65. Select all modules.

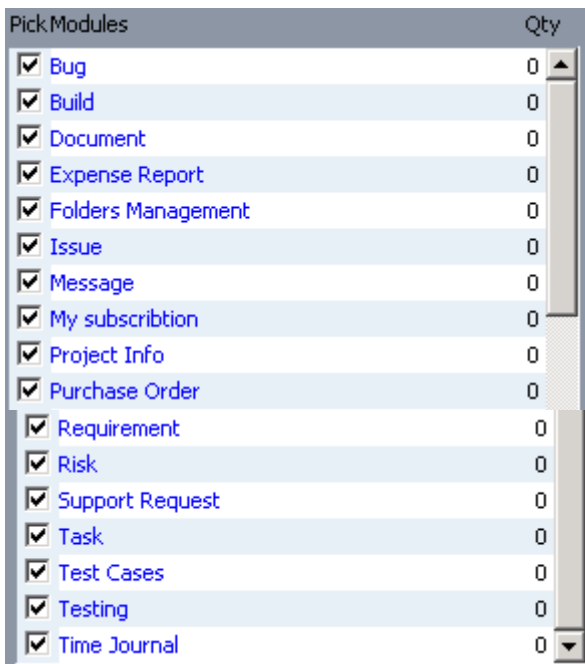


Figure 106. selected modules

66. click save.

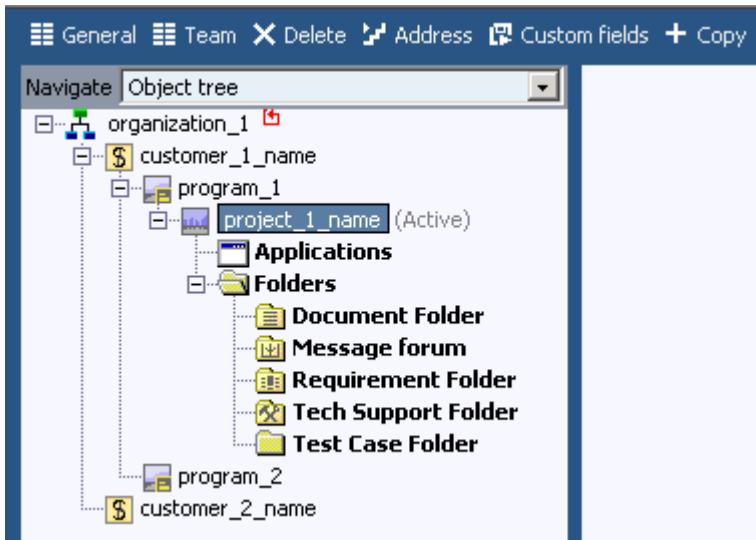


Figure 107. new program contents

67. create project_2_name.

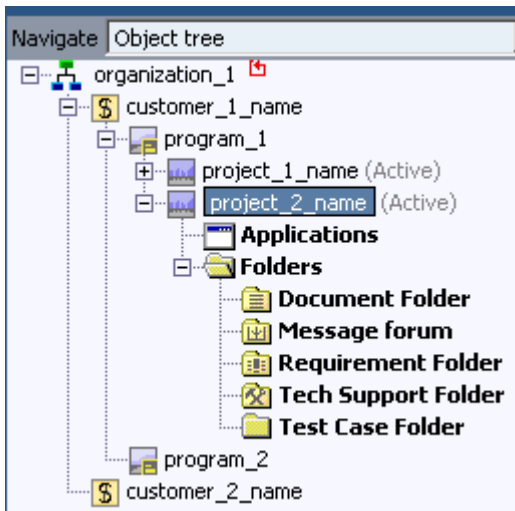


Figure 108. 2nd new program

5.1.3.4. Team members (to project)

68. projects / management.

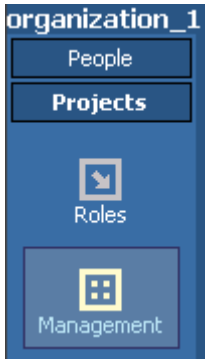


Figure 109. management

69. select project_1_name.

70. click team.

71. Click add member?.

72. Select person_1_name_last.

73. Select role_1_name.

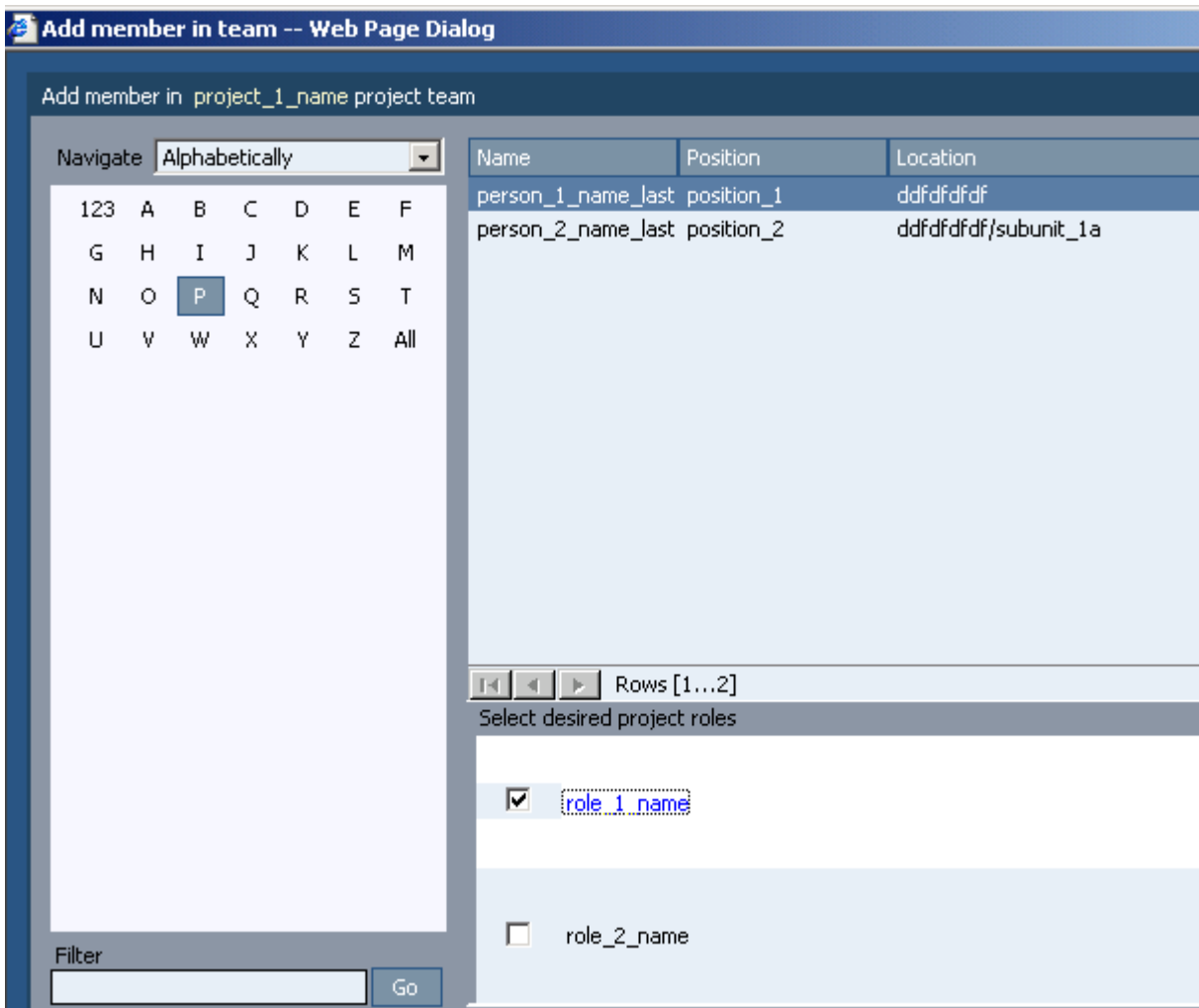


Figure 110. add team member

74. click OK.

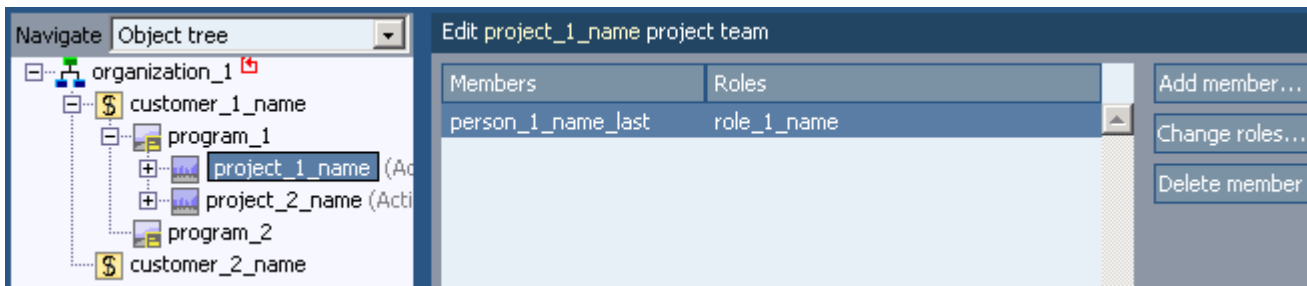


Figure 111. members list

75. add person_2_name_last with role_2_name.

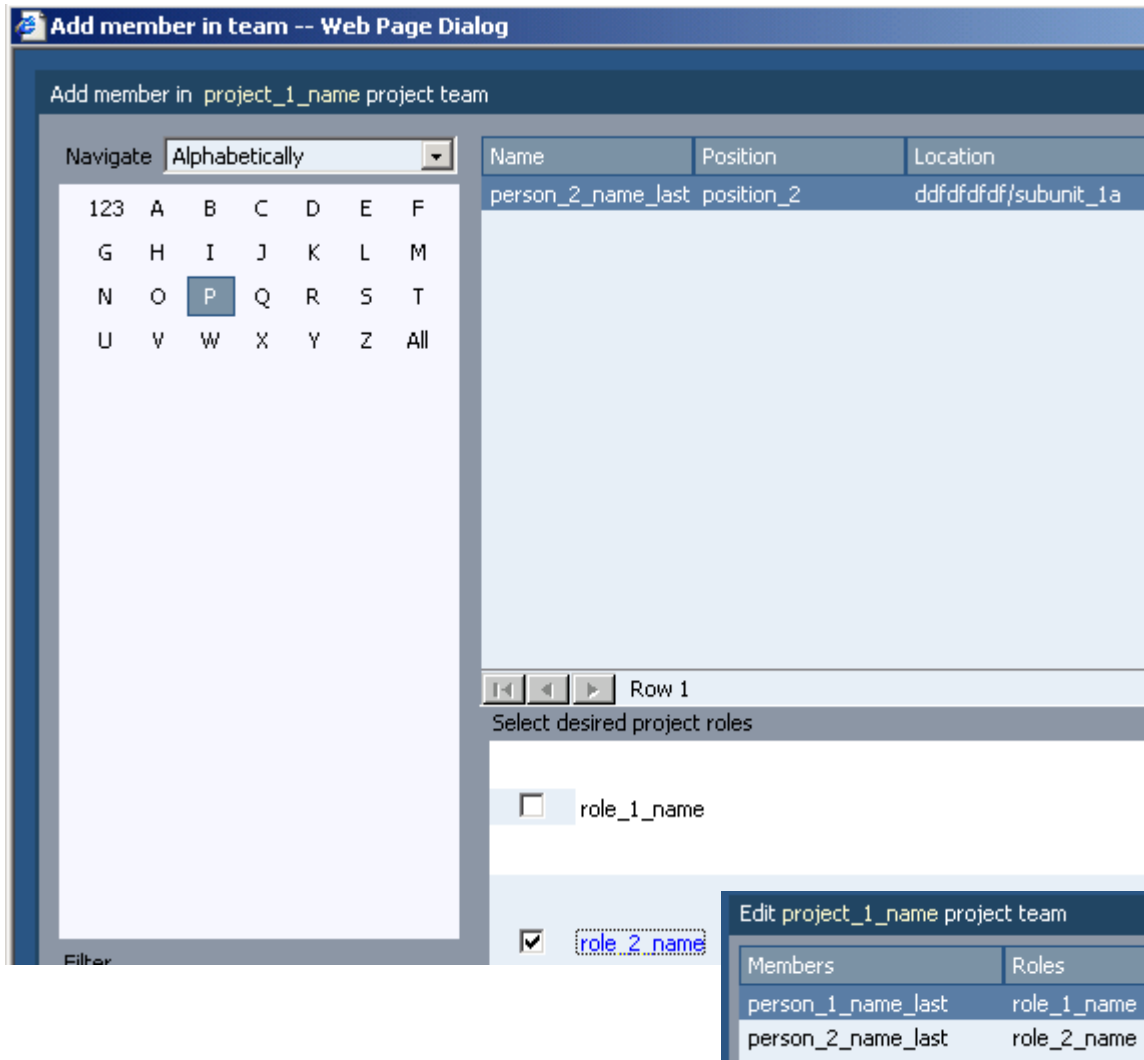


Figure 112. 2nd team member

5.1.3.5. Applications

76. for project_1_name select applications.

77. Click new application.

78. For name enter application_1_name.

79. Check is_active.

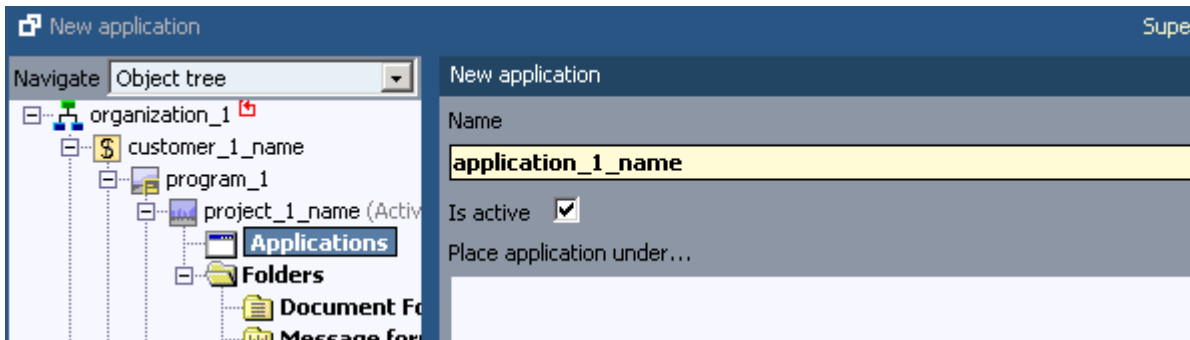


Figure 113. new application

80. click save.

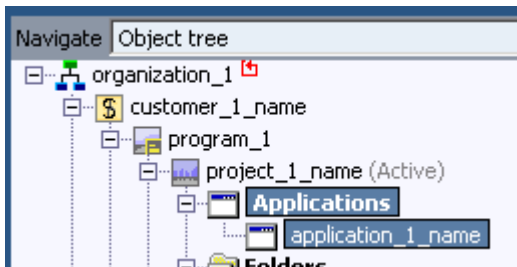


Figure 114. new application in tree

5.1.3.6. Folders

81. for project_1_name select document folder.
82. Click new folder.
83. For name enter document_folder_1_name.

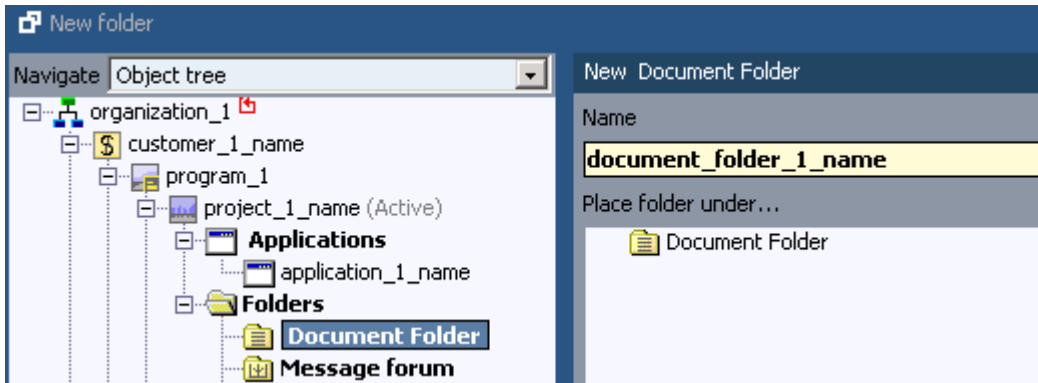


Figure 115. new folder

84. click save.

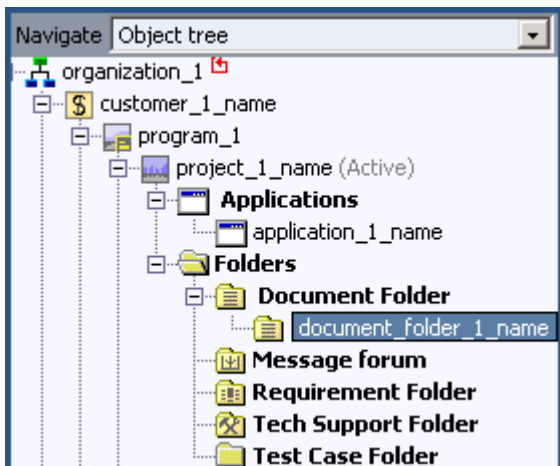


Figure 116. new folder in object tree

5.1.4. Authorization

You will now define all required authorization:

- [5.1.4.1. \(Customer\) objects \(groups/users\) \(page 164\)](#)
- [5.1.4.2. System actions \(groups/users\) \(page 168\)](#)
- [5.1.4.3. General actions \(roles\) \(page 169\)](#)
- [5.1.4.4. Users \(page 172\)](#)
- [5.1.4.5. Groups \(page 174\)](#)
- [5.1.4.6. Role permission sets \(page 176\)](#)

5.1.4.1. (Customer) objects (groups/users)

You will now :

- 5.1.4.1.1. Add permission set (page 164)
- 5.1.4.1.2. Add object permissions (page 164)
- 5.1.4.1.3. Assign to groups (page 166)
- 5.1.4.1.4. Assign to users (page 166)

5.1.4.1.1. Add permission set

85. click add.

86. For name enter object_permission_set_1_name.

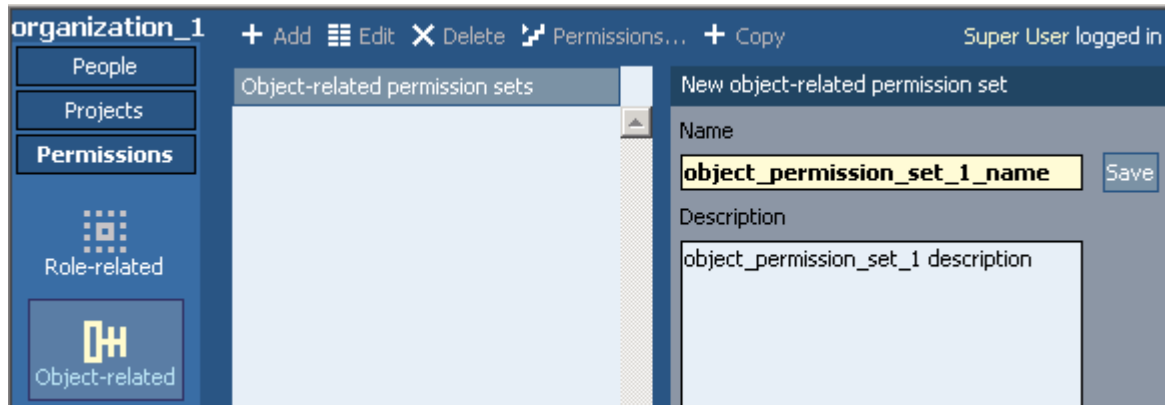


Figure 117. new object-related permission set

87. click save.

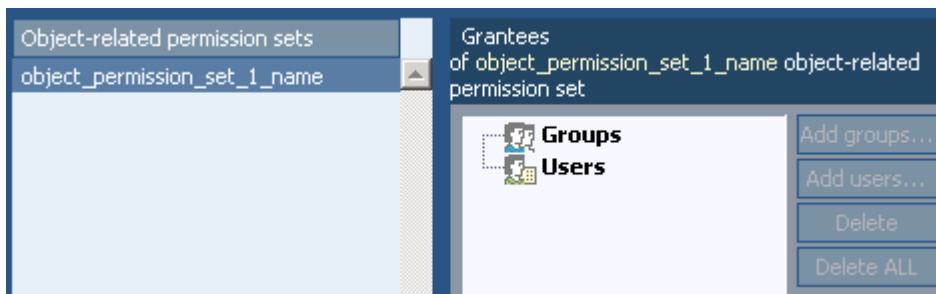


Figure 118. permission set

5.1.4.1.2. Add object permissions

88. click on permissions.

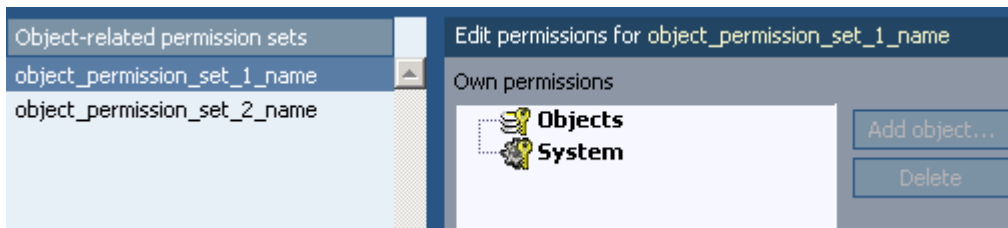


Figure 119. edit permissions for object permission set

89. select objects.

90. Click add object?.

91. Select customer_1_name.

92. Select actions.

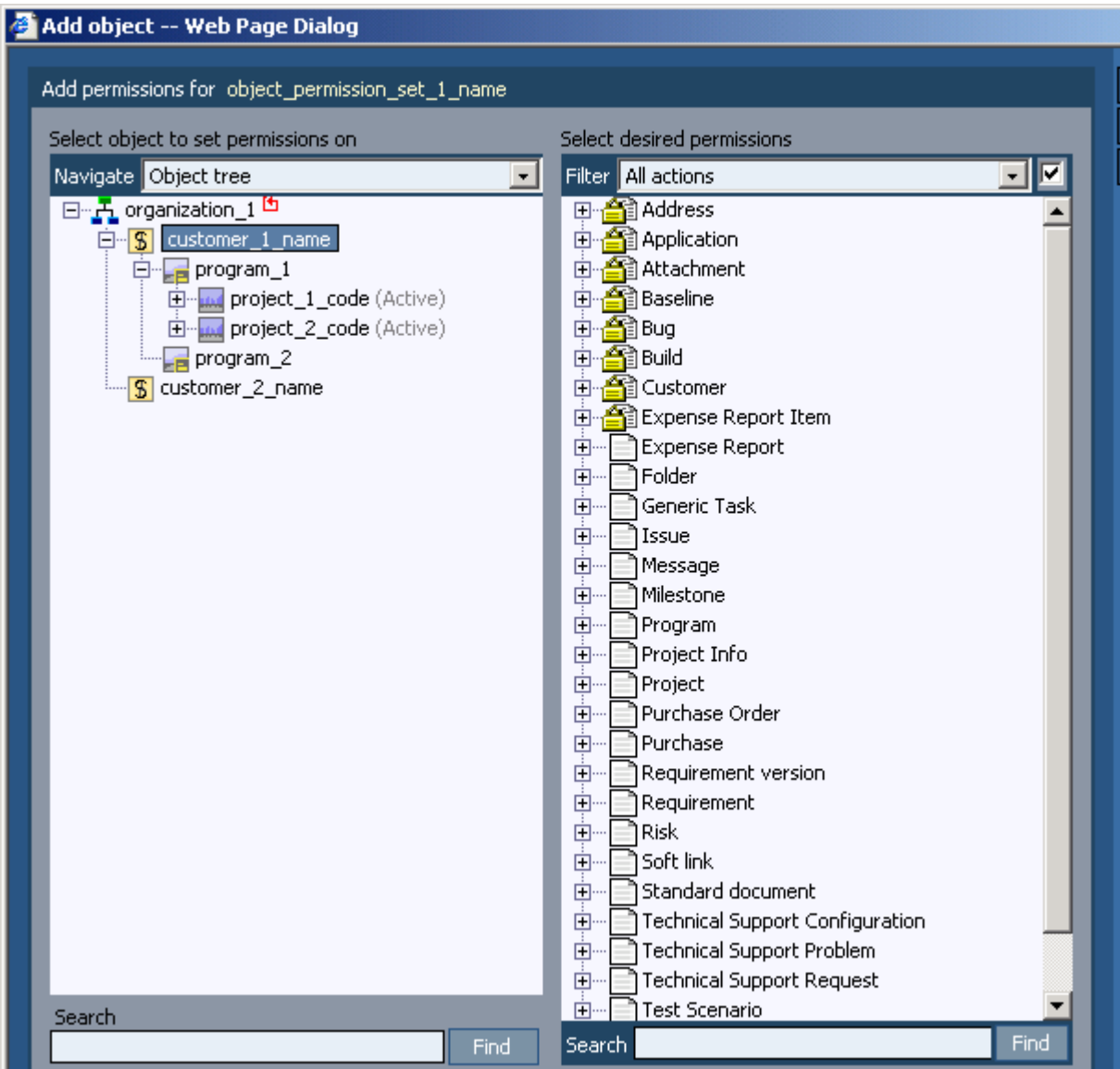


Figure 120. add permissions for object permission set

93. click ok.

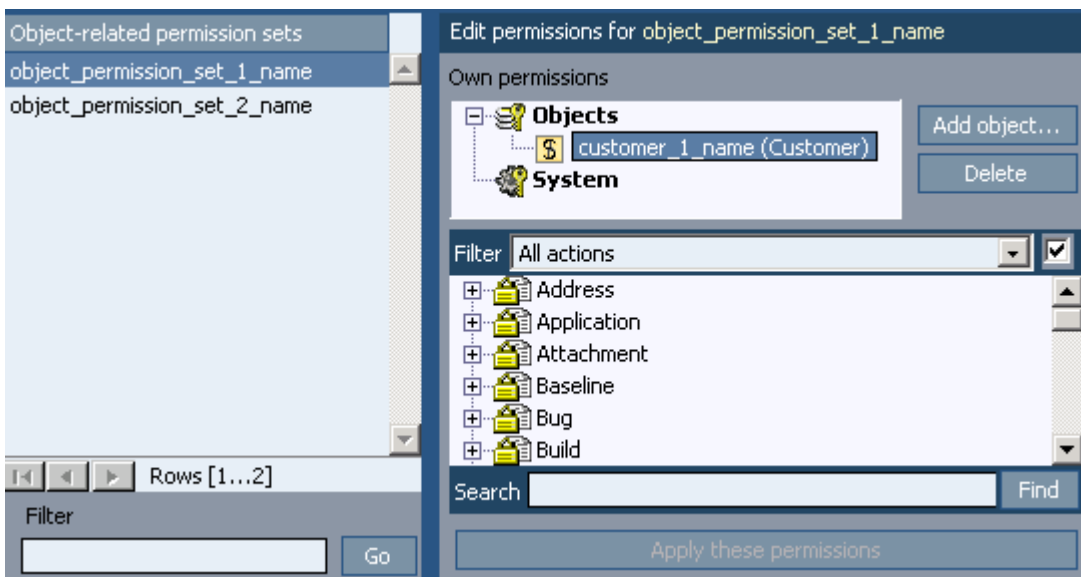


Figure 121. new permission set

5.1.4.1.3. Assign to groups

94. click on object_permission_set_1_name.



Figure 122. assign groups

95. click on add groups?.

96. Select Org employees.

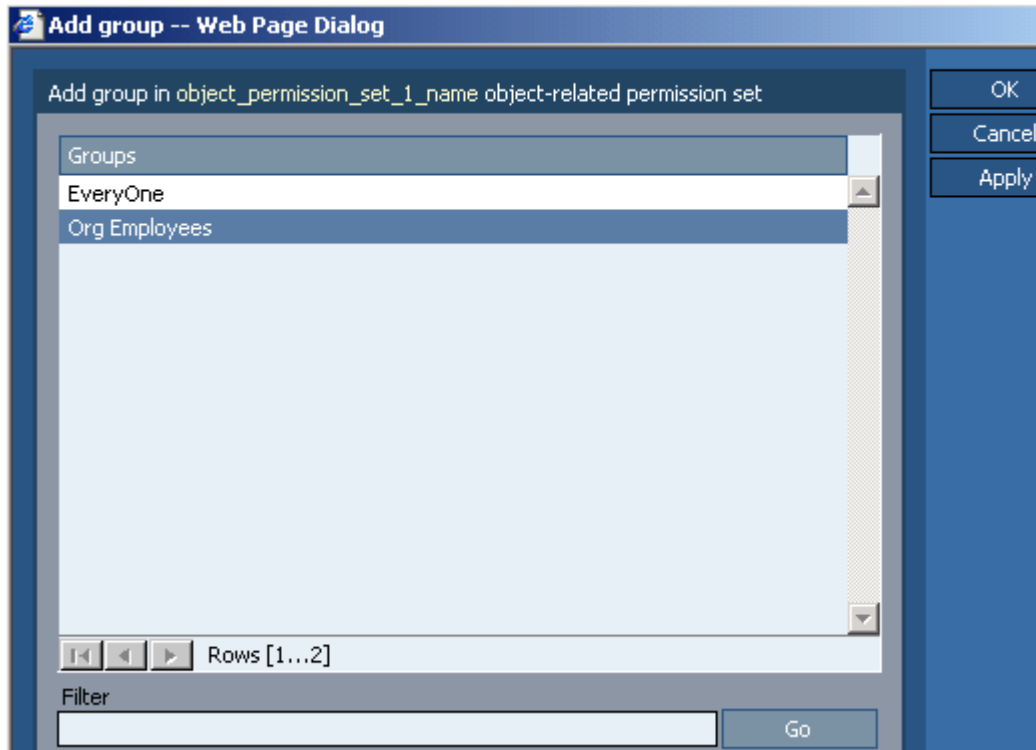


Figure 123. add group

97. click ok.

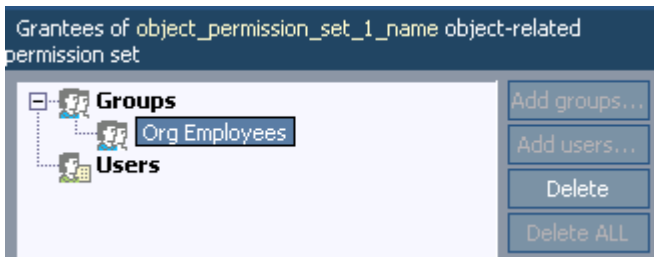


Figure 124. grantees of permission set

5.1.4.1.4. Assign to users

98. click on object_permission_set_1_name.

99. click on add users?.

100. Select person_1_name_last.

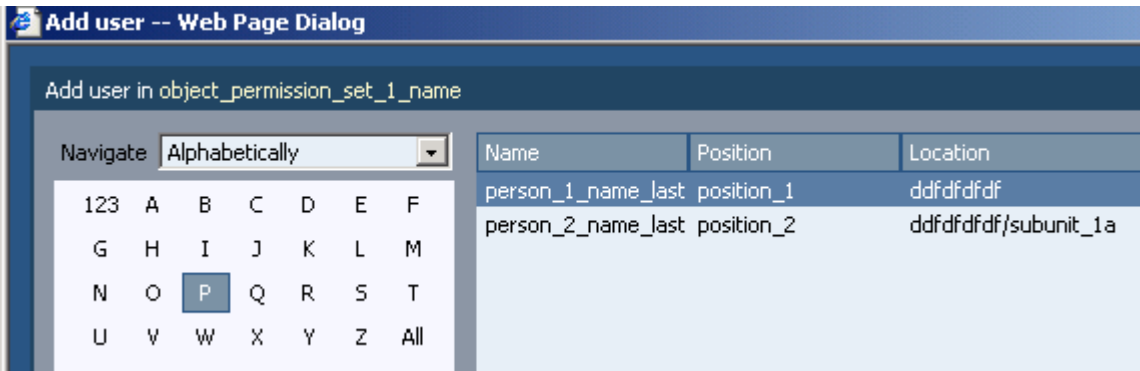


Figure 125. add user to object permission set

101. click ok.

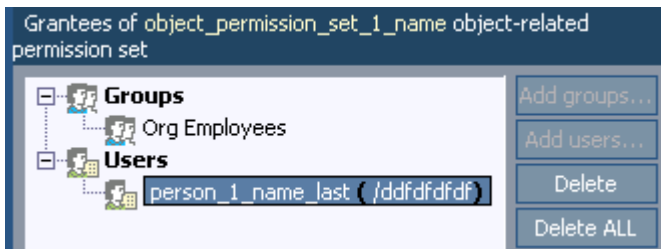


Figure 126. list of grantees

5.1.4.2. System actions (groups/users)

You will now :

- 5.1.4.2.1. (Add permission set) (page 168)
- 5.1.4.2.2. Add system action permissions (page 168)
- 5.1.4.2.3. Assign to groups (page 168)
- 5.1.4.2.4. Assign to users (page 168)

5.1.4.2.1. (Add permission set)

102. use the set created above.

5.1.4.2.2. Add system action permissions

103. click on permissions.

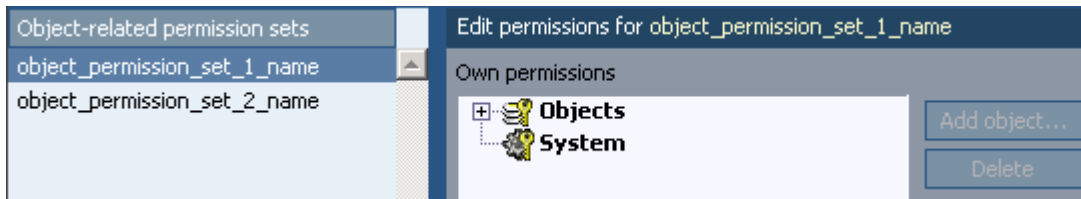


Figure 127. permissions

104. select system.

105. Select actions.

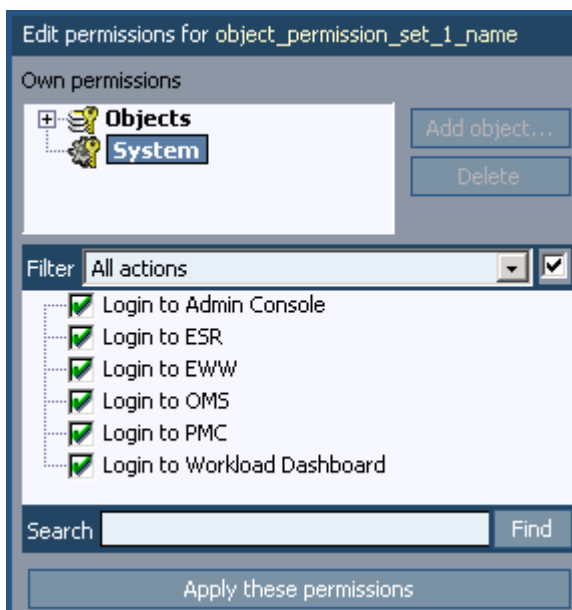


Figure 128. system permissions

106. click apply these permissions.

5.1.4.2.3. Assign to groups

107. (as described above)

5.1.4.2.4. Assign to users

108. (as described above)

5.1.4.3. General actions (roles)

You will now :

- 5.1.4.3.1. Add (role-related) permission set (template) (page 169)
- 5.1.4.3.2. Select actions (permissions) (page 169)
- 5.1.4.3.3. (Assign to roles) (page 170)

5.1.4.3.1. Add (role-related) permission set (template)

109. Note: previously was after 5.4.3 create projects

110. Permissions / role related.

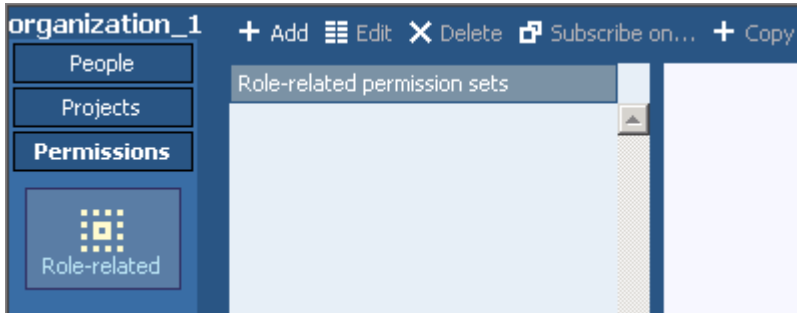


Figure 129. list of role-related permission sets

111. click add.

112. For name enter permission_set_1.

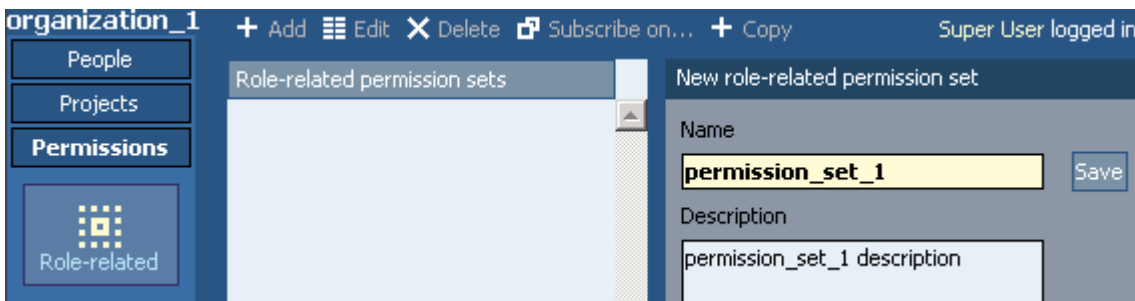


Figure 130. new role-related permission set

113. click save. the permissions for the set are displayed.

5.1.4.3.2. Select actions (permissions)

114. Select all permissions as shown.

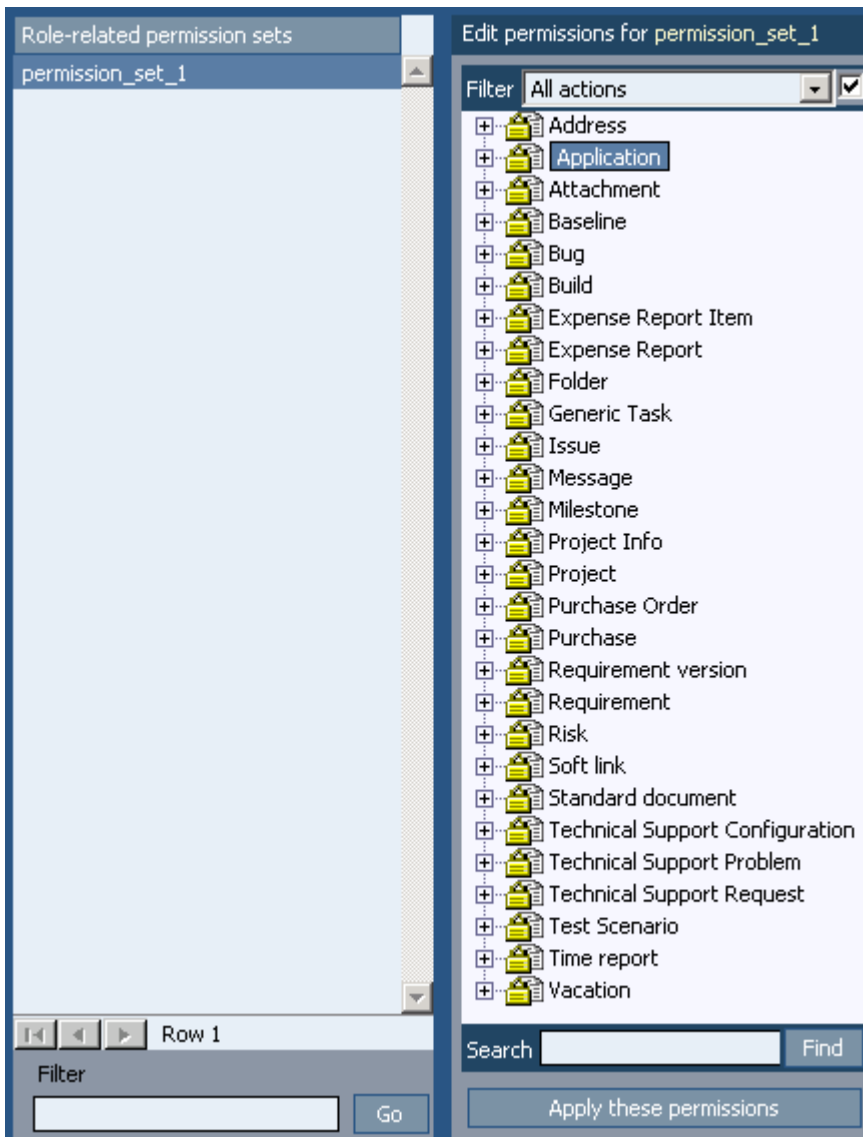


Figure 131. permissions for permission set

115. click apply these permissions.

116. Create permission_set_2.

5.1.4.3.3. (Assign to roles)

must be created before can create role.

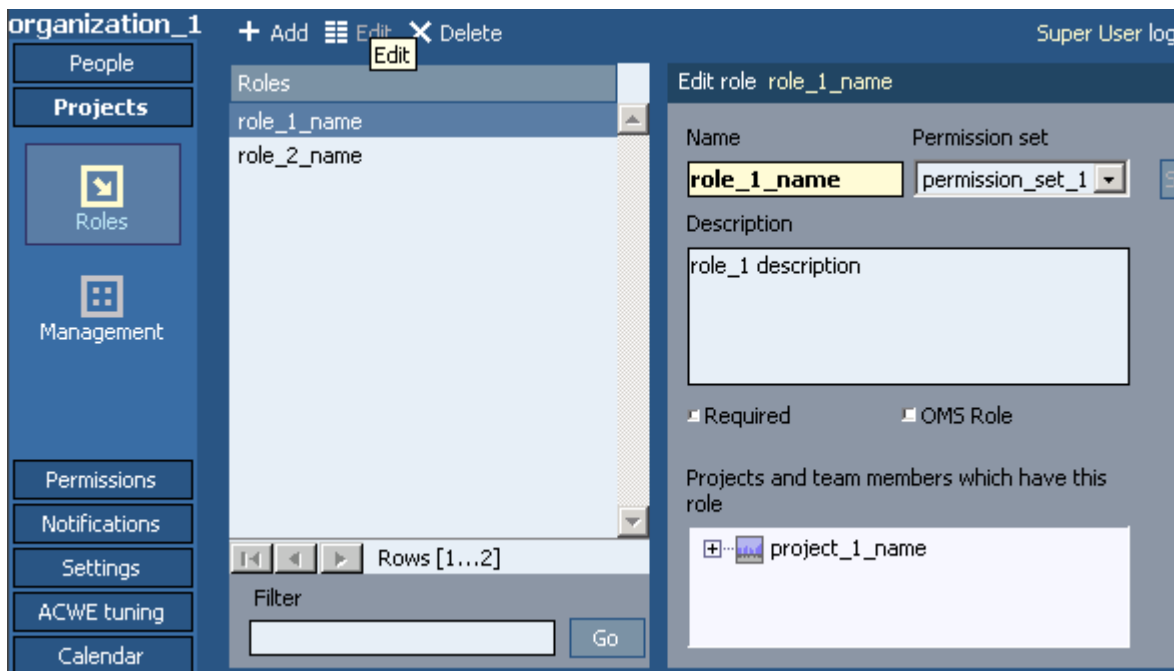


Figure 132. edit role

5.1.4.4. Users

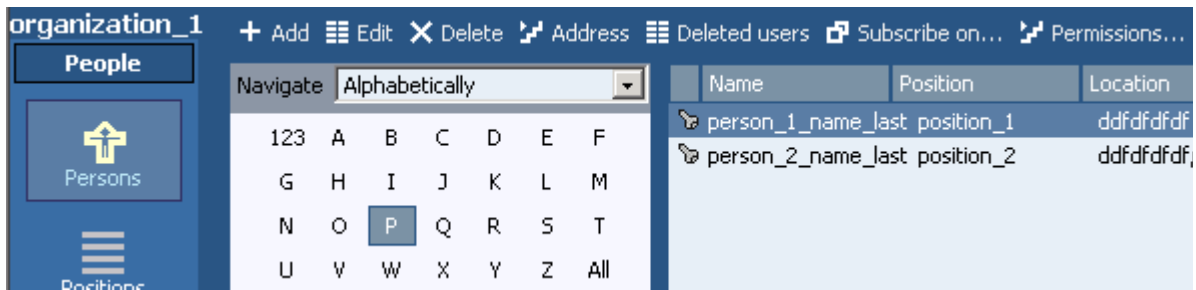


Figure 133. persons

117. click permissions.

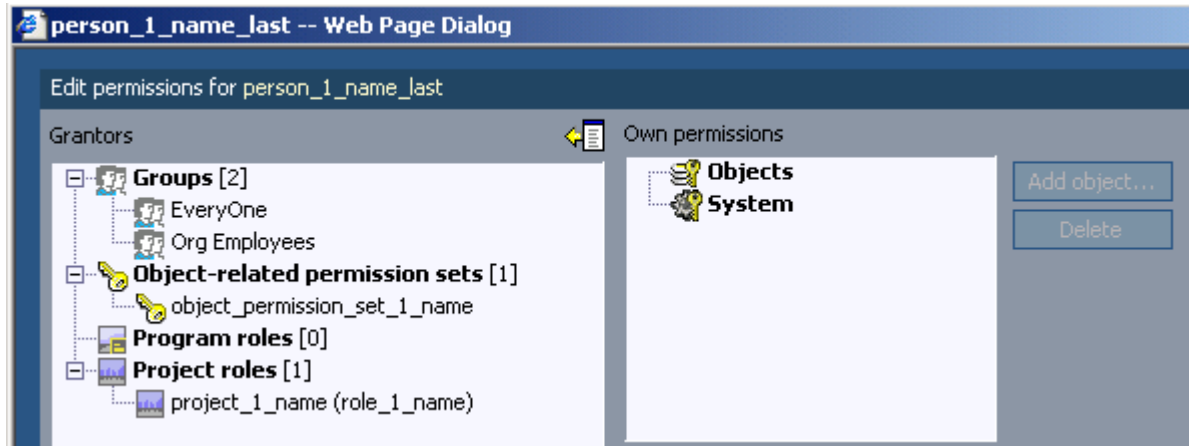


Figure 134. edit permissions

118. select objects.

119. Add an object.



Figure 135. own permissions

120. select system.

121. Select the actions.

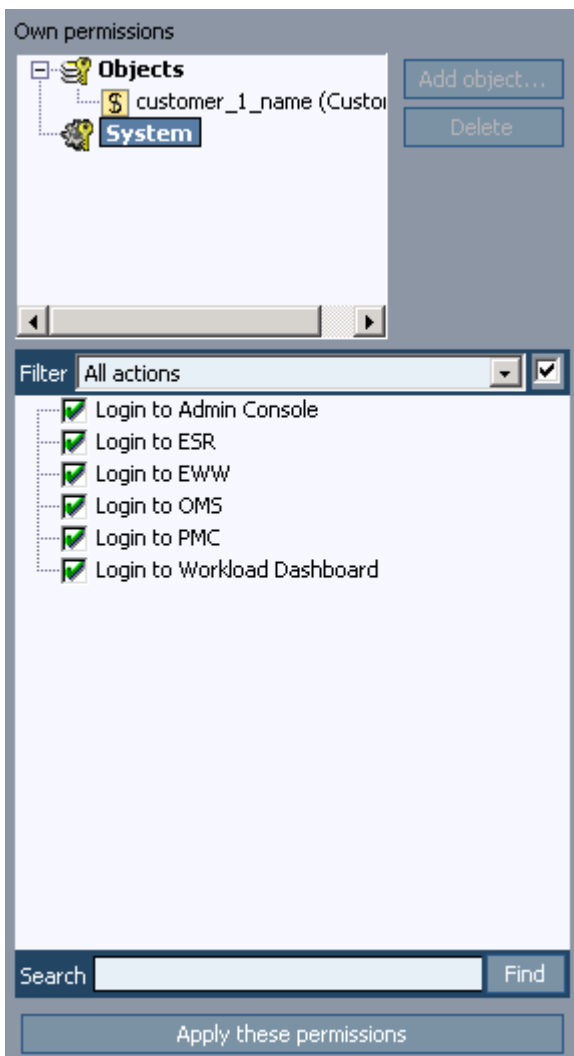


Figure 136. own permissions system

122. click apply these permissions.
123. Close the dialog.

5.1.4.5. Groups

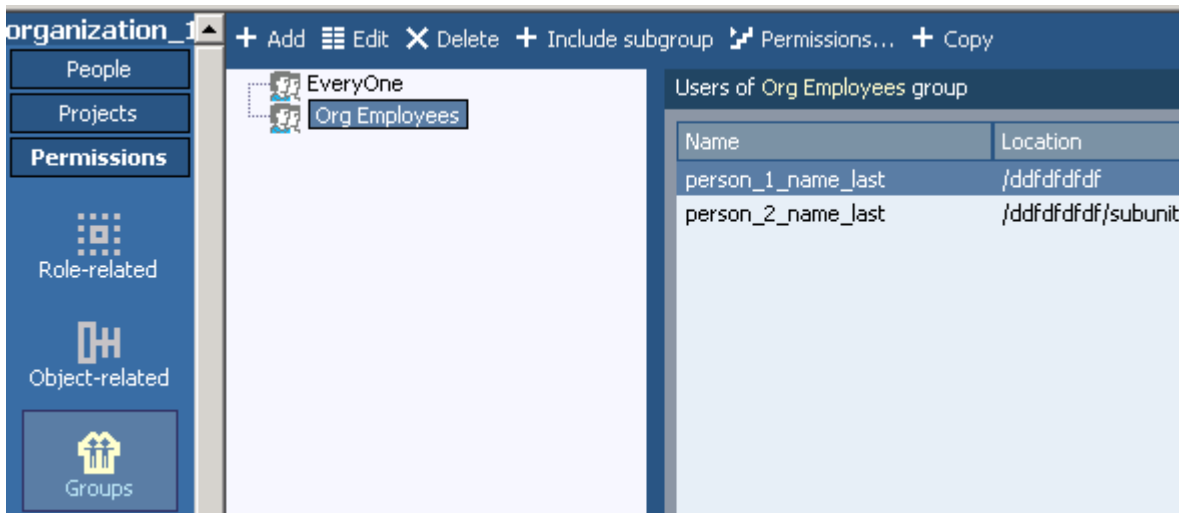


Figure 137. group permissions

- 124. select org employees.
- 125. click permissions.

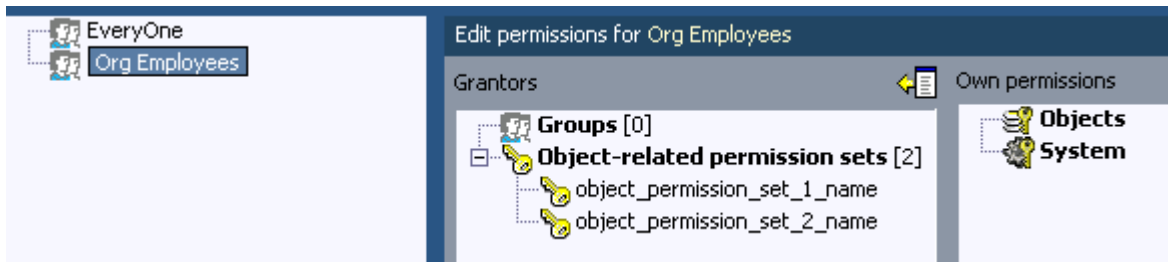


Figure 138. edit permissions for org employees

- 126. select objects.
- 127. Add an object.
- 128. ppp
- 129. select system.
- 130. Select the actions.

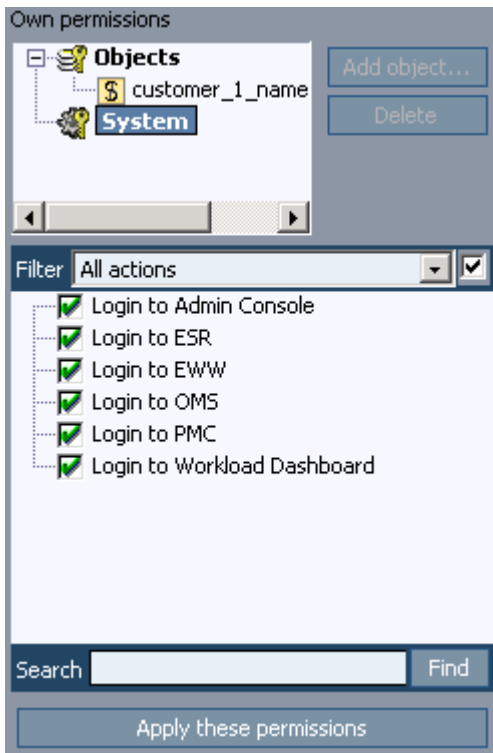


Figure 139. own permissions

131. click apply these permissions.

5.1.4.6. Role permission sets

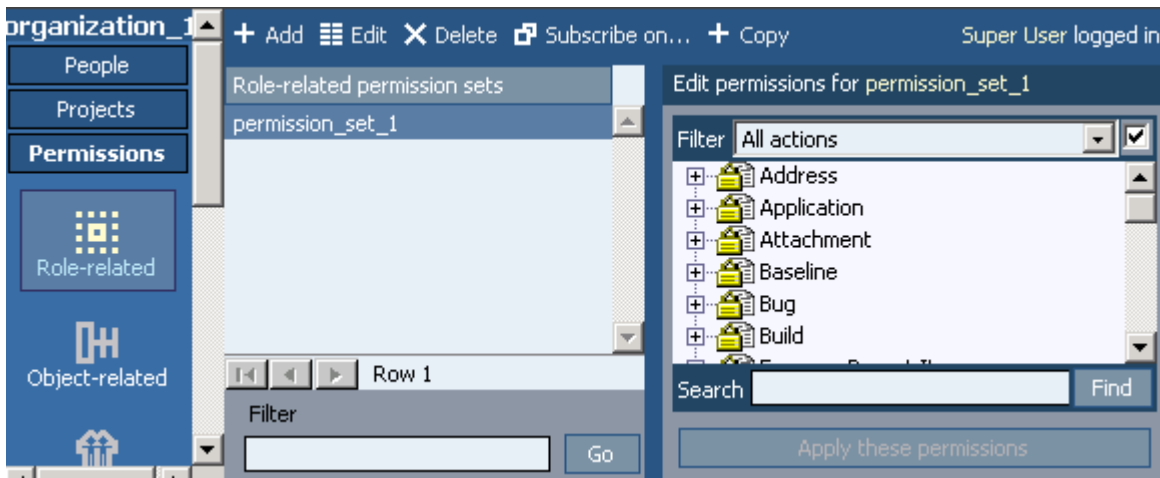


Figure 140. role permission sets

5.1.5. Processes

You will now define processes:

- [5.1.5.1. State transitions \(page 178\)](#)
- [5.1.5.2. Custom fields \(page 179\)](#)
- [5.1.5.3. Subscriptions \(page 180\)](#)

5.1.5.1. State transitions

The screenshot shows the 'Edit Issue state transitions' configuration window. The left sidebar contains a 'Permissions' menu with categories: Role-related, Object-related, Groups, Granting, Total permissions, and State transitions (selected). The main area shows a tree view of objects including Bug, Build, Expense Report, Generic Task, Issue (selected), Person, Purchase Order, Requirement version, Risk, Standard document, Confirmable document, Technical Support Request, Test Scenario, Time report, and Vacation. A search bar is at the bottom left. The right panel displays a table of state transitions.

From/To	Open	Assigned	Cancelled
Open	✗	✓	✓
Assigned	✗	✗	✓
Cancelled	✗	✗	✗
Resolved	✗	✗	✗
Reopened	✗	✓	✓

Figure 141. state transitions

5.1.5.2. Custom fields

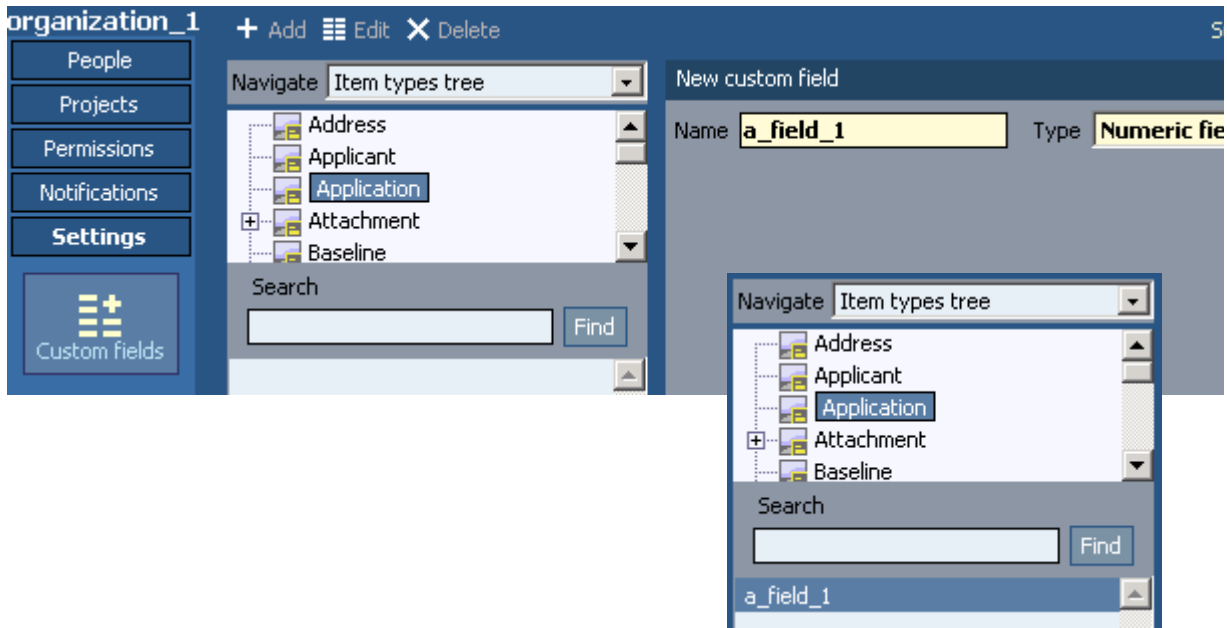


Figure 142. custom fields

5.1.5.3. Subscriptions

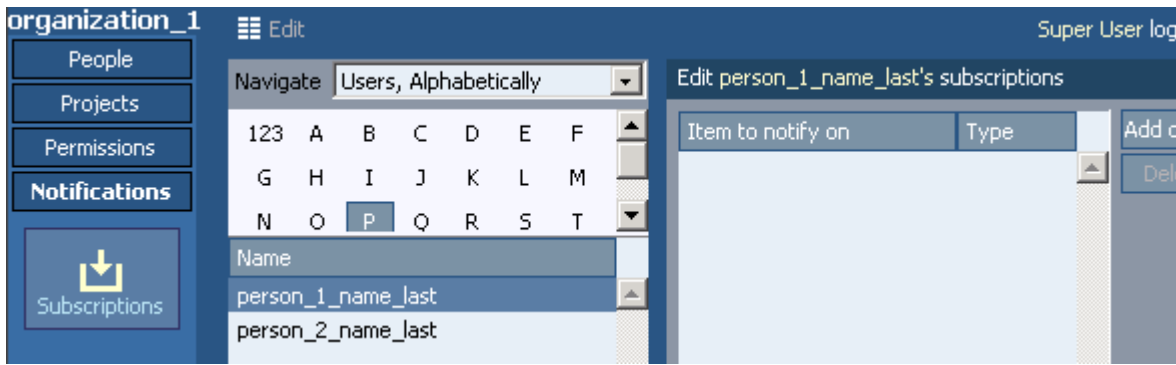


Figure 143. subscriptions

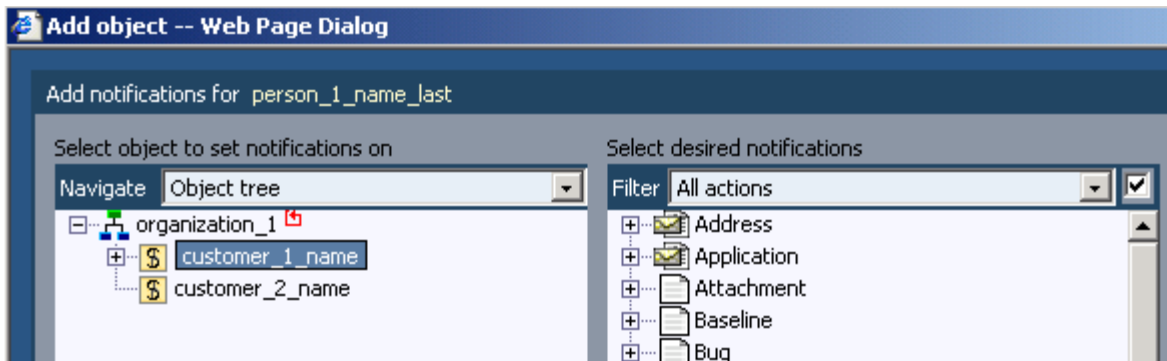


Figure 144. add notification for person

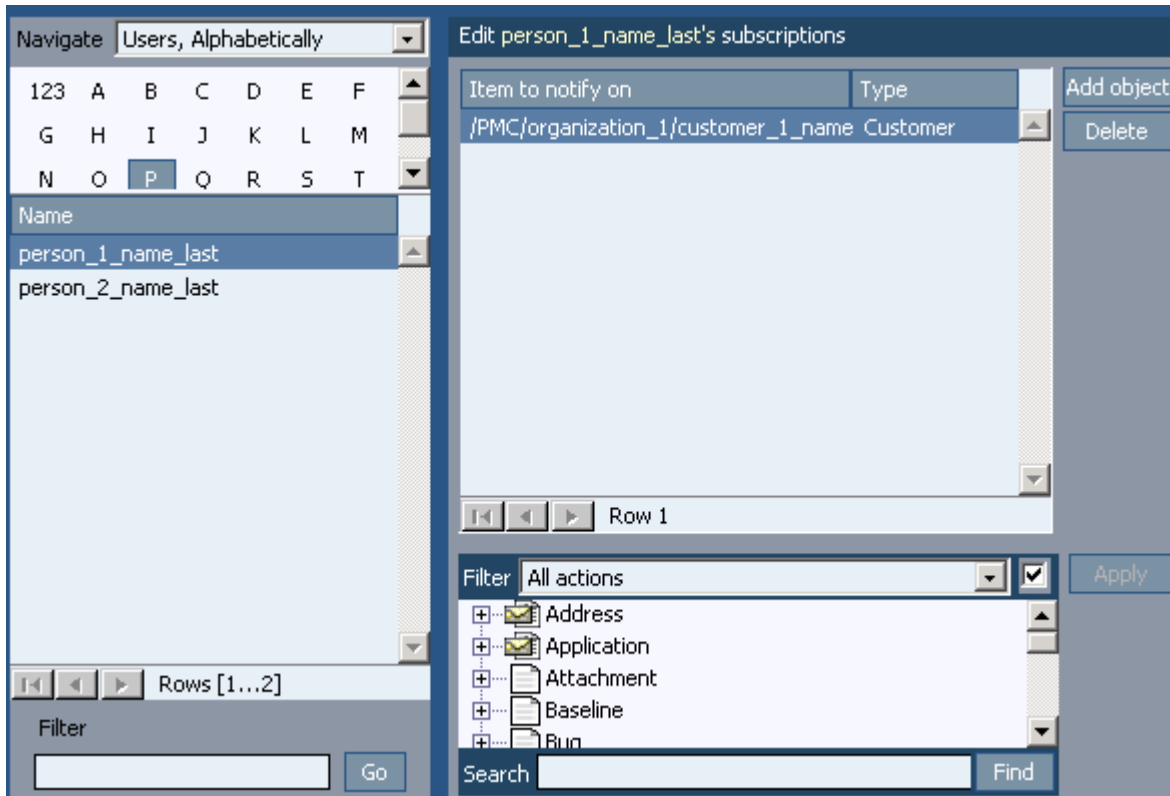


Figure 145. edit person subscriptions

5.1.6. ACWE

5.2. PMC CLIENT

31:QsPmcClient.html

07_pmc_qs_2_client.fm

Roles?:

Customer account manager

Program manager

Programmer

5.3. ESR

32:QsEsr.html
07_pmc_qs_3_esr.fm

5.4. OMS

33:QsOms.html

07_pmc_qs_4_oms.fm

Role: Corporate salesperson

Target Audience

The target user for the Opportunity Management System is a corporate salesperson. The functionality of the Opportunity Management System will allow the salesperson to track their Opportunities, Contacts, Accounts, and related information. The salesperson is typically working in a team-selling environment, with other members of the sales team to secure a deal. Each member of the sales team is assigned one or more roles, which governs what types of activities they are responsible for on the team. The sales cycles for the sales teams are typically long in duration and include many steps to win an opportunity.

5.5. HRM Workload

34:QsHrmWorkload.html

07_pmc_qs_5_hrm_workload.fm



Figure 146. xxx

- 5.5.1. Project initiation (page 190)
- 5.5.2. Staffing (page 192)
- 5.5.3. Resource management (page 195)

5.5.1. Project initiation

- 5.5.1.1. Initiation request (page 190)
- 5.5.1.2. Project resource plan (page 190)
- 5.5.1.3. Project profile (page 190)
- 5.5.1.4. Adding new project resource request (page 191)

5.5.1.1. Initiation request

When the Project Manager has decided that an opportunity warrants further development as a project, he creates a project initiation request.

The initiation request specifies the project customer, purpose, business goals, billing type, expected benefits and risks.

The screenshot shows the 'Add new Initiation Request' form in the EPAM Utilization and Project Staffing Analyzer. The form includes several input fields and dropdown menus:

- CATEGORY TYPE:** Project Request
- PROJECT CODE:** [Empty]
- CUSTOMER:** [Empty]
- CUSTOMER REGION:** [Empty]
- CATEGORY OF INITIATION REQUEST:** Administrative
- BILLING TYPE:** TSM
- PROJECT SPONSOR:** [Empty]
- ACCOUNT MANAGER:** [Empty]
- PROJECT MANAGER:** [Empty]
- PROJECT SUPERVISOR:** [Empty]
- PRIORITY:** Low
- START DATE:** [Empty]
- END DATE:** [Empty]

There are also several text areas for **PROJECT DESCRIPTION/PURPOSE**, **BUSINESS IMPERATIVE**, **BENEFIT**, and **COMMENT**. At the bottom, there are 'ADD' and 'CANCEL' buttons.

Figure 147. xxx

5.5.1.2. Project resource plan

After the project initiation request has been approved, the project manager or the project coordinator create a project resource plan that specifies the required positions, geographical location, utilization level and the uncertainty level.

The screenshot shows the 'BRBMB Resource Plan' interface. It features a resource utilization table and a 'BRBMB Position' details window.

		← WORKLOAD, % →									
		NOV-03	DEC-03	JAN-04	FEB-04	MAR-04	APR-04	MAY-04	JUN-04	JUL	
MOUSE											
TESTER	WOLHA VANCHENKA	100	100	100	100	100	100	100	100	100	
TESTER	DENIS COSMLOVSKI	100	100	100	100	100	100	100	100	100	
TESTER	NATALIA ZIL	100	100	100	100	100	100	100	100	100	
TESTER	SARHEL SEMIKULINAU	100	100	100	100	100	100	100	100	100	
TESTER	OLEG SHARIN	100									
TESTING TEAM LEAD	DAVID FILIPAU	100	100	100	100	100	100	100	100	100	
		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
	TOTAL FTE	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	

The 'BRBMB Position' window shows details for a position, including fields for **POSITION**, **LOCATION**, **RESPONSIBILITY**, and **SKILL**. It also includes a 'WORKLOAD & PERTINENTS' section with a grid for months from NOV-03 to OCT-04, and a 'Marked' section with a grid for months from NOV-03 to OCT-04.

Figure 148. xxx

5.5.1.3. Project profile

A project profile is created. It provides basic project information: Project type, customer, required skills and technological know-how, team members, workload, etc.

AMEXICO Project Properties

Facual | All Parties | Edit Profile

PROJECT TYPE / STATUS	Production / Active	CURRENT USED SKILLS	
CUSTOMER	Auro Medica	DESIGN	CRM SOLUTIONS
PRIORITY / BILLING TYPE	High / Fixed Price	Web site design	Contract Management System (CMS)
PROJECT SPONSOR	Anthony Dobbin	INDUSTRY SECTOR	OFFSHORE SOFTWARE DEVELOPMENT
ACCOUNT MANAGER	Edith Shekhter	Airlines * Travel Services & Lodging	OUTSOURCING - WEB SOLUTIONS
PROJECT SUPERVISOR			eBusiness solutions
PROJECT MANAGER	Clara Guldner	PROGRAMMING LANGUAGES	PROGRAMMING TECHNOLOGIES
PROJECT COORDINATOR	Rikala Novakovic	Java	Java (JDBC, JSP, JMS, Struts)
START DATE / END DATE	2003-02-03 / 2003-11-30	UNUSED SKILLS	
COMMENTS	CMS and Database Integration project for www.AuroMedica.com		
CASE STUDY			
KEY WORDS			

PROJECT TEAM				PERIOD
NAME	MANAGER	WORKLOAD IN THIS PROJECT	TOTAL WORKLOAD	2003-10-27 - 2003-11-02
ALEX NABREVECH	VITADY VEDCHOK	100	AMEXICO - \$100%	
ALENA HRYNIEVICH	ANORCI SAVASTSKIK	100	AMEXICO - \$100%	
ALEX LAD-ITMAN	MAX BOGBETSOV	100	AMEXICO - \$100%	
ALEXANDER ITIN	MARINA GUSAROVA	100	AMEXICO - \$100%	

Figure 149. xxx

5.5.1.4. Adding new project resource request

At any stage of project development the project manager can request human resources. Each project resource request specifies the project name, the project role of the prospective resource, required skills, pre-selected candidates, etc. E-mail notifications are automatically sent to the human resources department.

Add New Project Resource Request

PROJECT NAME: AMEXICO

PROJECT ROLE RESOURCE: [Text Field]

SPECIFIC SKILL AND EXPERIENCE REQUIREMENTS: [Text Field]

DATES (START/END): 11/27/03 / 11/27/03

WORKLOAD: 100

NAMES OF PRE-SELECTED CANDIDATES: [Text Field]

COMMENTS: [Text Field]

SEND EMAIL NOTIFICATION (TO: CRM GROUP MANAGERS; CC: HR STAFFING COMMITTEE)

[OK] [CANCEL]

Figure 150. xxx

5.5.2. Staffing

- 5.5.2.1. Resource request overview (page 192)
- 5.5.2.2. Skills database (page 192)
- 5.5.2.3. Advanced search options of skills database (page 192)
- 5.5.2.4. employees by skill (page 193)
- 5.5.2.5. employee personal card (page 193)
- 5.5.2.6. employee profile (page 193)
- 5.5.2.7. projects by technology (page 194)
- 5.5.2.8. searching for employees/projects (page 194)
- 5.5.2.9. open positions (page 194)
- 5.5.2.10. selected open positions (page 194)

5.5.2.1. Resource request overview

All resource requests appear in a “workbench” that provides an overview of the project resource demands. The requests can be filtered by various criteria, such as status (active, on-hold, closed), workload, and project role.

ID #	DATE	PROJECT #	PROJECT ROLE	STATUS	SPECIFIC SKILL	PERIOD OF ASSIGNMENT (START/END)	WORKLOAD	ESTIMATION: MAN-DAYS	CANDIDATES	COMMENTS
12	2003-10-30	MULTIAPP	Developer	Active	Required: XHTML, ASP/ASPScript, DHTML, XHTML, DHTML, ASP/ASPScript	2003-11-10/2004-12-31	100%	300.0		
13E	2003-10-29	EPINERUP	developer	Active	Java, CMS	2003-10-29/2003-12-31	10%	4E	Energy Ethel	
15E	2003-10-29	EPINERUP	developer	Active	CMS, XSLT, ASP	2003-10-29/2003-12-31	30%	15.8	Alamy Labady	
16L	2003-10-29	EPINERUP	Developer	Active	Strong knowledge of Velocity, Struts, JML, SAH	2003-10-29/2003-11-09	100%	8.0		Development of the SAH parser and Java related development for

Figure 151. xxx

5.5.2.2. Skills database

Project staff can be selected from the employees skills database, which lists all employee technology and business skills. You can search not only for the required skill, but also within projects where the skill was recently required.

Skills, Technology domain.

Job Function: All | Level: All levels | Target: People

APPLICATION SERVICES AND INFRASTRUCTURE

- BEA WebLogic Server (124) Bluewin Totalis-Server (4) Eresound Application Suite (115) IBM MQ Series (18) IBM WebSphere Application Server (89) Jakarta Tomcat (165) JBoss (1) JRun Application Server (36) Microsoft BizTalk Server (16) Microsoft Commerce Server (1) MS Message Queue Server (2) MS Transaction Server (25) Oracle Application Server (3) Oracle Portal (5) SAP Enterprise Portal (1) SAP Internet Transaction Server (4) SAP R/3E Server (3) Siebel Stream Application Server (8) Software Enterprise Application Server (14)

OPERATING SYSTEMS

- HP (16) IBM AIX (15) Linux (162) Mac OS (15) MS Windows (124) OS/390 (5) OS/400 (4) Palm OS (29) Sun Solaris (15) Unix (57) VMS (3) Windows CE (12)

PROGRAMMING LANGUAGES

- AT&T (Segue SilkTest) (42) ABAP/4 (22) C# (12) C/C++ (including ANEK C) (200) COBOL (2) FORTRAN (50) Java (282) JavaScript/JavaScript (41) Microsoft COBOL (8) Object Pascal (Delphi) (242) Perl (88) PL/I (21) PowerBuilder (18) RPG/400 (3) Scripting Languages/Other (3) T-SQL (2) TSL/Informatica Workflow (2) Visual Basic (24)

PROGRAMMING TECHNOLOGIES

- .NET (11) ActLink (157) COM (including DCOM, COM+) (150) CORBA (45) Electronic Document (21) J2EE (DB/BC, JML, EJB, JMS, Services) (229) J2EE (4) Java Beans (144) JFC (1) PDF Forms

Figure 152. xxx

5.5.2.3. Advanced search options of skills database

There are search filters that filter by employee job function, expertise level, target, and a variety of complex filters.

Skills, Technology domain.

Job Function: All | Level: **Advanced** | Target: People

Administrative/Other
Business Analyst
Construction
Design
Development
Human Resources
Information Systems
Maintenance/Support
Management
Operations
Quality Assurance

5 Windows (209) OS/390 (2) Palm OS (4) Sun (2)

Figure 153. xxx

5.5.2.4. employees by skill

The filtered list shows employees with the required skills and their current project workload. You can view any employee's personal card and profile.

NAME	MANAGER	TOTAL #	WORKLOAD DESCRIPTION	EXPERT ESTIMATION	SKILL LEVEL
ALEXANDER VASHTANIAN	VITVINY VOLOCHOK	100	SAP CRM - 100%	?	Interm
ALEXEY BUDZIKOV	DAVID CHAGOSKO	100	SAP CRM - 100%	?	Novice
ANTON KORVALI	SHARIL VASCHIN	100	SAP CRM - 100%	?	Expert

Figure 154. xxx

5.5.2.5. employee personal card

The employee personal card states the employee's title, job function, manager, contact information, current / planned workload and skills.

Hleb Kudzelka

FULL NAME / STATUS: Hleb Kudzelka / Active
 TITLE: Group Manager
 JOB FUNCTION: Project management
 MANAGER: Igor Cherepan
 REPORTER:
 LOCATION: Minsk
 EMAIL / PHONE: Hleb_Kudzelka@epam.com / None
 START DATE / END DATE: 2001-09-21 /
 COMMENTS:
 CURRENT WORKLOAD: SAP CRM - 100%
 WORKLOAD FOR PAST PERIOD II: 2003-11-10 - 2003-11-16

WORKLOAD FOR FUTURE PERIOD

MONTH	DEC-03	JAN-04	FEB-04	MAR-04	APR-04	MAY-04	JUN-04	JUL-04	AUG-04	SEP-04	OCT-04
SAP CRM	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
FTE	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

LEARNED INCLUDES

APPLICATION SERVICES AND OTHER PLATFORMS
 Financial Application Suite (Novice)
 Xeon Application Server (Novice)

PROGRAMMING TECH INCLUDES
 Axiom (Interm)
 COM (Including D.COM, COM+) (Interm)
 XEE (JDBC, JMS, EJB, JMS, Servlets) (Interm)
 WinAPI (Expert)

PROJECT MANAGEMENT TOOLS
 EPAM Project Management Center (Advanced)
 IMS Project (Novice)

DATA MINING AND DATA WAREHOUSING
 EDAM Star Reporter (Novice)

OBJECT TRACKING
 PDM Star (Advanced)

RAD
 Roland Builder (Interm)

Figure 155. xxx

5.5.2.6. employee profile

Each employee regularly updates his employee profile, which provides detailed information about the employee's skills, training, certificates, and project experience (with current and former employers).

EPAM Systems
 28 Emmons Drive, Suite C-10, Princeton, NJ 08540 • (609) 452-1701 • Fax (609) 452-1704

Legend
 A skill is considered "Expert" if all three conditions below are satisfied:
 a. the developer has expert level theoretical knowledge in that particular skill
 b. the developer has completed at least two major projects with key requirement for the skill
 c. the developer has 2+ years of recent experience in that skill
 A developer has "Advanced" skills if one of the three criteria above is missing
 A developer has "Interm" skills if two of the three criteria above are missing

Hleb Kudzelka

SKILLS	Experience, years	Level (Expert/Advanced/Interm/Novice)	Last used, year
Operating Systems	MS Windows	7	Advanced
	Unix	7	Interm
DBMS	Oracle	7	Expert
	MS Visual Studio	4	Advanced

Figure 156. xxx

5.5.2.7. projects by technology



Figure 157. xxx

5.5.2.8. searching for employees/projects



Figure 158. xxx

5.5.2.9. open positions



Figure 159. xxx

5.5.2.10. selected open positions



Figure 160. xxx

5.5.3. Resource management

- 5.5.3.1. analyzing planned resources (page 195)
- 5.5.3.2. planned resources by project (page 195)
- 5.5.3.3. summaries in excel (page 195)
- 5.5.3.4. resource plans summer (page 195)
- 5.5.3.5. planned resources by employee (page 196)
- 5.5.3.6. updating employee's personal workload (page 196)
- 5.5.3.7. actual workload (page 196)
- 5.5.3.8. drill down options for workload analysis (page 197)
- 5.5.3.9. statistics reports (page 197)
- 5.5.3.10. headcount dynamics (page 197)
- 5.5.3.11. newcomers statistics (page 197)
- 5.5.3.12. dismissal statistics (page 198)
- 5.5.3.13. graphical maps (page 198)

5.5.3.1. analyzing planned resources



Figure 161. xxx

5.5.3.2. planned resources by project



Figure 162. xxx

5.5.3.3. summaries in excel



Figure 163. xxx

5.5.3.4. resource plans summer



Figure 164. xxx

5.5.3.5. planned resources by employee



Figure 165. xxx

5.5.3.6. updating employee's personal workload



Figure 166. xxx

5.5.3.7. actual workload



Figure 167. xxx

5.5.3.7.1. by resource pool



Figure 168. xxx

5.5.3.7.2. by job function



Figure 169. xxx

5.5.3.7.3. by project



Figure 170. xxx

5.5.3.8. drill down options for workload analysis



Figure 171. xxx

5.5.3.9. statistics reports



Figure 172. xxx

5.5.3.10. headcount dynamics



Figure 173. xxx

5.5.3.11. newcomers statistics



Figure 174. xxx

5.5.3.12. dismissal statistics



Figure 175. xxx

5.5.3.13. graphical maps



Figure 176. xxx

5.6. HRM Applicant

35:QsHrmApplicant.html

07_pmc_qs_6_hrm_applicant.fm

5.7. HRM Survey

36:QsHrmSurvey.html
07_pmc_qs_7_hrm_survey.fm

5.8. EWW

37:QsEww.html
07_pmc_qs_8_eww.fm

5.9. LIBRARY

38:QsLibrary.html
07_pmc_qs_9_library.fm

6. Configuration

39:Config.html

08_pmc_config.fm

describes (not stepbystep, not a quick start) the configuration of the complete system for typical enterprises

7. Tasks

[40:Tasks.html](#)

09_pmc_tasks.fm

AutoPMCEPAM - <http://pmcmsq/pmc> (EPIS - <http://www>, OMS - <http://pmcmsq/oms>, Workload - <http://epmsd016/workload>,

ESR - <http://pmcmsq/esr/init>),

AutoPMCPinceton – <http://pmcpct/pmc>

GENPRD and PMC projects.

7.1. PMC ADMIN ([page 211](#))

7.2. PMC CLIENT ([page 213](#))

7.3. ESR ([page 235](#))

7.4. OMS ([page 237](#))

7.5. HRM Workload ([page 239](#))

7.6. HRM Applicant ([page 241](#))

7.7. HRM Survey ([page 243](#))

7.8. EWW ([page 245](#))

7.9. LIBRARY ([page 247](#))

7.1. PMC ADMIN

41:TasksPmcAdmin.html

09_pmc_tasks_1_admin.fm

7.2. PMC CLIENT

42:TasksPmcClient.html

09_pmc_tasks_2_client.fm

7.2.1. Basic

7.2.1.1. User Login Procedure

AutoPMCEPAM - <http://pmcmsq/pmc> (EPIS - <http://www>, OMS - <http://pmcmsq/oms>, Workload - <http://epmsd016/workload>,
ESR - <http://pmcmsq/esr/init>),
AutoPMCPinceton – <http://pmcpct/pmc>
GENPRD and PMC projects.

7.2.1.2. basic settings

choose color scheme,
language,
“start pmc from” field

7.2.1.3. navigation

make bookmarks,

7.2.1.4. messages

7.2.1.5. tasks

This diagram illustrates the general task workflow.

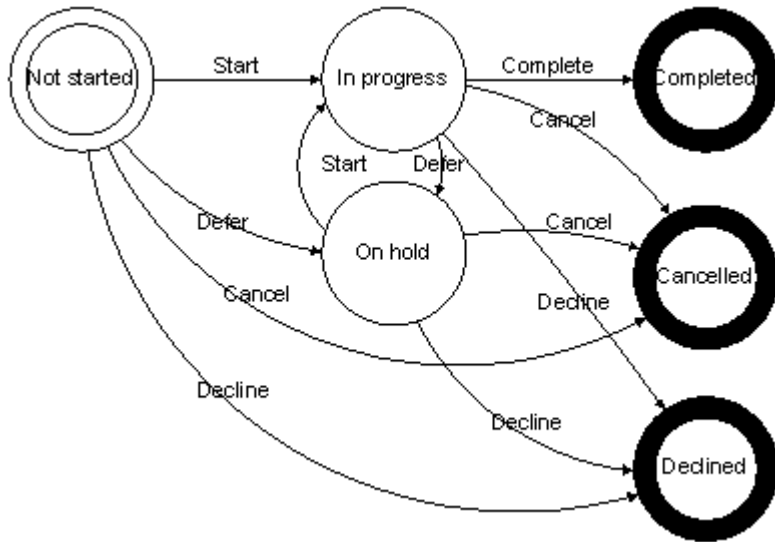


Figure 177. xxx

7.2.1.6. Documents

Opportunity to study all project related documentation..

Internal - Limit to 5 MB.

External documents – use a protocol name in URL (**file or http**)

7.2.1.6.1. Standard Documents

The document's workflow is illustrated by this diagram (VCS here means the *Version Control System*):

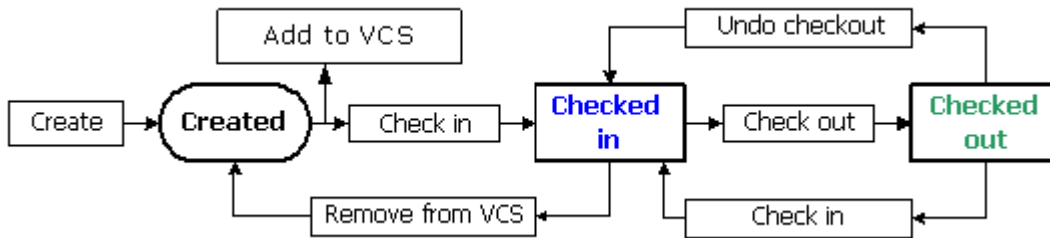


Figure 178. xxx

7.2.1.6.2. Confirmable documents

have advanced workflow. States defined for such documents:

- Draft – visible only to an author and users having “Work with confirmable document” permission;
- Prepared – visible to an author and for approvers and users having “Work with confirmable document” permission;
- Approved – visible for all users having “View document” permission;
- Rejected – see “Draft” state.

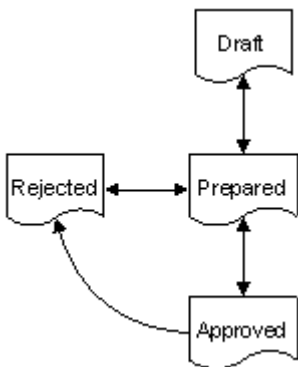


Figure 179. xxx

7.2.1.7. Bugs

After a bug is submitted by the tester, it can be: assigned, deferred, declined
 When a bug is assigned it means, that a bugfixing task for a developer, is being created (if you don't have appropriate rights to perform this action, please, contact System Administrator).
 Under "bugfixing" task we understand the special task subtype that is aimed to track activity of PMC user who is responsible for fixing a bug.
 State of bug is bound to a bugfixing task's state. For example, when the task is complete, it means that the bug is fixed.
 After bugs are fixed, at creation of a new build, list of all fixed bugs are present in a field of a new build and the tester can "verify" or "reopen" the bug.

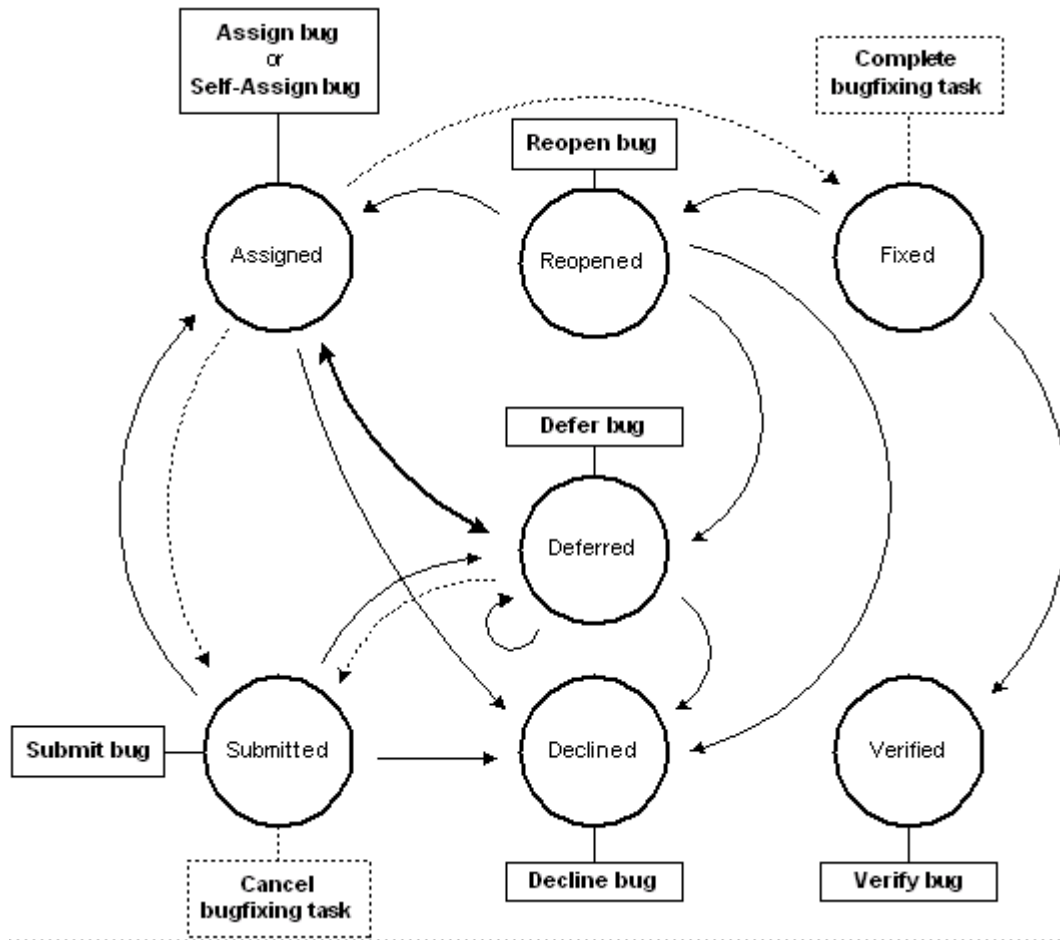


Figure 180. xxx

NOTE: When the bug is reopen, a new bugfixing task is created with a new task's state.
 Note: Always fill **Located** field in a bug detail window.

7.2.1.8. Builds

Ability to view all the build details for the developed application

Hierarchical structure. Date created.

The scheme of build's state changing will look like the following:

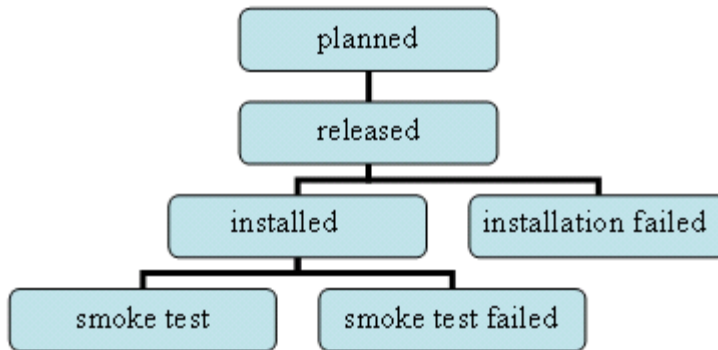


Figure 181. xxx

Remember, that one build can be installed several times and thus the procedure from build installation will be repeated in cycle.

Note: before you can add a new first build you should have at least a one application for a project. A new application could be created via **Folders** module.

7.2.1.9. Requirements

Opportunity to view up-to-date project requirements

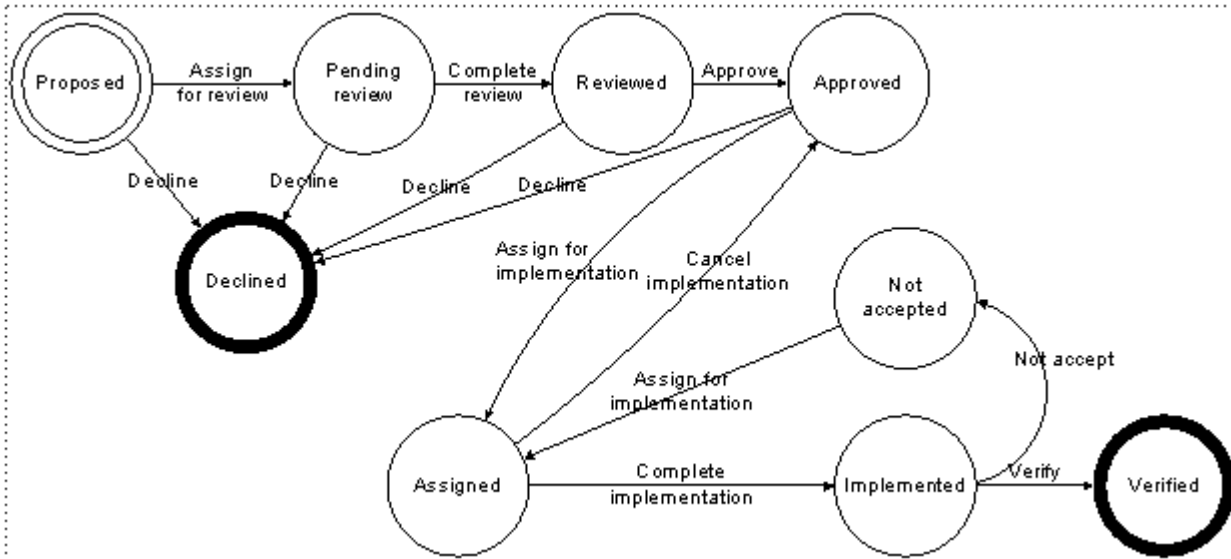


Figure 182. xxx

7.2.1.10. Support Request

Ability to make a support request, define its importance and set up the deadline for the request

7.2.2. PMC project role

7.2.2.1. Risks

Risk management is integral part of any project. It's vitally important for project managers to:

- foresee situations threatening normal flow of a project;
- have plans for avoiding risks;
- be prepared to fix consequences if nuisance happens.

"Risks" module of PMC provides unified mechanism (i.e. filtering, grouping, attachments, e-mail notifications, etc.) for keeping actual state of possible risks and allows operative analysis.

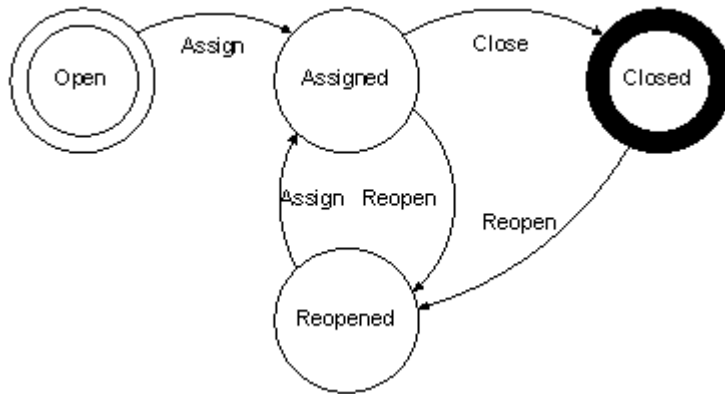


Figure 183. xxx

7.2.2.2. Issues

The following actions are defined for the “**Issue**” item type:

- standard actions: Create, Edit, View Delete;
- workflow actions: Assign, Resolve, Cancel, Reopen.

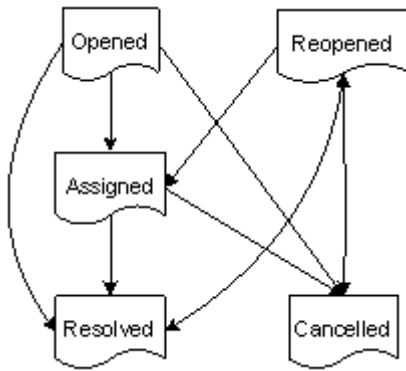


Figure 184. xxx

7.2.2.3. Test case

Test Scenario – Test Case – Test Step

7.2.2.4. Folders

Filters Role

7.2.2.5. Time Journal

- Fast time reporting with user-focused Time Journal interface

7.2.2.6. Expense Reports

Report all expenses and make purchase orders
 This diagram represents expense reporting workflow.

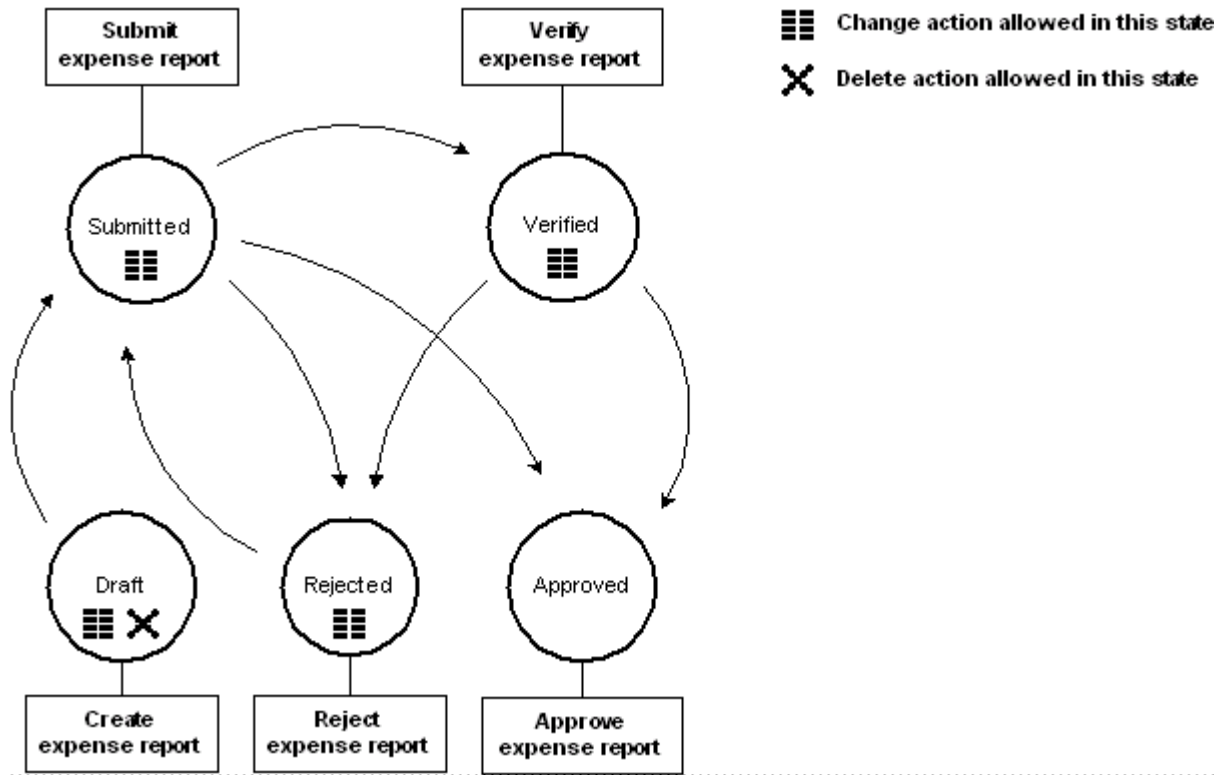


Figure 185. xxx

NOTE: notifications about expense report are sent only to the person, selected from the drop down at the window of expense reporting create (see the module **Expense Reports**), but as soon as expense reports are created all those, indicated in the drop down will see expense reports.

7.2.2.7. Purchase orders

7.2.2.8. Project info

7.3. ESR

43:TasksEsr.html
09_pmc_tasks_3_esr.fm

7.3.1. Role: xxx

7.4. OMS

44:TasksOms.html
09_pmc_tasks_4_oms.fm

7.4.1. Role: xxx

7.5. HRM Workload

[45:TasksHrmWorkload.html](#)

09_pmc_tasks_5_hrm_workload.fm

7.5.1. Role: xxx

7.6. HRM Applicant

46:TasksHrmApplicant.html

09_pmc_tasks_6_hrm_applicant.fm

7.6.1. Role: xxx

7.7. HRM Survey

47:TasksHrmSurvey.html

09_pmc_tasks_7_hrm_survey.fm

7.7.1. Role: xxx

7.8. EWW

48:TasksEww.html
09_pmc_tasks_8_eww.fm

7.8.1. Role: xxx

7.9. LIBRARY

49:TasksLibrary.html
09_pmc_tasks_9_library.fm

7.9.1. Role: xxx

8. User Interface Description

50:Ui.html

framemaker file: 10_pmc_ui.fm

This chapter describes the user interfaces for the following PMC tools:

- [8.1. PMC ADMIN \(page 251\)](#)
- [8.2. PMC CLIENT \(page 295\)](#)
- [8.3. PMC ESR \(page 473\)](#)
- [8.4. PMC OMS CLIENT \(page 503\)](#)
- [8.5. PMC HRM WORKLOAD \(page 573\)](#)
- [8.6. PMC HRM APPLICANTS \(page 605\)](#)
- [8.7. PMC HRM SURVEY \(page 607\)](#)
- [8.8. EWW \(page 609\)](#)
- [8.9. LIBRARY \(page 611\)](#)

8.1. PMC ADMIN

51:ConceptsPmcAdmin.html

10_pmc_ui_1_admin.fm

This section describes the PMC Admin user interface:

- [8.1.1. Login page \(page 252\)](#)
- [8.1.2. Initial page \(page 253\)](#)
- [8.1.3. Organization tabs \(page 254\)](#)
- [8.1.4. People / Persons \(page 255\)](#)
- [8.1.5. People / Positions \(page 278\)](#)
- [8.1.6. People / Hierarchy \(page 279\)](#)
- [8.1.7. Projects / Roles \(page 280\)](#)
- [8.1.8. Projects / Management \(page 281\)](#)
- [8.1.9. Permissions / Role-related \(page 282\)](#)
- [8.1.10. Permissions / Object-related \(page 283\)](#)
- [8.1.11. Permissions / Groups \(page 284\)](#)
- [8.1.12. Permissions / Granting \(page 285\)](#)
- [8.1.13. Permissions / Total permissions \(page 286\)](#)
- [8.1.14. Permissions / State transitions \(page 287\)](#)
- [8.1.15. Notifications / Subscriptions \(page 288\)](#)
- [8.1.16. Settings / Custom fields \(page 289\)](#)
- [8.1.17. Settings / Geographical locations \(page 290\)](#)
- [8.1.18. ACEW Tuning / Categories \(page 291\)](#)
- [8.1.19. Calendar / Calendar \(page 292\)](#)
- [8.1.20. Calendar / Calendars mapping \(page 293\)](#)

8.1.1. Login page

52: PmcAdminLogin.html
(description)

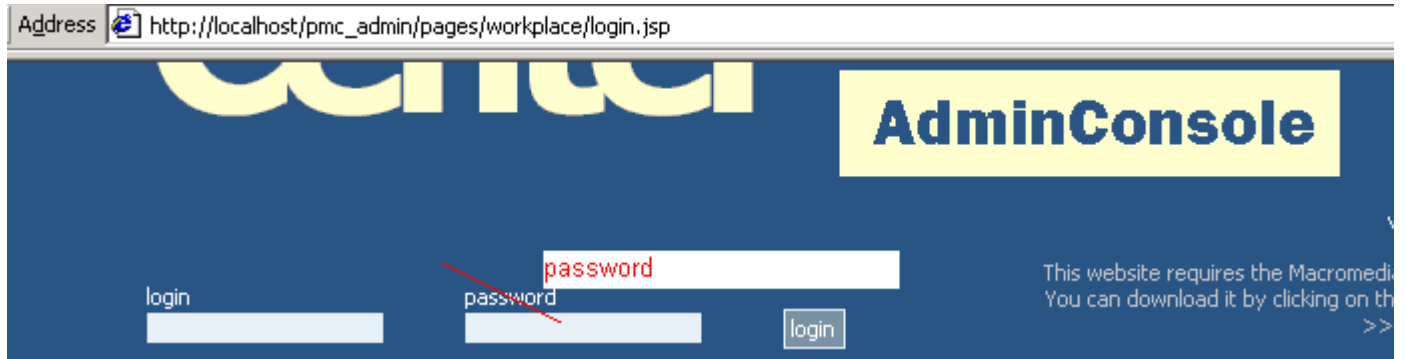


Figure 186. Login page

8.1.2. Initial page

53:PmcAdminInitialPage.html
(description)

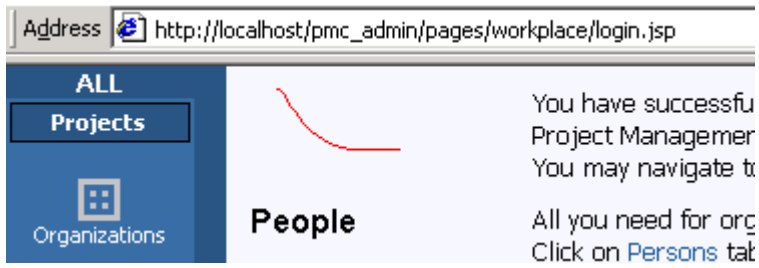


Figure 187. Initial page

8.1.3. Organization tabs

54: PmcAdminOrganizationTabs.html
(description)



Figure 188. Organization tabs

8.1.4. People / Persons

55 : PmcAdminPersons.html

(description)

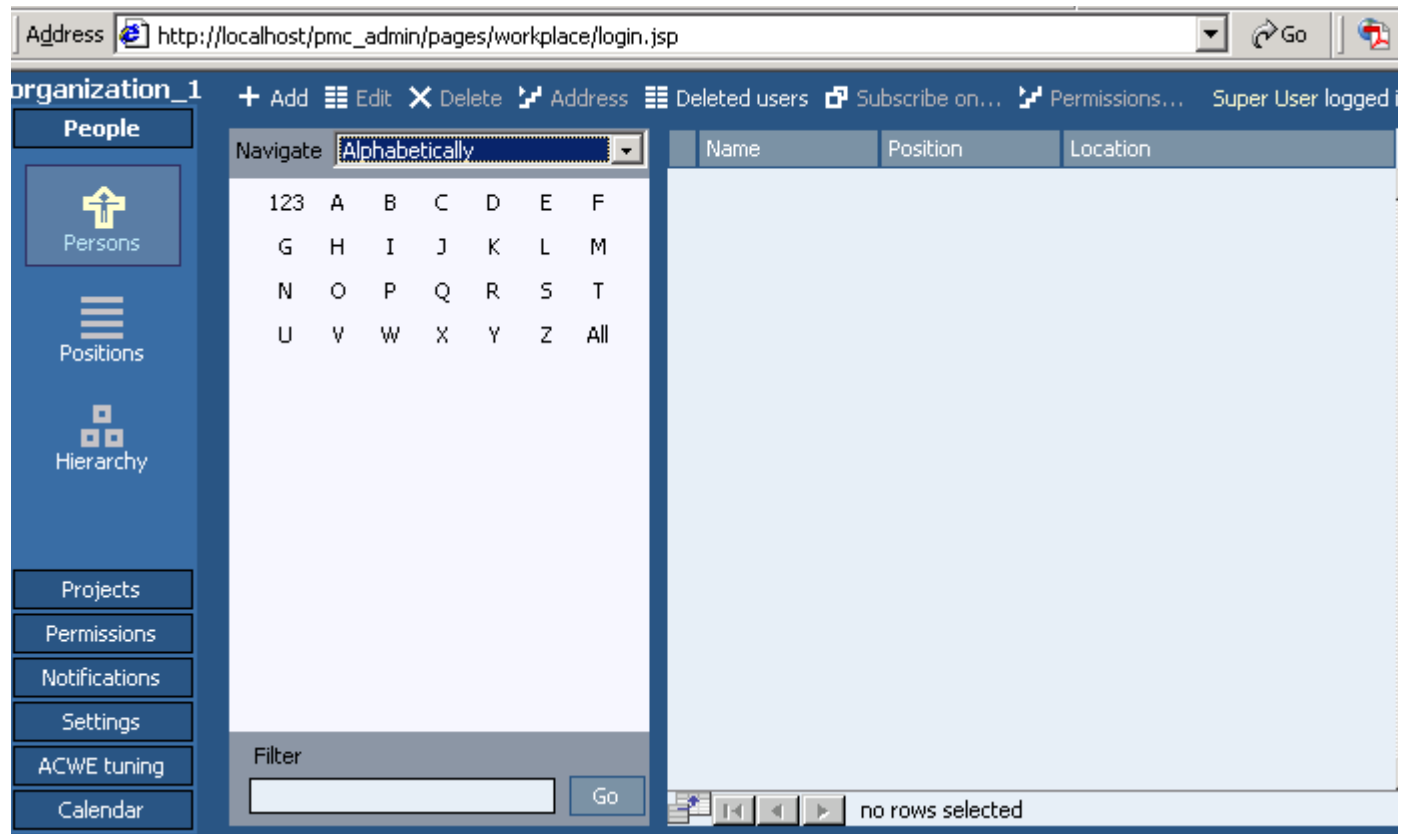
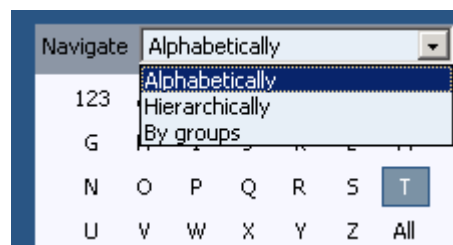


Figure 189. Persons

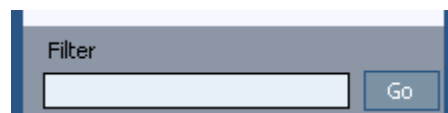
Navigate



List title bar

Name	Position	Location
test2 test2	dog_pos	dog_subunit/dog_team
testt teere test	FIRED	

Filter



Field chooser



Row navigation



The following sections describe

- [8.1.4.1. People / Persons / Add/Edit \(page 257\)](#)
- [8.1.4.2. People / Persons / Address \(page 265\)](#)
- [8.1.4.3. People / Persons / Deleted users \(page 269\)](#)
- [8.1.4.4. People / Persons / Subscribe \(page 270\)](#)
- [8.1.4.5. People / Persons / Permissions \(page 272\)](#)

8.1.4.1. People / Persons / Add/Edit

[56:PmcAdminPersonAddEdit.html](#)

(description)

The following sections describe

- [8.1.4.1.1. People / Persons / Add/Edit / Personal \(page 258\)](#)
- [8.1.4.1.2. People / Persons / Add/Edit / Employee \(page 259\)](#)
- [8.1.4.1.3. People / Persons / Add/Edit / Children \(page 260\)](#)
- [8.1.4.1.4. People / Persons / Add/Edit / Login \(page 261\)](#)
- [8.1.4.1.5. People / Persons / Add/Edit / Membership \(page 262\)](#)
- [8.1.4.1.6. People / Persons / Add/Edit / Custom fields \(page 263\)](#)
- [8.1.4.1.7. People / Persons / Add/Edit / Contact \(page 264\)](#)

8.1.4.1.1. People / Persons / Add/Edit / Personal

57: PmcAdminPersonAddEditPersonal.html
 (description)

Add person -- Web Page Dialog

Add person

Personal | Employee | Children | Login | Membership | Custom fields | Contact

First name:

Middle name:

Last name:

Nickname:

Birthday:

Language:

Photo upload:

Category: Org. ID Number:

Native full name: Governmental ID:

Manager:

Geographical location:

Location phones:

Figure 190. Person information personal

8.1.4.1.2. People / Persons / Add/Edit / Employee

58 : PmcAdminPersonAddEditEmployee.html
 (description)

The screenshot shows a web page dialog titled "Add person -- Web Page Dialog". Inside the dialog, there is a tabbed interface with the "Employee" tab selected. The "Add person" section contains the following fields and controls:

- Location:** A text input field.
- Position:** A text input field with "Assign.." and "Fire.." buttons to its right.
- Workstation:** A text input field.
- Work start:** A date input field with a calendar icon.
- Fired date:** A date input field with a calendar icon.
- Purchase limit:** A text input field.
- Driving category:** A text input field.
- Driving expiring:** A date input field with a calendar icon.
- Allow to go abroad:** A text input field with a calendar icon.
- Visa records and notes:** A large text area for notes, located to the right of the date fields.

On the right side of the dialog, there are "OK" and "Cancel" buttons.

Figure 191. Person information employee

8.1.4.1.3. People / Persons / Add/Edit / Children

59: PmcAdminPersonAddEditChildren.html
 (describe)

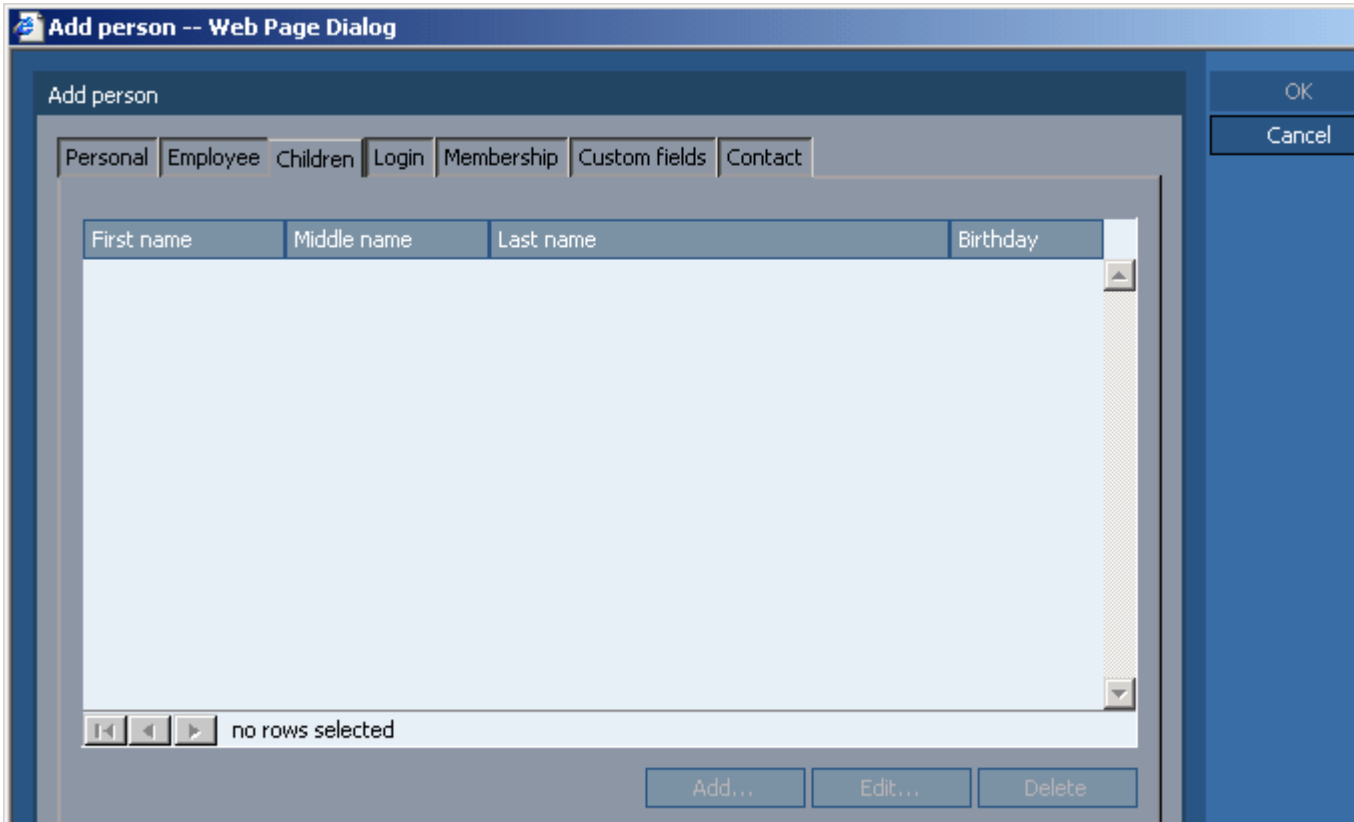


Figure 192. Person children

8.1.4.1.4. People / Persons / Add/Edit / Login

60: PmcAdminPersonAddEditLogin.html
 (description)

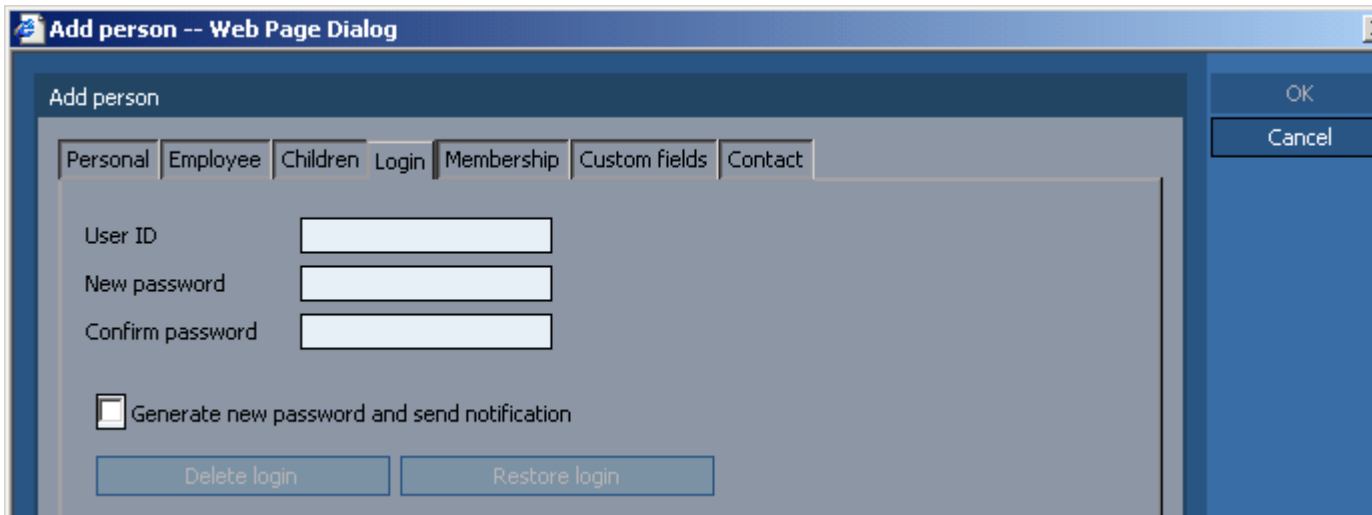


Figure 193. Person login

8.1.4.1.5. People / Persons / Add/Edit / Membership

61: PmcAdminPersonAddEditMembership.html
 (description)

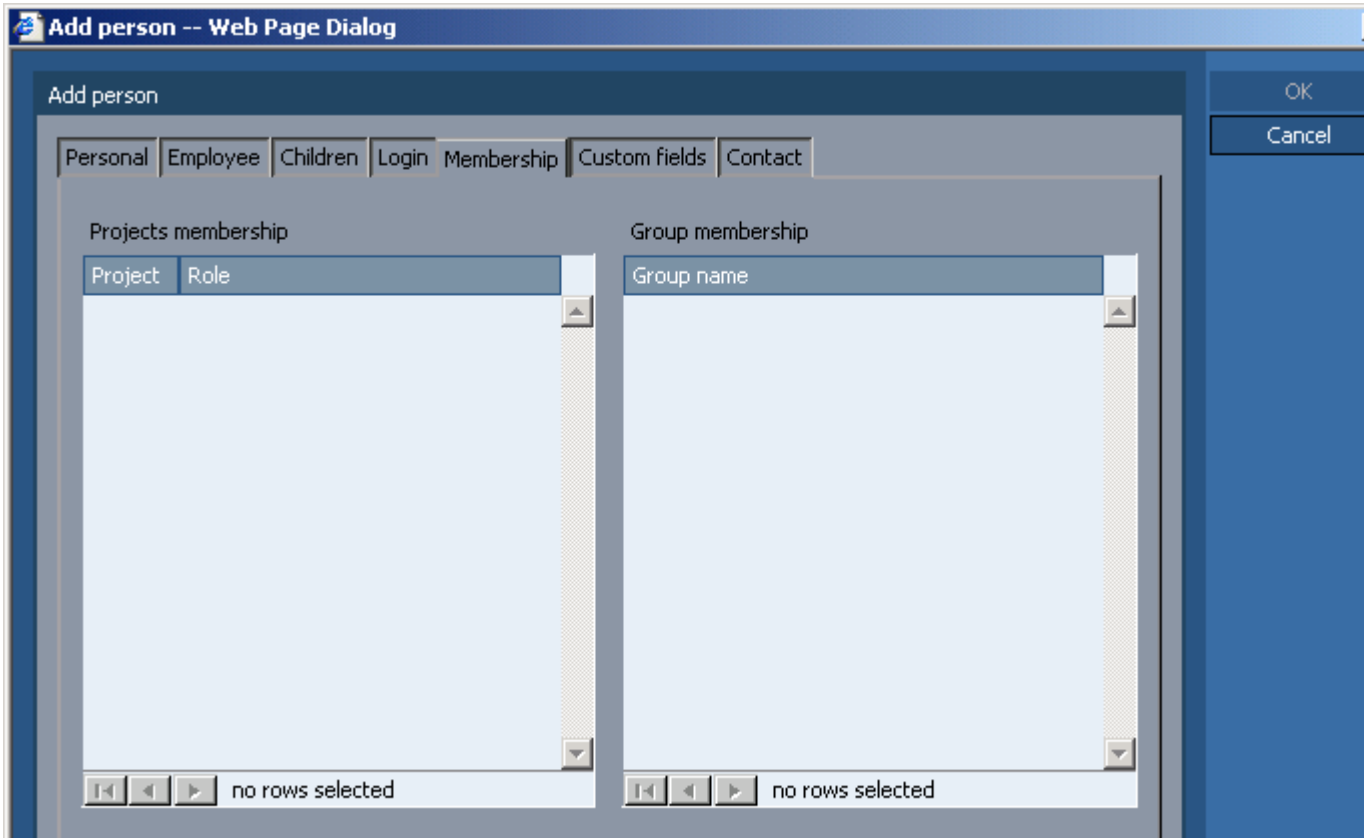


Figure 194. Person membership

8.1.4.1.6. People / Persons / Add/Edit / Custom fields

62: PmcAdminPersonAddEditCustomFields.html
 (description)

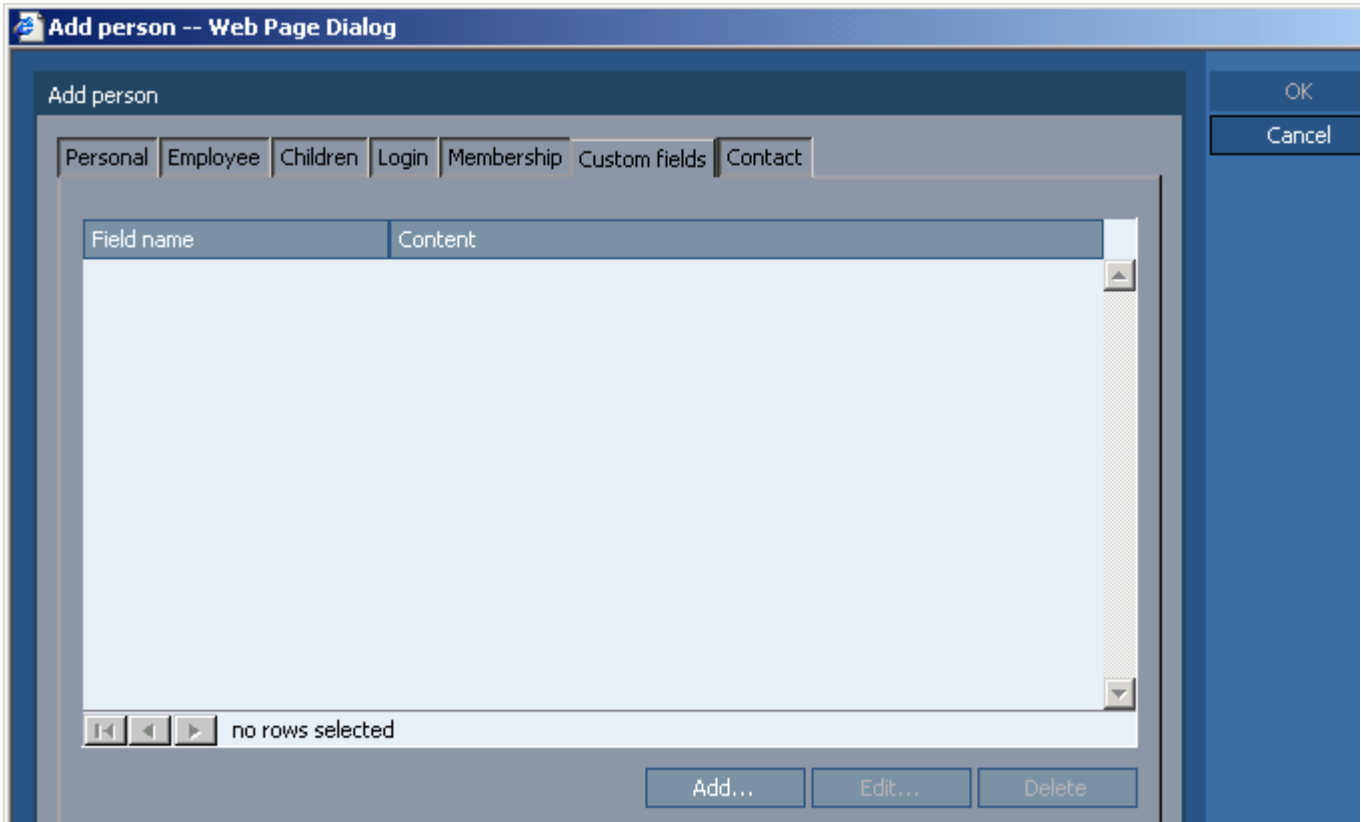


Figure 195. Person custom fields

8.1.4.1.7. People / Persons / Add/Edit / Contact

63: PmcAdminPersonAddEditContact.html
(description)

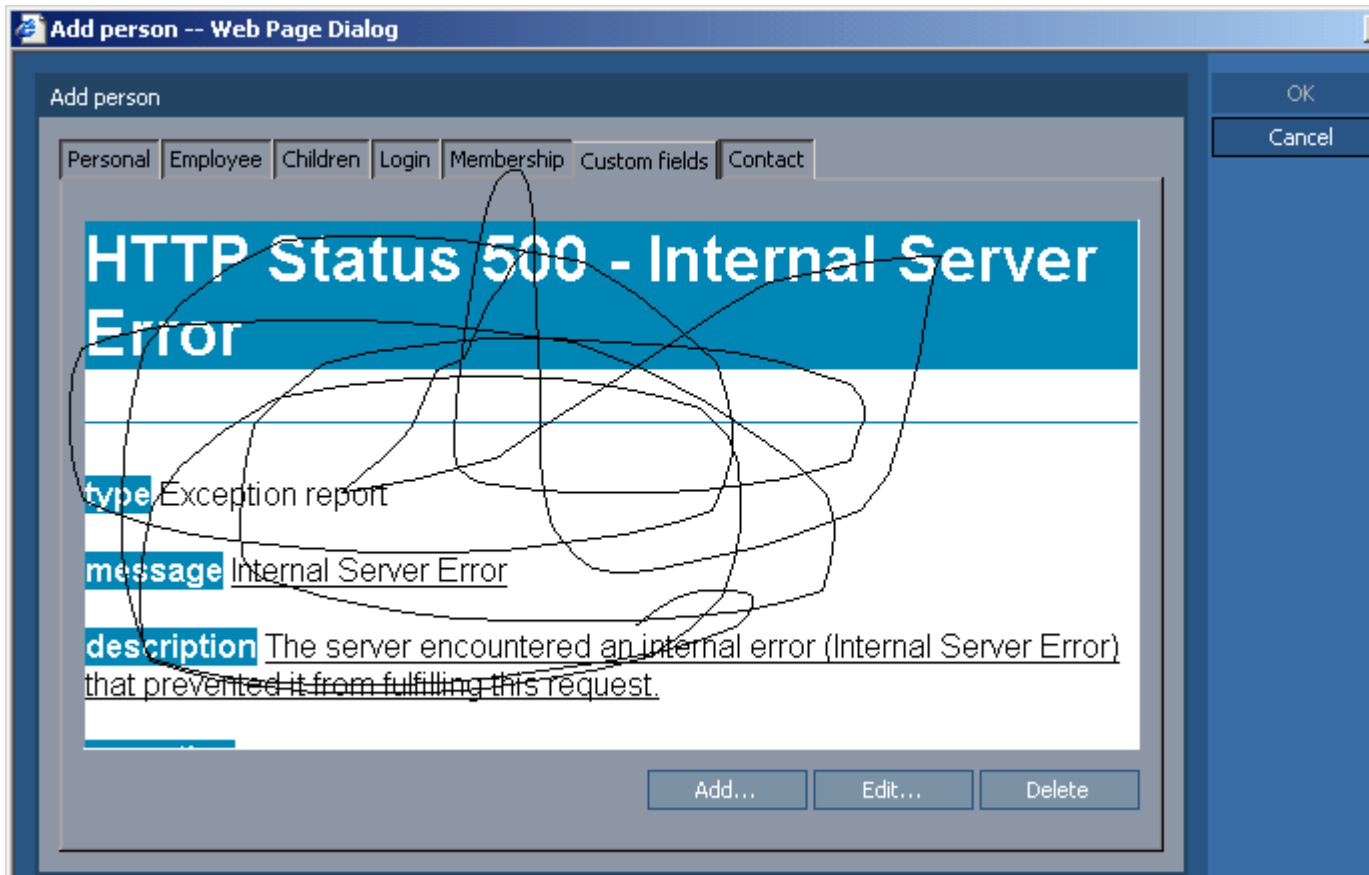


Figure 196. Person contact

8.1.4.2. People / Persons / Address

[64:PmcAdminPersonAddress.html](#)

(description)

The following sections describe

- [8.1.4.2.1. People / Persons / Address / Email \(page 266\)](#)
- [8.1.4.2.2. People / Persons / Address / Phones \(page 267\)](#)
- [8.1.4.2.3. People / Persons / Address / Postal \(page 268\)](#)

8.1.4.2.1. People / Persons / Address / Email

65: PmcAdminPersonAddressEmail.html
 (description)

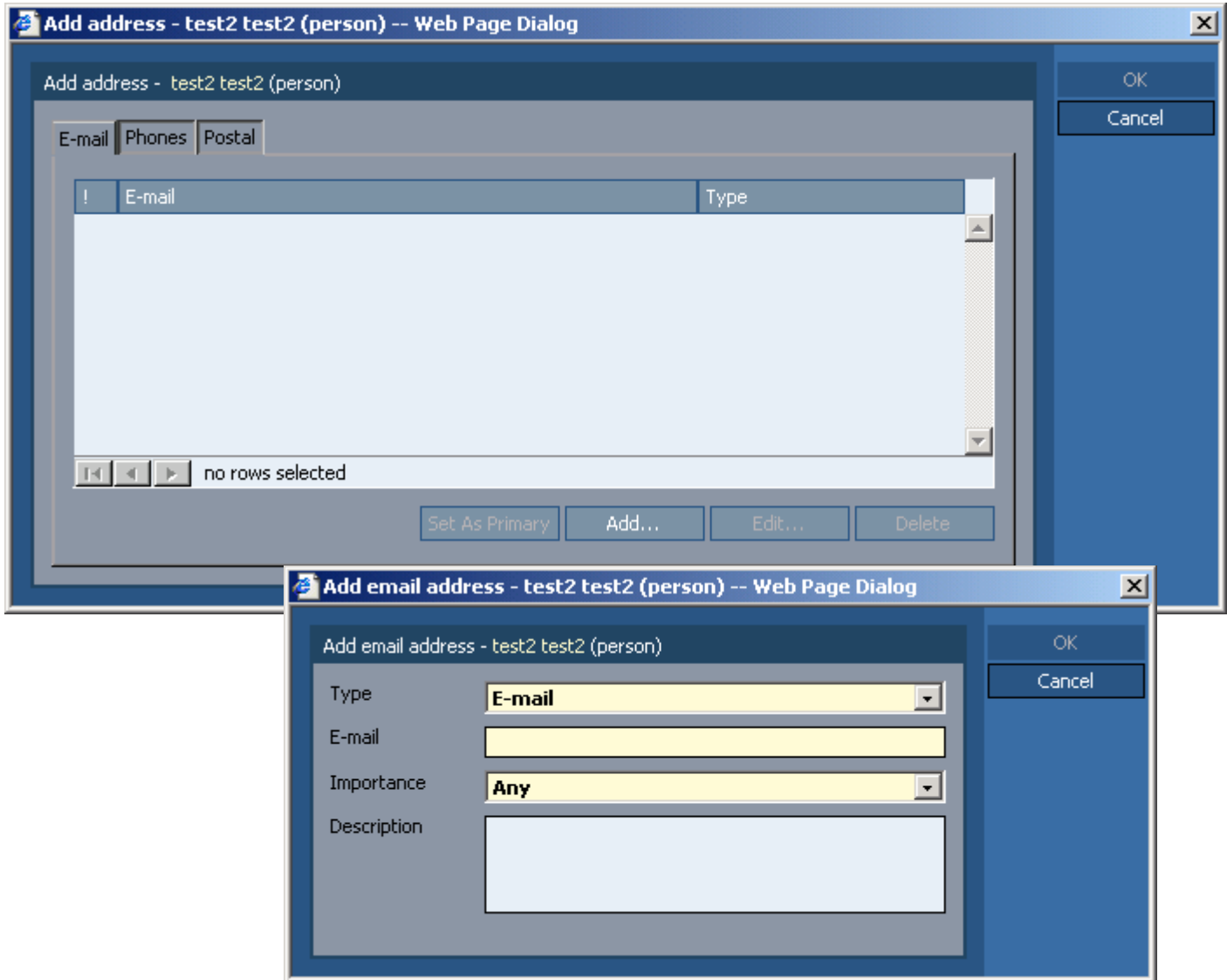


Figure 197. Person address email

8.1.4.2.2. People / Persons / Address / Phones

66 : PmcAdminPersonAddressPhones.html
(description)

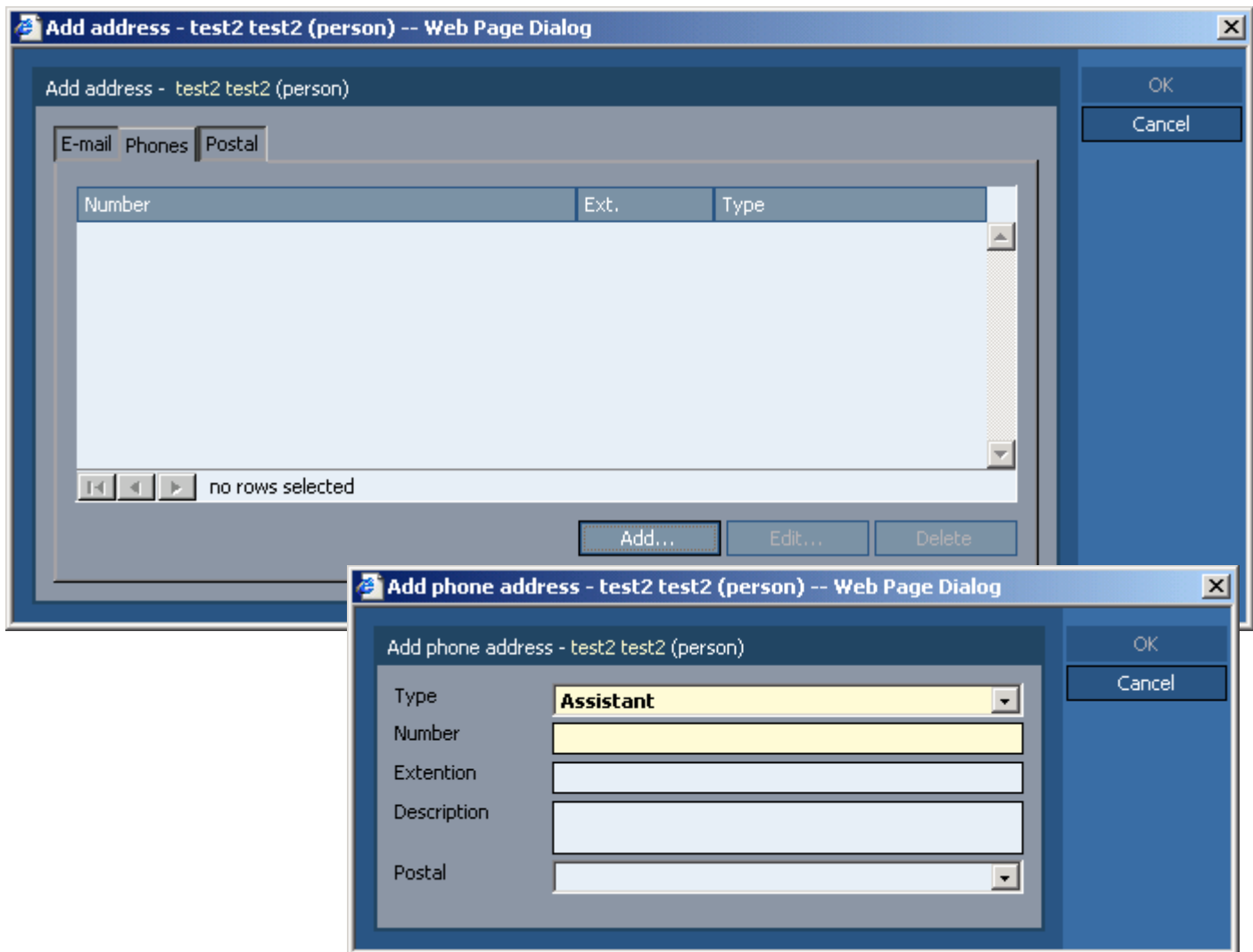


Figure 198. Person address phones

8.1.4.2.3. People / Persons / Address / Postal

67: PmcAdminPersonAddressPostal.html
 (description)

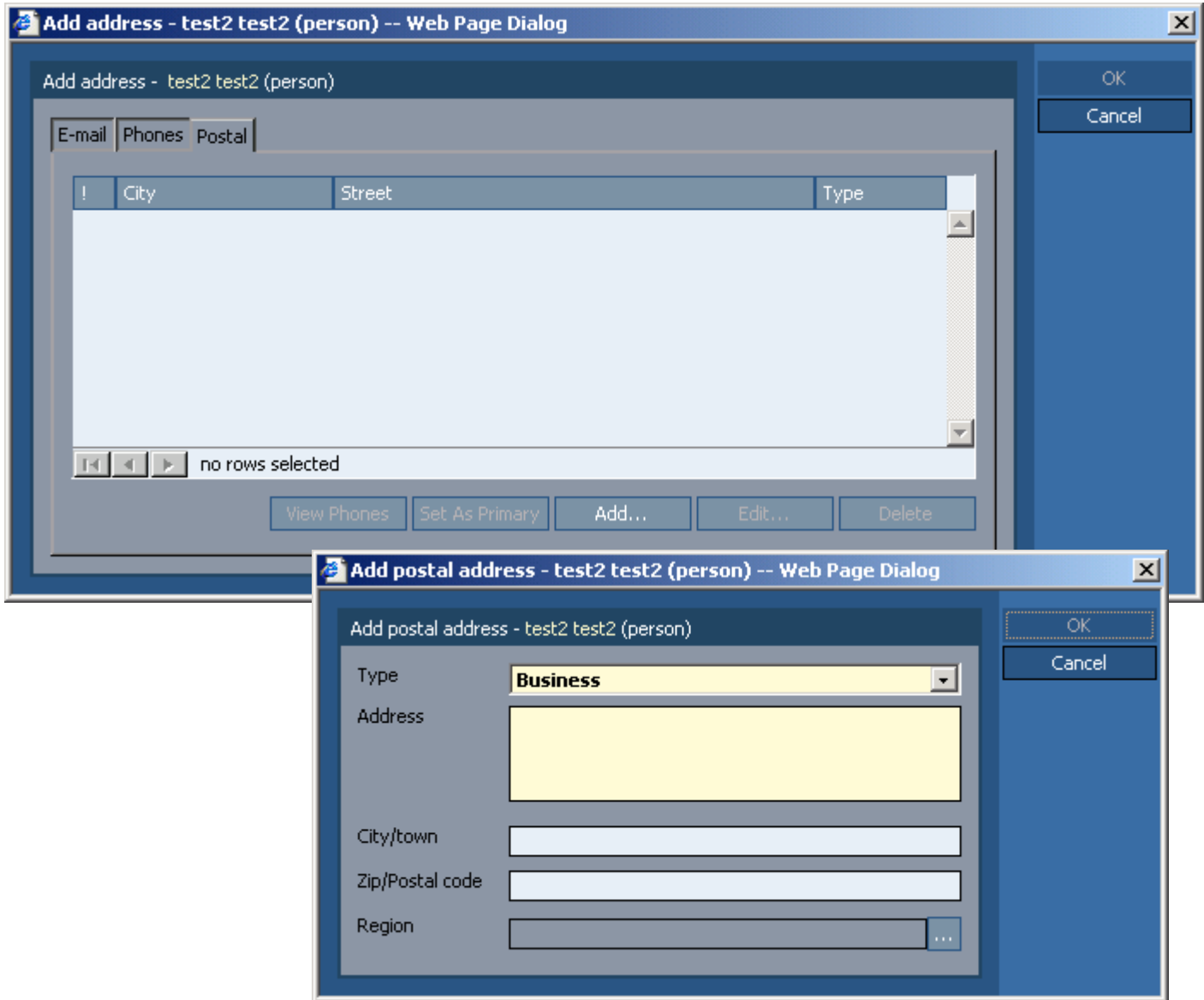


Figure 199. Person address postal

8.1.4.3. People / Persons / Deleted users

68:PmcAdminPersonDeletedUsers.html

(describe)

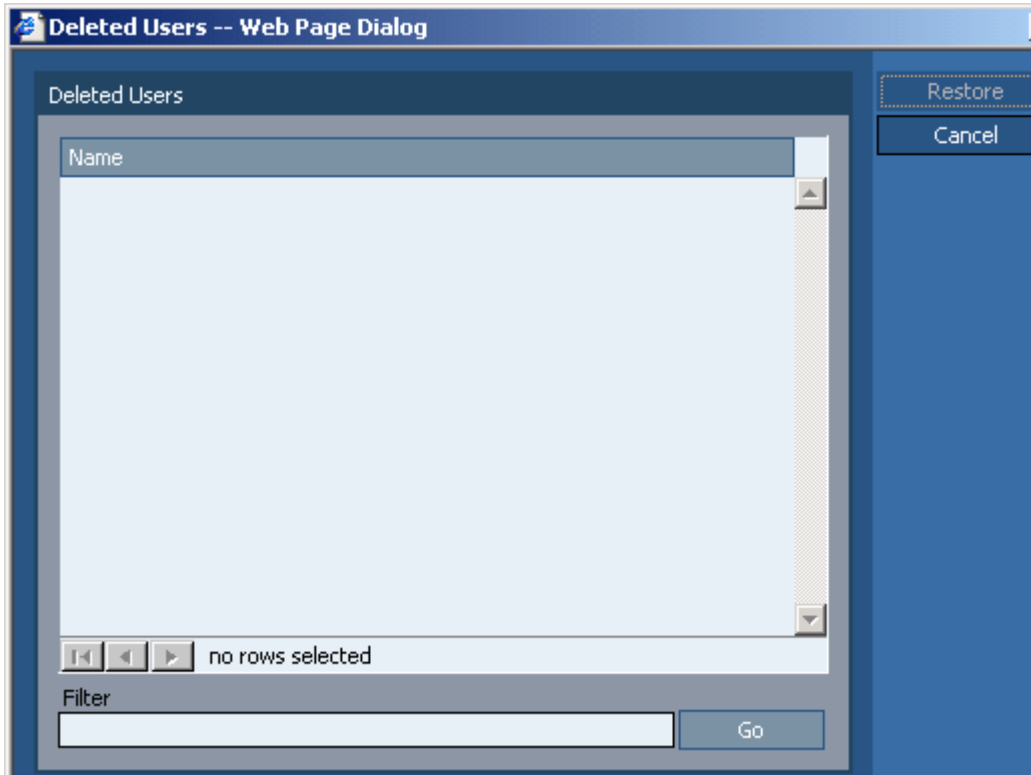


Figure 200. Deleted users

8.1.4.4. People / Persons / Subscribe

69: PmcAdminPersonSubscribe.html
(description)

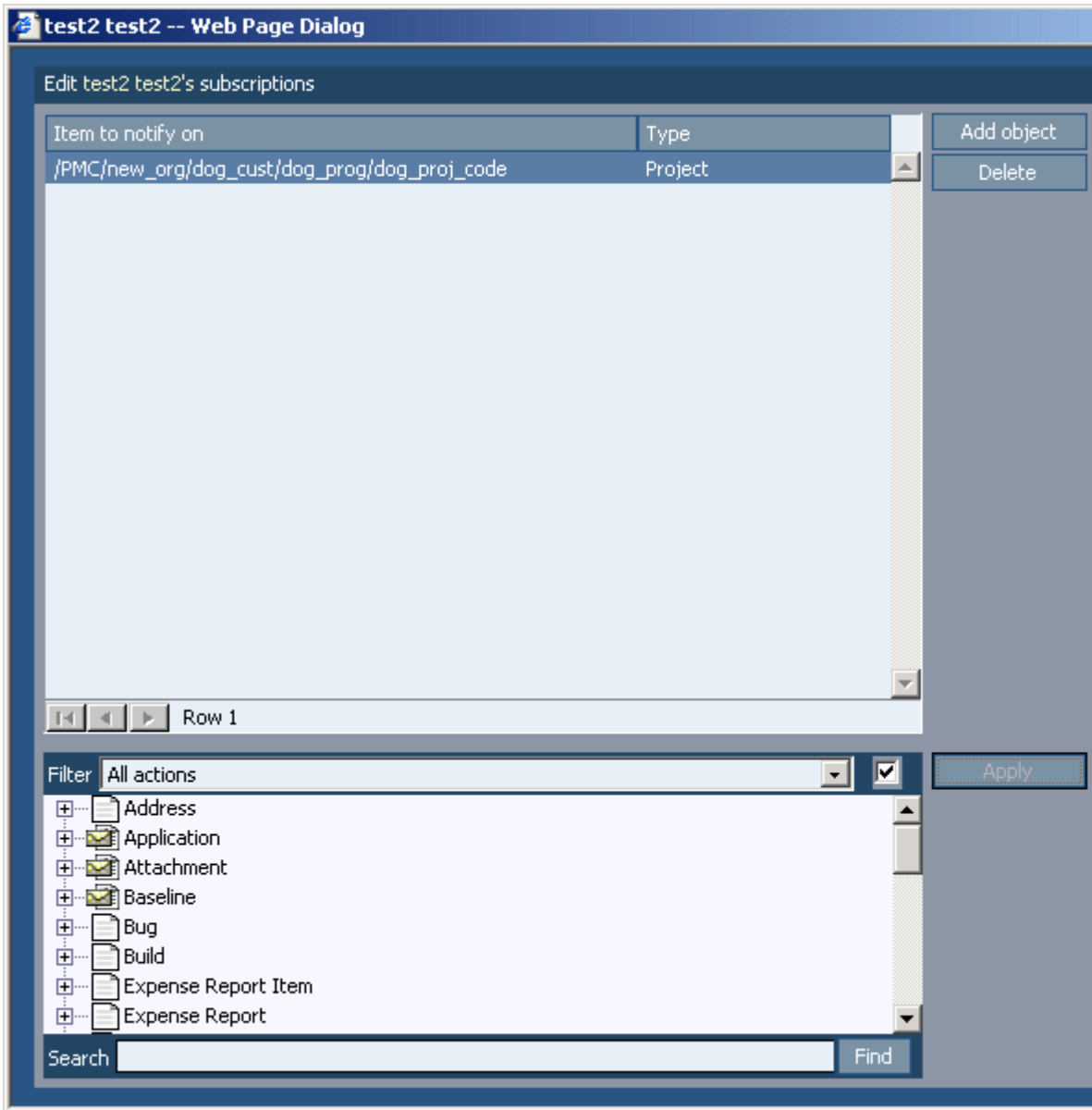


Figure 201. Person subscriptions

Add object

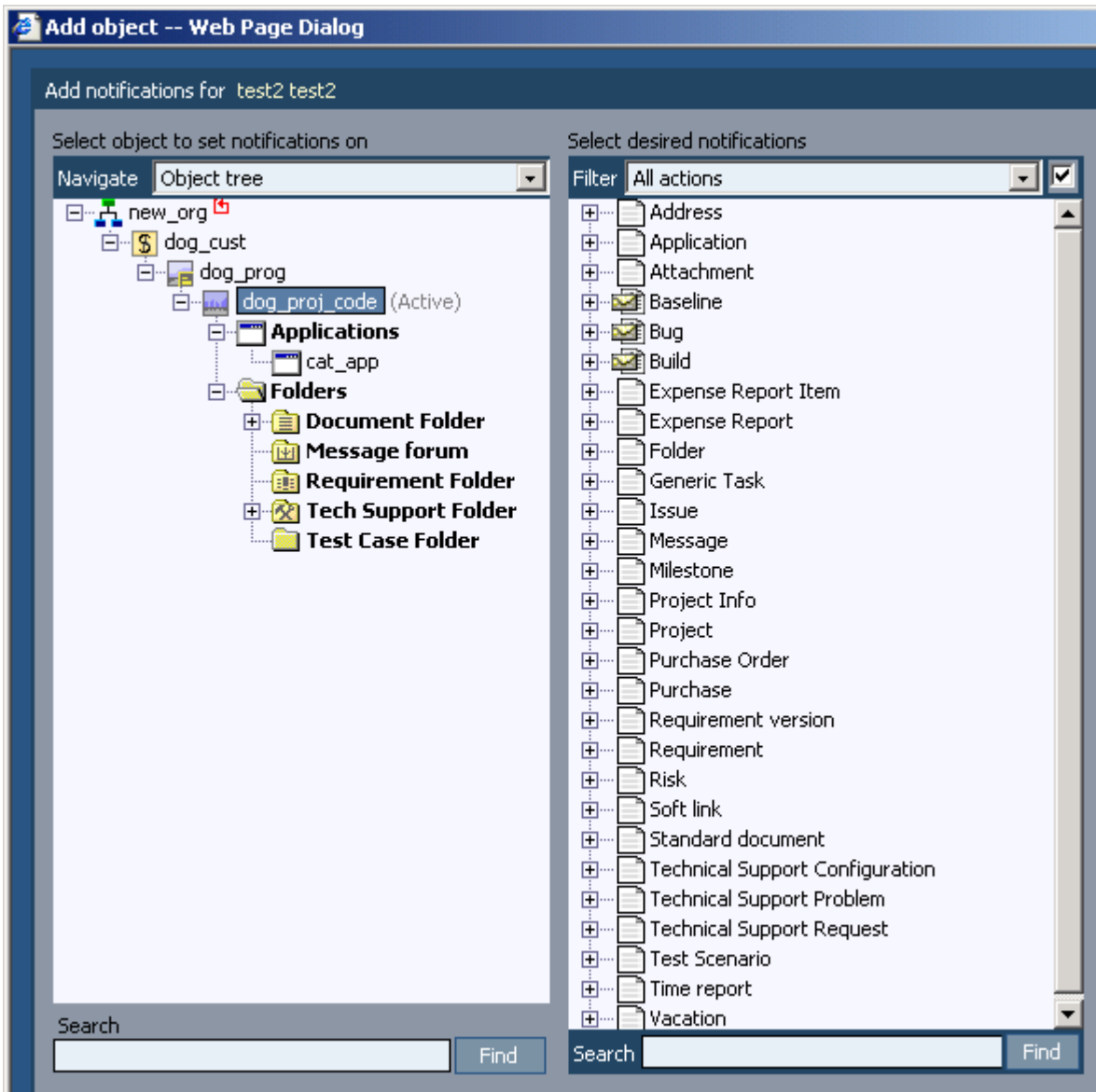


Figure 202. Add person subscription

8.1.4.5. People / Persons / Permissions

70: PmcAdminPersonPermissions.html
(description)

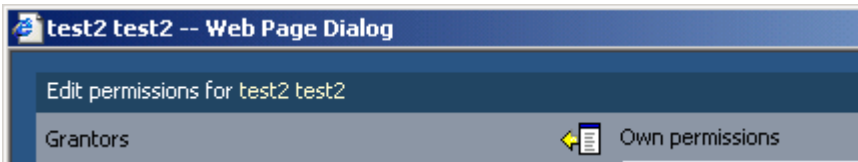


Figure 203. Person permissions

The following sections describe

- [8.1.4.5.1. People / Persons / Permissions / Grantor \(page 273\)](#)
- [8.1.4.5.2. People / Persons / Permissions / Own \(page 275\)](#)

8.1.4.5.1. People / Persons / Permissions / Grantor

71: PmcAdminPersonPermissionsGrantor.html
 (description)

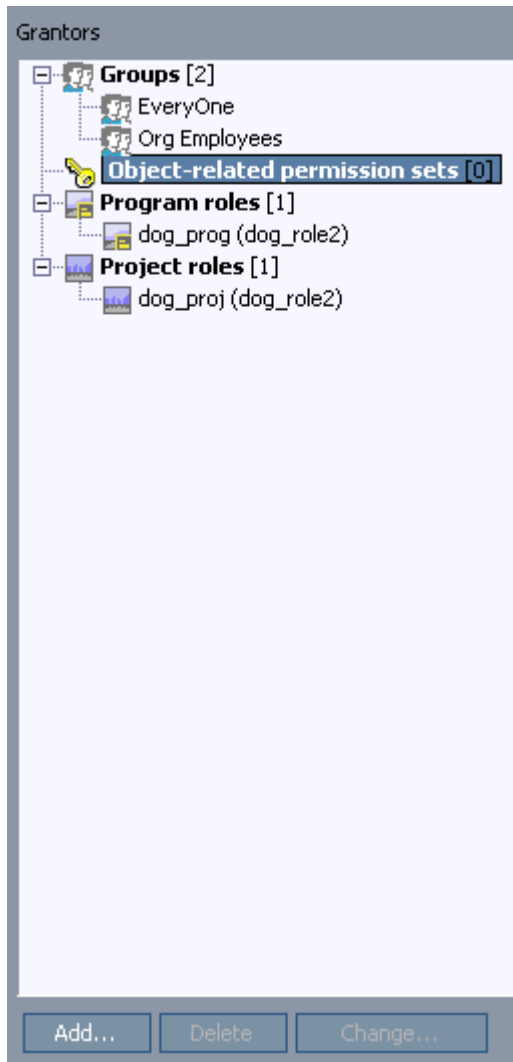


Figure 204. Person permission grantors

Add

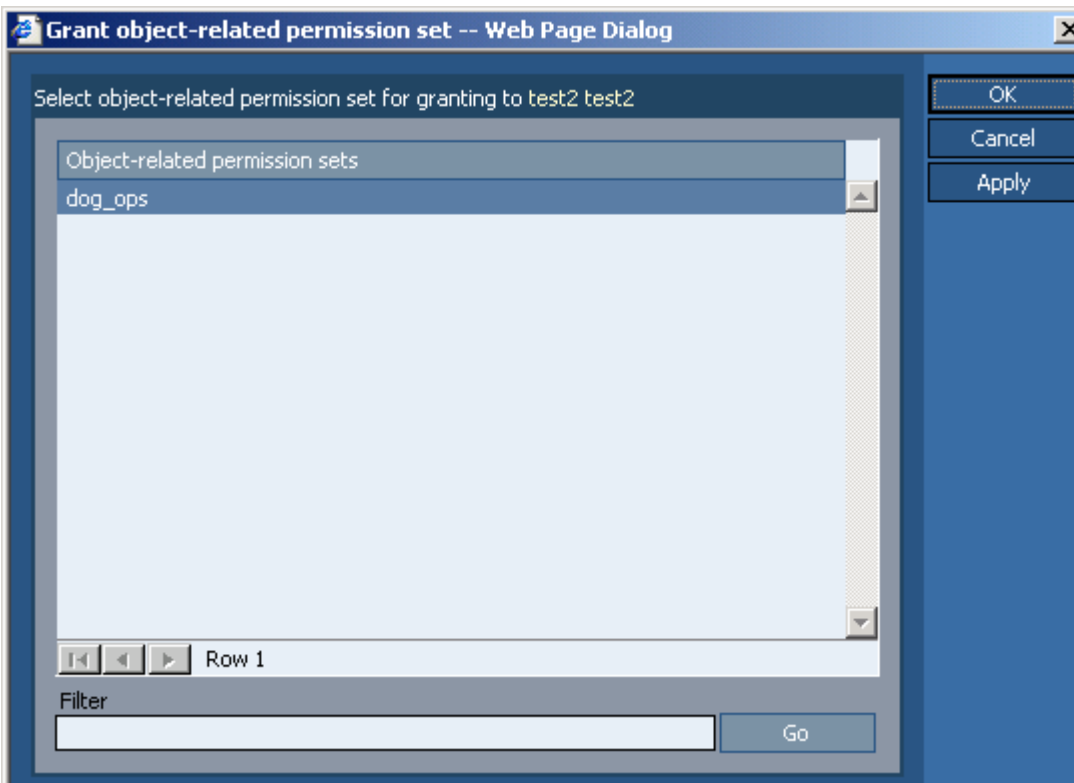


Figure 205. Add person permission grantor

8.1.4.5.2. People / Persons / Permissions / Own

72: PmcAdminPersonPermissionsOwn.html
(description)

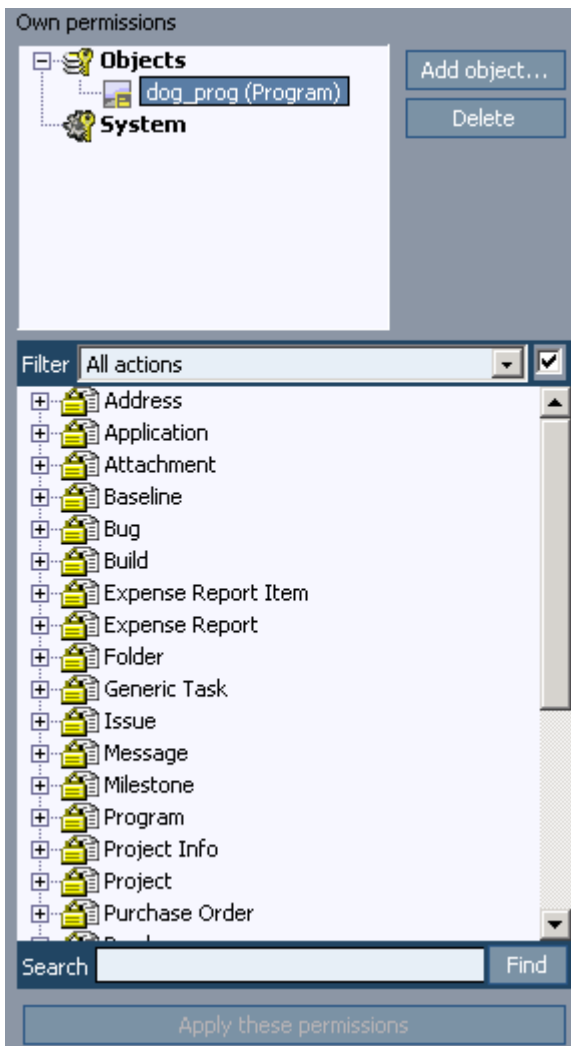


Figure 206. Person permissions own

The following sections describe

- 8.1.4.5.2.1. People / Persons / Permissions / Own / Add object (page 275)
- 8.1.4.5.2.2. People / Persons / Permissions / Own / System (page 276)

8.1.4.5.2.1. People / Persons / Permissions / Own / Add object

(description)

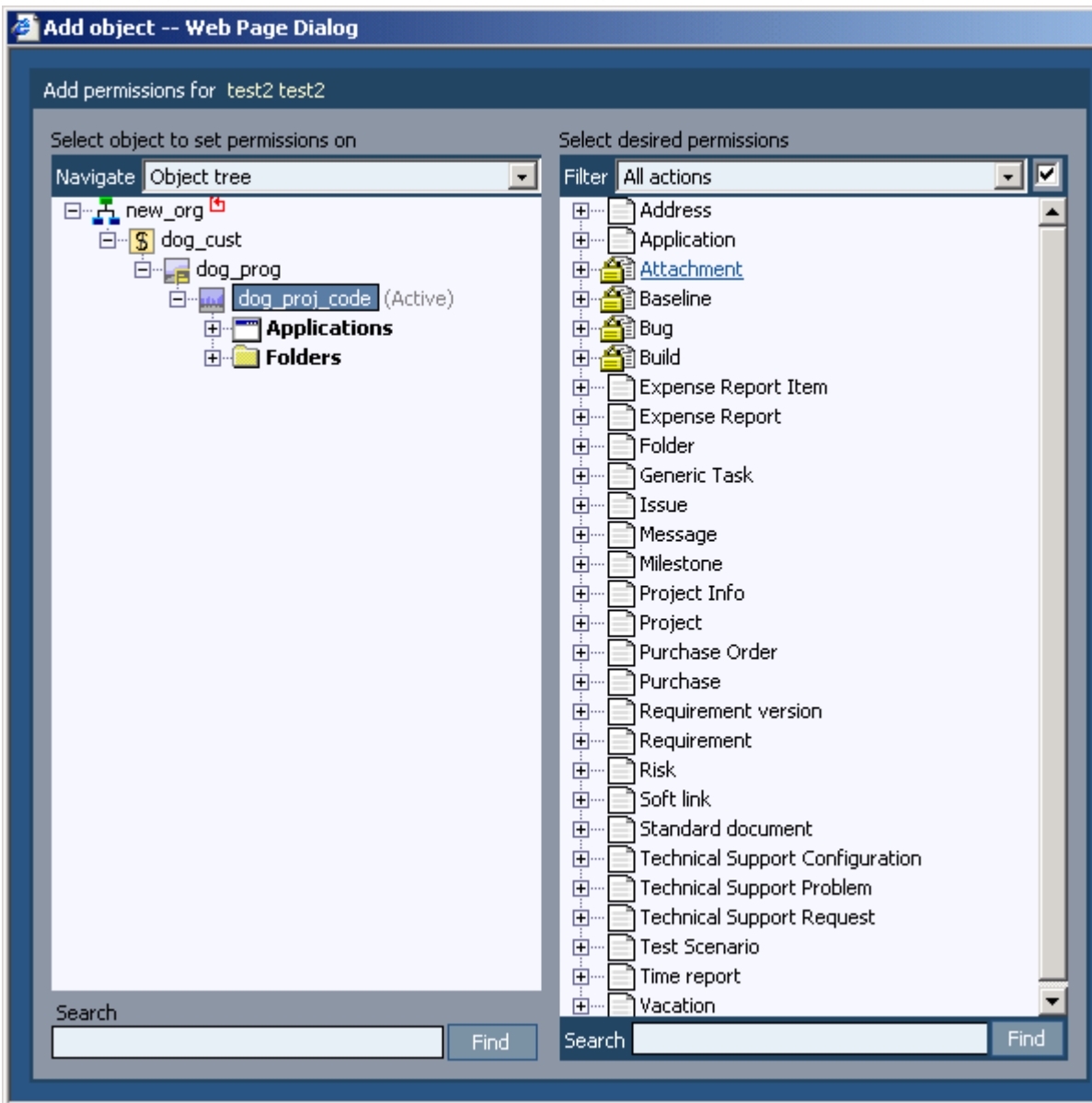


Figure 207. Add persons permission own object

8.1.4.5.2.2. People / Persons / Permissions / Own / System

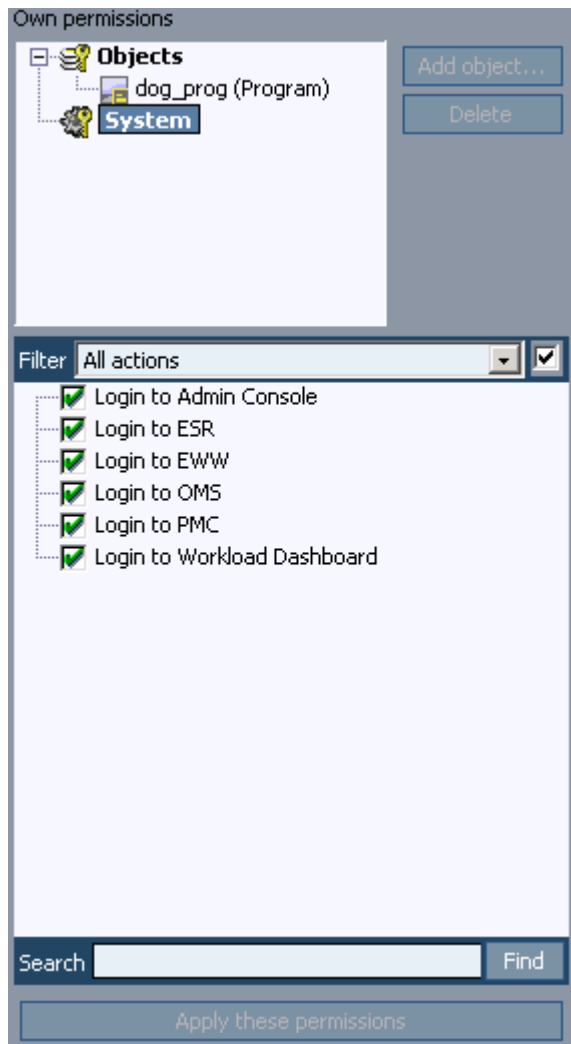


Figure 208. Add persons permission own system

8.1.5. People / Positions

73:PmcAdminPositions.html

8.1.6. People / Hierarchy

74:PmcAdminHierarchy.html

8.1.7. Projects / Roles

75:PmcAdminRoles.html

8.1.8. Projects / Management

76:PmcAdminManagement.html

8.1.9. Permissions / Role-related

77:PmcAdminRoleRelated.html

8.1.10. Permissions / Object-related

78:PmcAdminObjectRelated.html

8.1.11. Permissions / Groups

79:PmcAdminGroups.html

8.1.12. Permissions / Granting

80:PmcAdminGranting.html

8.1.13. Permissions / Total permissions

81:PmcAdminPermissions.html

8.1.14. Permissions / State transitions

82:PmcAdminTransitions.html

8.1.15. Notifications / Subscriptions

83:PmcAdminSubscriptions.html

8.1.16. Settings / Custom fields

84:PmcAdminCustomFields.html

8.1.17. Settings / Geographical locations

85:PmcAdminGeographicalLocations.html

8.1.18. ACEW Tuning / Categories

86:PmcAdminAcewTuningCategories.html

8.1.19. Calendar / Calendar

87:PmcAdminCalendar.html

8.1.20. Calendar / Calendars mapping

88:PmcAdminCalendarMapping.html

8.2. PMC CLIENT

89:ConceptsPmcClient.html

10_pmc_ui_2_client.fm

This section describes the PMC Client user interface:

- [8.2.1. Main / Summary \(page 296\)](#)
- [8.2.2. Main / Summary / Customize \(page 297\)](#)
- [8.2.3. Main / Messages \(page 299\)](#)
- [8.2.4. Main / Tasks \(page 306\)](#)
- [8.2.5. Main / Documents \(page 316\)](#)
- [8.2.6. Main / Bugs \(page 324\)](#)
- [8.2.7. Main / Builds \(page 335\)](#)
- [8.2.8. Main / Requirements \(page 342\)](#)
- [8.2.9. Main / Support Requests \(page 350\)](#)
- [8.2.10. Main / Support Requests / Problems \(page 360\)](#)
- [8.2.11. Main / Support Requests / Configurations \(page 367\)](#)
- [8.2.12. Main / Risks \(page 368\)](#)
- [8.2.13. Main / Issues \(page 375\)](#)
- [8.2.14. Info / Project \(page 383\)](#)
- [8.2.15. Manage / Folders \(page 436\)](#)
- [8.2.16. Manage / My subscriptions \(page 441\)](#)
- [8.2.17. Accounting / Time journal \(page 445\)](#)
- [8.2.18. Accounting / Expense reports \(page 452\)](#)
- [8.2.19. Accounting / Purchase orders \(page 460\)](#)
- [8.2.20. Attachments list \(page 468\)](#)
- [8.2.21. Filter \(page 469\)](#)
- [8.2.22. Right frame \(page 471\)](#)

8.2.1. Main / Summary

90:PMCClientSummary.html

The dialog **Summary** contains summary information.

Customize...

xxx

Calendar

xxx

Tasks

xxx

Bookmarks

xxx

(buttons) 

xxx

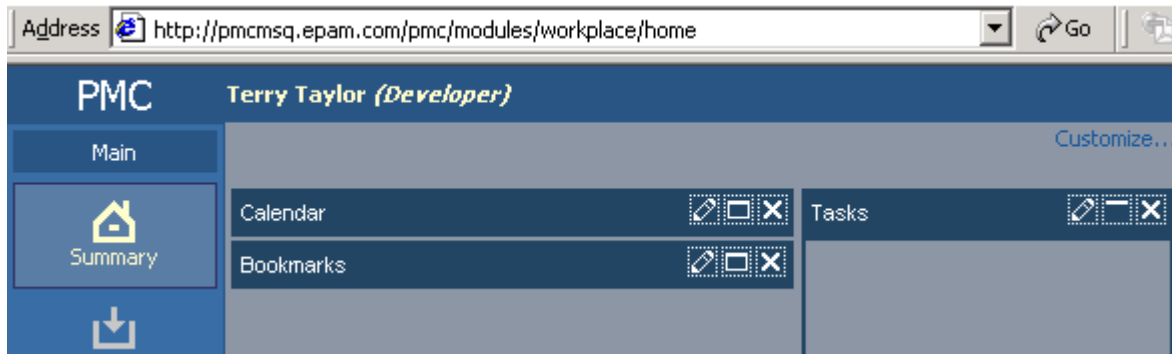


Figure 209. Summary

8.2.2. Main / Summary / Customize

91:PmcClientCustomize.html

The dialog **Customize** allows you to customize the appearance of PMC Client.

Change your password and primary email...

xxx

Back to summary...

xxx

Select color scheme

xxx

Calendar, ..., Edit detail

xxx

Apply changes

xxx

This is your customized settings

xxx

Row count, displayed on list page (max =100)

xxx

Number of days to highlight tasks before they expire

xxx

Language

xxx

Start PMC from

xxx

Select moduel on project change

xxx

Make each second line on list page in highlight color

xxx

Number of periods in Time Journal (max=100)

xxx

Assign tasks only for:

xxx

Apply

xxx

mailto: system administrator

xxx

Terry Taylor (Developer)

Change your password and primary e-mail... [Back to summary..](#)

Select color scheme: **Blue (default)**

PMC

Main

Tasks in / with subfolders

2002 Feb

Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We

- Calendar
- List pane
- Tree pane
- View detail
- Edit detail
- Apply changes

This is your customized settings

Row count, displayed on list page (max=100): Start PMC from: **Last visited page**

Number of days to highlight tasks before they expire: Select module on project change: by current project by hand-picked project

Language: **English** Make each second line on list page in highlight color:

Number of periods in Time Journal (max=100):

Assign tasks only for:

Account Manager <input checked="" type="checkbox"/>	Business Analyst <input checked="" type="checkbox"/>	Business consultant <input checked="" type="checkbox"/>	Consultant <input checked="" type="checkbox"/>
Consultant PrimGen <input checked="" type="checkbox"/>	Contact <input checked="" type="checkbox"/>	Customer <input checked="" type="checkbox"/>	Customer KSPNGY <input checked="" type="checkbox"/>
Customer PECOMNS <input checked="" type="checkbox"/>	Customer RUSALMTO <input checked="" type="checkbox"/>	Customer SAP:PD <input checked="" type="checkbox"/>	Data Modeller <input checked="" type="checkbox"/>
Designer <input checked="" type="checkbox"/>	Developer <input checked="" type="checkbox"/>	Developer ESS <input checked="" type="checkbox"/>	Development Team Lead <input checked="" type="checkbox"/>
Executive <input checked="" type="checkbox"/>	Financial Manager <input checked="" type="checkbox"/>	Key Developer <input checked="" type="checkbox"/>	Key Developer ESS <input checked="" type="checkbox"/>
Member <input checked="" type="checkbox"/>	Program Manager <input checked="" type="checkbox"/>	Project Coordinator <input checked="" type="checkbox"/>	Project GENERP Consultant <input checked="" type="checkbox"/>
Project GENERP Developer Team Lead <input checked="" type="checkbox"/>	Project GENERP Supervisor <input checked="" type="checkbox"/>	Project Manager <input checked="" type="checkbox"/>	Project Sponsor <input checked="" type="checkbox"/>
Project Supervisor <input checked="" type="checkbox"/>	QA Manager <input checked="" type="checkbox"/>	Resource Manager <input checked="" type="checkbox"/>	STR customers <input checked="" type="checkbox"/>
Sales Executive <input checked="" type="checkbox"/>	Sales Manager <input checked="" type="checkbox"/>	Sales Rep <input checked="" type="checkbox"/>	Satori Customer <input checked="" type="checkbox"/>
System Architect <input checked="" type="checkbox"/>	TS Engineer <input checked="" type="checkbox"/>	TS Student <input checked="" type="checkbox"/>	Tester <input checked="" type="checkbox"/>
Testing Team Lead <input checked="" type="checkbox"/>	Writer <input checked="" type="checkbox"/>		

[mailto: system administrator](mailto:system administrator)

Figure 210. Customize

8.2.3. Main / Messages

92: PmcClientMessages.html

The dialog **Messages** displays your messages.

Toolbar

xxx

Submit

xxx

[8.2.3.1. Main / Messages / New\(submit\)/View/Edit \(page 301\)](#)

View

xxx

[8.2.3.1. Main / Messages / New\(submit\)/View/Edit \(page 301\)](#)

Edit

xxx

[8.2.3.1. Main / Messages / New\(submit\)/View/Edit \(page 301\)](#)

Delete

xxx

Data export

xxx

Up level

xxx

Switch flagged

xxx

All messages (drop-down list)

xxx

Show/hide tree...

xxx

All messages

xxx

Open filter editor

xxx

[8.2.3.3. Main / Messages / Filter \(page 305\)](#)

Message list header

xxx

Sort by: Is new

xxx

Sort by: Is flagged

xxx

Sort by: Attachment

xxx

Sort by: Reply chain

xxx

Subject

xxx

Posted by

XXX

Posted on

XXX

(list of messages)

Double-click to open a message.

Footer

XXX

[This portion messages: ###] [Page: #] [Portion: #]

XXX

Getting previous/next portion of data 

XXX

Go to previous/next page 

XXX

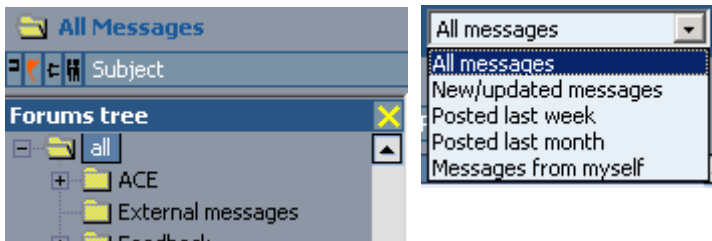
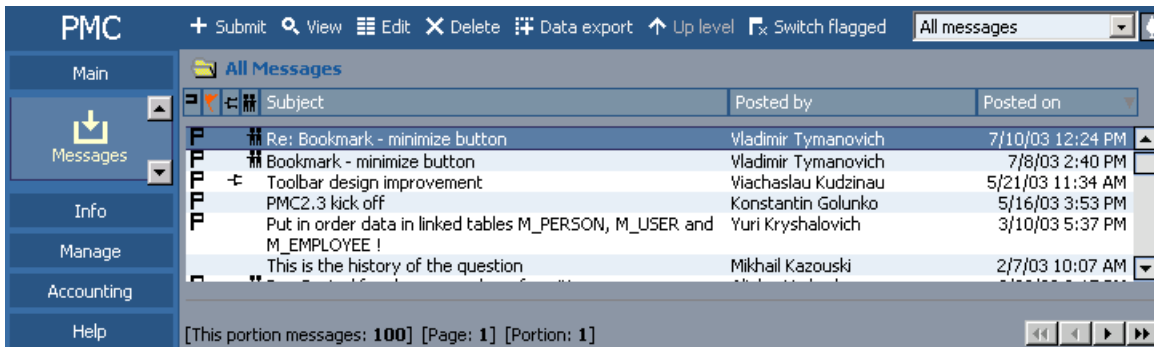


Figure 211. Messages

8.2.3.1. Main / Messages / New(submit)/View/Edit

93:PmcClientMessageNewViewEdit.html

The dialog **Messages** has the following subdialogs

- **Submit**. Creates a new message.
- **View**. Displays a message.
- **Edit**. Modifies a message.

Toolbar

XXX

Save (submit)

XXX

Close

XXX

Attachments list (submit)

XXX

[8.2.20. Attachments list \(page 468\)](#)

Reply (view/edit)

XXX

History (view/edit)

XXX

Reply chain (view/edit)

XXX

Flagging / reset flagging of the item (view/edit)

XXX

Message area

XXX

Add bookmark 

XXX

Posted (view/edit)

XXX

Forum

XXX

Subject

XXX

Message

XXX

Right column

XXX

[8.2.22. Right frame \(page 471\)](#)

[8.2.3.2. Main / Messages / Edit / Subscribe / Advanced \(page 304\)](#)

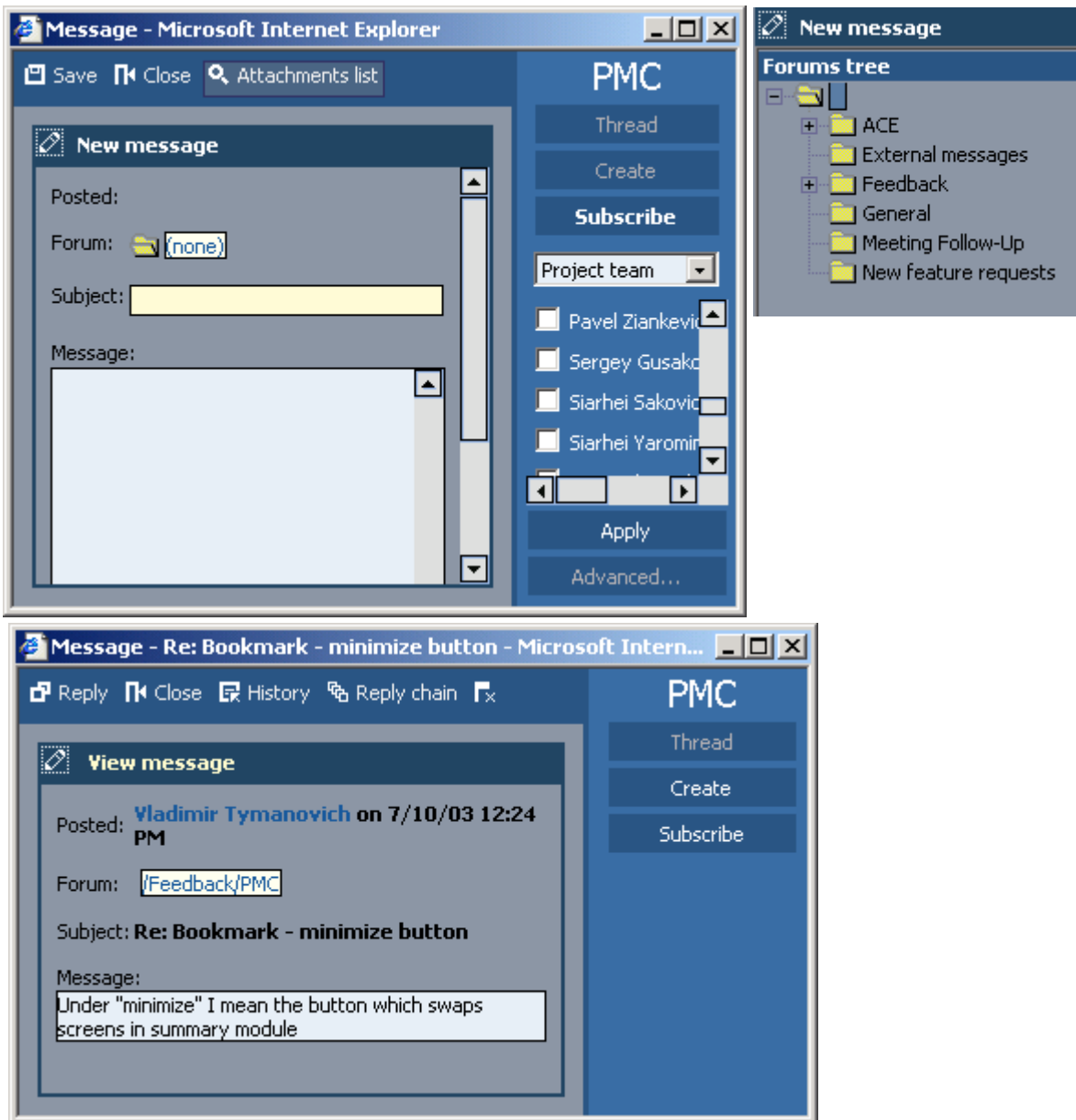


Figure 212. New (submit) message

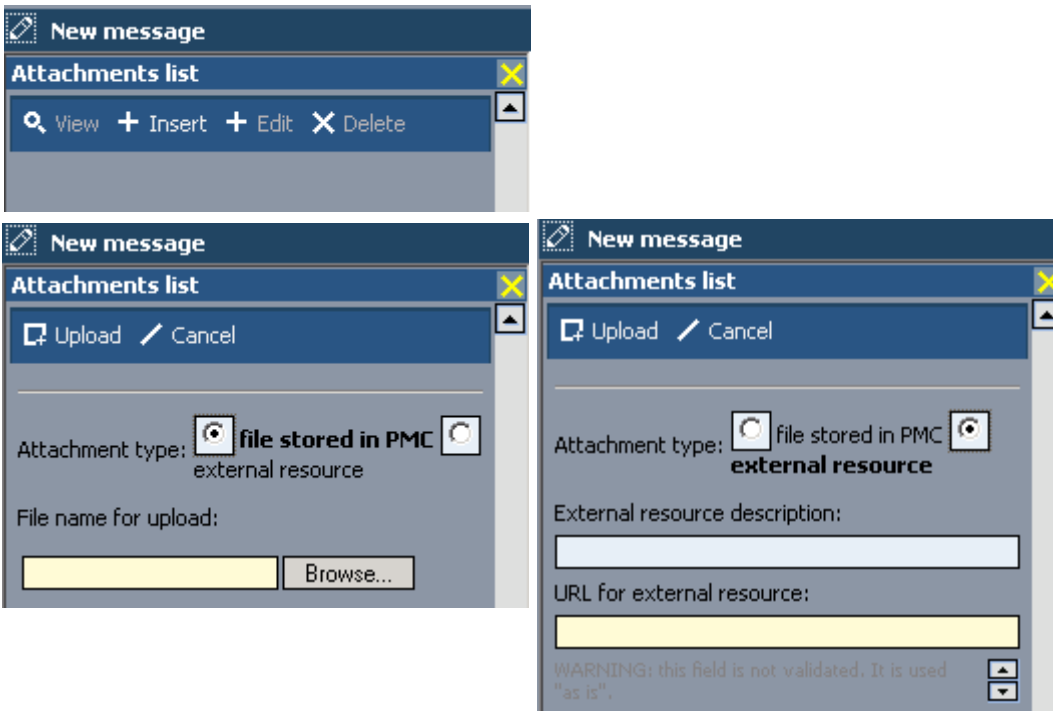


Figure 213. New message attachments (message history log description)

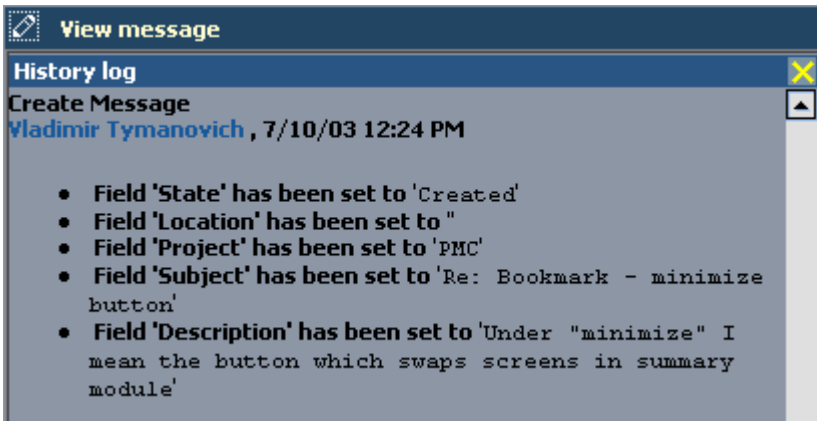


Figure 214. Message history log (view/edit) (reply chain description)

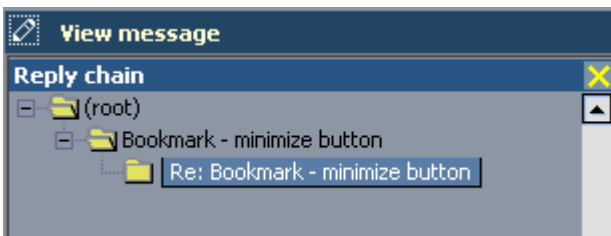


Figure 215. Message reply chain (view/edit)

8.2.3.2. Main / Messages / Edit / Subscribe / Advanced

94:PMCClientMessageSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a message.

Create message

XXX

Read message

XXX

Change message

XXX

Delete message

XXX

Select / clear all

XXX

OK / Cancel / Apply

XXX

Subscribe me / others

XXX

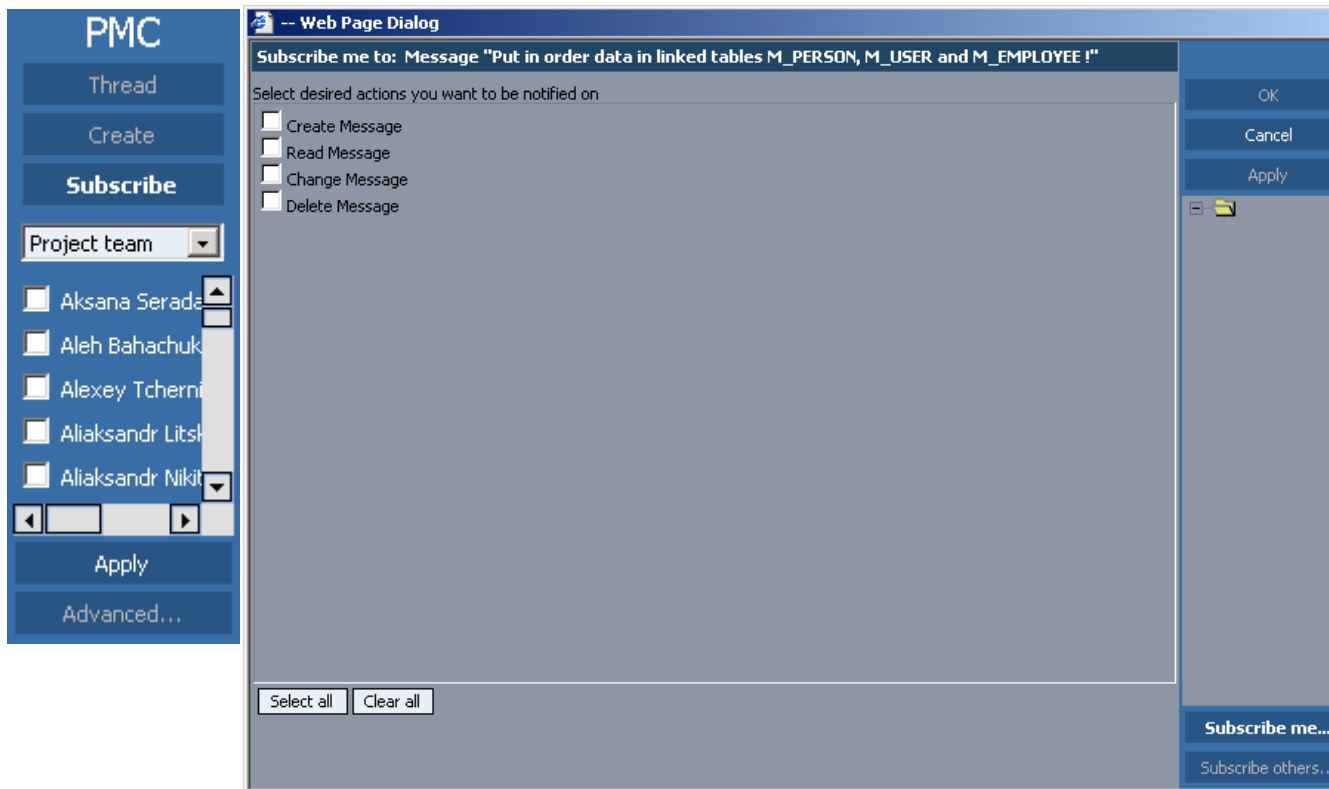


Figure 216. Message subscription

8.2.3.3. Main / Messages / Filter

95:PmcClientMessageFilter.html

The dialog **Filter** displays the filter settings for messages.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

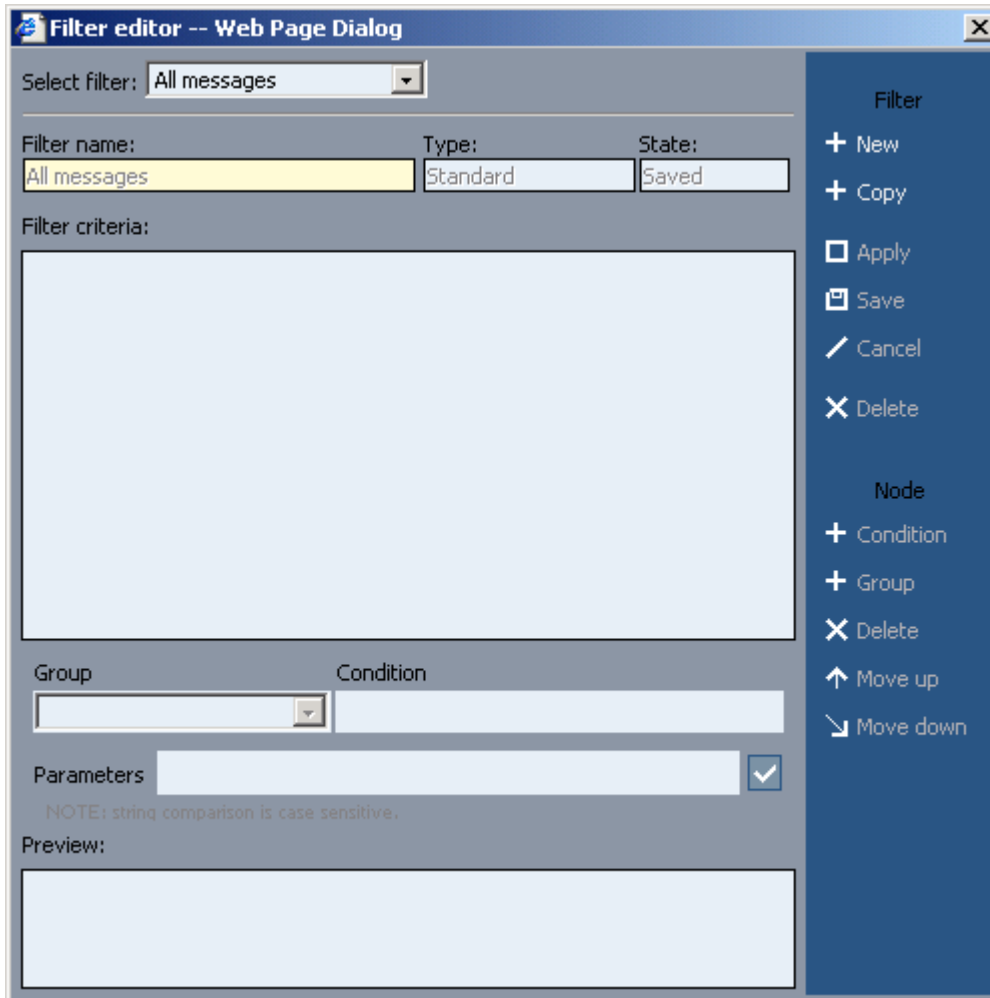


Figure 217. Messages filter

8.2.4. Main / Tasks

[96:PmcClientTasks.html](#)

The dialog **Tasks** displays your tasks.

Tasks have a workflow, and depending on the workflow they are different. generic, bug fixing, requirement implementation, (see 444 for all kinds).

generic tasks are not connected with anything. non-generic tasks have a parent item... a bug fixing request, tech support request,

reminder also not connected with anything else.

Toolbar

xxx

Add

add a task or subtask (to the selected task).

[8.2.4.1. Main / Tasks / New/View/Edit \(page 309\)](#)

View / Edit

view or edit the selected task.

[8.2.4.1. Main / Tasks / New/View/Edit \(page 309\)](#)

Delete

delete the selected task.

note: you cant delete a task that is a part of a workflow. because it has a parent item.

Search

enter the number (for example 4000629611170000556) of the message you want to find.

NOT SEARCH.

Data export

exports a list of tasks to an excel file. ERROR.

Tasks related to

opens a tree view of the available subfolders for the currently selected folder.

you can click on a subfolder to display the tasks for that subfolder.

with subfolders

show the tasks not only in the selected folder but also in all subfolders of that folder.

Filter tasks (drop-down list)

Select the type of tasks to display in the task list.

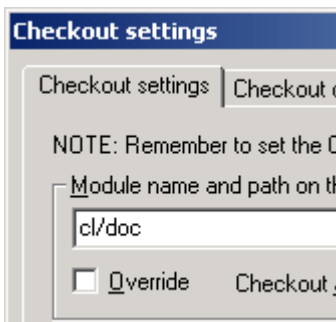


Figure 218. Task types in filter

Open filter editor

Click to open the filter editor and create a custom filter (that only you can use).

[8.2.4.3. Main / Tasks / Filter \(page 315\)](#)

Show hierarchy

display the task hierarchy (includes a gantt chart).

Task list header

left click to sort.

right click to group.
click on X to go back.

Is new 

is marked if the task is new.
WHAT IS NEW??

Is flagged 

the task has been flagged.
WHAT IS FLAGGED??

Attach count 

indicates that the task includes an attachment.

Name

name of the task.

Workflow

workflow of task.

Priority

priority of task.... low, normal, high.

Assigned by / to

who assigned the task.
who task assigned to.

Start / due date

??

Status

complete, in progress, not started, cancelled, etc.

(list of tasks)

Double-click to open a task.

Footer

xxx

Total:## | Portions ## x ## : 1 2 3 ...

Total is the total number of tasks.

Portions is the number of pages.

x ## is the number of tasks shown on a page.

1 2 3 click on to show the portion.

PMC + Add View Edit Delete Search Data export All tasks

Main Tasks related to / PMC with subfolders Show hierarchy

Name	Workflow	Priority	Assigned by	Assigned to	Start date	Due date	Status
"ASAP" priority support needed	Generic	Normal	Maxim Yakovenko	Maxim Yakovenko	9/1/03		Complete
"All actions/Checked only/Changed only" filtering actions in the actions tree.	Generic	Normal	Yauheni Kurbayeu	Yauheni Kurbayeu	3/19/02	3/20/02	Complete
"Alphabet" and "CheckSet" controls initialization on Manage notification page.	Generic	Normal	Yauheni Kurbayeu	Yauheni Kurbayeu		12/21/01	Complete
"Attachments" submodule redesign: adding compression	Generic	Normal	Andrei Urbanovich	Andrei Urbanovich	7/2/02		Complete

Total :2542 | Portions 102 x 25 : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Tasks related to / PMC with subfolders

- Application
- Requirement Folder
- Tech Support Folder

All tasks

- All open tasks
- All completed tasks
- Open tasks I've assigned
- Open tasks assigned to me
- Tasks I've completed last week

Figure 219. Tasks

8.2.4.1. Main / Tasks / New/View/Edit

97:PmcClientTaskNewViewEdit.html

The dialog **Tasks** has the following subdialogs

- **New**. Creates a new task.
- **View**. Displays a task.
- **Edit**. Modifies a task.

Toolbar

xxx

Save (new)

save

Close

close window with undo changes.

Cancel (edit)

same as close except return to view window.

Attachments list (new/edit)

[8.2.20. Attachments list \(page 468\)](#)

Edit (view)

click to edit task

Subtask (view/edit)

create a new task that is a subtask of the current task.

History log (view/edit)

xxx

Switch flagged (view/edit)

xxx

Task area

xxx

Add bookmark

xxx

Billable

??

directly billable to a customer (not overhead).

Global / private

private: a task for 1 person.

global: for all project members.

Subject

shows the # and title of a tech request, bug, requirement, issue, etc. to be resolved by task completion.

Parent item

can be folder, task.

Module

application

Workflow

xxx

Discipline

?? is not edited anywhere... why did they add?... ask oleg danilov

WBS code

work breakdown structure. P19.TSF3.TSR7.TST1 P=project, TSR=technical support request, TST=technical support task.

Created

peron who created (automatic)

Assigned by / to

xxx

Priority

xxx

State

in progress, complete, etc.

Planned start date

xxx

Due date

xxx

Real start date

actual

Completion date

actual

Expiration date

?? if the task is not completed by this date, then the task is nulled ?

Readiness %

% of task work completed.

Hours estimated**Hours to complete**

?? actual spent to complete

Spent hours

?? from the time journal.

WBS

??

Requirement

??

Task description

xxx

Right column

xxx

[8.2.22. Right frame \(page 471\)](#)

[8.2.4.2. Main / Tasks / Edit / Subscribe / Advanced \(page 313\)](#)

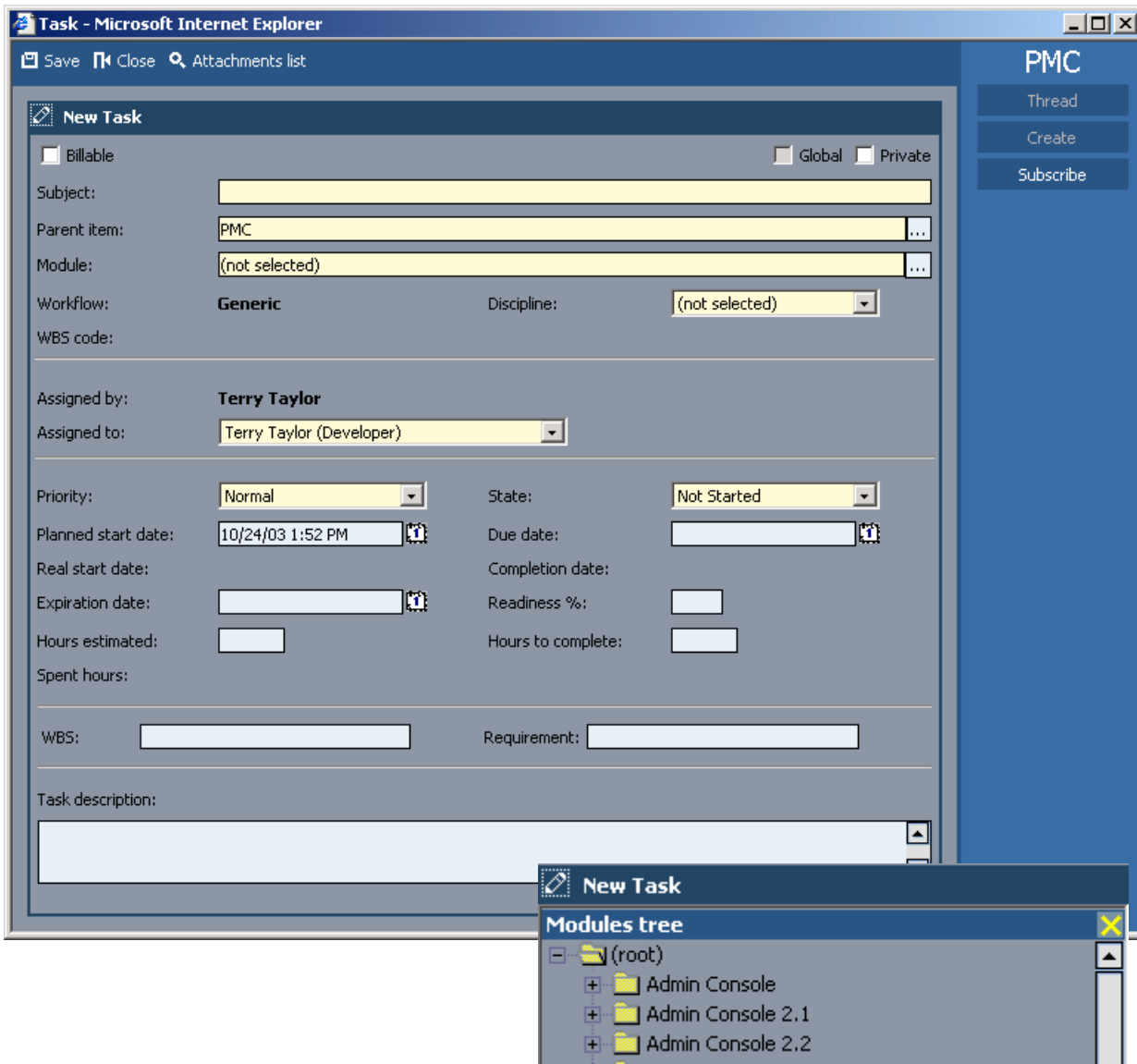


Figure 220. New task dialog

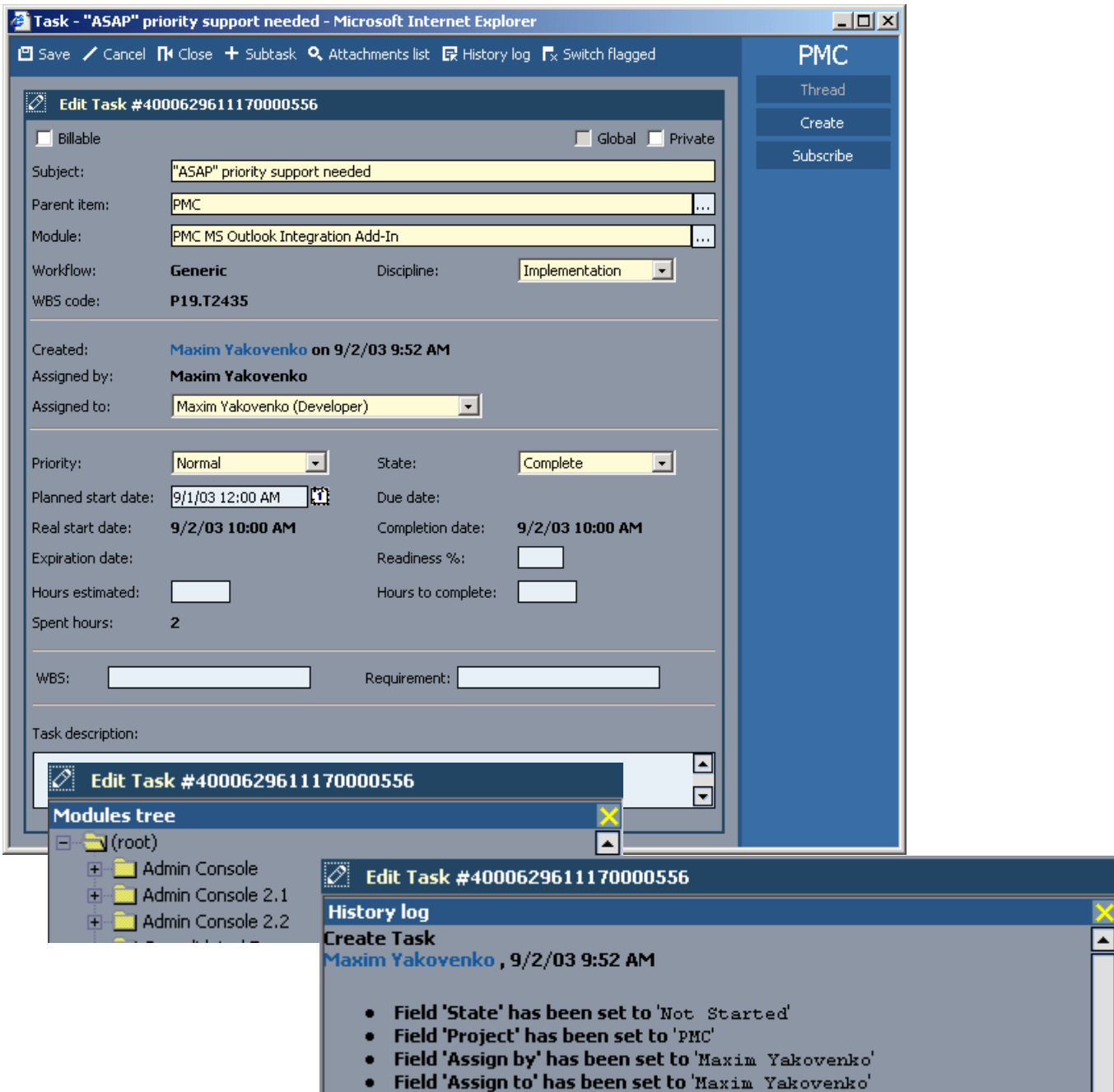


Figure 221. Task view/edit

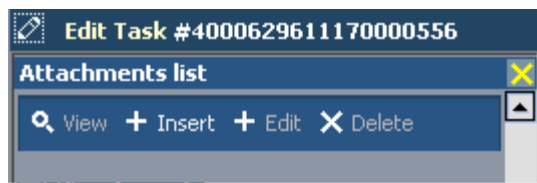


Figure 222. Task attachments list

8.2.4.2. Main / Tasks / Edit / Subscribe / Advanced

98:PmcClientTaskSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a task.

Create task

xxx

Read task

xxx

Change task

xxx

Delete task

xxx

Create global task

xxx

Modify “Due Date” task field

xxx

Return to not start state

xxx

Begin task

xxx

Defer task

xxx

Complete task

xxx

Cancel task

xxx

Decline task

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

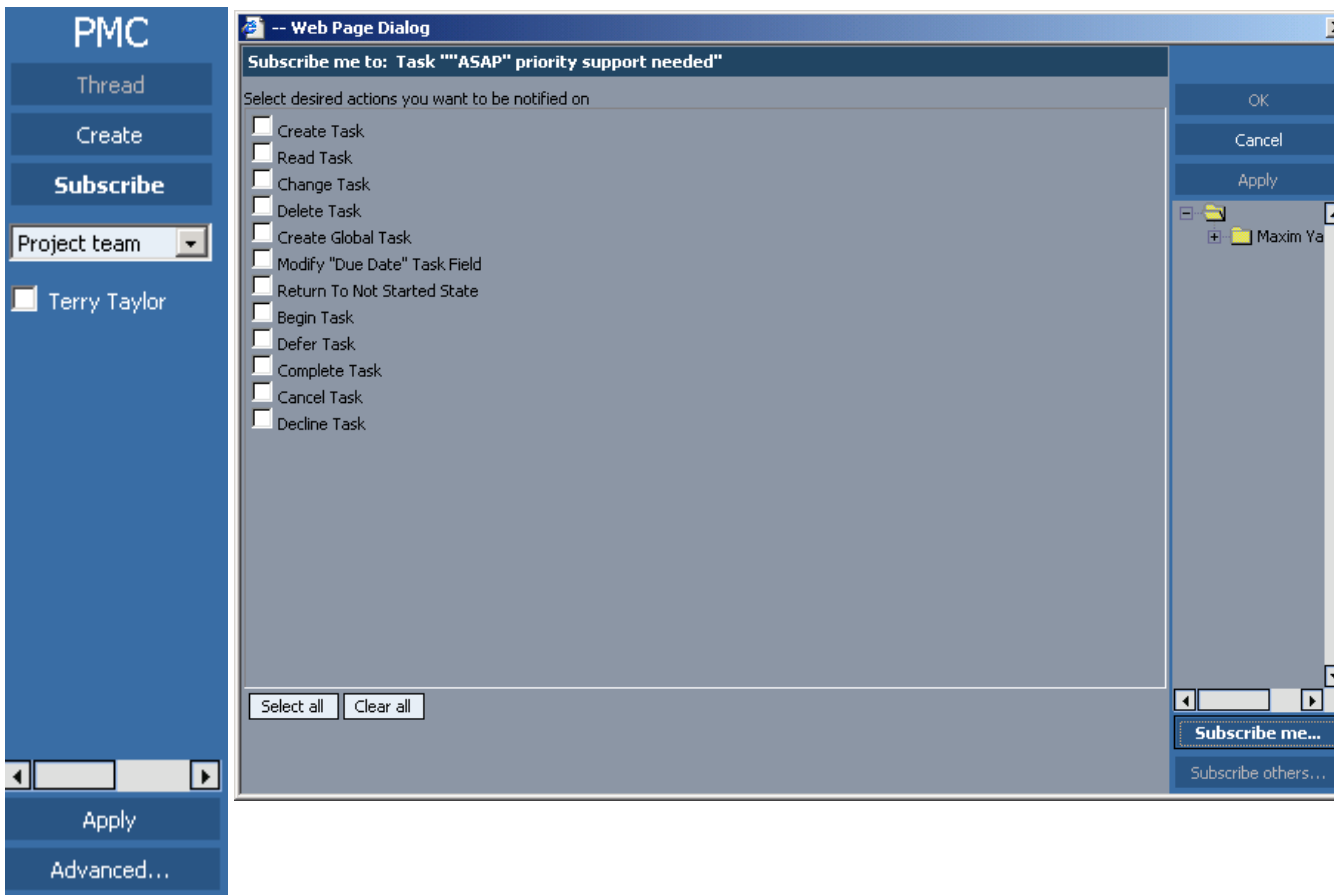


Figure 223. Task edit subscription

8.2.4.3. Main / Tasks / Filter

99:PmcClientTaskFilter.html

The dialog **Filter** displays the filter settings for tasks.

For a general description of the filter dialog see 8.2.21. [Filter](#) (page 469).

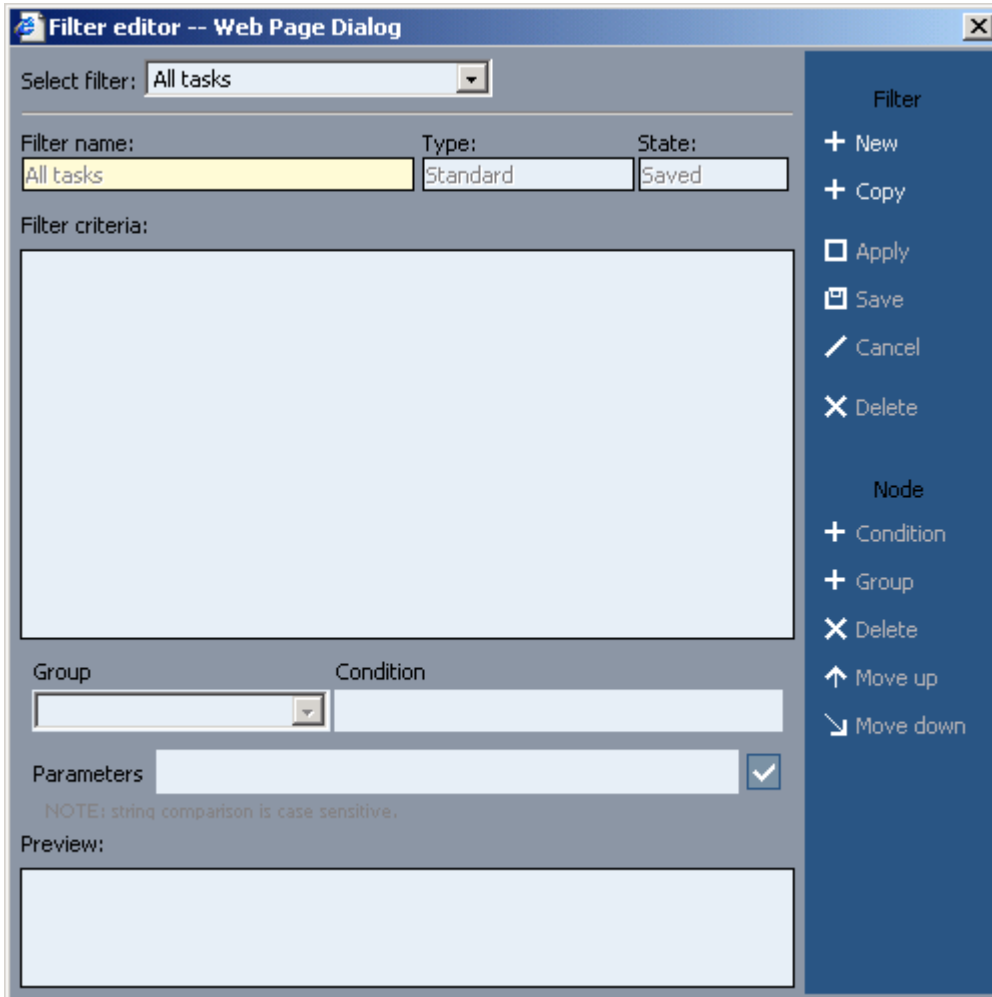


Figure 224. Tasks filter

8.2.5. Main / Documents

100:PmcClientDocuments.html

The dialog **Documents** displays your documents.

Toolbar

XXX

Add

XXX

8.2.5.1. Main / Documents / New(Add)/View(Properties)/Edit (page 318)

Properties(view)/Edit

XXX

8.2.5.1. Main / Documents / New(Add)/View(Properties)/Edit (page 318)

Delete

XXX

Data export

XXX

Documents in

XXX

with subfolders

XXX

All documents (drop-down list)

XXX

Open filter editor

XXX

8.2.5.3. Main / Documents / Filter (page 323)

Versions: latest / approved

XXX

Document list header

XXX

Sort by: Is new

XXX

Sort by: Is flagged

XXX

Sort by: Attach count

XXX

Sort by: Version control status

XXX

Name

XXX

Size

XXX

Type

XXX

Category

XXX

Changed

xxx

State

xxx

Language

xxx

(list of tasks)

Double-click to open a task.

Footer

xxx

[This portion messages: ###] [Page: #] [Portion: #]

xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx

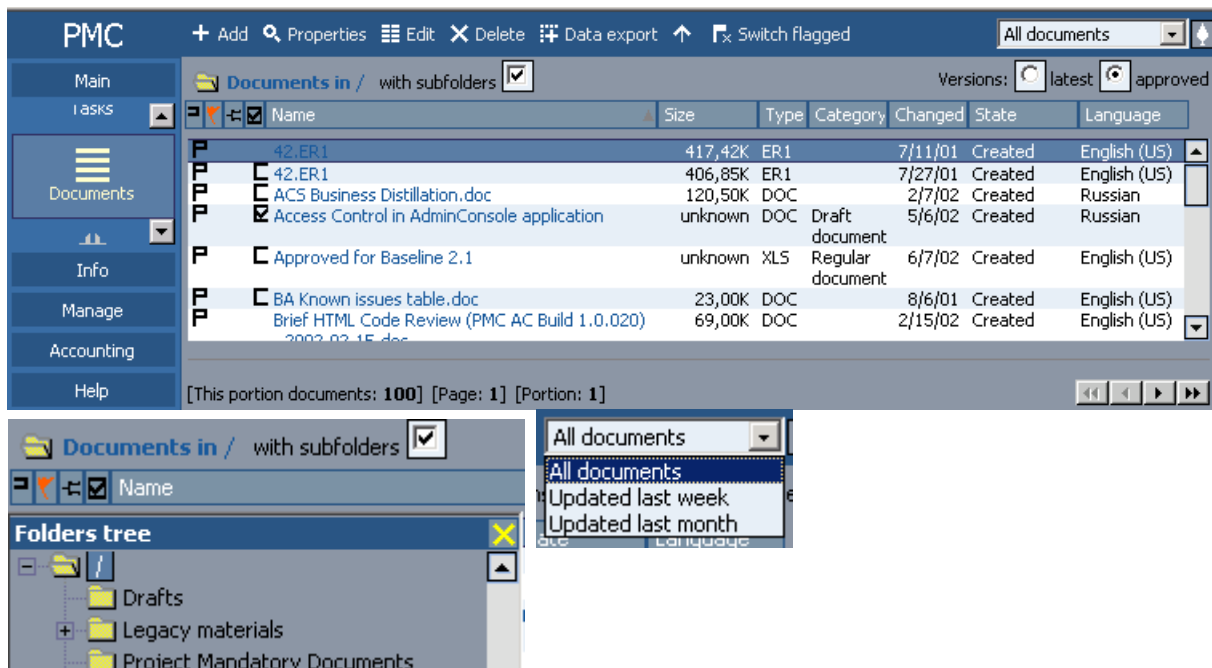


Figure 225. Documents

8.2.5.1. Main / Documents / New(Add)/View(Properties)/Edit

101:PmcClientDocumentNewViewEdit.html

The dialog **Documents** has the following subdialogs

- **Add**. Creates a new document.
- **Properties**. Displays a document.
- **Edit**. Modifies a document.

Toolbar

xxx

Save (new/edit)

xxx

Edit (view)

xxx

Close

xxx

Delete (view)

xxx

Cancel (edit)

xxx

Attachments list (new/edit)

xxx

[8.2.20. Attachments list \(page 468\)](#)

History log (view/edit)

xxx

Switch flagged (view/edit)

xxx

Document area

xxx

Add bookmark

xxx

Subject

xxx

Filename (view/edit)

xxx

Size (view/edit)

xxx

Folder

xxx

Created (view/edit)

xxx

Updated (view/edit)

xxx

Version status (view/edit)

xxx

Put under version control (new)

xxx

Type

xxx

Expiry date

xxx

Category

xxx

Language

xxx

Description

xxx

Keywords (edit)

xxx

What do you want to change: update properties and upload body (edit)

xxx

What do you want to change: properties only (edit)

xxx

Document body upload (new/edit(update properties and upload body))

see [8.2.20. Attachments list \(page 468\)](#)

Right click ... to download (view)

xxx

Right column

xxx

[8.2.22. Right frame \(page 471\)](#)

[8.2.5.2. Main / Documents / Edit / Subscribe / Advanced \(page 322\)](#)

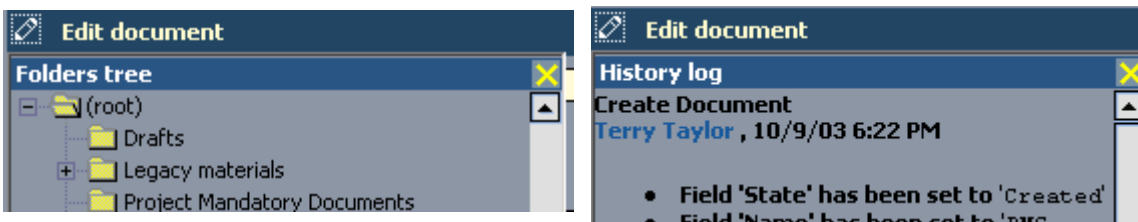
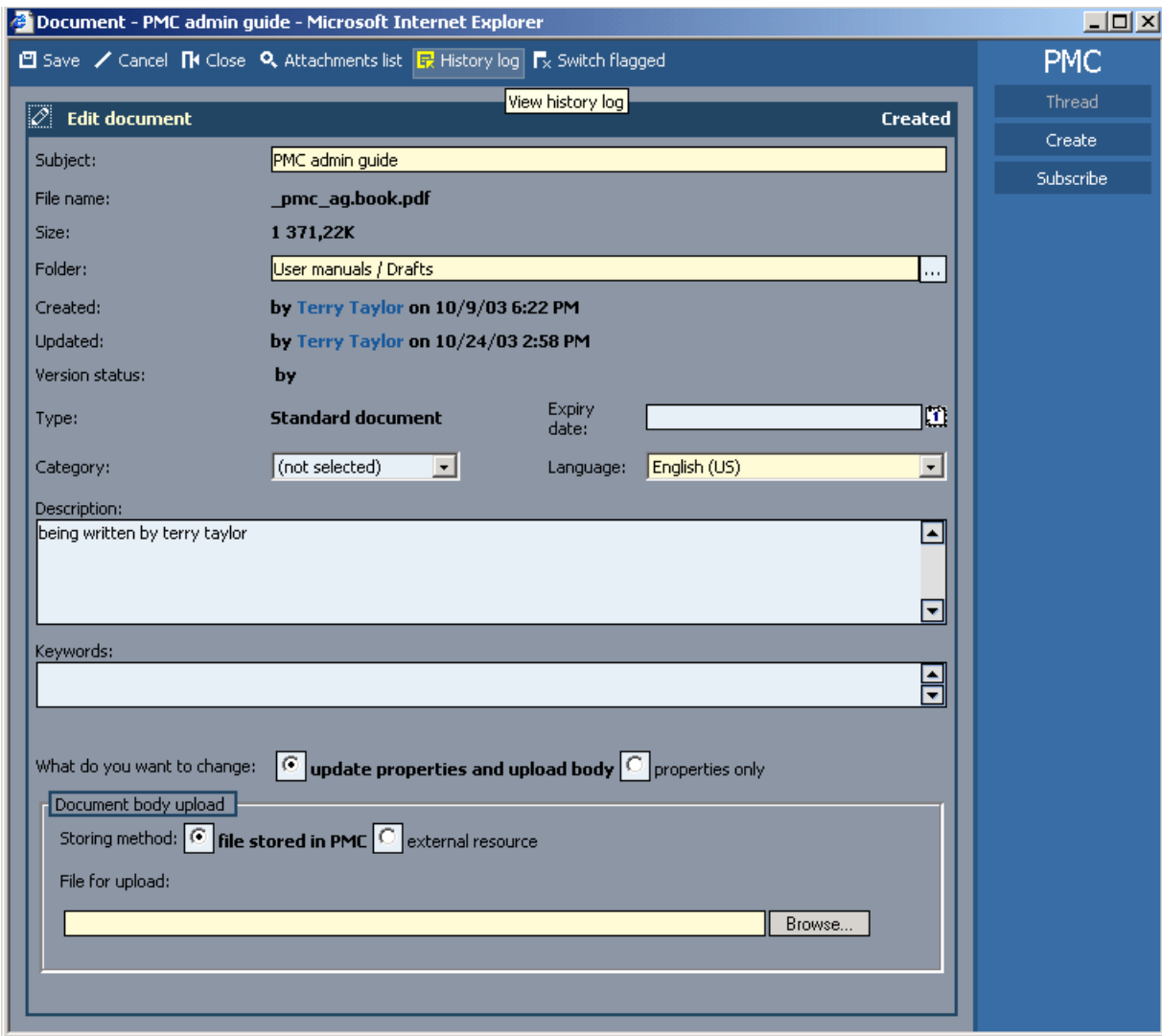


Figure 226. Add document (description attachments list)



Figure 227. Document attachments list

The screenshot shows a Microsoft Internet Explorer browser window titled "Document - PMC admin guide - Microsoft Internet Explorer". The address bar and menu bar are visible. The main content area displays document details for "PMC admin guide".

Document Details:

- Subject: **PMC admin guide**
- File name: **_pmc_ag.book.pdf**
- Size: **1 371,22K**
- Folder: **User manuals / Drafts**
- Created: **by Terry Taylor on 10/9/03 6:22 PM**
- Updated: **by Terry Taylor on 10/24/03 2:58 PM**
- Version status: **by**
- Type: **Standard document** Expiry date:
- Category: **(not selected)** Language: **English (US)**

Description:

Right click on the icon and select 'Save Target As' or 'Save Link As' to download

PMC

- Thread
- Create
- Subscribe

Place icon here

The screenshot shows a "History log" window with the following content:

History log

Create Document
Terry Taylor , 10/9/03 6:22 PM

- Field 'State' has been set to 'Created'
- Field 'Name' has been set to 'PMC install/config'

Figure 228. View document

8.2.5.2. Main / Documents / Edit / Subscribe / Advanced

[102:PmcClientDocumentSubscribe.html](#)

The dialog **Advanced** displays the advanced subscription settings for a document.

Create document

xxx

Read document

xxx

Change document

xxx

Delete document

xxx

Force undo checkout

xxx

Add to/remove from version control

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

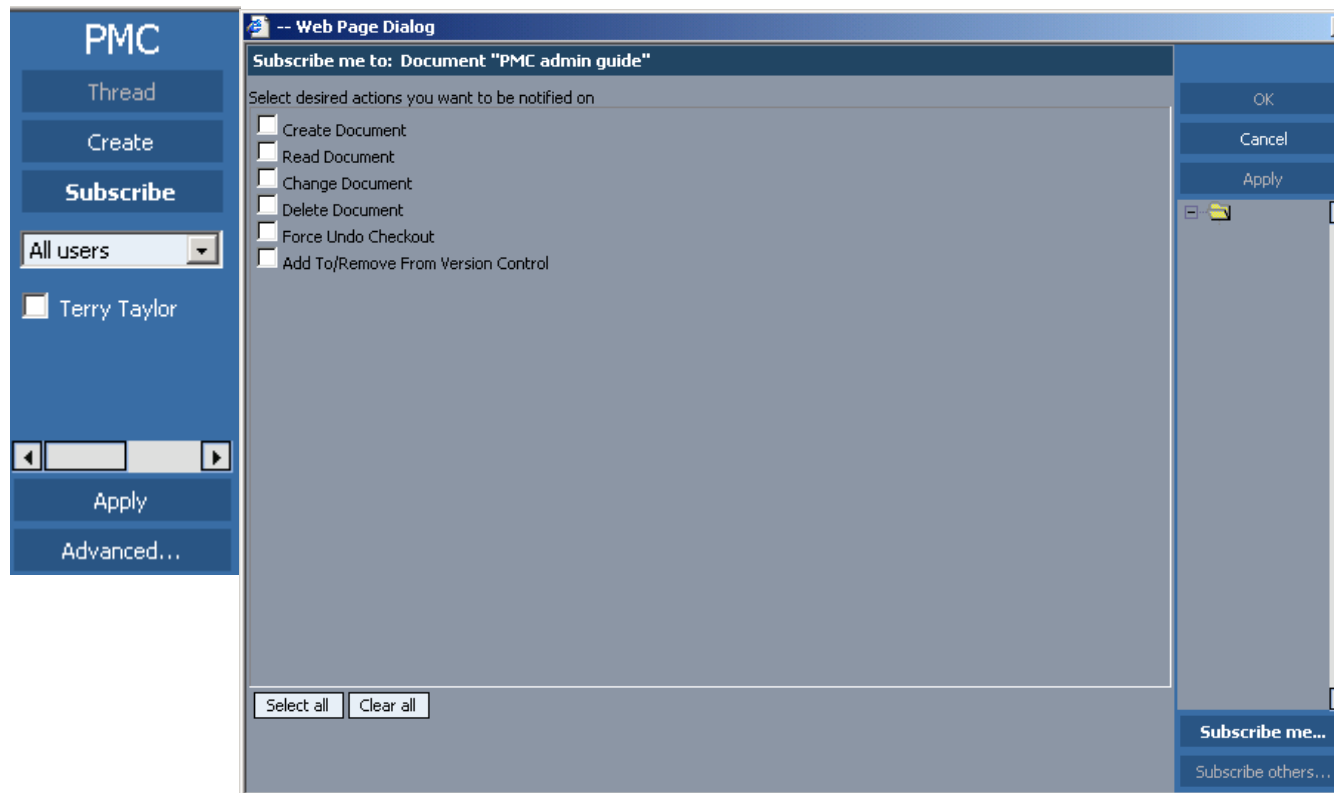


Figure 229. Document subscription

8.2.5.3. Main / Documents / Filter

103:PmcClientDocumentFilter.html

The dialog **Filter** displays the filter settings for documents.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

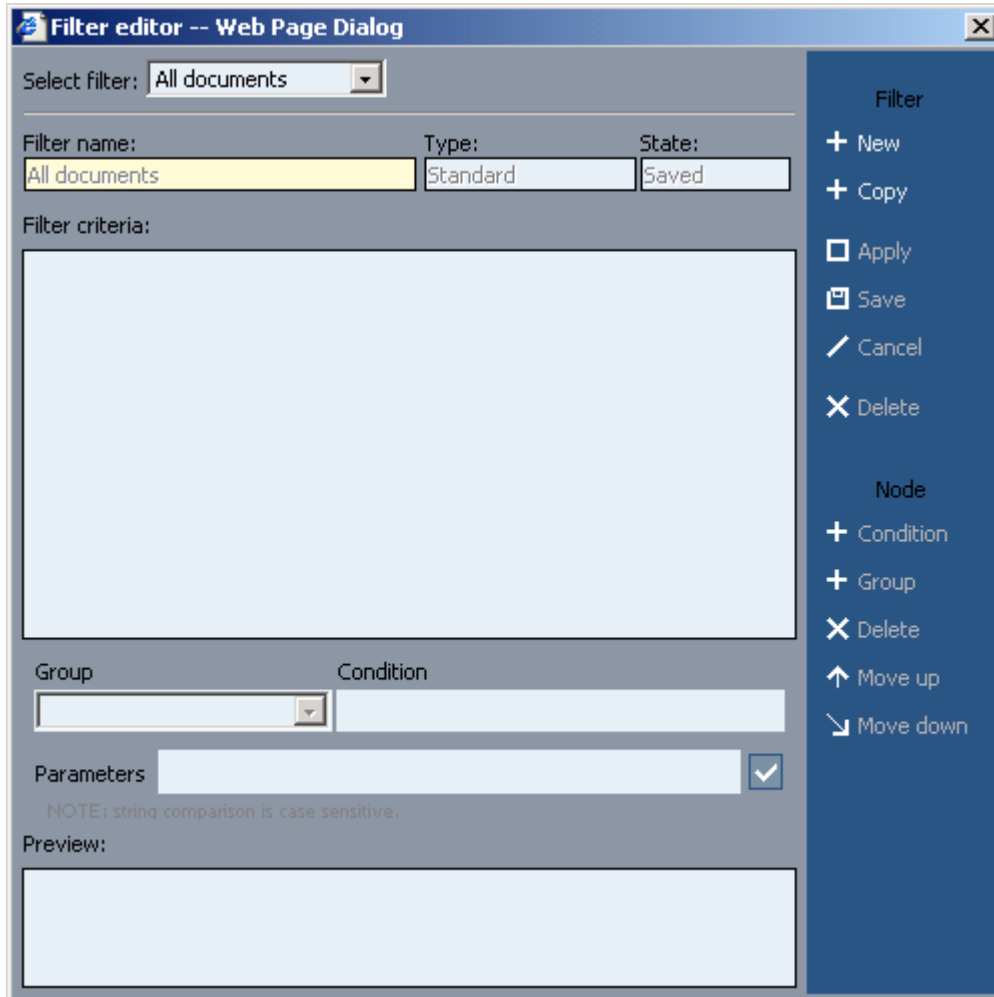


Figure 230. Documents filter

8.2.6. Main / Bugs

[104:PmcClientBugs.html](#)

The dialog **Bugs** displays the project bugs.

Toolbar

xxx

Submit

xxx

[8.2.6.1. Main / Bugs / New\(Submit\)/View/Edit \(page 326\)](#)

View

xxx

[8.2.6.1. Main / Bugs / New\(Submit\)/View/Edit \(page 326\)](#)

Edit

xxx

[8.2.6.1. Main / Bugs / New\(Submit\)/View/Edit \(page 326\)](#)

Delete

xxx

Data export

xxx

Up level

xxx

Switch flagged

xxx

Show/hide tree...

xxx

All bugs

xxx

Find by ID

xxx

All documents (drop-down list)

xxx

Open filter editor

xxx

[8.2.6.3. Main / Bugs / Filter \(page 334\)](#)

Bugs list header

xxx

Sort by: Is new

xxx

Sort by: Is flagged

xxx

Sort by: Attachment

xxx

Summary

xxx

Build

xxx

Date

xxx

Severity

xxx

Task priority

xxx

Assigned to

xxx

Status

xxx

(list of bugs)

Double-click to open a task.

Footer

xxx

[This portion bugs: ###] [Page: #] [Portion: #]

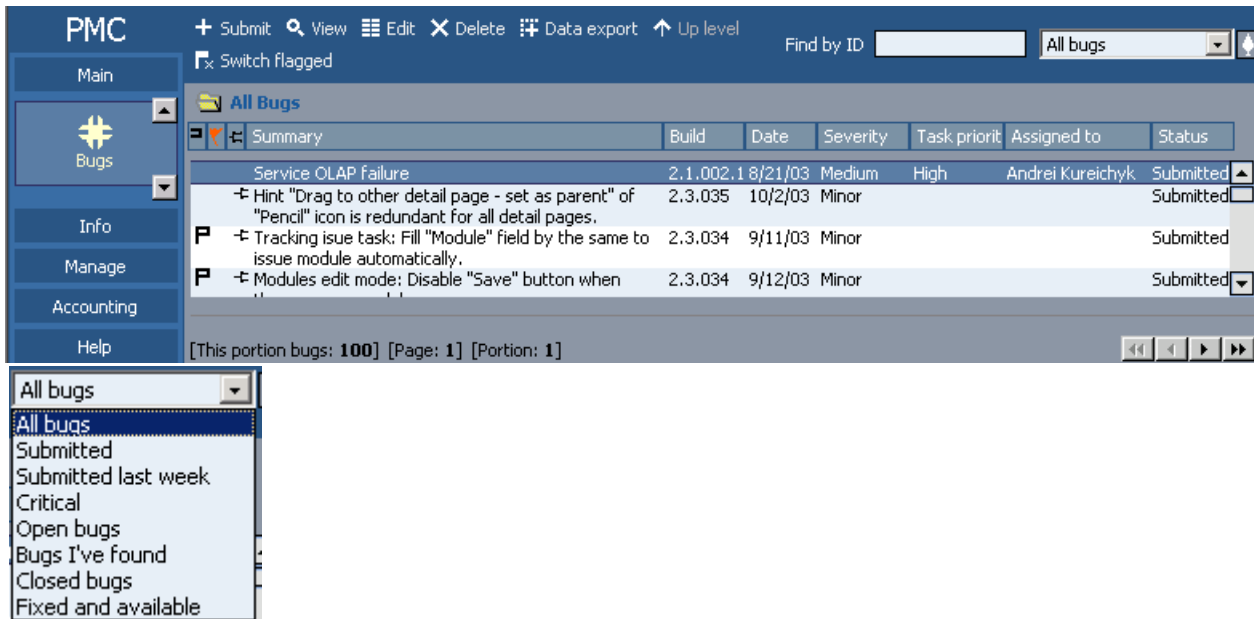
xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx



PMC + Submit View Edit Delete Data export Up level Find by ID All bugs

Switch flagged

All Bugs

Summary	Build	Date	Severity	Task priority	Assigned to	Status
Service OLAP failure	2.1.002.18	8/21/03	Medium	High	Andrei Kureichyk	Submitted
- Hint "Drag to other detail page - set as parent" of "Pencil" icon is redundant for all detail pages.	2.3.035	10/2/03	Minor			Submitted
- Tracking issue task: Fill "Module" field by the same to issue module automatically.	2.3.034	9/11/03	Minor			Submitted
- Modules edit mode: Disable "Save" button when	2.3.034	9/12/03	Minor			Submitted

[This portion bugs: 100] [Page: 1] [Portion: 1]

- All bugs
- All bugs
- Submitted
- Submitted last week
- Critical
- Open bugs
- Bugs I've found
- Closed bugs
- Fixed and available

Figure 231. Bugs

8.2.6.1. Main / Bugs / New(Submit)/View/Edit

[105:PmcClientBugNewViewEdit.html](#)

The dialog **Bugs** has the following subdialogs

- **Submit**. Creates a new bug.
- **View**. Displays a bug.
- **Edit**. Modifies a bug.

Toolbar

xxx

Save (new/edit)

xxx

SaveAdd (new/edit)

xxx

Cancel (edit)

xxx

Edit (view)

xxx

Submit (view)

xxx

Close

xxx

Comments (view)

xxx

Attachments list (new/edit)

xxx

[8.2.20. Attachments list \(page 468\)](#)

History log (view/edit)

xxx

Switch flagged (view/edit)

xxx

Assign (view)

xxx

Defer (view)

xxx

Decline (view)

xxx

Bug area

xxx

Add bookmark 

xxx

Found by (view/edit)

xxx

Status (view/edit)

xxx

Reviewed by (view/edit)

xxx

Assigned to (view/edit)

xxx

Task priority (view/edit)

xxx

Estimated time to fix (view/edit)

xxx

Elapsed time (view/edit)

xxx

Due date (view/edit)

xxx

Summary

xxx

Location

xxx

Found

xxx

Symptom

xxx

Severity

xxx

To fix

xxx

How found

xxx

Priority

xxx

Fixed

xxx

Where issued

xxx

Reproducible

xxx

Cause

xxx

Requirement

xxx

WBS

xxx

Database

xxx

Browser

xxx

Client OS

xxx

Server OS

xxx

Show/hide additional info (view/edit)

xxx

Additional information (place stacks, dumps, logs etc. here) (view/edit)

xxx

Description

xxx

Steps to reproduce

xxx

Right column

has more than usual functionality

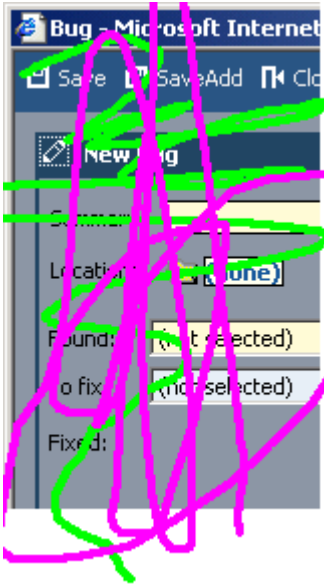


Figure 232. Right column for bugs

8.2.22. Right frame (page 471)

8.2.6.2. Main / Bug / View / Subscribe / Advanced (page 332)

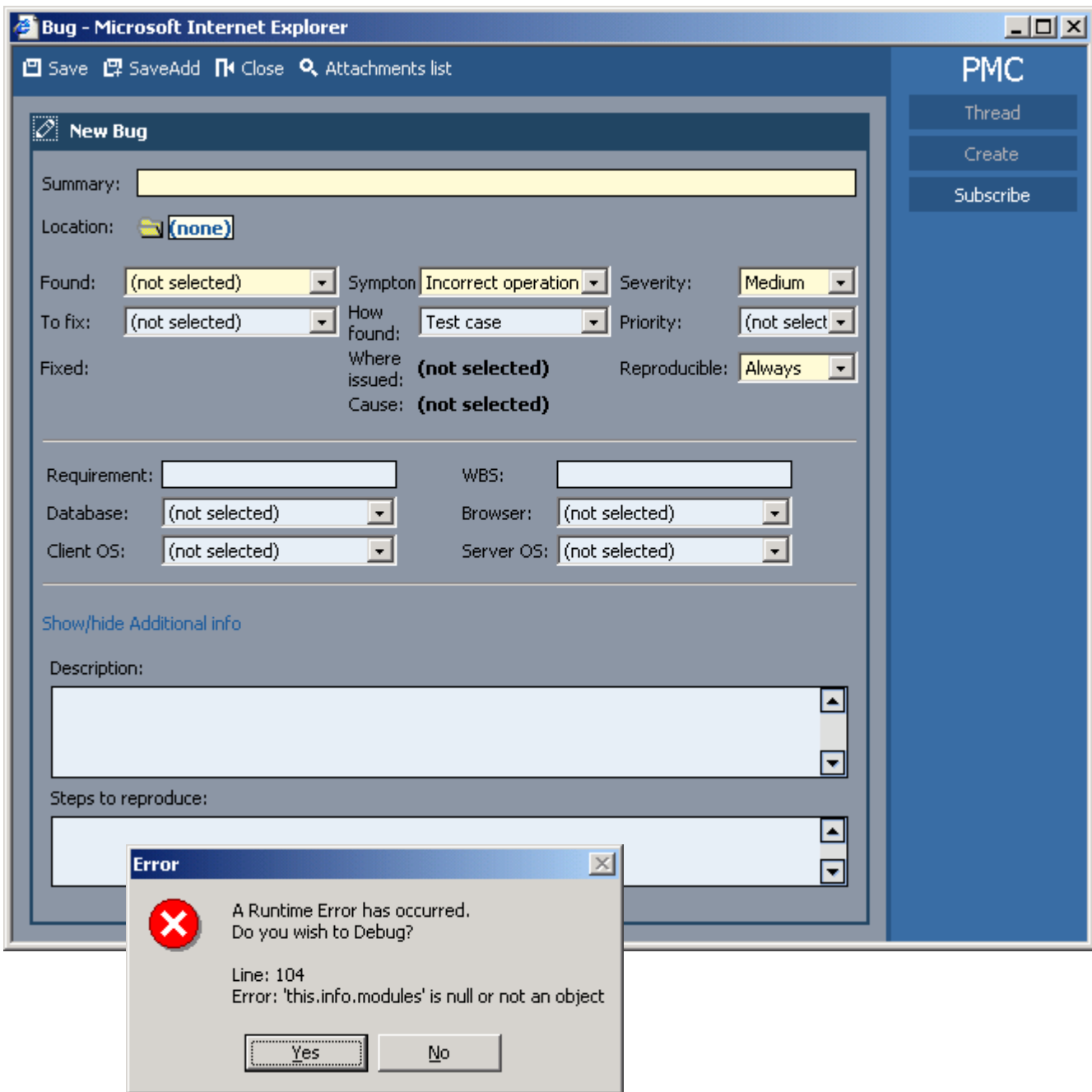


Figure 233. Add bug (attachments list)

The screenshot shows a web browser window titled "Bug - Service OLAP failure - Microsoft Internet Explorer". The browser's address bar and menu bar are visible. The main content area displays a bug report for bug #4000629602050001528. The report includes fields for "Found by", "Reviewed by", "Assigned to", "Status", "Task priority", "Due date", "Summary", "Location", "Found", "To fix", "Fixed", "Requirement", "Database", "Client OS", "WBS", "Browser", "Server OS", "Description", and "Steps to reproduce". A runtime error dialog box is overlaid on the bottom right of the browser window, displaying the message: "A Runtime Error has occurred. Do you wish to Debug? Line: 104 Error: 'this.info.modules' is null or not an object". The dialog box has "Yes" and "No" buttons.

View Bug #4000629602050001528

Found by: **Aksana Serada** on 8/21/03 10:05 AM Status: **Submitted**
 Reviewed by: **Aksana Serada** Assigned to: **Andrei Kureichyk** Task priority: **High**
 Estimated time to fix: Elapsed time: Due date: **8/24/03**

Summary: **Service OLAP failure**
 Location: **/PMC Data ORA**

Found: **PMCD8-2.1.002.13 build 2.1.002.13** Symptom: **Data corruption/Loss** Severity: **Medium**
 To fix: **(not selected)** How found: **Test case** Priority: **(not selected)**
 Fixed: **(not selected)** Where issued: **(not selected)** Reproducible: **Sometimes**
 Cause: **(not selected)**

Requirement: WBS:
 Database: **Oracle 9i** Browser: **(not selected)**
 Client OS: **(not selected)** Server OS: **(not selected)**

Description:
 Conflict between OLAP and Oracle. (see \\epmsa006\efs\orahome92\admin\pmc2\bdump>alert_pmc2.log)
 Need to set some path for resolve.

Steps to reproduce:
 Additional information (place stacks, dumps, logs etc.)

Error
 A Runtime Error has occurred.
 Do you wish to Debug?
 Line: 104
 Error: 'this.info.modules' is null or not an object
 Yes No

Figure 234. View bug (comments, history log)

Bug - Service OLAP failure - Microsoft Internet Explorer

Save SaveAdd Cancel Close Attachments list History log Switch flagged

Edit Bug #4000629602050001528

Found by: **Aksana Serada** on **8/21/03 10:05 AM** Status: **Submitted**
 Reviewed by: **Aksana Serada** Assigned to: **Andrei Kureichyk** Task priority: **High**
 Estimated time to fix: Elapsed time: Due date: **8/24/03**

Summary: **Service OLAP failure**

Location: **/PMC_Data_ORA**

Found: **PMCDDB-2.1.002.13 bui** Symptom: **Data corruption/Los** Severity: **Medium**
 To fix: **(not selected)** How found: **Test case** Priority: **(not select)**
 Fixed: **(not selected)** Where issued: **(not selected)** Reproducible: **Sometimes**
 Cause: **(not selected)**

Requirement: WBS:
 Database: **Oracle 9i** Browser: **(not selected)**
 Client OS: **(not selected)** Server OS: **(not selected)**

Show/hide Additional info

Description:
 Conflict between OLAP and Oracle. (see \\epmsa006\ep\orahome92\admin\pmc2
 \bdump\alert_pmc2.log)
 Need to set some path for resolve.

Steps to reproduce:

Error A Runtime Error has occurred. Do you wish to Debug?

Error A Runtime Error has occurred. Do you wish to Debug?
 Line: 104

PMC
 Thread
 Create
 Subscribe
 All items

Service OLAP fa
 Fix bug "Service failure". (#4000629602050)

Figure 235. Edit bug (attachments list, history log)

8.2.6.2. Main / Bug / View / Subscribe / Advanced

[106:PmcClientBugViewSubscribe.html](#)

The dialog **Advanced** displays the advanced subscription settings for a bug.

Submit bug report

xxx

Read bug report

xxx

Change bug report

xxx

Delete bug report

xxx

Assign bug fixing

xxx

Decline bug report

xxx

Defer bug fixing

xxx

Verify bug fixing

xxx

Reopen bug

xxx

Self-assign bug fixing

xxx

Fix bug

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

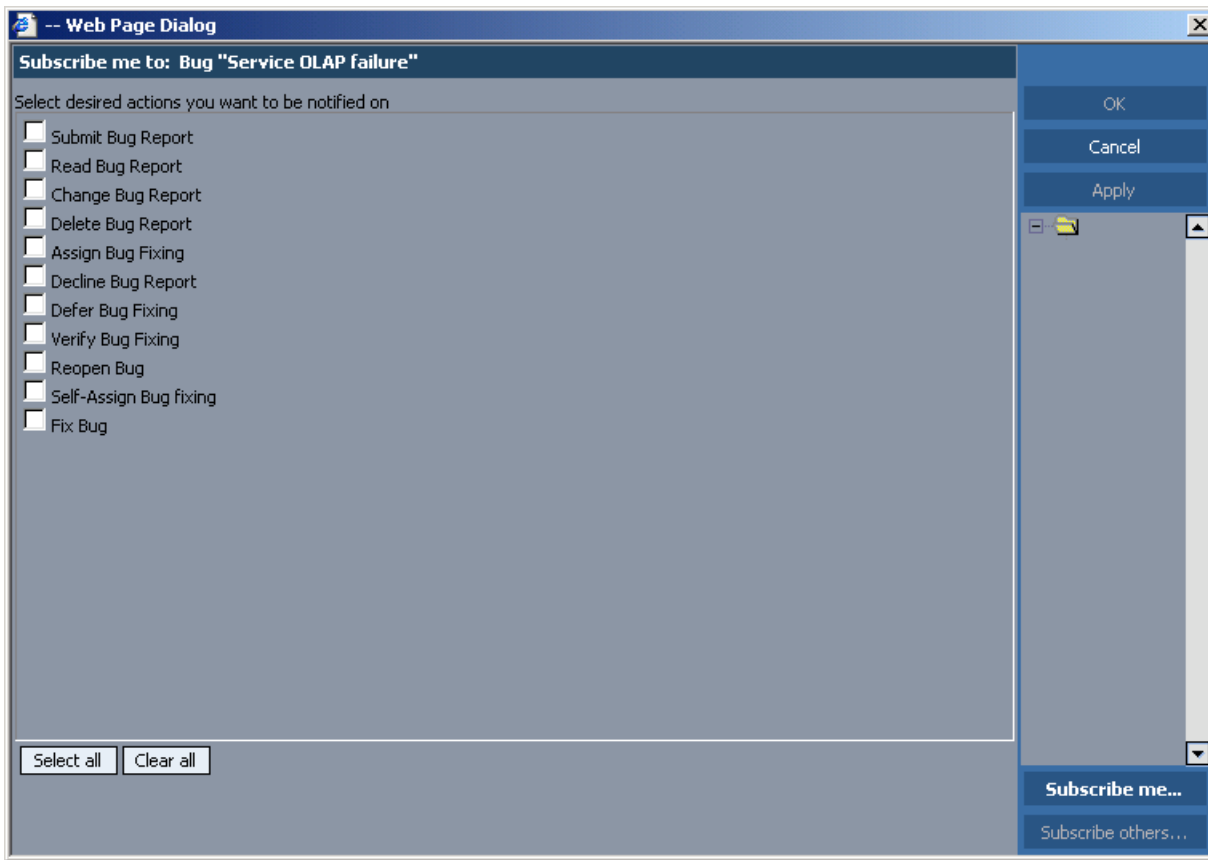


Figure 236. Bug subscription

8.2.6.3. Main / Bugs / Filter

107:PmcClientBugFilter.html

The dialog **Filter** displays the filter settings for bugs.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

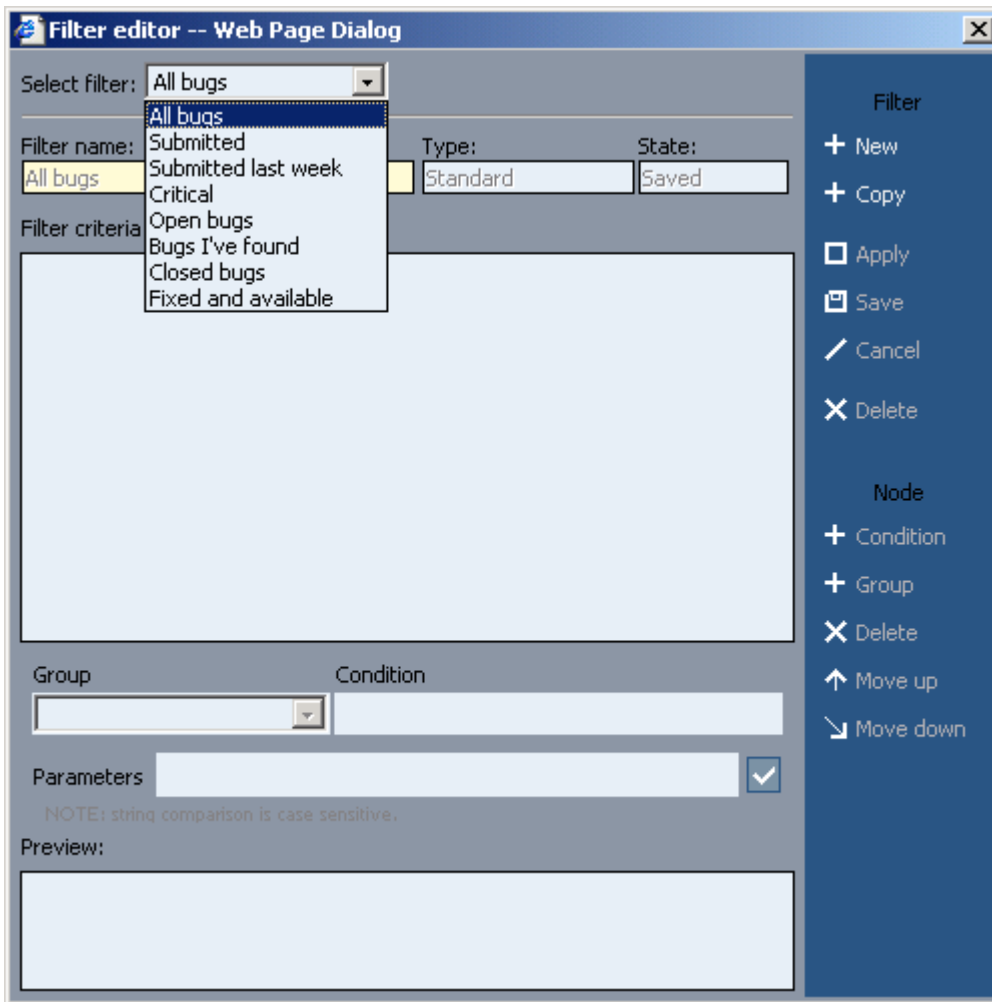


Figure 237. Bug filter

8.2.7. Main / Builds

108:PmcClientBuilds.html

The dialog **Builds** displays the project builds.

Toolbar

xxx

Add

xxx

8.2.7.1. Main / Builds / New(Add)/View/Edit (page 337)

View

xxx

8.2.7.1. Main / Builds / New(Add)/View/Edit (page 337)

Edit

xxx

8.2.7.1. Main / Builds / New(Add)/View/Edit (page 337)

Delete

xxx

Data export

xxx

All builds

xxx

Open filter editor

xxx

8.2.7.3. Main / Builds / Filter (page 341)

Builds list header

xxx

Sort by: Is new

xxx

Sort by: Attachment

xxx

Application

xxx

Build

xxx

Sent by

xxx

Sending time

xxx

State

xxx

(list of builds)

Double-click to open a task.

Footer

xxx

[This portion builds: ###] [Page: #] [Portion: #]

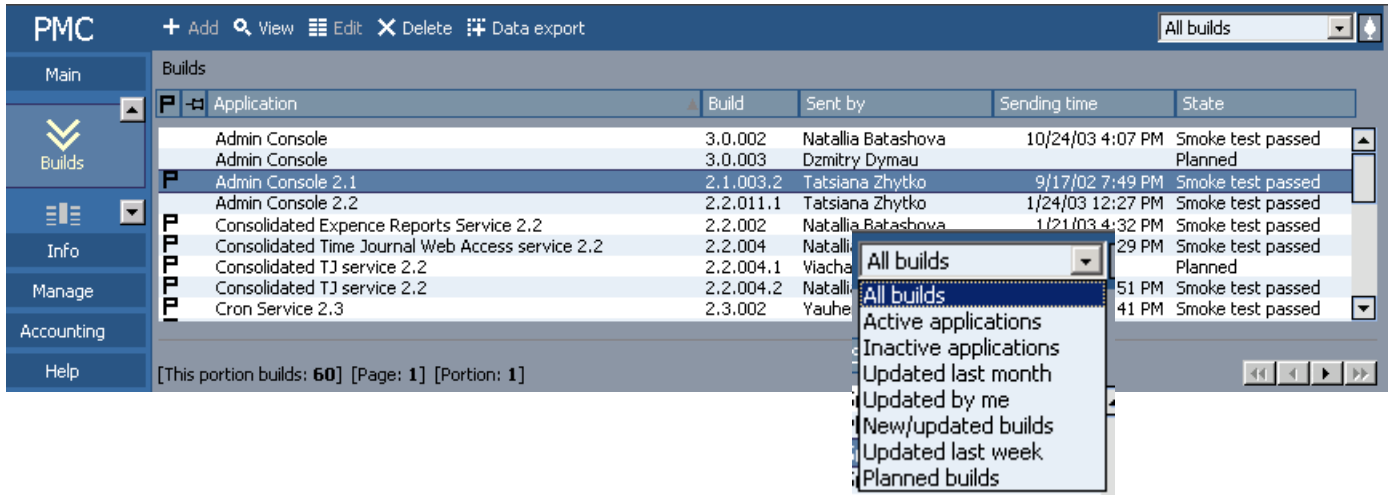
xxx

Getting previous/next portion of data 

XXX

Go to previous/next page 

XXX



The screenshot shows the PMC Builds interface. At the top, there are navigation buttons for getting previous/next portions of data and going to previous/next pages. The main area displays a table of build records with columns for Application, Build, Sent by, Sending time, and State. A dropdown menu is open over the table, showing filter options: All builds, Active applications, Inactive applications, Updated last month, Updated by me, New/updated builds, Updated last week, and Planned builds. The status bar at the bottom indicates '[This portion builds: 60] [Page: 1] [Portion: 1]'.

Application	Build	Sent by	Sending time	State
Admin Console	3.0.002	Natallia Batashova	10/24/03 4:07 PM	Smoke test passed
Admin Console	3.0.003	Dzmitry Dymau		Planned
Admin Console 2.1	2.1.003.2	Tatsiana Zhytko	9/17/02 7:49 PM	Smoke test passed
Admin Console 2.2	2.2.011.1	Tatsiana Zhytko	1/24/03 12:27 PM	Smoke test passed
Consolidated Expence Reports Service 2.2	2.2.002	Natallia Batashova	1/21/03 4:32 PM	Smoke test passed
Consolidated Time Journal Web Access service 2.2	2.2.004	Natallia Batashova	1/21/03 4:29 PM	Smoke test passed
Consolidated TJ service 2.2	2.2.004.1	Viachaslau		Planned
Consolidated TJ service 2.2	2.2.004.2	Natallia Batashova	1/21/03 4:51 PM	Smoke test passed
Cron Service 2.3	2.3.002	Yauhen	1/21/03 4:41 PM	Smoke test passed

Figure 238. Builds

8.2.7.1. Main / Builds / New(Add)/View/Edit

109:PmcClientBuildNewViewEdit.html

i had no access to the edit dialog.

The dialog **Builds** has the following subdialogs

- **Add**. Creates a new build.
- **View**. Displays a build.
- **Edit**. Modifies a build.

Toolbar

XXX

Save (new/xedit)

XXX

Cancel (xedit)

XXX

xSubmit (view)

XXX

Close

XXX

xComments (view)

XXX

Attachments list (new/xedit)

XXX

[8.2.20. Attachments list \(page 468\)](#)

History log (view/xedit)

XXX

xSwitch flagged (view/edit)

XXX

Build area

XXX

Add bookmark 

XXX

Build of

XXX

State changed by (view)

XXX

Version

XXX

Build number

XXX

State (view)

XXX

Spent time (view)

XXX

Product size (LOC) (view)

XXX

Mail to (new)

XXX

Right column

has more than usual functionality

8.2.22. Right frame (page 471)

8.2.6.2. Main / Bug / View / Subscribe / Advanced (page 332)

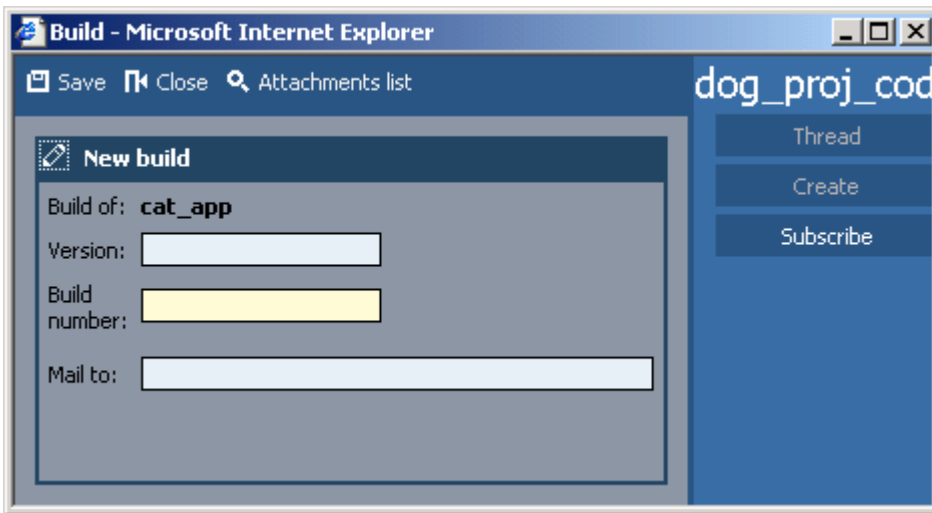


Figure 239. Add build

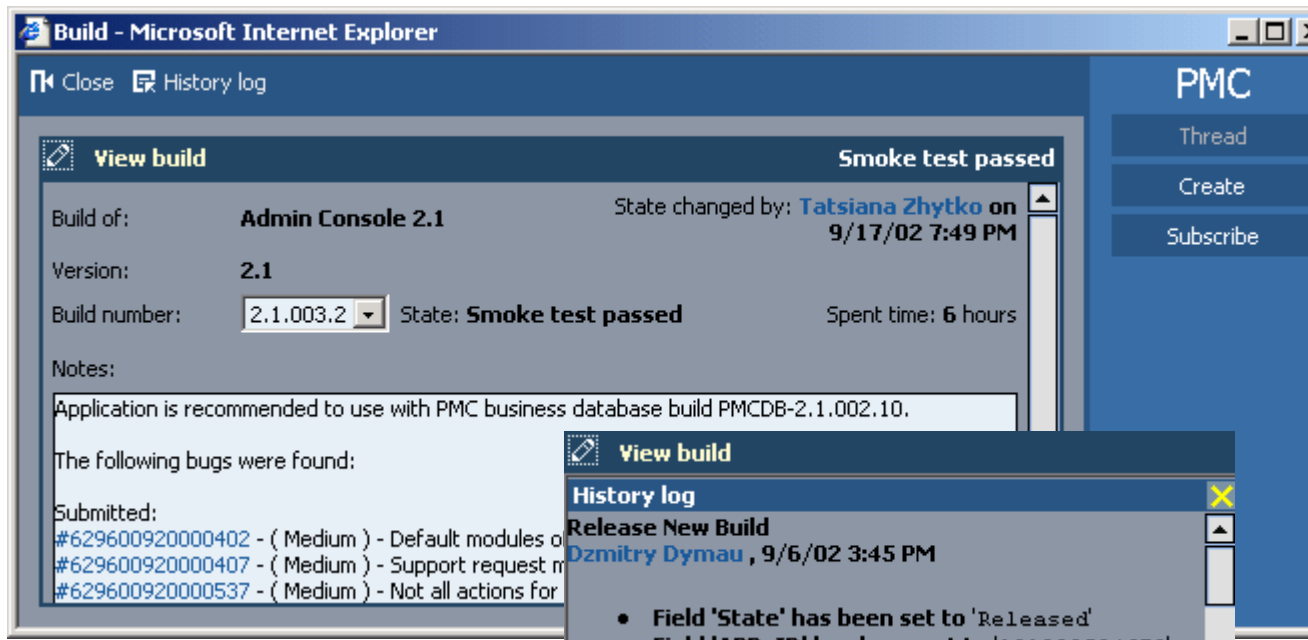


Figure 240. View build

8.2.7.2. Main / Builds / View / Subscribe / Advanced

110:PmcClientBuildViewSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a build.

Release new build

xxx

Read build info

xxx

Change build

xxx

Delete build

xxx

Install build

xxx

Proclaim installation failed

xxx

Proclaim smoke test passed

xxx

Proclaim smoke test failed

xxx

Plan build

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

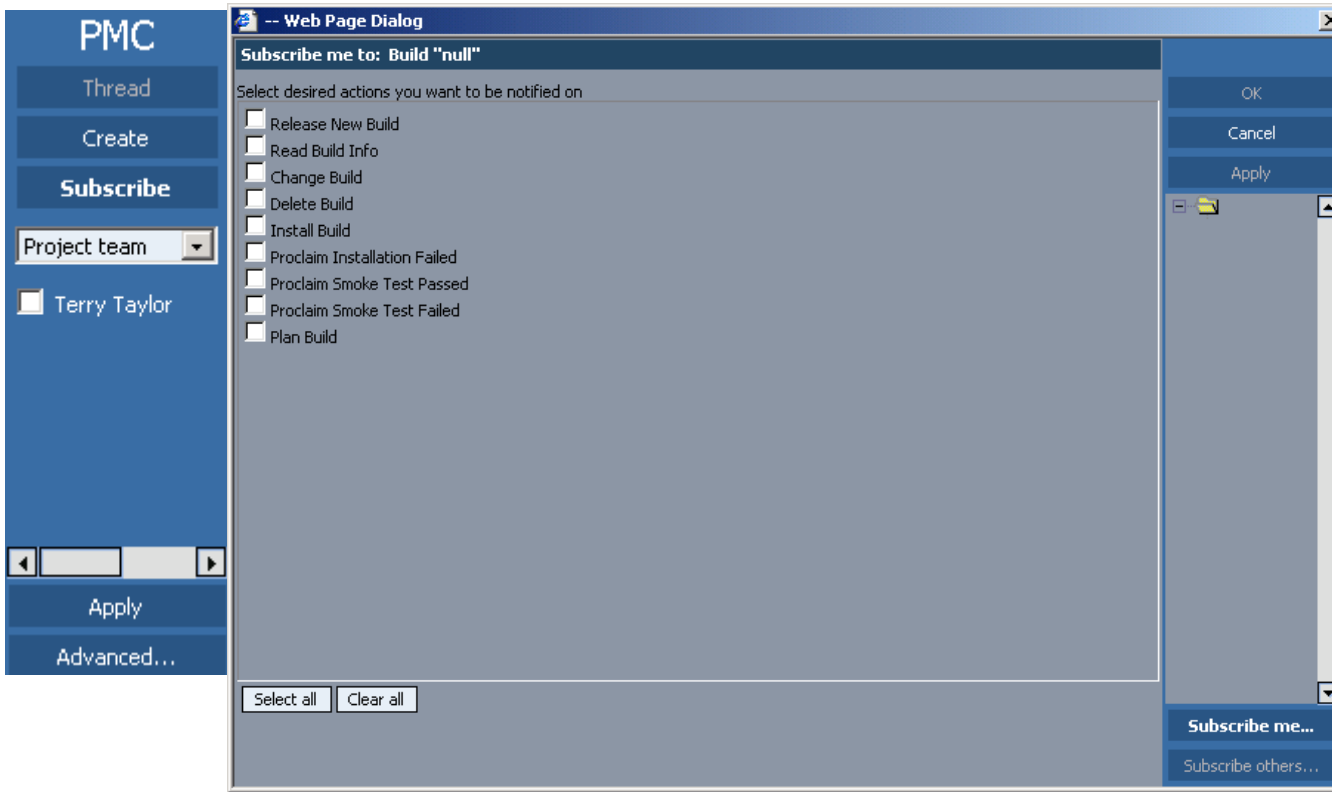


Figure 241. Build subscribe

8.2.7.3. Main / Builds / Filter

111:PmcClientBuildFilter.html

The dialog **Filter** displays the filter settings for builds.

For a general description of the filter dialog see 8.2.21. [Filter](#) (page 469).

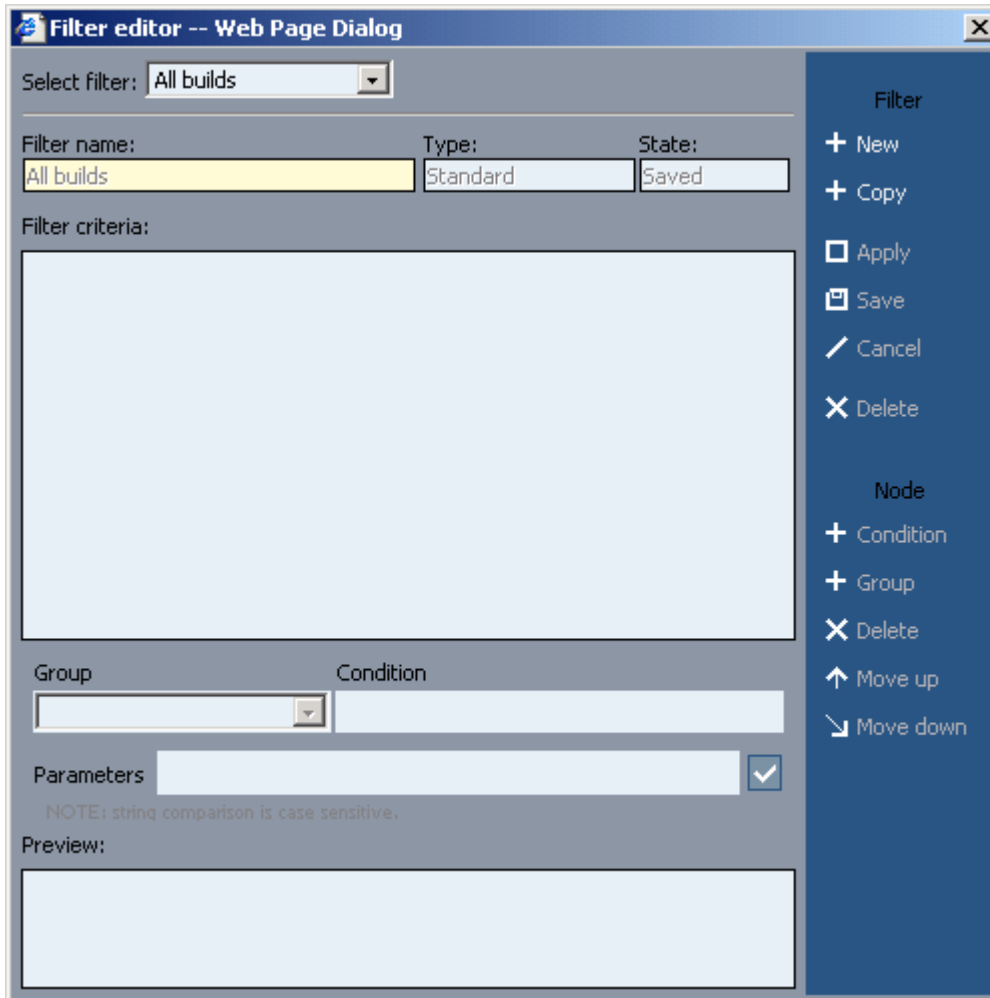


Figure 242. Build filter

8.2.8. Main / Requirements

[112:PmcClientRequirements.html](#)

The dialog **Requirements** displays the project requirements.

Toolbar

xxx

Add

xxx

[8.2.8.1. Main / Requirements / New\(Add\)/View/Edit \(page 344\)](#)

View

xxx

[8.2.8.1. Main / Requirements / New\(Add\)/View/Edit \(page 344\)](#)

Edit

xxx

[8.2.8.1. Main / Requirements / New\(Add\)/View/Edit \(page 344\)](#)

Delete

xxx

Data export

xxx

Requirements related to

xxx

with subfolders

xxx

All requirements (drop-down list)

xxx

Open filter editor

xxx

[8.2.8.3. Main / Requirements / Filter \(page 349\)](#)

Show hierarchy

xxx

Requirements list header

xxx

Sort by: Is new

xxx

Sort by: Is flagged

xxx

Sort by: Attachment

xxx

Summary

xxx

Status

xxx

Complexity

xxx

Importance

XXX

Creator

XXX

Created

XXX

Assigned to

XXX

(list of requirements)

Double-click to open a task.

Footer

XXX

Total

XXX

Getting previous/next portion of data 

XXX

Go to previous/next page 

XXX

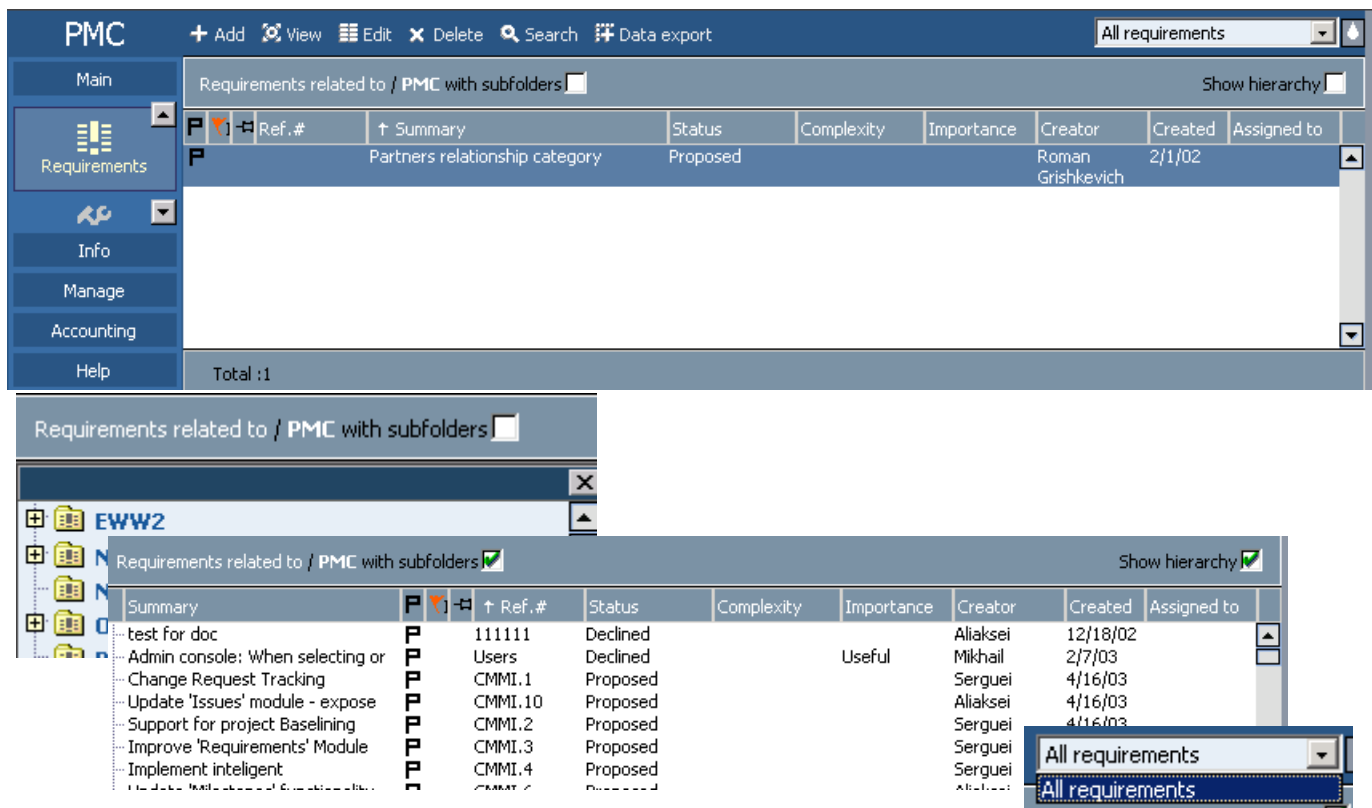


Figure 243. Requirements

8.2.8.1. Main / Requirements / New(Add)/View/Edit

113:PmcClientRequirementNewViewEdit.html

i had no access to the edit dialog.

The dialog **Requirements** has the following subdialogs

- **Add**. Creates a new requirement.
- **View**. Displays a requirement.
- **Edit**. Modifies a requirement.

Toolbar

xxx

Save (new/xedit)

xxx

xCancel (edit)

xxx

Subrequirement (view)

xxx

Close

xxx

xComments (view)

xxx

Attachments list (new/xedit)

xxx

[8.2.20. Attachments list \(page 468\)](#)

History log (view/xedit)

xxx

Modules (view/xedit)

xxx

Switch flagged (view/xedit)

xxx

Versions (view/xedit)

xxx

Requirement area

xxx

Add bookmark 

xxx

Proposed

xxx

Ref #

xxx

Summary

xxx

Parent item

xxx

Source

xxx

Estimated effort

xxx

Type

XXX

Duration

XXX

Risk

XXX

Percent complete

XXX

Complexity

XXX

Start date

XXX

Importance

XXX

Target date

XXX

Stability

XXX

Clarifications

XXX

Requested by

XXX

Requirements description

XXX

Right column

XXX

8.2.22. Right frame (page 471)

8.2.8.2. Main / Requirements / View / Subscribe / Advanced (page 348)

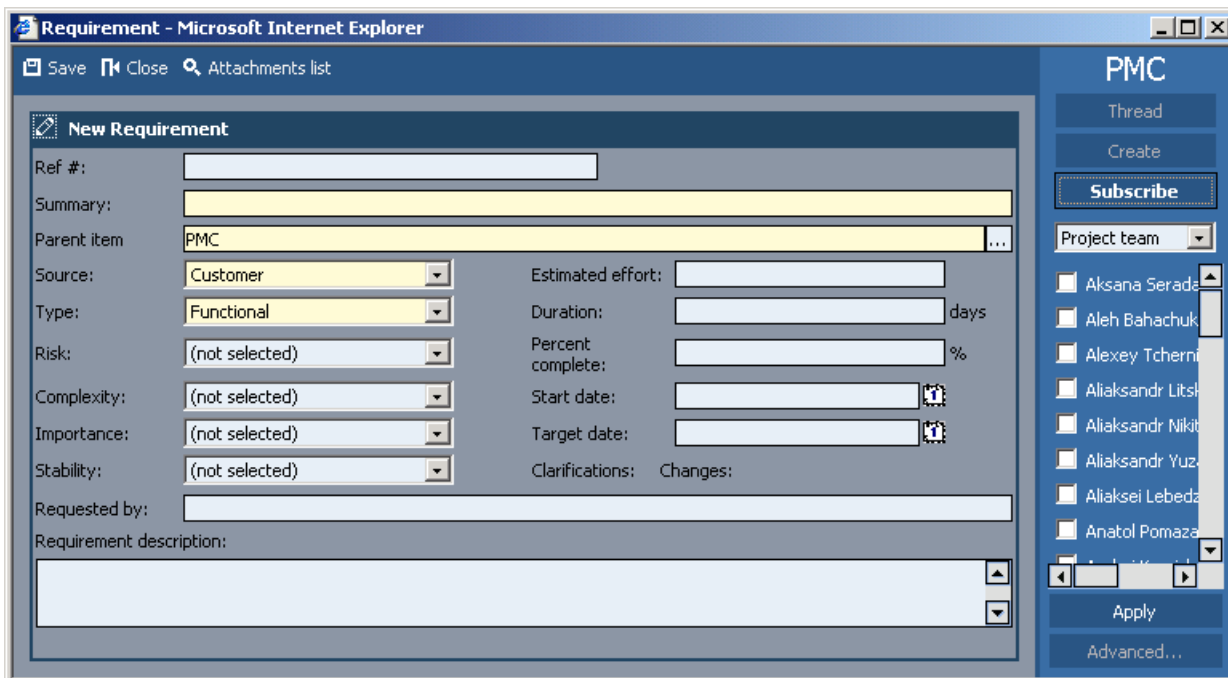


Figure 244. Add requirement

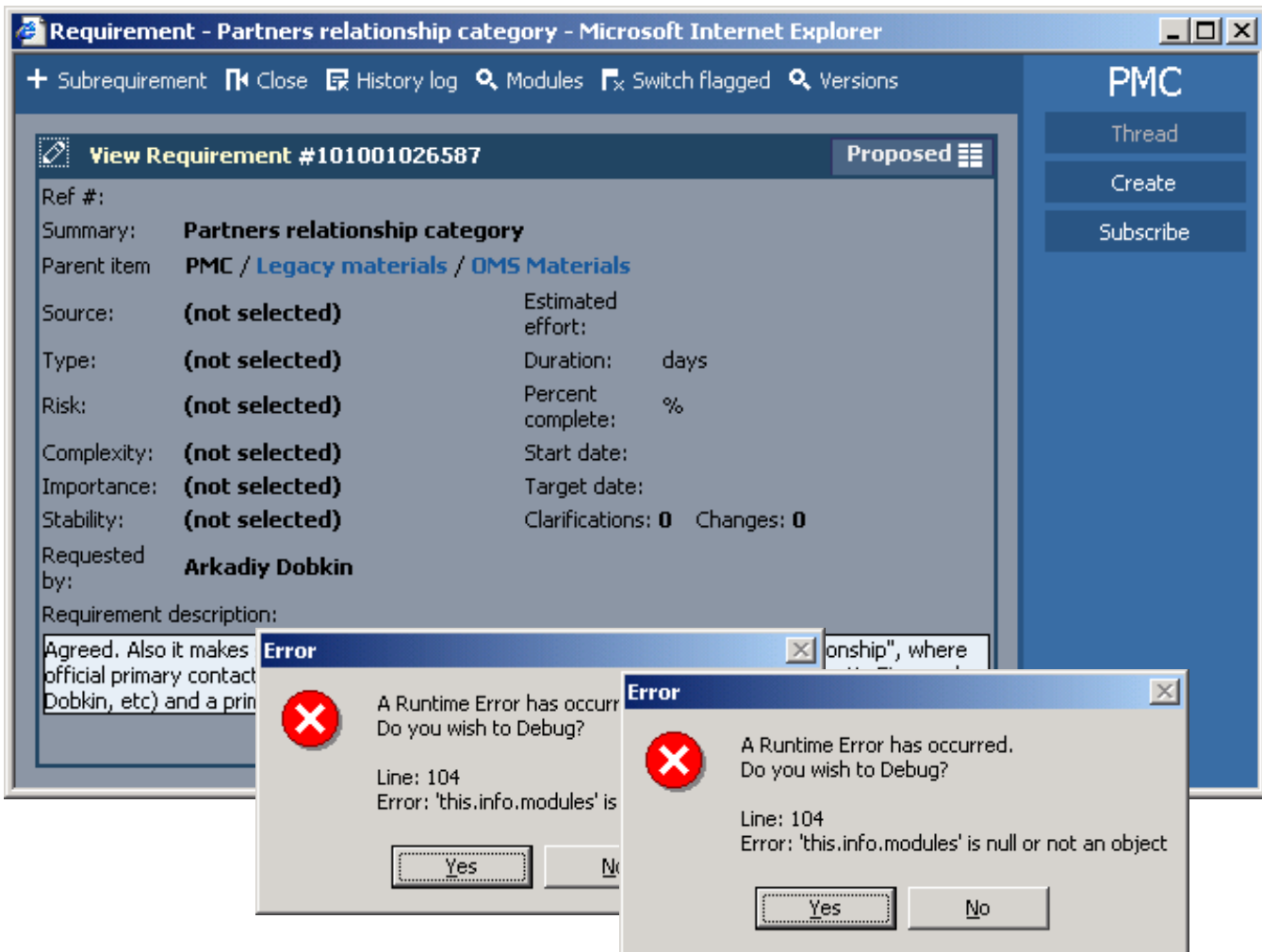


Figure 245. View/Edit requirements (subrequirement, history log) (modules description)

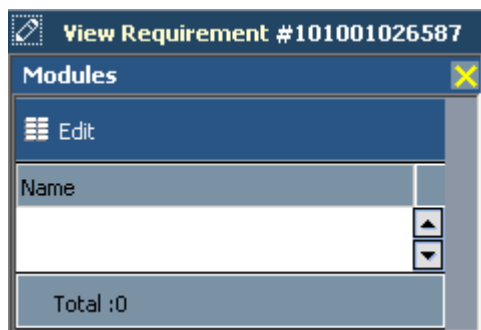


Figure 246. View/edit requirement: Modules (versions description)

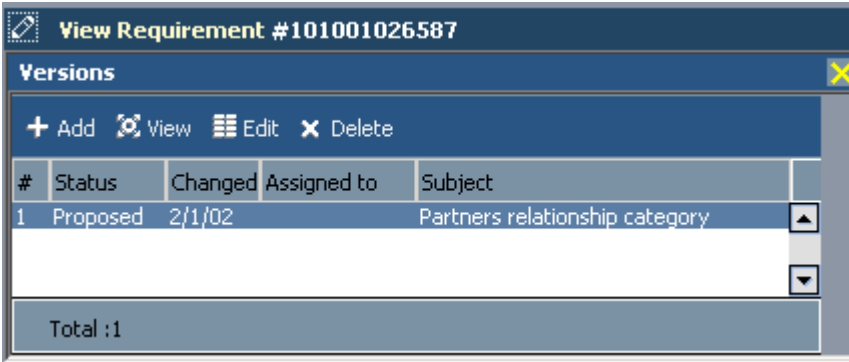


Figure 247. View/edit requirement: Versions
(workflow description)

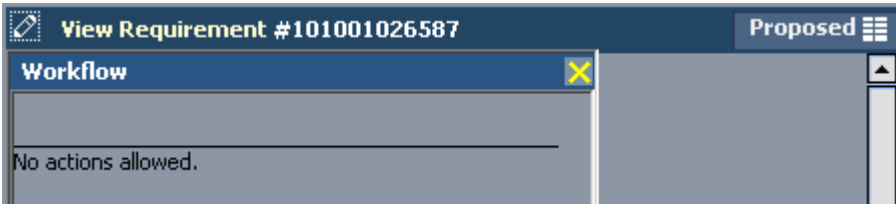


Figure 248. View/edit requirement: Workflow

8.2.8.2. Main / Requirements / View / Subscribe / Advanced

114:PmcClientRequirementViewSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a requirement.

Create requirement

XXX

Read requirement

XXX

Change requirement

XXX

Delete requirement

XXX

Select / clear all

XXX

OK / Cancel / Apply

XXX

Subscribe me / others

XXX

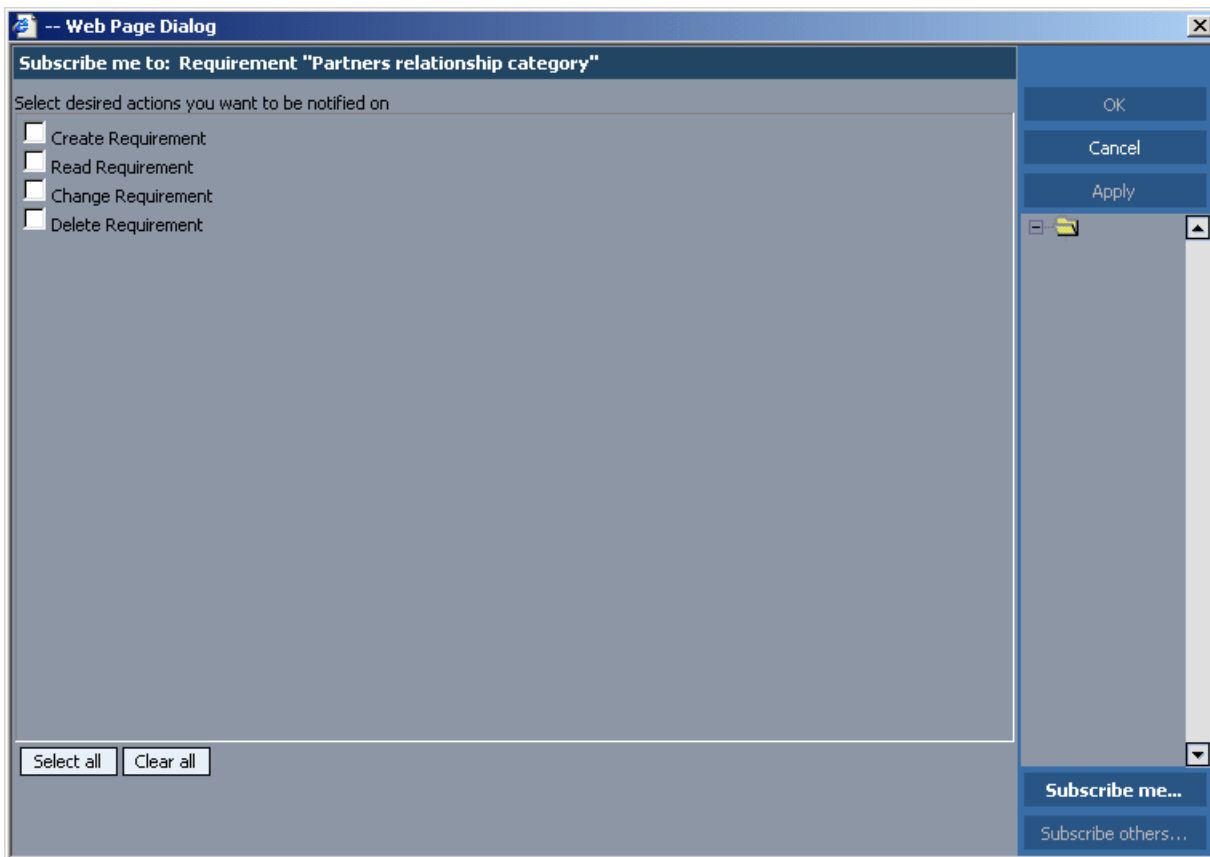


Figure 249. Requirement subscription

8.2.8.3. Main / Requirements / Filter

115:PmcClientRequirementFilter.html

The dialog **Filter** displays the filter settings for requirements.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

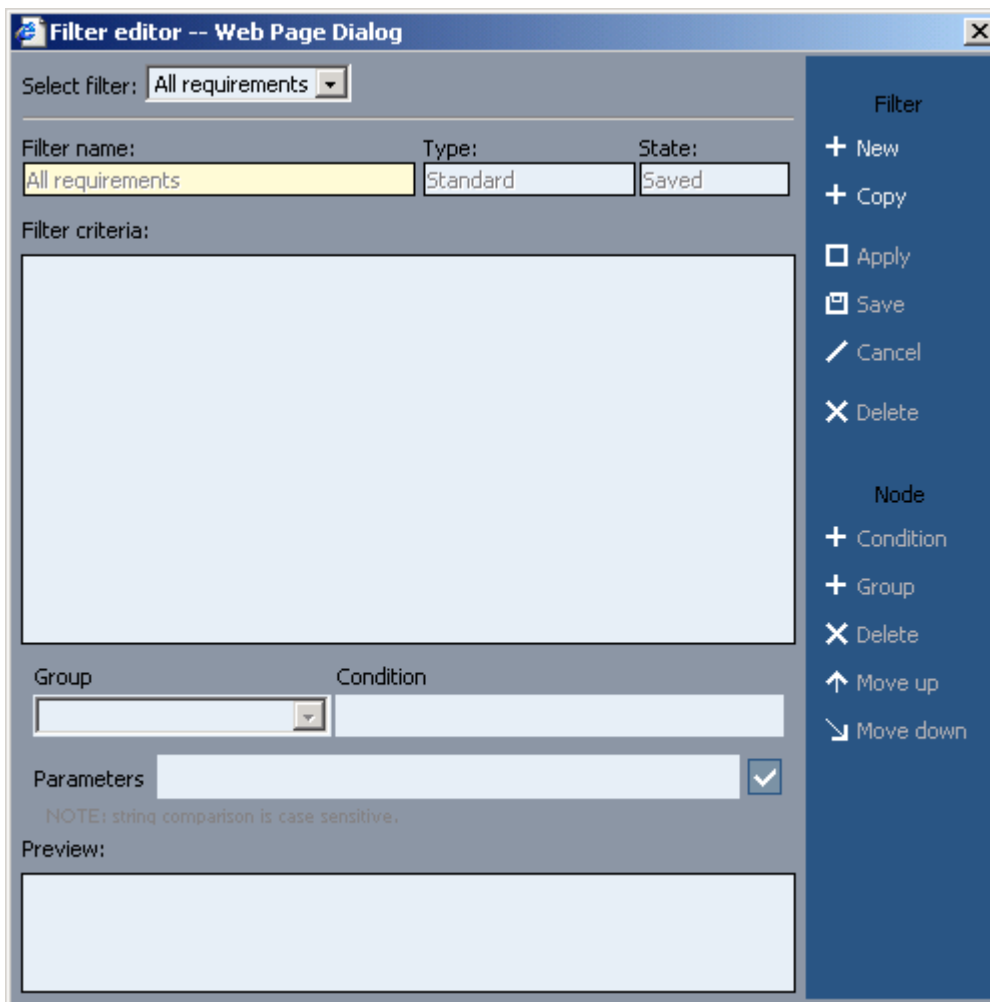


Figure 250. Requirements filter

8.2.9. Main / Support Requests

[116:PmcClientSupportRequests.html](#)

The dialog **Support requests** displays the project support requests.

Toolbar

xxx

Submit

xxx

[8.2.9.1. Main / Support Requests / New\(Submit\)/View/Edit \(page 353\)](#)

View

xxx

[8.2.9.1. Main / Support Requests / New\(Submit\)/View/Edit \(page 353\)](#)

Edit

xxx

[8.2.9.1. Main / Support Requests / New\(Submit\)/View/Edit \(page 353\)](#)

Delete

xxx

Data export

xxx

Up level

xxx

Switch flagged

xxx

View by folders

xxx

View by configurations

xxx

Show / hide tree

xxx

Support requests in

xxx

with subfolders

xxx

All support request (drop-down list)

xxx

Open filter editor

xxx

[8.2.9.3. Main / Support Requests / Filter \(page 359\)](#)

Support requests

xxx

Problems

xxx

Configurations

xxx

Support requests list header

xxx

Sort by: Is new

xxx

Sort by: Is flagged 

xxx

Sort by: Attachment 

xxx

Sort by: Priority 

xxx

Summary

xxx

Problem ID

xxx

Location

xxx

Status

xxx

Found by

xxx

TS contact

xxx

Deadline

xxx

Sort by: Non-completed tasks 

xxx

Sort by: All tasks 

xxx

(list of support requests)

Double-click to open a task.

Footer

xxx

[This portion builds: ###] [Page: #] [Portion: #]

xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx

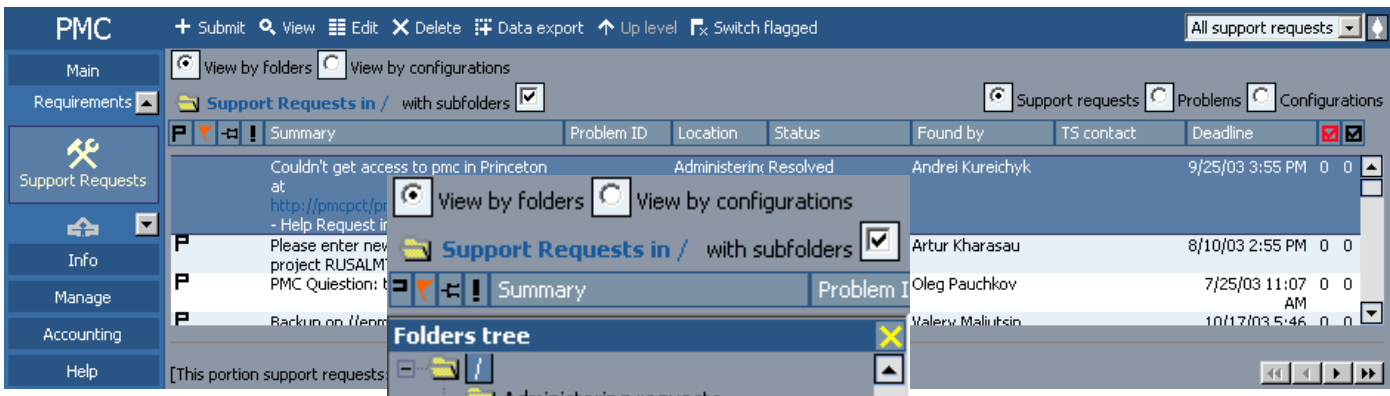


Figure 251. Supports requests (view by folders)

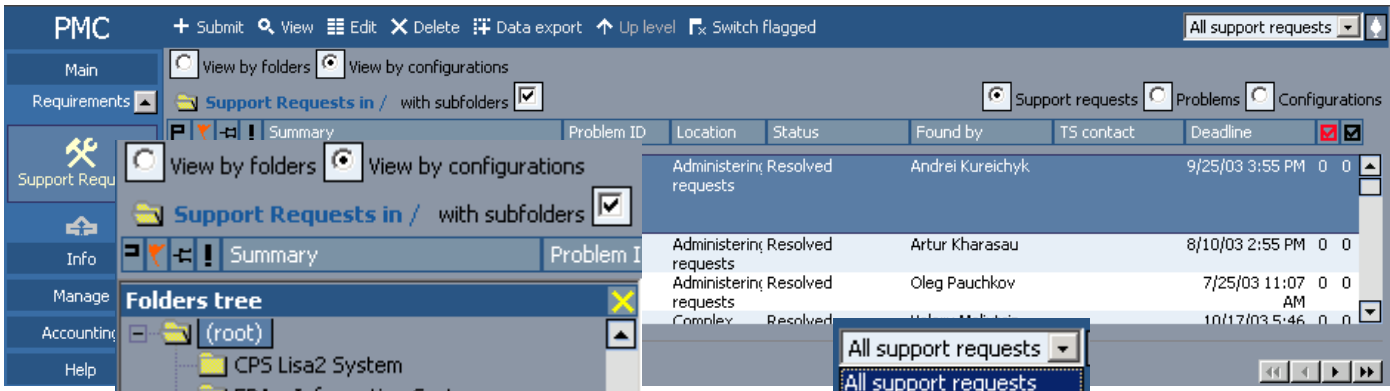


Figure 252. Supports requests (view by configuration)

8.2.9.1. Main / Support Requests / New(Submit)/View/Edit

117:PmcClientSupportRequestNewViewEdit.html

i had no access to the edit dialog.

The dialog **Support requests** has the following subdialogs

- **Submit**. Creates a new support request.
- **View**. Displays a support request.
- **Edit**. Modifies a support request.

Toolbar

XXX

Save (new/xedit)

XXX

xCancel (edit)

XXX

Close

XXX

Comments (view)

XXX

Attachments list (new/xedit)

XXX

[8.2.20. Attachments list \(page 468\)](#)

History log (view/xedit)

XXX

xModules (view/xedit)

XXX

Switch flagged (view/xedit)

XXX

xVersions (view/xedit)

XXX

Support request area

XXX

Add bookmark 

XXX

Submitted by

XXX

Reviewed by

XXX

Found by

XXX

Summary

XXX

TS folder

XXX

Problem

XXX

Deadline

XXX

Estimated hours

xxx

Elapsed hours

xxx

Work stoppage

xxx

Importance

xxx

Category

xxx

Configuration

xxx

--

xxx

Description

xxx

Contacts

xxx

Resolution (view)

xxx

Right column

xxx

[8.2.22. Right frame \(page 471\)](#)

[8.2.9.2. Main / Support Requests / View / Subscribe / Advanced \(page 357\)](#)

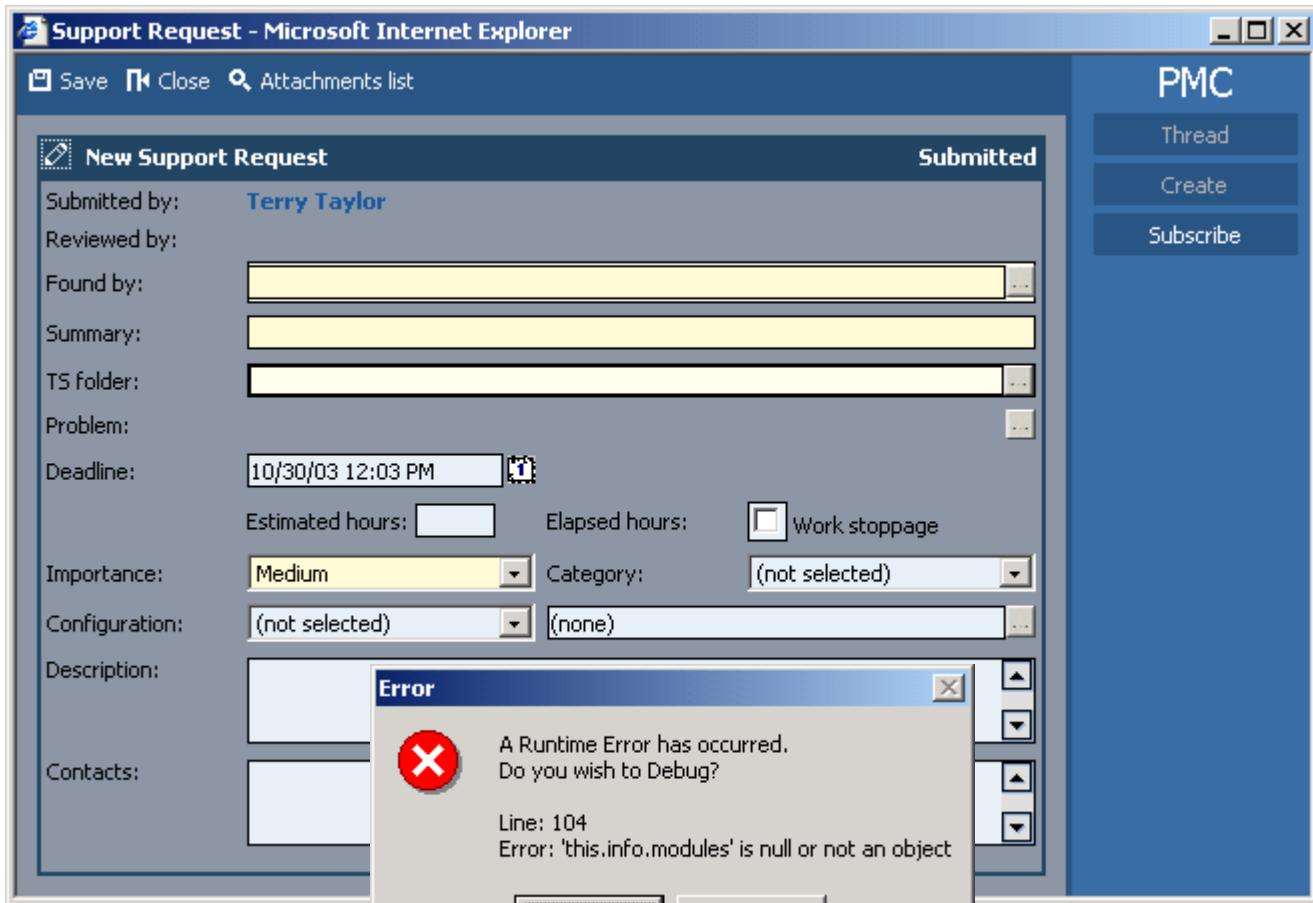


Figure 253. Submit support request (attachments list)



Figure 254. Submit support request: Found by

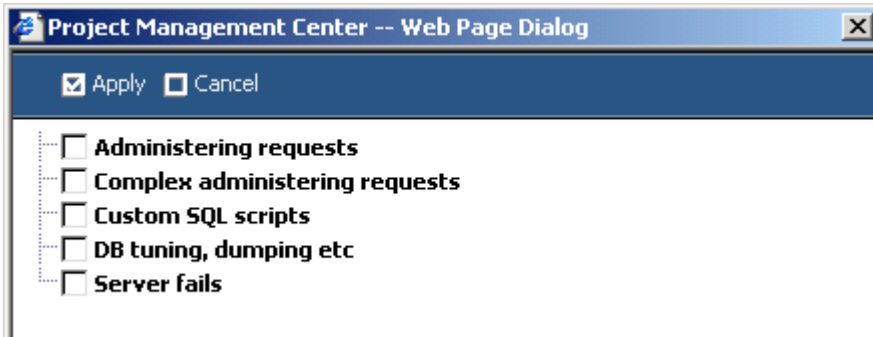


Figure 255. Submit support request: TS folder (configuration description)

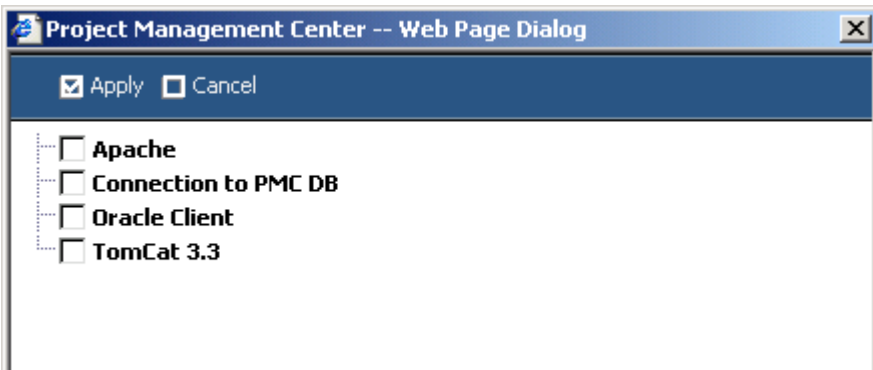


Figure 256. Submit support request: Configuration

Support Request - Couldn't get access to pmc in Princeton at http://pmcpct/pmc/modules/...

Close Comments History log Switch flagged

View Support Request Resolved

Submitted by: **Andrei Kureichyk** on 9/22/03 3:56 PM

Reviewed by: **Andrei Kureichyk** on 9/22/03 3:57 PM

Found by: Andrei Kureichyk

Summary: **Couldn't get access to pmc in Princeton at <http://pmcpct/pmc/modules/workplace/start> - Help Request info**

TS folder: /Administering requests

Problem:

Deadline: **9/25/03 3:55 PM**

Estimated hours: Elapsed hours: 0 Work stoppage

Importance: **Medium** Category: **(not selected)**

Configuration: **(not selected)** (none)

Description: Couldn't get access to pmc in Princeton at <http://pmcpct/pmc/modules/workplace/start> - Help Request info

Contacts:

Error

A Runtime Error has occurred. Do you wish to Debug?

Line: 104
Error: 'this.info.modules' is r

Error

A Runtime Error has occurred. Do you wish to Debug?

Line: 104
Error: 'this.info.modules' is r

Figure 257. View/edit support request (comments, history log)

8.2.9.2. Main / Support Requests / View / Subscribe / Advanced

118:PmcClientSupportRequestViewSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a support request.

Submit support request

xxx

Read support request

xxx

Change support request

xxx

Delete support request

xxx

Accept support request

xxx

Decline support request

xxx

Assign support request

xxx

Resolve support request

xxx

Reopen support request

xxx

Begin support tracking task

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

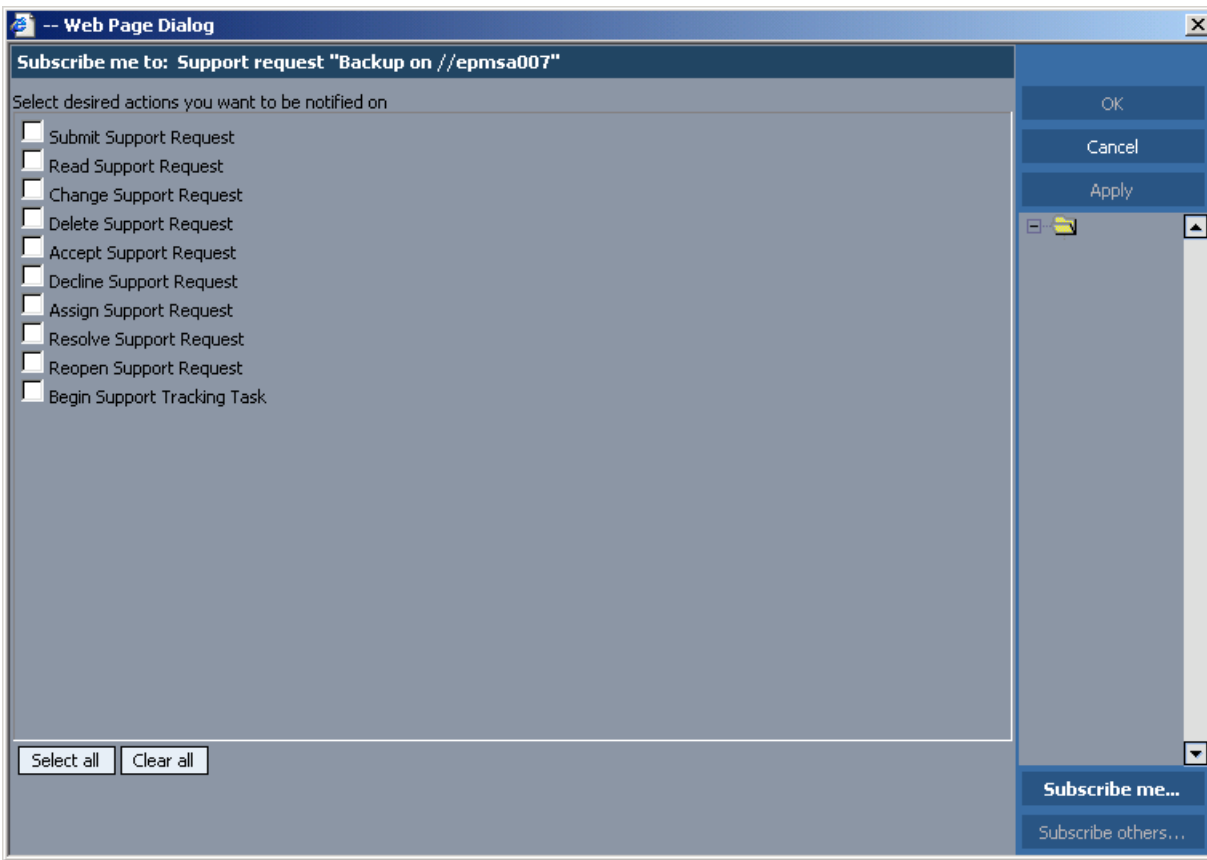


Figure 258. Support request subscribe

8.2.9.3. Main / Support Requests / Filter

119:PmcClientSupportRequestFilter.html

The dialog **Filter** displays the filter settings for support requests.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

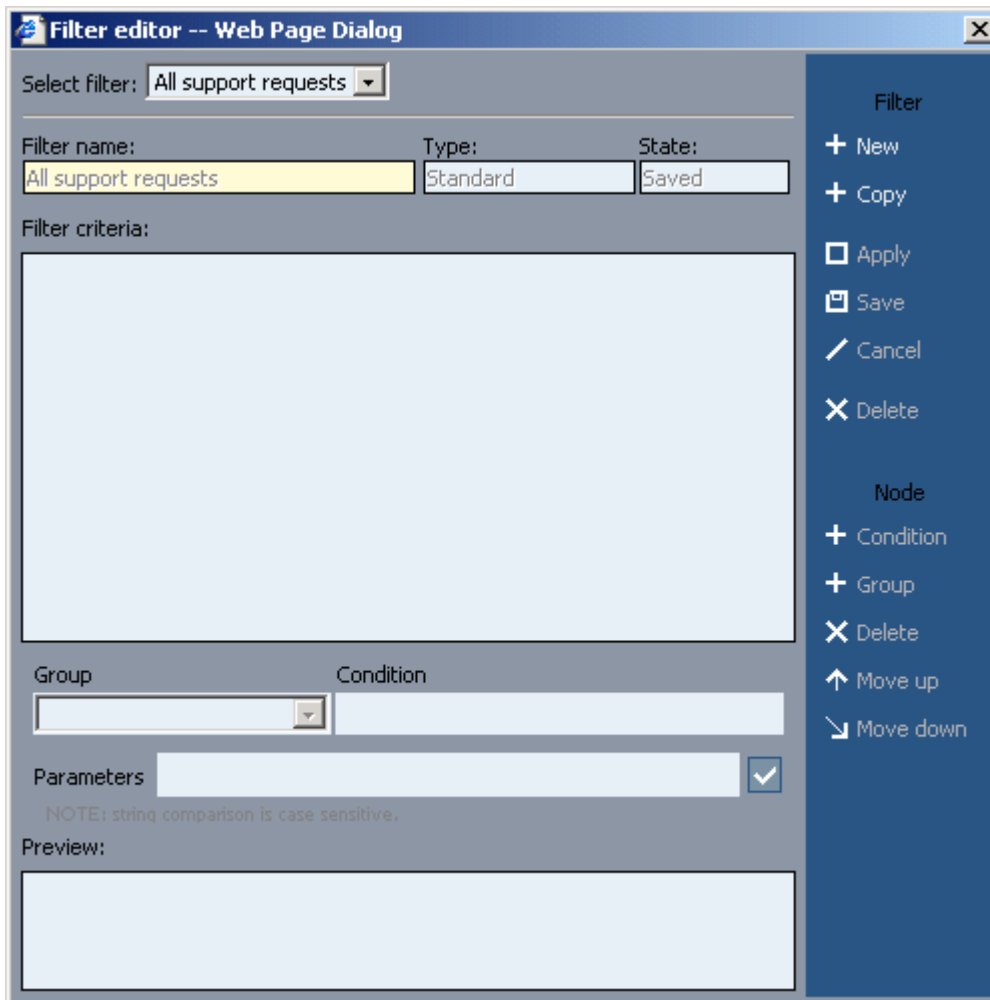


Figure 259. Support request filter

8.2.10. Main / Support Requests / Problems

[120:PmcClientProblems.html](#)

The dialog **Problems** displays the project support request problems.

Toolbar

XXX

? Submit

XXX

[8.2.10.1. Main / Support Requests / Problems / New\(Submit\)/View/Edit \(page 363\)](#)

View

XXX

[8.2.10.1. Main / Support Requests / Problems / New\(Submit\)/View/Edit \(page 363\)](#)

Edit

XXX

[8.2.10.1. Main / Support Requests / Problems / New\(Submit\)/View/Edit \(page 363\)](#)

Delete

XXX

Data export

XXX

Up level

XXX

Switch flagged

XXX

Find by ID

XXX

Show / hide tree

XXX

Support requests in

XXX

with subfolders

XXX

All problems (drop-down list)

XXX

Open filter editor

XXX

[8.2.10.3. Main / Support Requests / Problems / Filter \(page 366\)](#)

Support requests

XXX

Problems

XXX

Configurations

XXX

Support requests list header

XXX

Sort by: Is new

XXX

Sort by: Is flagged 

xxx

Sort by: Attachment 

xxx

Sort by: Priority 

xxx

ID

xxx

Last changed

xxx

Location

xxx

Summary

xxx

Sort by: Non-resolved requests 

xxx

Sort by: All tasks 

xxx

(list of problems)

Double-click to open a task.

Footer

xxx

[This portion builds: ###] [Page: #] [Portion: #]

xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx

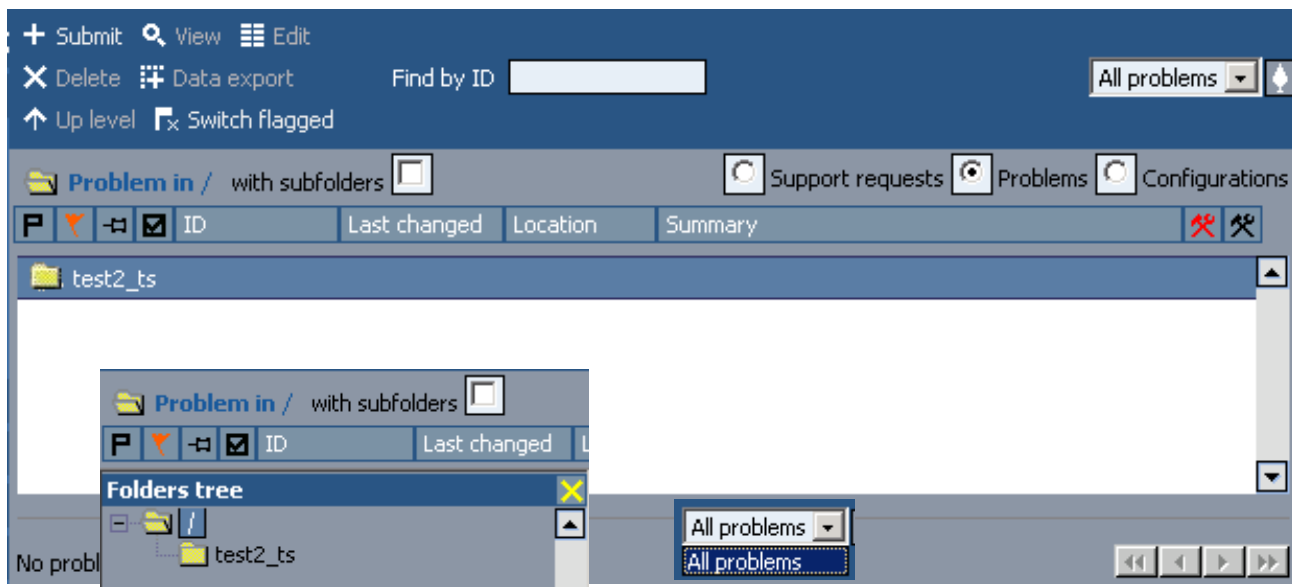


Figure 260. Problems

8.2.10.1. Main / Support Requests / Problems / New(Submit)/View/Edit

121:PmcClientProblemNewViewEdit.html

i had no access to these dialogs.

The dialog **Problems** has the following subdialogs

- **Submit**. Creates a new support request problem.
- **View**. Displays a support request problem.
- **Edit**. Modifies a support request problem.

Toolbar

xxx

Save (new/xedit)

xxx

xCancel (edit)

xxx

Close

xxx

Comments (view)

xxx

Attachments list (new/xedit)

xxx

[8.2.20. Attachments list \(page 468\)](#)

History log (view/xedit)

xxx

xModules (view/xedit)

xxx

Switch flagged (view/xedit)

xxx

xVersions (view/xedit)

xxx

Problem area

xxx

Add bookmark 

xxx

Submitted by

xxx

Summary

xxx

Select custom fields you wish to use

xxx

Type

xxx

Location

xxx

Apply

xxx

Right column

xxx

8.2.22. Right frame (page 471)

8.2.10.2. Main / Support Requests / Problems / View / Subscribe / Advanced (page 365)

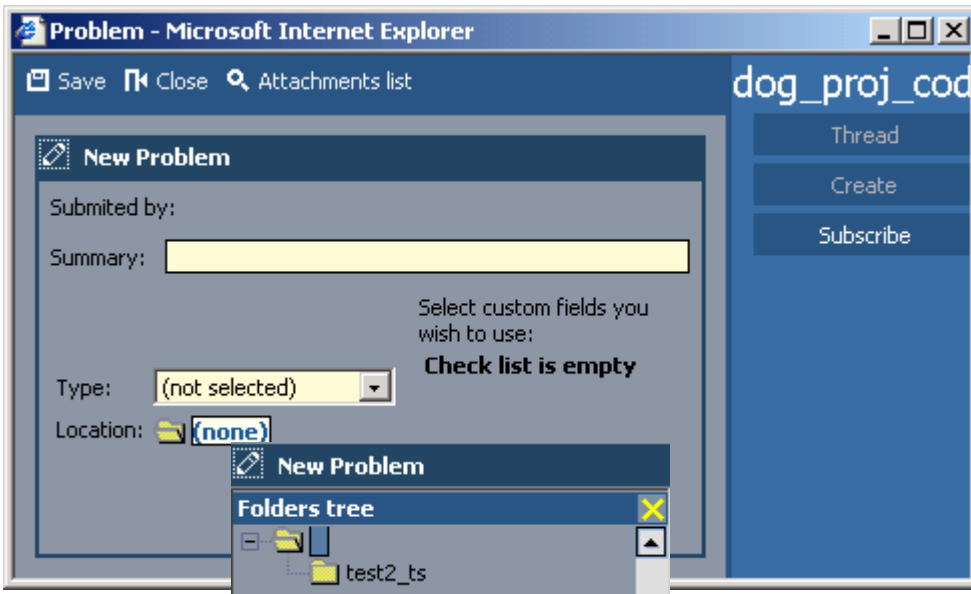


Figure 261. Problem submit

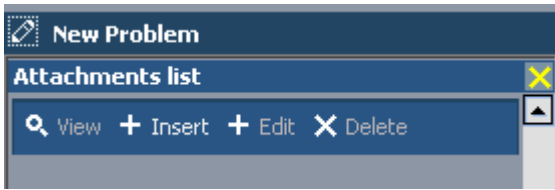


Figure 262. Problem submit attachments list



Figure 263. View/edit problem

8.2.10.2. Main / Support Requests / Problems / View / Subscribe / Advanced

[122: PmcClientProblemViewSubscribe.html](#)

The dialog **Advanced** displays the advanced subscription settings for a support request problem.



Figure 264. Problem subscribe

8.2.10.3. Main / Support Requests / Problems / Filter

123:PmcClientProblemFilter.html

The dialog **Filter** displays the filter settings for support request problems.
For a general description of the filter dialog see 8.2.21. Filter (page 469).

The screenshot shows a dialog box titled "Filter editor -- Web Page Dialog". At the top left, there is a "Select filter:" dropdown menu currently set to "All problems". Below this, there are three input fields: "Filter name:" with the text "All problems", "Type:" with the text "Standard", and "State:" with the text "Saved". A large, empty text area labeled "Filter criteria:" occupies the middle section. At the bottom, there are two dropdown menus labeled "Group" and "Condition", a "Parameters" checkbox which is checked, and a "Preview:" text area. On the right side of the dialog, there is a vertical toolbar with two sections: "Filter" and "Node". The "Filter" section includes buttons for "+ New", "+ Copy", "□ Apply", "Save", "Cancel", and "X Delete". The "Node" section includes buttons for "+ Condition", "+ Group", "X Delete", "↑ Move up", and "↘ Move down".

Figure 265. Support request filter

8.2.11. Main / Support Requests / Configurations

[124:PmcClientConfigurations.html](#)

The dialog **Configurations** displays the support request configurations.

Configurations

xxx

Find

xxx

Clear

xxx

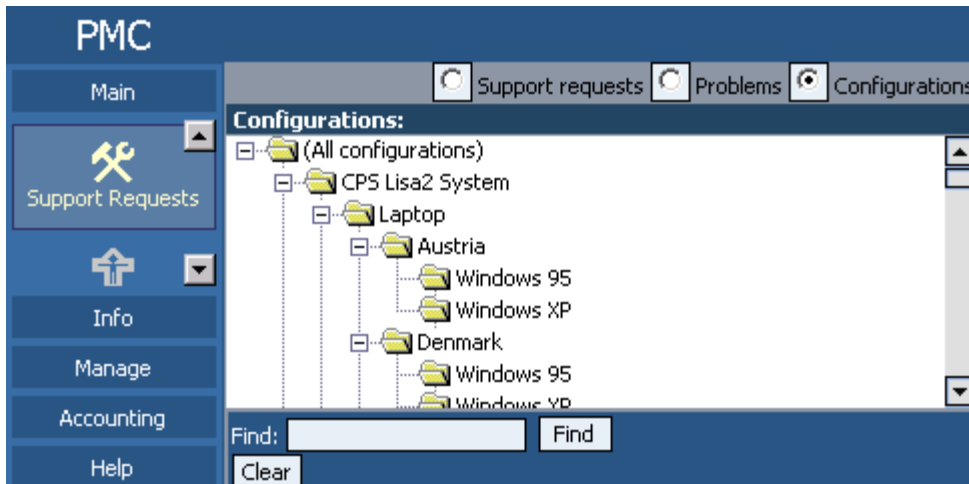


Figure 266. Support requests configurations

8.2.12. Main / Risks

[125:PmcClientRisks.html](#)

The dialog **Risks** displays the project risks.

Toolbar

XXX

Add

XXX

[8.2.12.1. Main / Risks / New\(Submit\)/View/Edit \(page 370\)](#)

View

XXX

[8.2.12.1. Main / Risks / New\(Submit\)/View/Edit \(page 370\)](#)

Edit

XXX

[8.2.12.1. Main / Risks / New\(Submit\)/View/Edit \(page 370\)](#)

Delete

XXX

Data export

XXX

Switch flagged

XXX

Find by ID

XXX

All support request (drop-down list)

XXX

Open filter editor

XXX

[8.2.12.3. Main / Risks / Filter \(page 374\)](#)

Risks list header

XXX

Sort by: Is new

XXX

Sort by: Is flagged

XXX

Sort by: Attachment

XXX

ID

XXX

Short description

XXX

State

XXX

Rank

XXX

Release

xxx

Probability

xxx

Impact

xxx

Exposure

xxx

(list of risks)

Double-click to open.

Footer

xxx

[This portion builds: ###] [Page: #] [Portion: #]

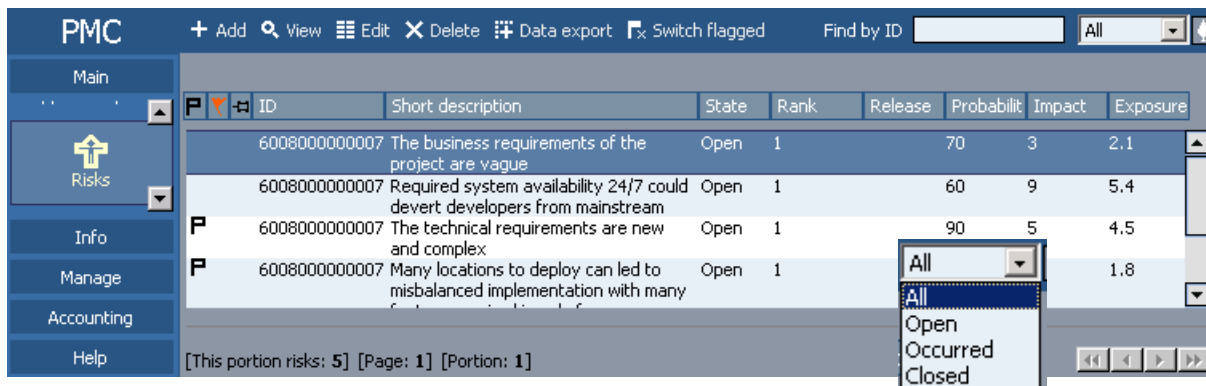
xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx



ID	Short description	State	Rank	Release	Probabilit	Impact	Exposure
6008000000007	The business requirements of the project are vague	Open	1		70	3	2.1
6008000000007	Required system availability 24/7 could divert developers from mainstream	Open	1		60	9	5.4
6008000000007	The technical requirements are new and complex	Open	1		90	5	4.5
6008000000007	Many locations to deploy can led to misbalanced implementation with many	Open	1				1.8

Figure 267. Risks

8.2.12.1. Main / Risks / New(Submit)/View/Edit

[126:PmcClientRiskNewViewEdit.html](#)

The dialog **Risks** has the following subdialogs

- **Submit**. Creates a new risk.
- **View**. Displays a risk.
- **Edit**. Modifies a risk.

Toolbar

xxx

Save (new/edit)

xxx

Cancel (edit)

xxx

Edit (view)

xxx

Close

xxx

Comments (view)

xxx

Attachments list (new/edit)

xxx

[8.2.20. Attachments list \(page 468\)](#)

History log (view/edit)

xxx

Switch flagged (view/edit)

xxx

Risk area

xxx

Add bookmark

xxx

Short description

xxx

Creator

xxx

Changer

xxx

Creation date

xxx

Closure date

xxx

Rank

xxx

Release

xxx

Probability

xxx

Impact

XXX

Exposure

XXX

Mitigation

XXX

Trigger event

XXX

Effect

XXX

Contingency

XXX

Right column

XXX

8.2.22. Right frame (page 471)

8.2.12.2. Main / Risks / View / Subscribe / Advanced (page 373)

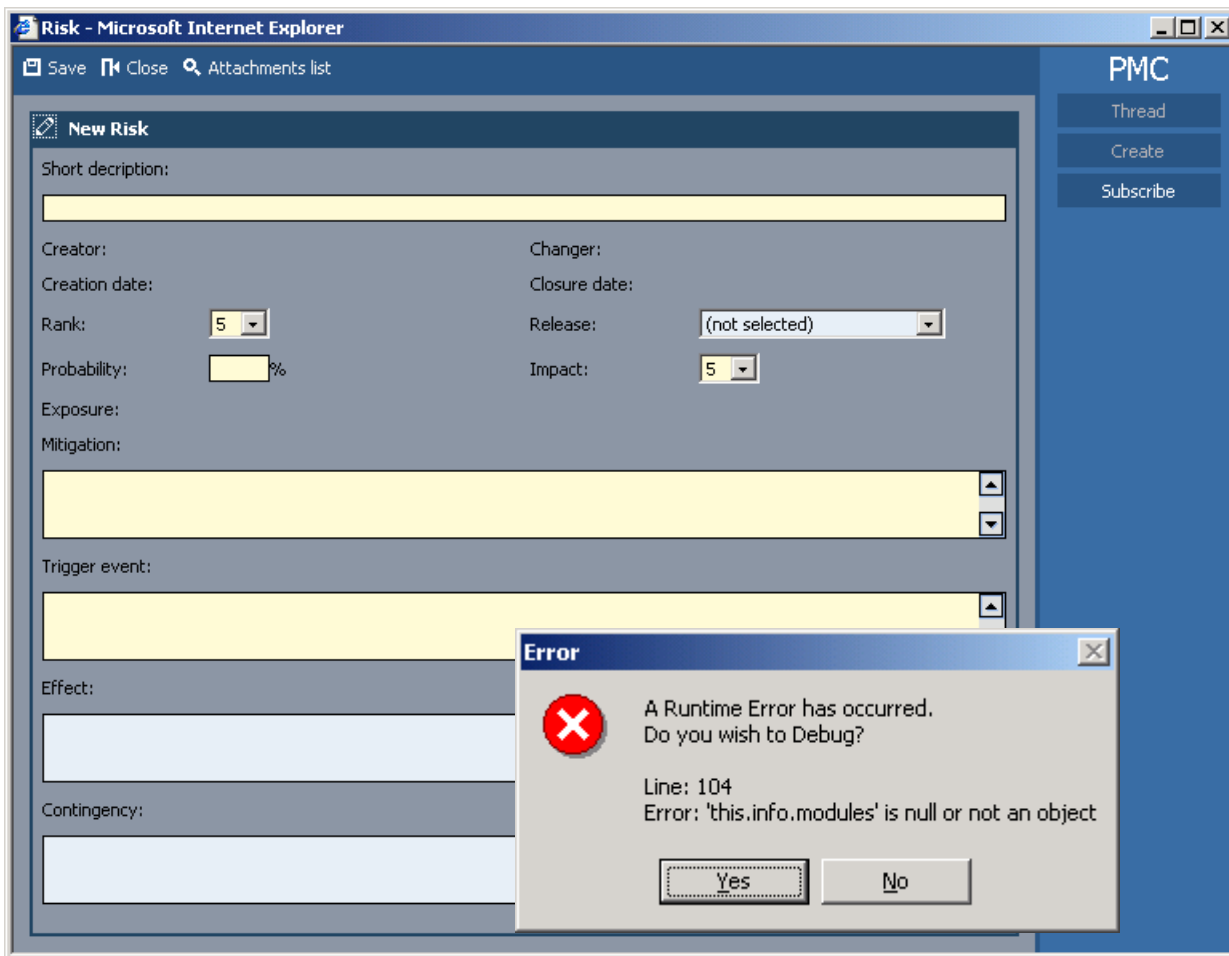


Figure 268. Submit risk (attachments list)

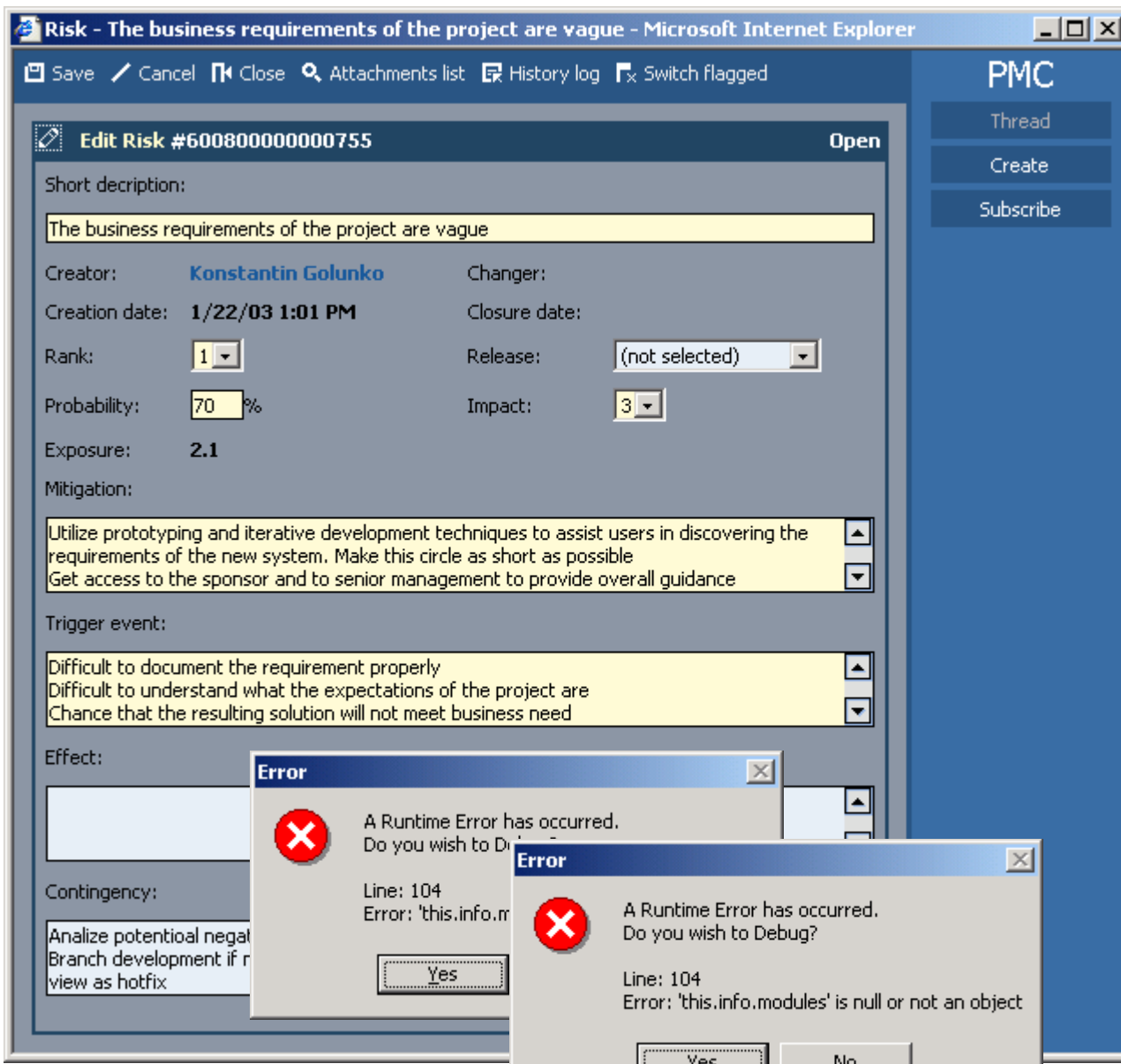


Figure 269. View/edit risks (attachments list, history log)

8.2.12.2. Main / Risks / View / Subscribe / Advanced

127:PmcClientRiskViewSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a risk.

Create risk

xxx

Modify risk

xxx

Delete risk

xxx

View risk

xxx

Assign risk

xxx

Close risk

xxx

Reopen risk

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

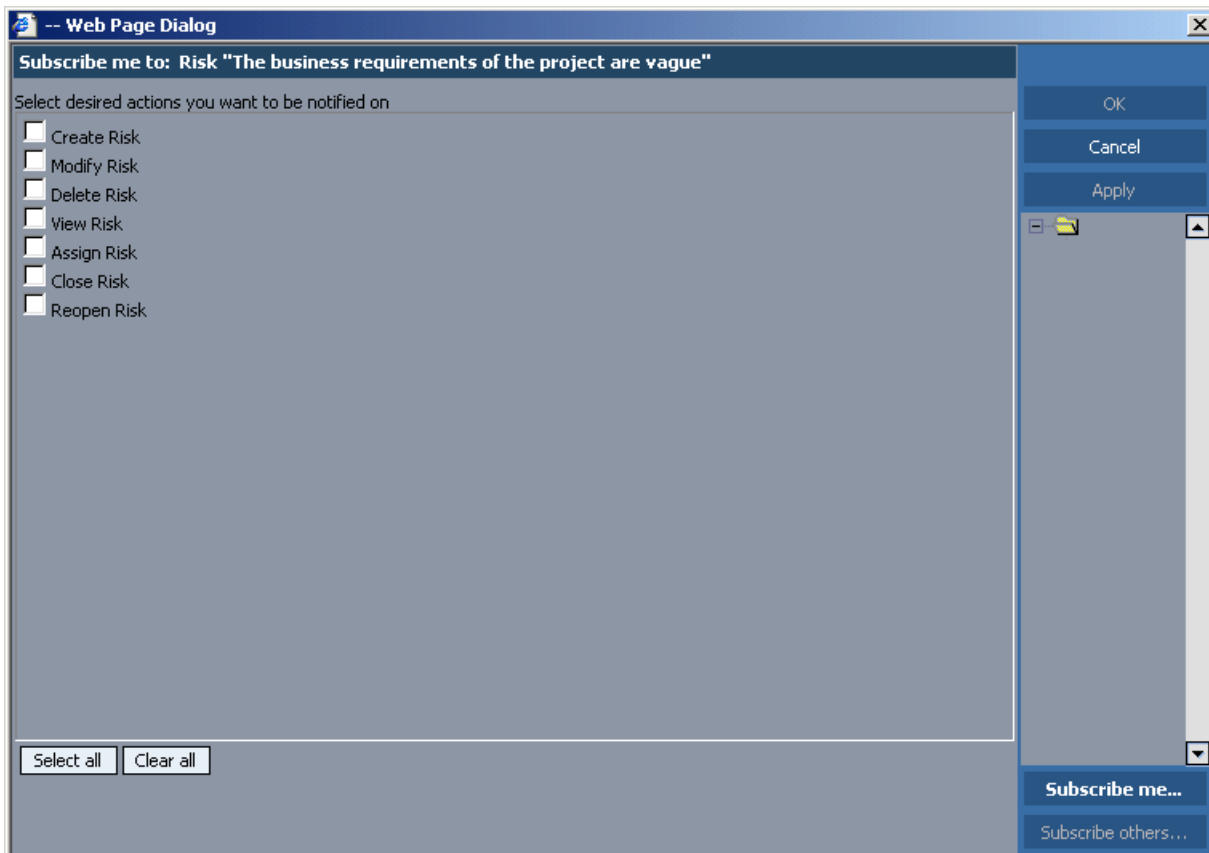


Figure 270. Risk subscribe

8.2.12.3. Main / Risks / Filter

128:PmcClientRiskFilter.html

The dialog **Filter** displays the filter settings for risks.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

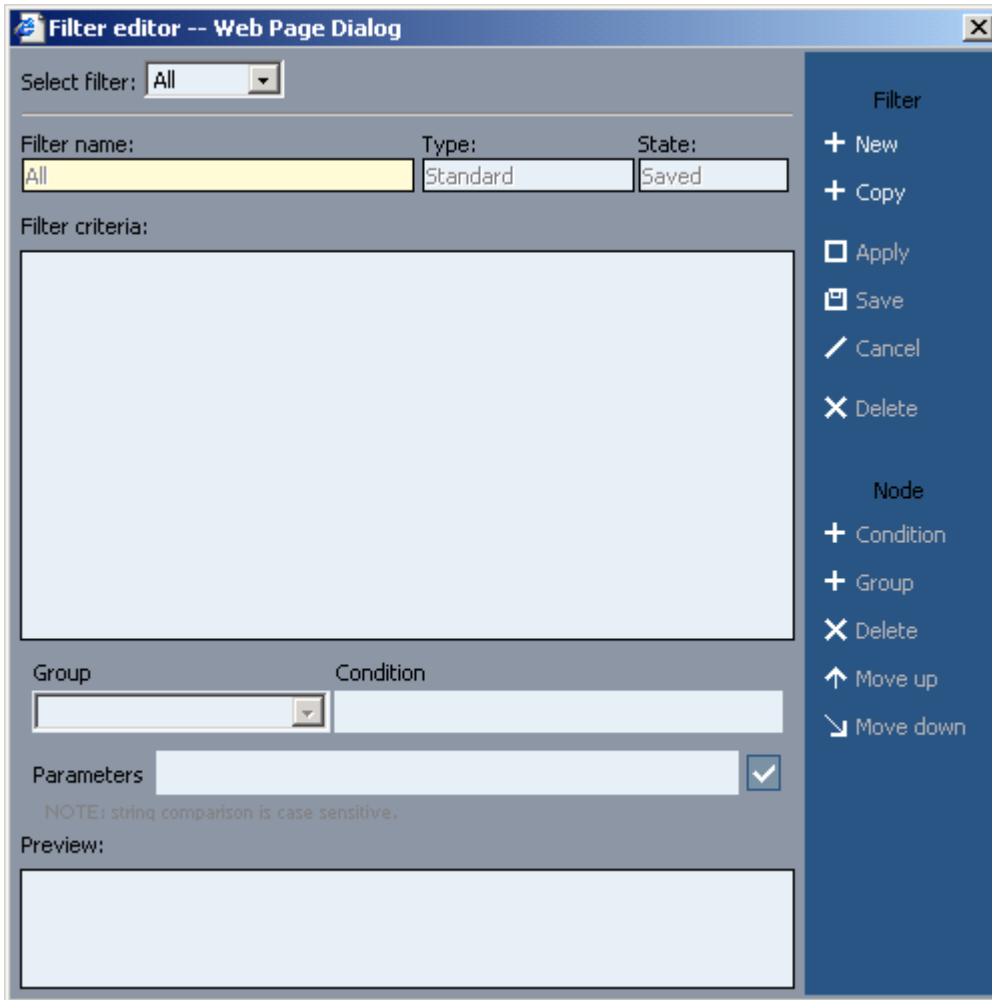


Figure 271. Filter risks

8.2.13. Main / Issues

[129:PmcClientIssues.html](#)

The dialog **Issues** displays the project issues.

Toolbar

xxx

Add

xxx

[8.2.13.1. Main / Issues / New\(Submit\)/View/Edit \(page 377\)](#)

View

xxx

[8.2.13.1. Main / Issues / New\(Submit\)/View/Edit \(page 377\)](#)

Edit

xxx

[8.2.13.1. Main / Issues / New\(Submit\)/View/Edit \(page 377\)](#)

Delete

xxx

Data export

xxx

Switch flagged

xxx

Show / hide tree

xxx

with subfolders

xxx

Find by ID

xxx

All (drop-down list)

xxx

Open filter editor

xxx

[8.2.13.3. Main / Issues / Filter \(page 382\)](#)

Issue list header

xxx

Sort by: Is new

xxx

Sort by: Is flagged

xxx

Sort by: Attachment

xxx

Issue ID

xxx

Subject

xxx

State

XXX

Priority

XXX

Planned build to close

XXX

Footer

XXX

[This portion builds: ###] [Page: #] [Portion: #]

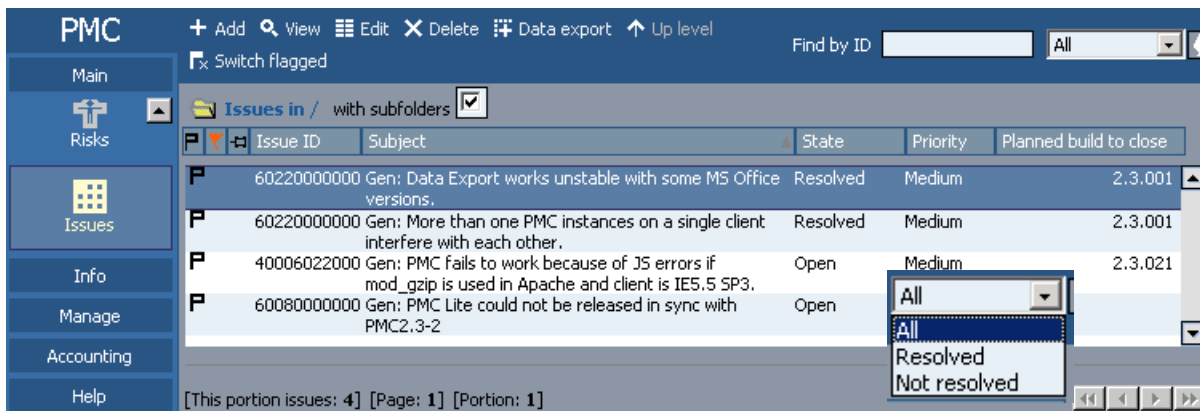
XXX

Getting previous/next portion of data 

XXX

Go to previous/next page 

XXX



Issue ID	Subject	State	Priority	Planned build to close
60220000000	Gen: Data Export works unstable with some MS Office versions.	Resolved	Medium	2.3.001
60220000000	Gen: More than one PMC instances on a single client interfere with each other.	Resolved	Medium	2.3.001
40006022000	Gen: PMC fails to work because of JS errors if mod_gzip is used in Apache and client is IES.5 SP3.	Open	Medium	2.3.021
60080000000	Gen: PMC Lite could not be released in sync with PMC2.3-2	Open		

Figure 272. Issues

8.2.13.1. Main / Issues / New(Submit)/View/Edit

130:PmcClientIssueNewViewEdit.html

The dialog **Issues** has the following subdialogs

- **Submit**. Creates a new issue.
- **View**. Displays an issue.
- **Edit**. Modifies an issue.

Toolbar

XXX

Save (new/xedit)

XXX

xCancel (edit)

XXX

Close

XXX

xComments (view)

XXX

Attachments list (new/xedit)

XXX

[8.2.20. Attachments list \(page 468\)](#)

History log (view/xedit)

XXX

Switch flagged (view/xedit)

XXX

Resolve (view/xedit)

XXX

Issue area

XXX

Add bookmark 

XXX

Created by (view)

XXX

Changed by (view)

XXX

Reviewed by (view)

XXX

Assigned to (view)

XXX

Subject

XXX

Application

XXX

Planned close date

XXX

Planned close build

XXX

Actual close date (view)

xxx

Actual close build (view)

xxx

Priority

xxx

Difficulty

xxx

Reopen count (view)

xxx

Description

xxx

Right column

xxx

8.2.22. Right frame (page 471)

8.2.13.2. Main / Issues / View / Subscribe / Advanced (page 380)

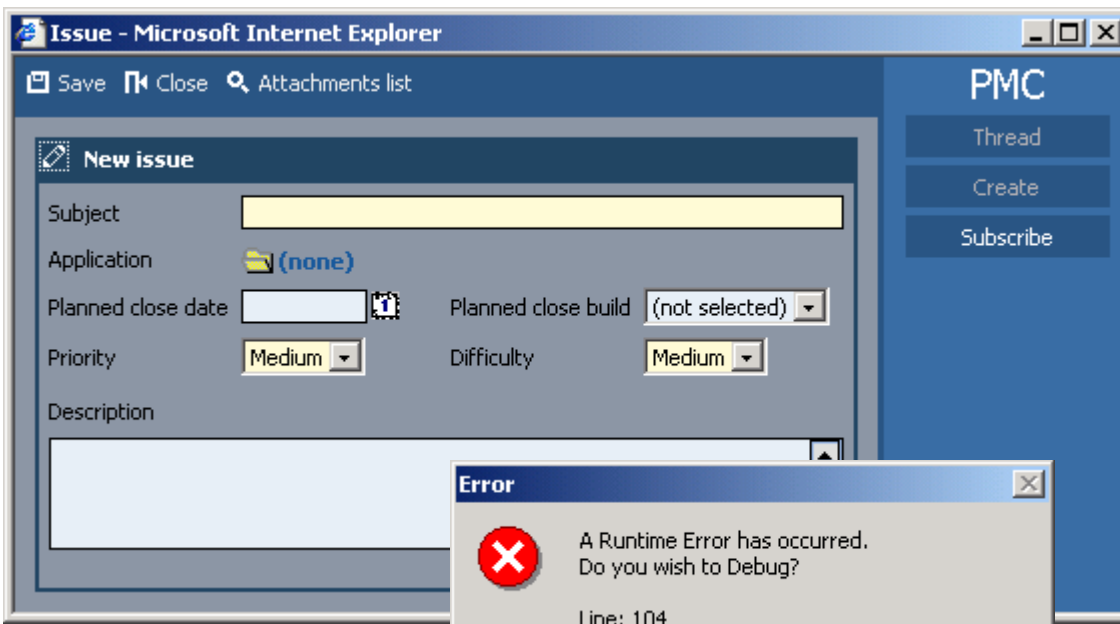


Figure 273. Submit issue (attachments list)

The screenshot shows a web browser window titled "Issue - Gen: Data Export works unstable with some MS Office versions. - Microsoft Internet Explorer". The page content includes:

- Issue #60220000005145** (Status: Resolved)
- Created by:** Dzmitry Dymau on 1/29/03 10:03 AM
- Changed by:** Dzmitry Dymau on 2/20/03 6:28 PM
- Reviewed by:** (empty)
- Assigned to:** (empty)
- Subject:** Gen: Data Export works unstable with some MS Office versions.
- Application:** /PMC 2.3
- Planned close date:** (empty)
- Planned close build:** 2.3.001
- Actually closed date:** 2/20/03 6:28 PM
- Actually closed build:** 2.3.007
- Priority:** Medium
- Difficulty:** Medium
- Reopen count:** 0
- Description:** Sometimes Data Export fails to export cyrillic symbols or to export any data at all.
- Resolution:** (collapsed)
- Date:** (unknown) **User:** (unknown) **Action:** (unknown)
- Description:** Resolved. Resolution: Solution has b

An error dialog box is overlaid on the page with the following text:

Error
 A Runtime Error has occurred.
 Do you wish to Debug?

On the right side of the browser window, there is a sidebar for "PMC" with buttons for "Thread", "Create", "Subscribe", a "Project team" dropdown menu, a user profile for "Terry Taylor", and "Apply" and "Advanced..." buttons at the bottom.

Figure 274. View/edit issue (history log)

8.2.13.2. Main / Issues / View / Subscribe / Advanced

131:PmcClientIssueSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for an issue.

Create issue

XXX

Modify issue

XXX

Delete issue

XXX

View issue

XXX

Assign issue

XXX

Resolve issue

XXX

Reopen issue

XXX

Cancel issue

XXX

Select / clear all

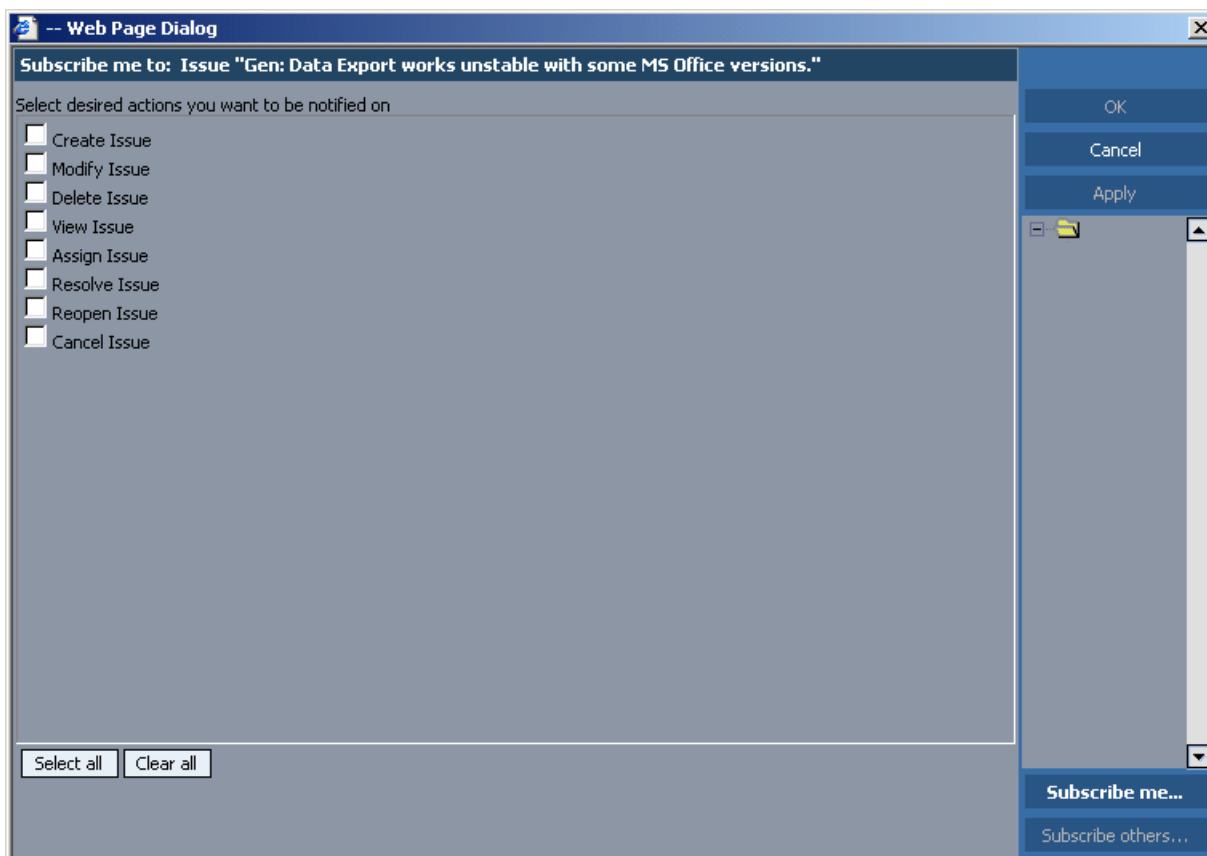
XXX

OK / Cancel / Apply

XXX

Subscribe me / others

XXX



| *Figure 275. Issue subscription*

8.2.13.3. Main / Issues / Filter

[132:PmcClientIssueFilter.html](#)

The dialog **Filter** displays the filter settings for issues.

For a general description of the filter dialog see [8.2.21. Filter \(page 469\)](#).

Filter editor -- Web Page Dialog

Select filter:

Filter name: Type: State:

Filter criteria:

Group Condition

Parameters

NOTE: string comparison is case sensitive.

Preview:

Filter

- + New
- + Copy
- Apply
- Save
- Cancel
- Delete

Node

- + Condition
- + Group
- Delete
- Move up
- Move down

Figure 276. Issues filter

8.2.14. Info / Project

133:PmcClientProject.html

The **Project** tabs describe the project.

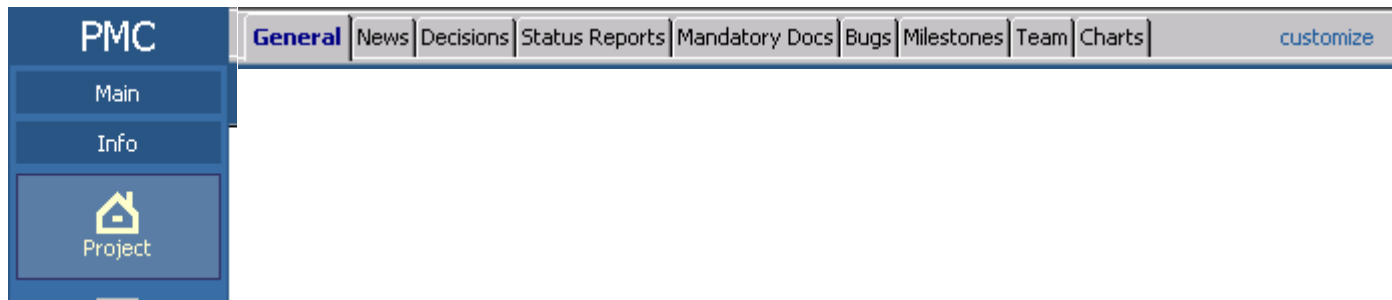


Figure 277. Project tabs

The following sections describe

- [8.2.14.1. Info / Project / General \(page 384\)](#)
- [8.2.14.2. Info / Project / News \(page 385\)](#)
- [8.2.14.3. Info / Project / Decisions \(page 386\)](#)
- [8.2.14.4. Info / Project / Status Reports \(page 387\)](#)
- [8.2.14.5. Info / Project / Mandatory Docs \(page 388\)](#)
- [8.2.14.6. Info / Project / Bugs \(page 389\)](#)
- [8.2.14.7. Info / Project / Milestones \(page 390\)](#)
- [8.2.14.8. Info / Project / Team \(page 392\)](#)
- [8.2.14.9. Info / Project / Charts \(page 398\)](#)

8.2.14.1. Info / Project / General

134:PmcClientProjectGeneral.html

The **Project** tab **General** contains general project information.

(Project name)

x

General state

x

Schedule indicator

x

Staffing indicator

x

Customer

x

Type

x

Status

x

Manager

x

Start / end date

x




Description

x

Used skills

x



-  General state
-  Schedule indicator
-  Staffing indicator

Customer	EPAM Systems, Inc.
Type	Maintenance
Status	Active
Manager	Konstantin Golunko
Start/end date	1999-December -06/2003-December -31

Description

EPAM Project Management Center

Used skills

MS Windows, Linux, Oracle, Oracle Developer, Java Server Pages (JSP), HTML/DHTML, XML, J2EE, JavaScript, Application Servers and Middleware, BEA WebLogic

Figure 278. Project general info

8.2.14.2. Info / Project / News

135: PmcClientProjectNews.html
 The **Project** tab **News** displays project news.

Subject

x

Creator

x

Created

x

Total

x

(news item text window)

x

General News Decisions Status Reports Mandatory Docs Bugs Milestones Team Charts			
Subject	Creator	Created	
Requirements module	Uladzimir G Katliarou	2002-01-11	▲
No Attach	Oleg Dobrodei	2001-07-13	□
I can't create new build again!	Ihar Makushynski	2001-05-24	
Advanced filter don't work?!	Ihar Makushynski	2001-05-24	
I can't create new build	Ihar Makushynski	2001-05-21	▼
Total :35			
I think from the standpoint of more active usage of Requirements module it's a sense to fix the threaded bug (ID 10100901). See also attached letter.			▲ ▼

Figure 279. Project news

8.2.14.3. Info / Project / Decisions

136:PmcClientProjectDecisions.html

The **Project** tab **Decisions** lists the project decisions.

Subject

x

Creator

x

Created

x

Total

x

(decision item text window)

x

General	News	Decisions	Status Reports	Mandatory Docs	Bugs	Milestones	Team	Charts
Subject	Creator	Created						
PMC2.3 kick off	Konstantin Golunko	2003-05-16	▲					
MFU: Steps to Independence	Konstantin Golunko	2001-07-05	□					
MFU: PMC2 modular architecture on J2EE platform	Konstantin Golunko	2001-06-08						
PMC2.M.05 MFU: PMC development strategy	Siarhei Yaromin	2001-01-03	▼					
Total :8								
10.7.2002 Participated: I. Ovsianik, R. Grishkevich, D. Yakovlev, K. Golunko, S. Yaromin Discussed: Ideas for PMC 2.3								
scope High-level list of possible functionality: 1. Finance (Cash flow) management. Notes: Mostly is needed for Moscow								

Figure 280. Project decisions

8.2.14.4. Info / Project / Status Reports

137:PMCClientProjectStatusReports.html

The **Project** tab **Status Reports** lists the project status reports.

Generate new one

x

(dates) (for generate new)

x

Name

x

State

x

Language

x

Total

x

General				News				Decisions				Status Reports				Mandatory Docs				Bugs				Milestones				Team				Charts															
Generate new one																																															
Name																								State												Language											
[-] 2003-May (5)																																															
PMCWeeklyStatus20030530.doc																								Created												English (US)											
PMCWeeklyStatus20030523.doc																								Created												English (US)											
PMCWeeklyStatus20030516.doc																								Created												English (US)											
PMCWeeklyStatus20030510.doc																								Created												English (US)											
PMCWeeklyStatus20030502.doc																								Created												English (US)											
[-] 2003-April (4)																																															
[-] 2003-March (4)																																															
Total :82																																															

Figure 281. Project status reports

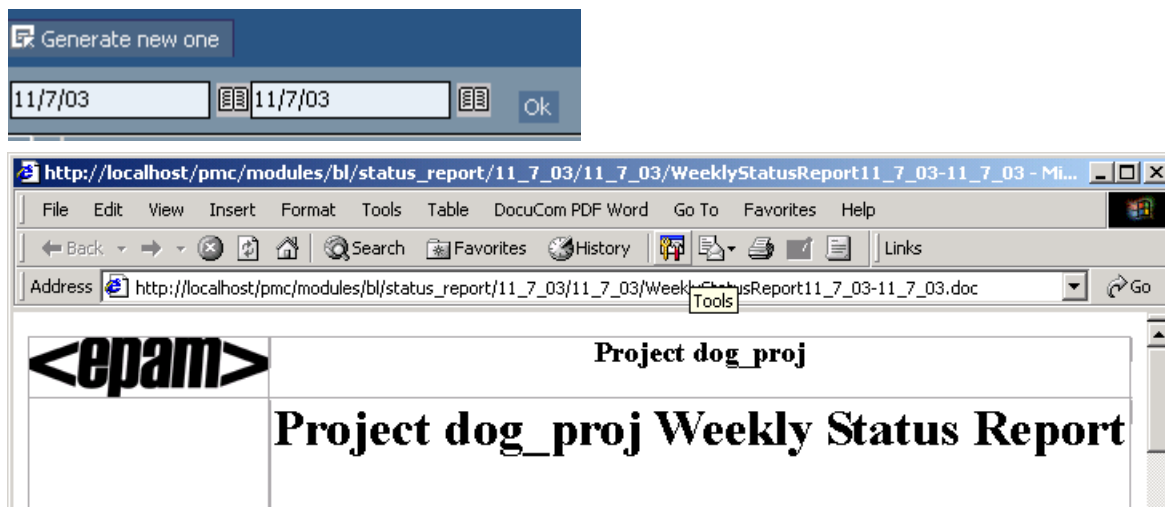


Figure 282. Generating a new status report

8.2.14.5. Info / Project / Mandatory Docs

138:PmcClientProjectMandatoryDocs.html

The **Project** tab **Mandatory Docs** lists the project's mandatory (required) documents.

Name

x

State

x

Language

x

Total

x

General	News	Decisions	Status Reports	Mandatory Docs	Bugs	Milestones	Team	Charts
Name				State			Language	
PMC project plan				Draft			English (US)	▲
Plans for 3.0.				Created			English (US)	□
PMC2SupportPlan.doc				Created			English (US)	□
PMC2BuildWorkflow.doc				Created			English (US)	▼
Total :17								

Figure 283. Project mandatory docs

8.2.14.6. Info / Project / Bugs

139:PmcClientProjectBugs.html

The **Project** tab **Bugs** lists the project bugs.

active applications only

x

(application name)

x

All / reopened / assigned / deferred / submitted

x

All / Minor / Medium / Major / Critical

x

General News Decisions Status Reports Mandatory Docs Bugs Milestones Team Charts					
					active applications only <input checked="" type="checkbox"/>
Admin Console	All	Minor	Medium	Major	Critical
All	54	33	18	3	-
Reopened	-	-	-	-	-
Assigned	-	-	-	-	-
Deferred	5	4	1	-	-
Submitted	49	29	17	3	-
EWV 2.3	All	Minor	Medium	Major	Critical
All	40	30	8	2	-
Reopened	-	-	-	-	-
Assigned	-	-	-	-	-

Figure 284. Project bugs

8.2.14.7. Info / Project / Milestones

[140:PmcClientProjectMilestones.html](#)

The **Project** tab **Milestones** lists the project milestones.

View

X

[8.2.14.7.1. Info / Project / Milestones / \(New\)/View/\(Edit\) \(page 391\)](#)

Subject

X

Date

X

Actual date

X

Overdue

X

Pass criteria

X

Total

X

General	News	Decisions	Status Reports	Mandatory Docs	Bugs	Milestones	Team	Charts
View								
Passed:8 Overdue: 2 Overdue in % : 25% (0%)								
Subject	Date	Actual date	Overdue	Pass criteria				
Draft	4/2/00	4/6/00	■	Draft				
PMC 1.5	4/2/01	4/2/01		PMC 1.5				
PMC 2.0	4/1/02	4/2/02	■	PMC 2.0				
Fast ACWE	5/2/02	5/1/02		Performance testing				
Total :8								

Figure 285. Project milestones

8.2.14.7.1. Info / Project / Milestones / (New)/View/(Edit)

141: PmcClientProjectMilestonesNewViewEdit.html

The **Project** tab **Milestones** has the following subdialogs

- **View**. Displays an issue.

Close

x

Actual completion date

x

Subject

x

Pass criteria

x

History log

x

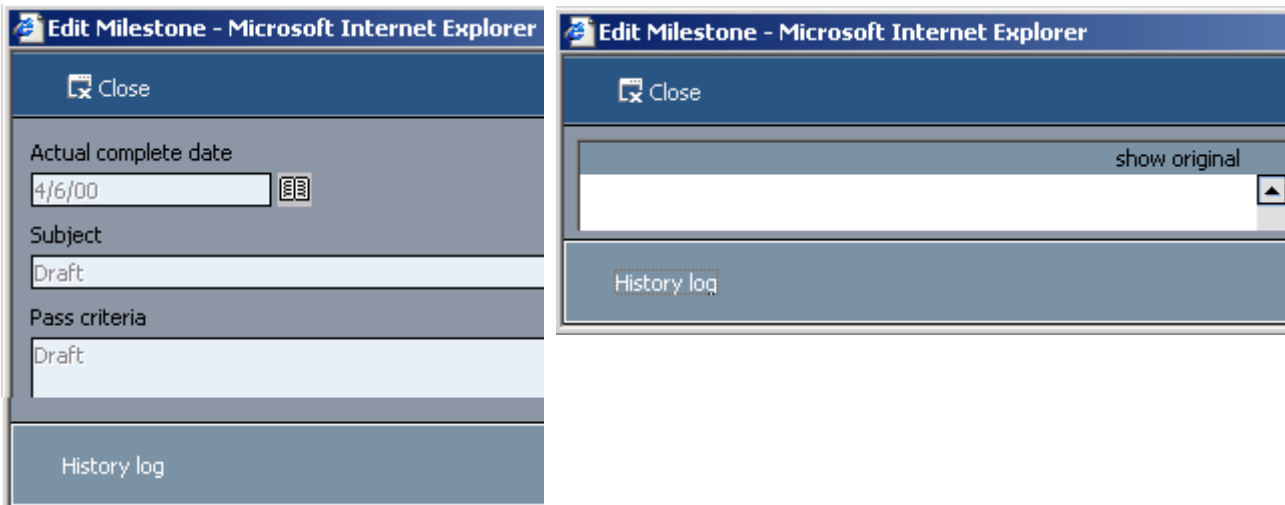


Figure 286. New project milestone

8.2.14.8. Info / Project / Team

[142:PmcClientProjectTeam.html](#)

The **Project** tab **Team** lists the project team members.

Toolbar

x

View

x

Data export

x

(drop-down list)

x

Member list

x

Member

x

Participation

x

Total

x

General		News	Decisions	Status Reports	Mandatory Docs	Bugs	Milestones	Team	Charts
View		Data export		All Members ▾					
Member	Participation								
Aksana Serada	TS Engineer								
Aleh Bahachuk	Consultant								
Alexey Tcherniak	Developer								
Aliaksandr Litskevich	Developer, Key Developer								
Total :37									

Figure 287. Project team

8.2.14.8.1. Info / Project / Team / (New/)View(/Edit)

143:PmcClientProjectTeamNewViewEdit.html

The **Project** tab **Team** has the following subdialogs

- 8.2.14.8.1.1. Info / Project / Team / (New/)View(/Edit) / Personal card (page 393)
- 8.2.14.8.1.2. Info / Project / Team / (New/)View(/Edit) / Employee profile (page 394)

8.2.14.8.1.1. Info / Project / Team / (New/)View(/Edit) / Personal card

The **Project** tab **Team** subdialog **View / Personal card** has the following subdialogs

Close

x

Show employee profile

(description)

- 8.2.14.8.1.1.1. (top portion) (page 393)
- 8.2.14.8.1.1.2. General (page 393)
- 8.2.14.8.1.1.3. Personal (page 393)
- 8.2.14.8.1.1.4. Organizational (page 393)
- 8.2.14.8.1.1.5. Governmental (page 393)
- 8.2.14.8.1.1.6. Address (page 394)

8.2.14.8.1.1.1. (top portion)

The top portion has a picture and basic information.

Name

x

Position

x

Location / office / room

x



Figure 288. Project team

8.2.14.8.1.1.2. General

The tab **General** displays general information.

8.2.14.8.1.1.3. Personal

The tab **Personal** displays personal information.

8.2.14.8.1.1.4. Organizational

The tab **Organizational** displays organizational information.

8.2.14.8.1.1.5. Governmental

The tab **Governmental** displays governmental information.

8.2.14.8.1.1.6. Address

The tab **Address** displays address information.

8.2.14.8.1.2. Info / Project / Team / (New/)View/(Edit) / Employee profile

The **Project** tab **Team** subdialog **View / Employee profile** has the following subdialogs

Close

x

Show personal card

x

- 8.2.14.8.1.2.1. General (page 394)
- 8.2.14.8.1.2.2. Skills (page 394)
- 8.2.14.8.1.2.3. Certificates (page 395)
- 8.2.14.8.1.2.4. Education (page 395)
- 8.2.14.8.1.2.5. Employment History (page 396)

8.2.14.8.1.2.1. General

The top portion has a picture and basic information.

Employee name

x

Position

x

Address / phone / email

x

Participation

x

Total

x

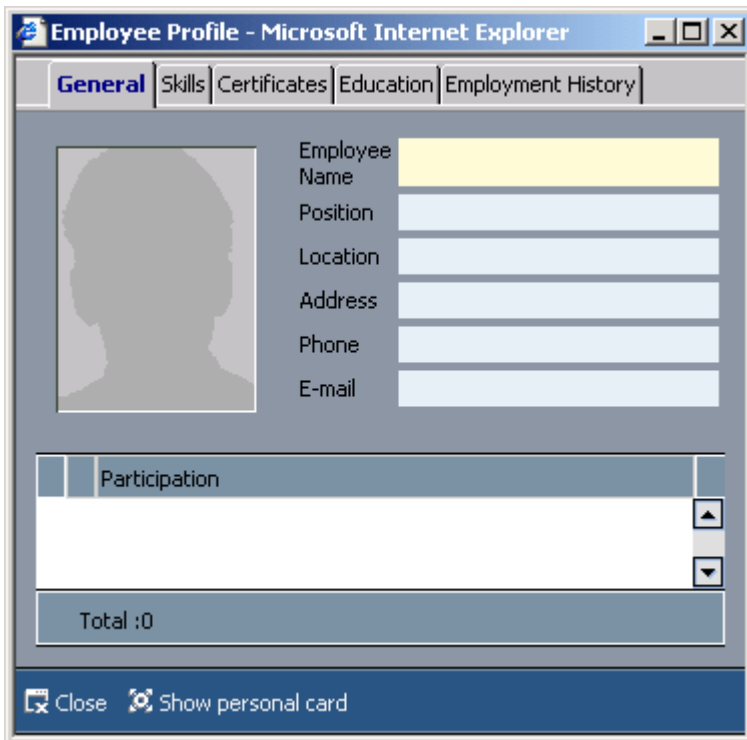


Figure 289. General

8.2.14.8.1.2.2. Skills

The tab **Skills** displays skills information.

Skill name

- x
- Skill level**
- x
- Experience**
- x
- Last used**
- x
- Total**
- x

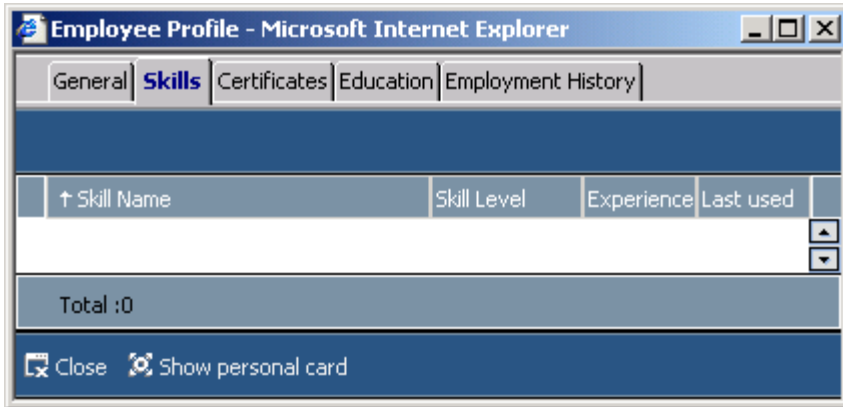


Figure 290. Skills

8.2.14.8.1.2.3. Certificates

The tab **Certificates** displays certificate information.

- Authority name**
- x
- Certificate Name**
- x
- Issue date**
- x
- Expiration date**
- x
- Total**
- x

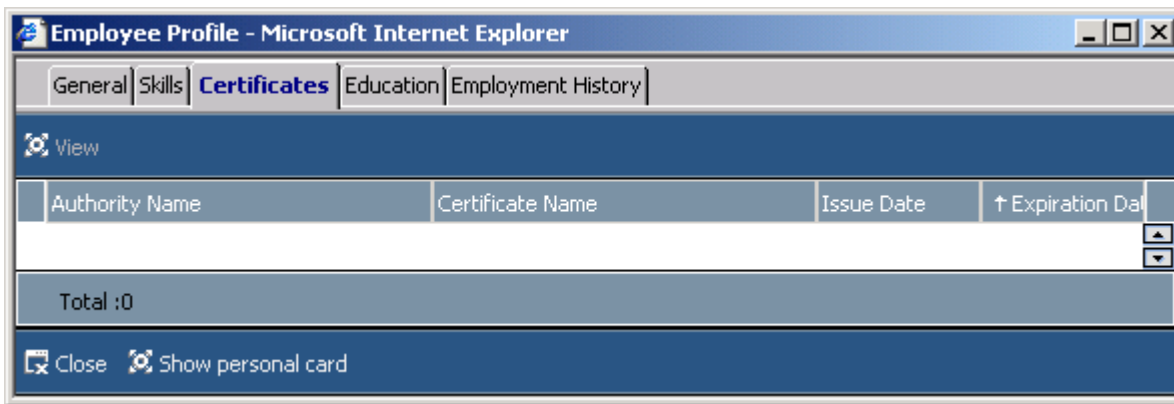


Figure 291. Certificates

8.2.14.8.1.2.4. Education

The tab **Education** displays educational information.

View

x

Diploma type

x

Diploma degree

x

Start date

x

Completion date

x

Qualification

x

Disciplines

x

Subject

x

Total

x

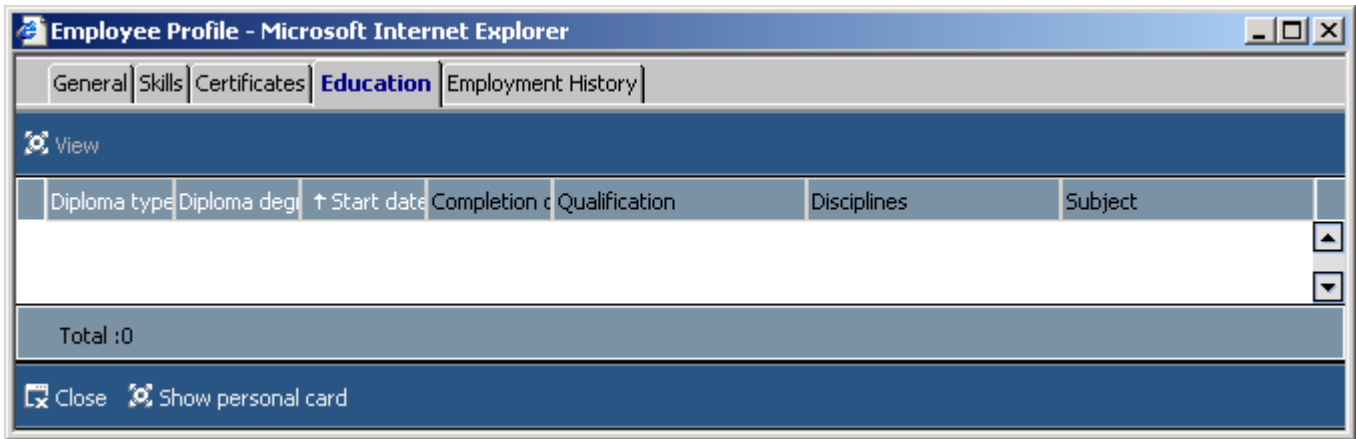


Figure 292. Education

8.2.14.8.1.2.5. Employment History

The tab **Employment history** displays employment history information.

Set used skills

x

Start date

x

End date

x

Organization

x

Project

x

Function

x

Used skills

x

Total

x

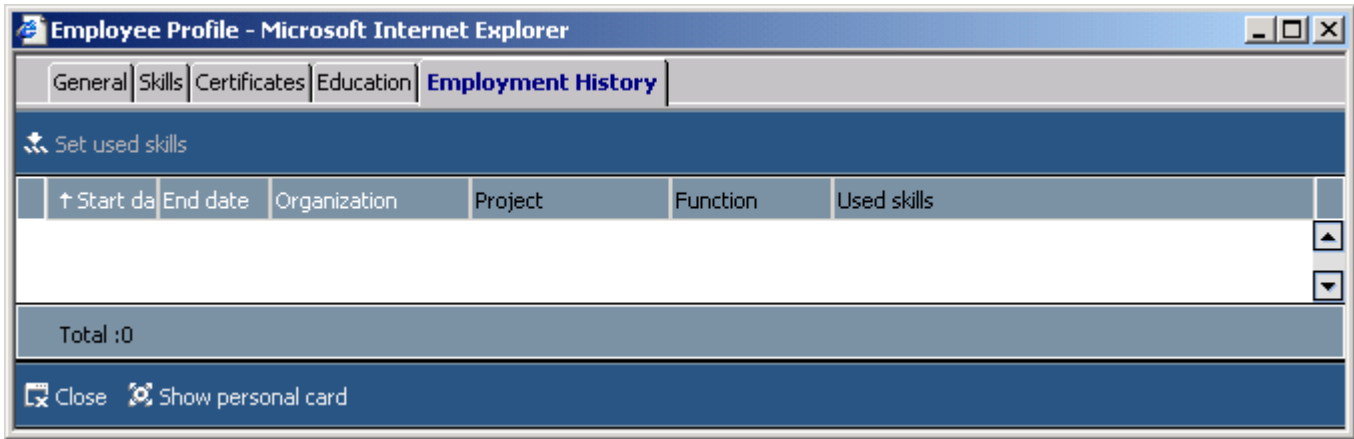


Figure 293. Employment history

8.2.14.9. Info / Project / Charts

[144:PmcClientProjectCharts.html](#)

The **Project** tab **Charts** displays project charts.

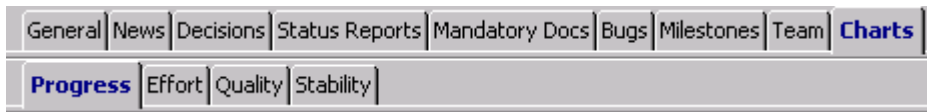


Figure 294. Project charts tabs

The following types of charts are available

- [8.2.14.9.1. Info / Project / Charts / Progress \(page 399\)](#)
- [8.2.14.9.2. Info / Project / Charts / Effort \(page 407\)](#)
- [8.2.14.9.3. Info / Project / Charts / Quality \(page 409\)](#)
- [8.2.14.9.4. Info / Project / Charts / Stability \(page 422\)](#)

8.2.14.9.1. Info / Project / Charts / Progress

[145: PmcClientProjectChartsProgress.html](#)

The **Project** tab **Charts** subtab **Progress** displays project progress charts.



Figure 295. Project charts progress tabs

The following types of charts are available

- [8.2.14.9.1.1. info / Project / Charts / Progress / Tasks \(page 400\)](#)
- [8.2.14.9.1.2. Info / Project / Charts / Progress / Bugs \(page 402\)](#)
- [8.2.14.9.1.3. Info / Project / Charts / Progress / Bugfixing \(page 404\)](#)
- [8.2.14.9.1.4. Info / Project / Charts / Progress / Requirements \(page 406\)](#)

8.2.14.9.1.1. info / Project / Charts / Progress / Tasks

[146:PmcClientProjectChartsProgressTasks.html](#)

The **Project** tab **Charts** subtab **Progress** subtab **Tasks** displays project task progress charts.

Header

x

by subtype

x

by category

x

Graph

x

x: week

x

y1: %%

x

y2: count

x

actual vs. planned

x

actual

x

planned

x

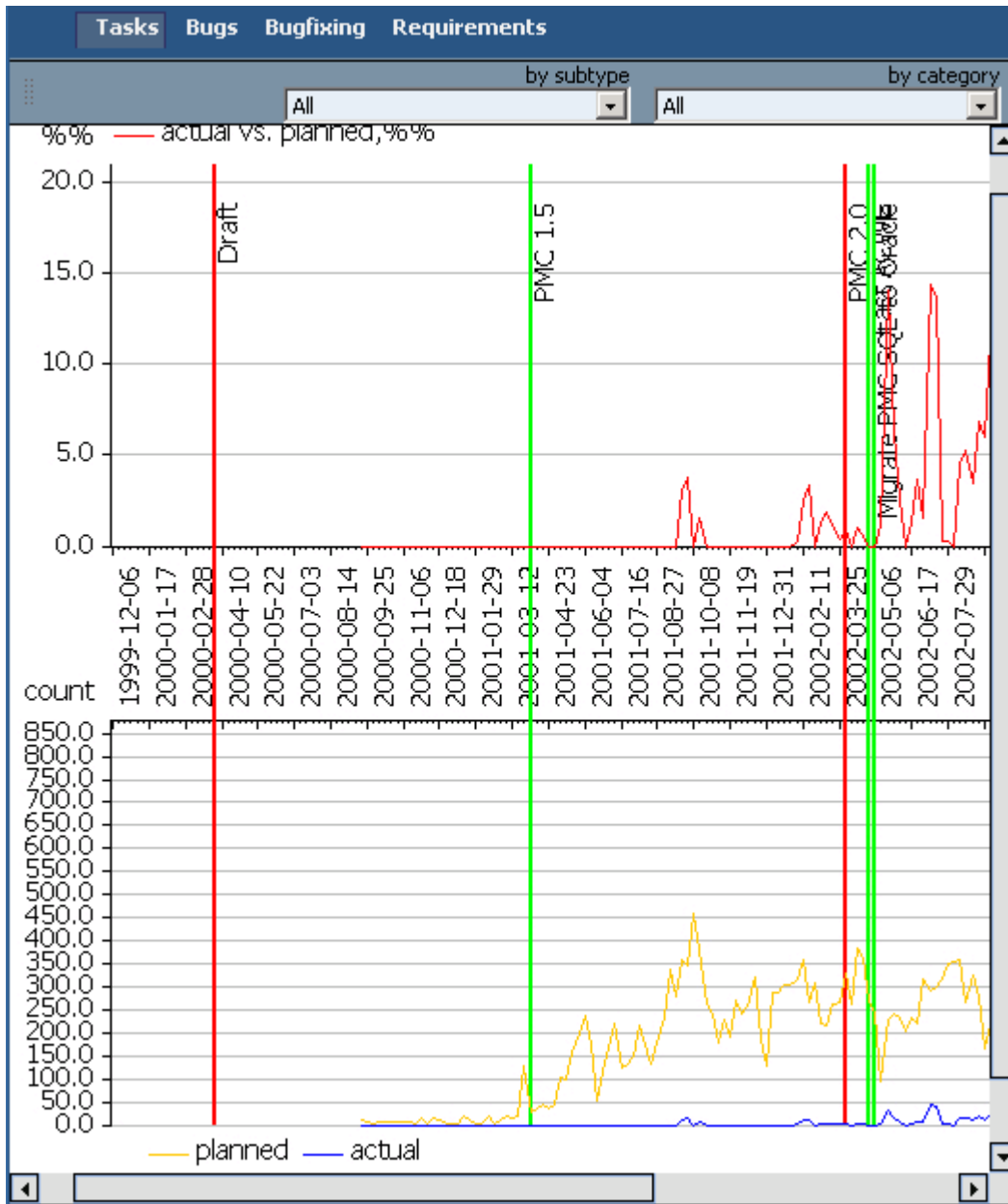


Figure 296. Project charts progress tasks

8.2.14.9.1.2. Info / Project / Charts / Progress / Bugs

[147:PmcClientProjectChartsProgressBugs.html](#)

The **Project** tab **Charts** subtab **Progress** subtab **Bugs** displays project bug progress charts.

Header

x

by application

x

active only

x

Graph

x

x: week

x

y1: %%

x

y2: count

x

rate

x

planned

x

verified

x



Figure 297. Project charts progress bugs

8.2.14.9.1.3. Info / Project / Charts / Progress / Bugfixing

[148:PmcClientProjectChartsProgressBugfixing.html](#)

The **Project** tab **Charts** subtab **Progress** subtab **Bugfixing** displays project bug fixing progress charts.

Header

x

by application

x

active only

x

Graph

x

x: week

x

y: count

x

total

x

total_closed

x

closed

x

new

x

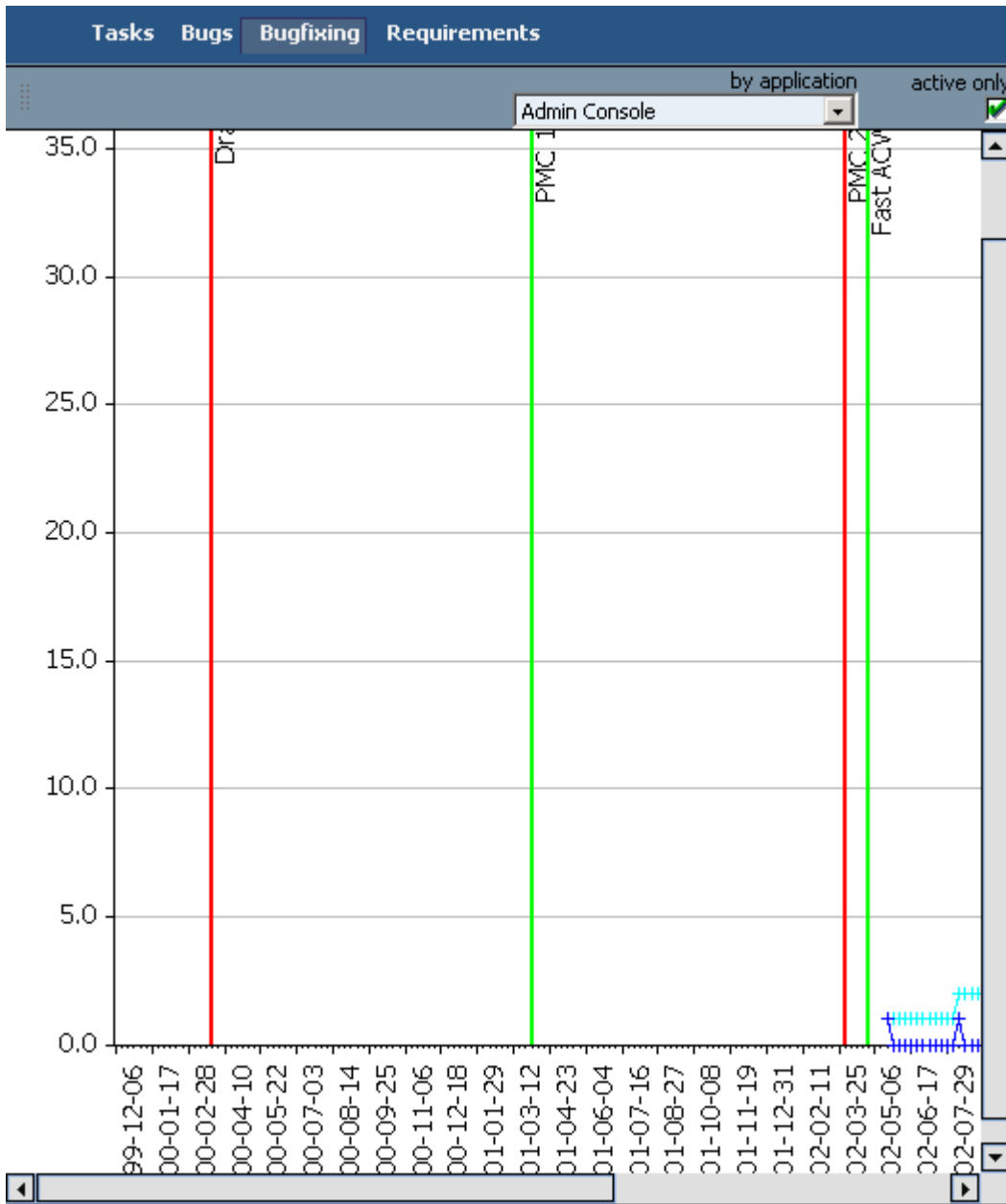


Figure 298. Project charts progress bugfixing

8.2.14.9.1.4. Info / Project / Charts / Progress / Requirements

149:PmcClientProjectChartsProgressRequirements.html

The Project tab Charts subtab Progress subtab Requirements displays project requirements progress charts.

Graph

x

x: week

x

y: hours

x

analyze time

x

fulfill time

x

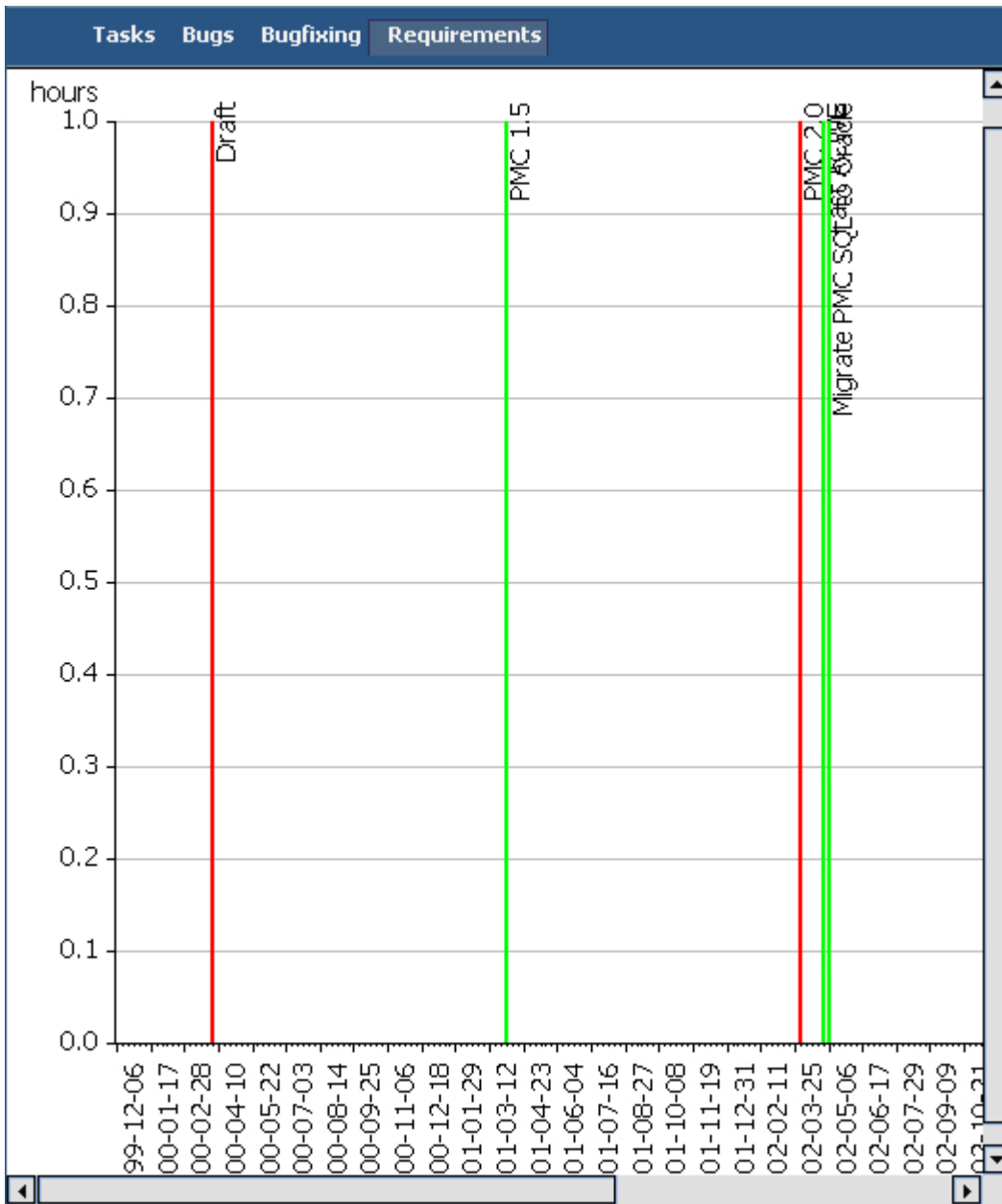


Figure 299. Project charts progress requirements

8.2.14.9.2. Info / Project / Charts / Effort

[150:PmcClientProjectChartsEffort.html](#)

The **Project** tab **Charts** subtab **Effort** displays project effort charts.

Header

x

(drop down list)

x

Graph

x

x: week

x

y1: %%

x

y2: hours

x

overtime

x

planned

x

actual

x

staff level

x



Figure 300. Project charts effort

8.2.14.9.3. Info / Project / Charts / Quality

[151: PmcClientProjectChartsQuality.html](#)

The **Project** tab **Charts** subtab **Quality** displays project quality charts.

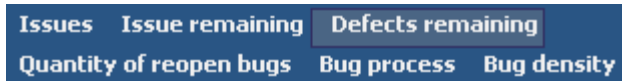


Figure 301. Project charts quality tabs

The following types of charts are available

- 8.2.14.9.3.1. Info / Project / Charts / Quality / Issues (page 410)
- 8.2.14.9.3.2. Info / Project / Charts / Quality / Issue remaining (page 412)
- 8.2.14.9.3.3. Info / Project / Charts / Quality / Defects remaining (page 414)
- 8.2.14.9.3.4. Info / Project / Charts / Quality / Quantity of reopen bugs (page 416)
- 8.2.14.9.3.5. Info / Project / Charts / Quality / Bug process (page 418)
- 8.2.14.9.3.6. Info / Project / Charts / Quality / Bug density (page 420)

8.2.14.9.3.1. Info / Project / Charts / Quality / Issues

[152:PmcClientProjectChartsQualityIssues.html](#)

The **Project** tab **Charts** subtab **Quality** subtab **Issues** displays project quality issue charts.

Header

x

by subtype

x

by application

x

active only

x

Graph

x

x: week

x

y1: %%

x

y2: count

x

rate

x

total

x

reopen

x

closed

x

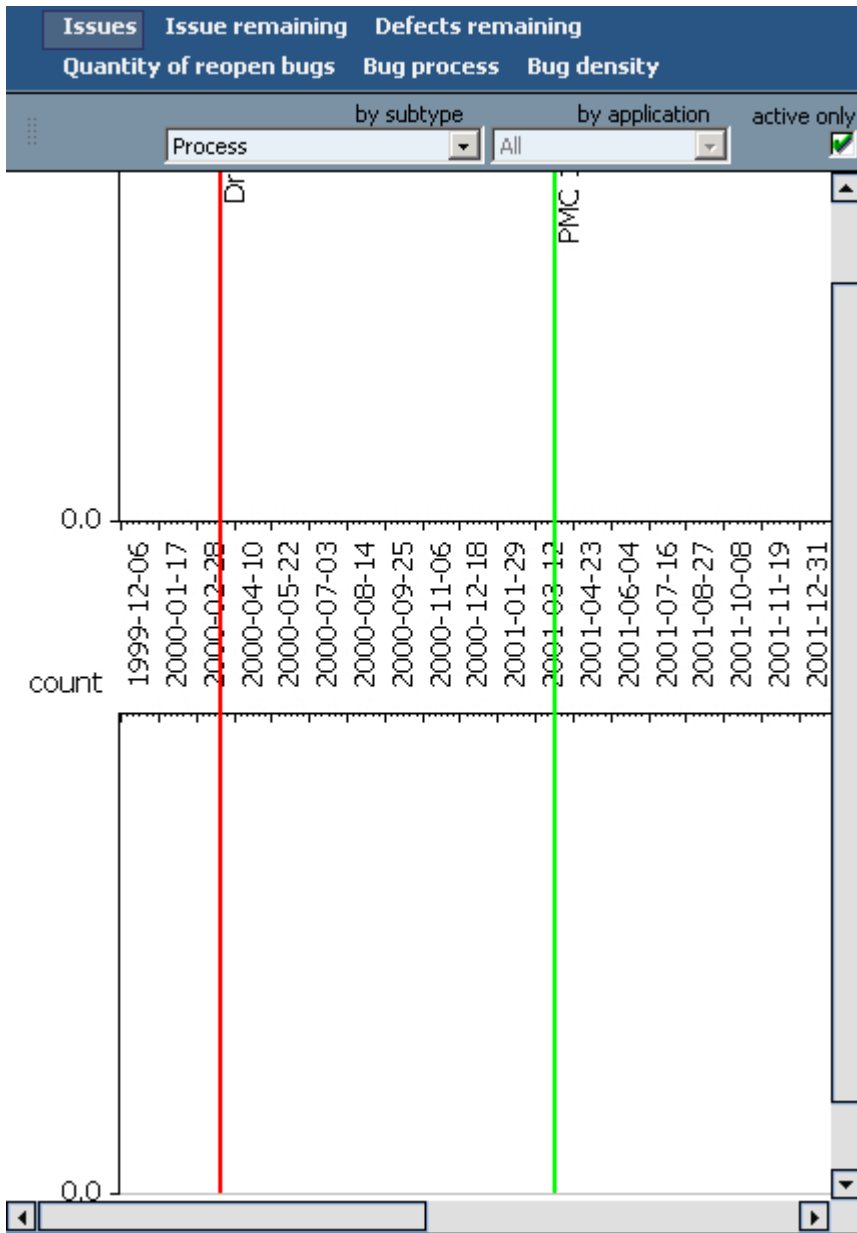


Figure 302. Project charts quality issues

8.2.14.9.3.2. Info / Project / Charts / Quality / Issue remaining

[153:PmcClientProjectChartsQualityIssueRemaining.html](#)

The **Project** tab **Charts** subtab **Quality** subtab **Issues remainig** displays project quality remaining issue charts.

Header

x

by subtype

x

by application

x

active only

x

Graph

x

x: week

x

y1: count

x

y2: count

x

trend high/medium/low

x

high/medium/low

x

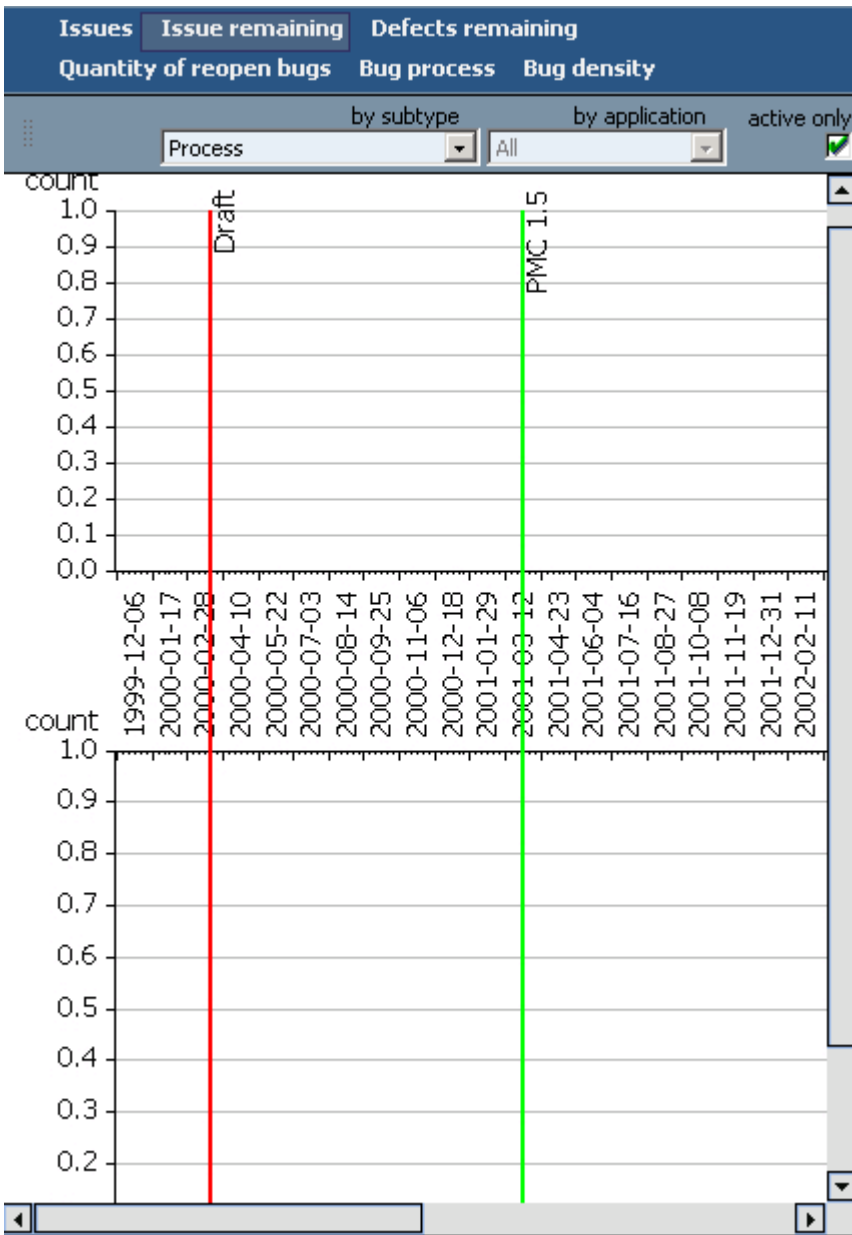


Figure 303. Project charts quality issue remaining

8.2.14.9.3.3. Info / Project / Charts / Quality / Defects remaining

[154:PmcClientProjectChartsQualityDefectsRemaining.html](#)

The **Project** tab **Charts** subtab **Quality** subtab **Defects remaining** displays project quality remaining defects charts.

Header

x

by application

x

active only

x

Graph

x

x: week

x

y1: %% ??

x

y2: count

x

trend critical/major/medium/minor

x

major/medium/minor

x

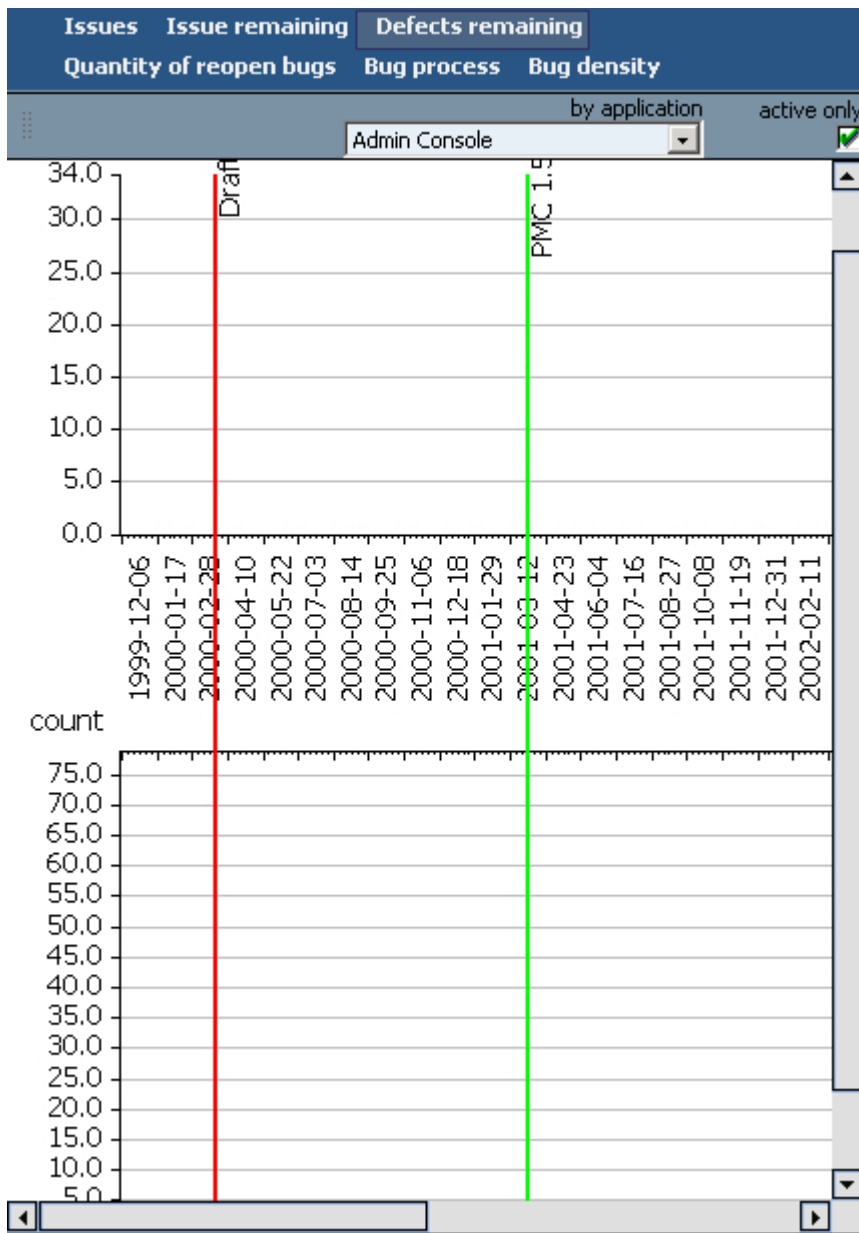


Figure 304. Project charts quality defects remaining

8.2.14.9.3.4. Info / Project / Charts / Quality / Quantity of reopen bugs

[155:PmcClientProjectChartsQualityQuantityOfReopenBugs.html](#)

The **Project** tab **Charts** subtab **Quality** subtab **Quantity of reopen bugs** displays project quality reopened bug quantity charts.

Header

x

by application

x

active only

x

Graph

x

x: week

x

y1: %%

x

y2: count

x

rate

x

reopen count

x

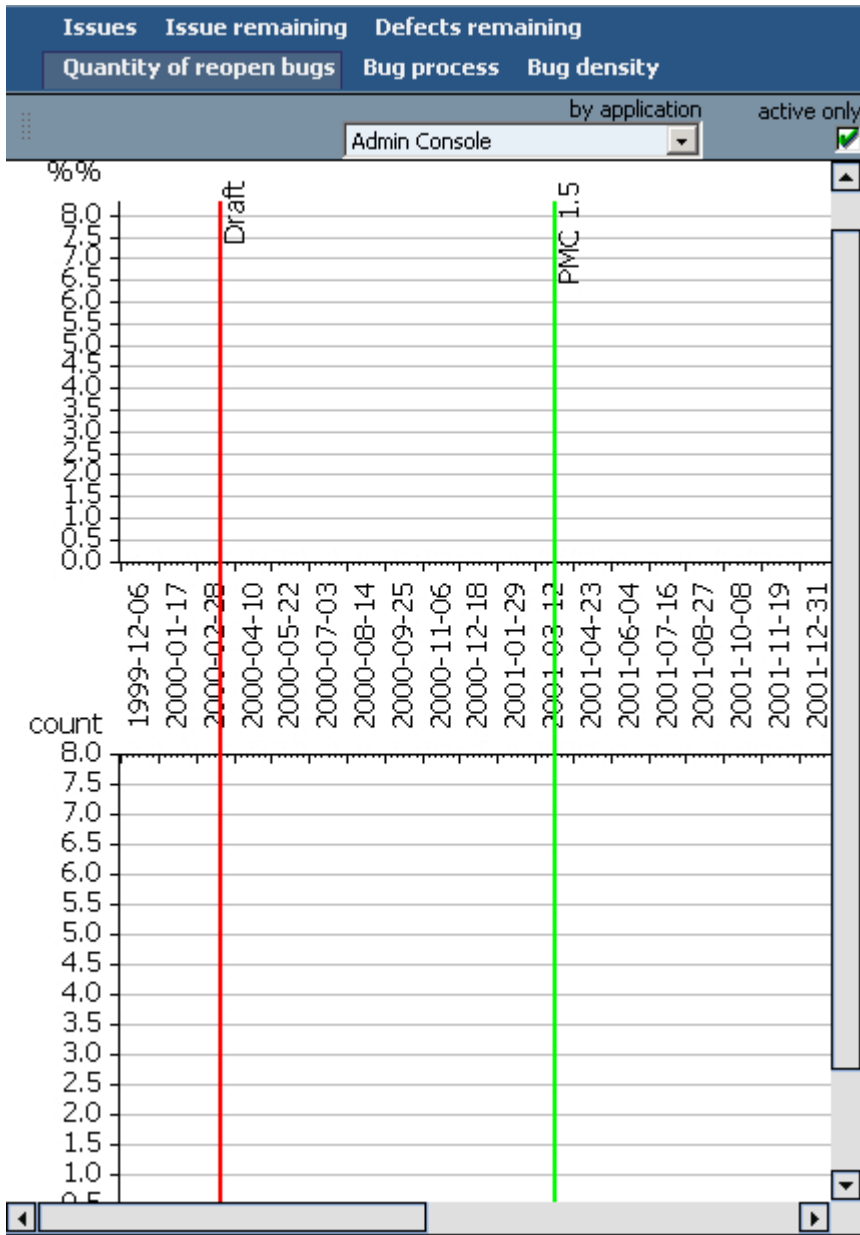


Figure 305. Project charts quality quantity of reopen bugs

8.2.14.9.3.5. Info / Project / Charts / Quality / Bug process

[156:PmcClientProjectChartsQualityBugProcess.html](#)

The **Project** tab **Charts** subtab **Quality** subtab **Bug process** displays project quality bug process charts.

Header

x

by application

x

active only

x

Graph

x

x: week

x

y: %%

x

F/(T-D)

x

V/(T-D)

x

D/T

x

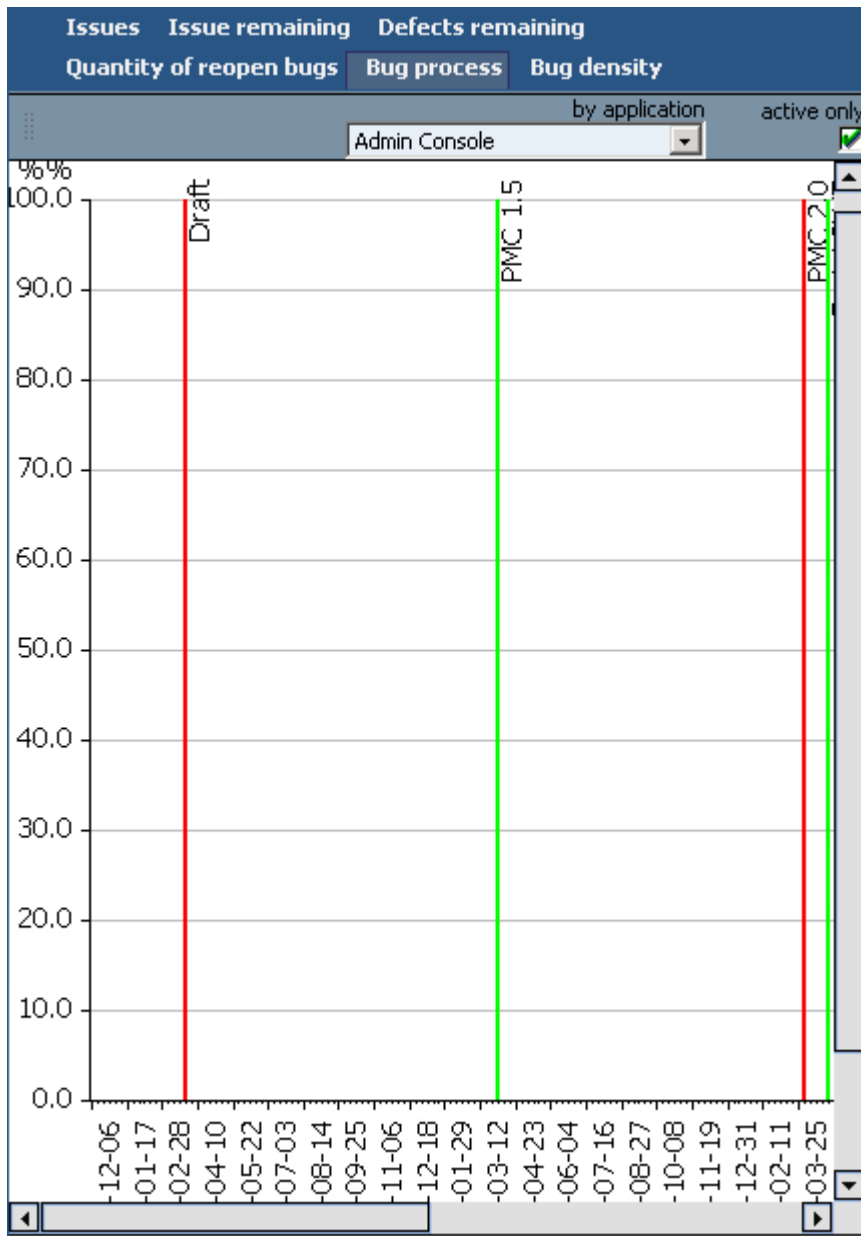


Figure 306. Project charts quality bug process

8.2.14.9.3.6. Info / Project / Charts / Quality / Bug density

[157: PmcClientProjectChartsQualityBugDensity.html](#)

The **Project** tab **Charts** subtab **Quality** subtab **Bug density** displays project quality bug density charts.

Header

x

by application

x

active only

x

Graph

x

x: week

x

y: 1/1000LoC

x

bud density

x

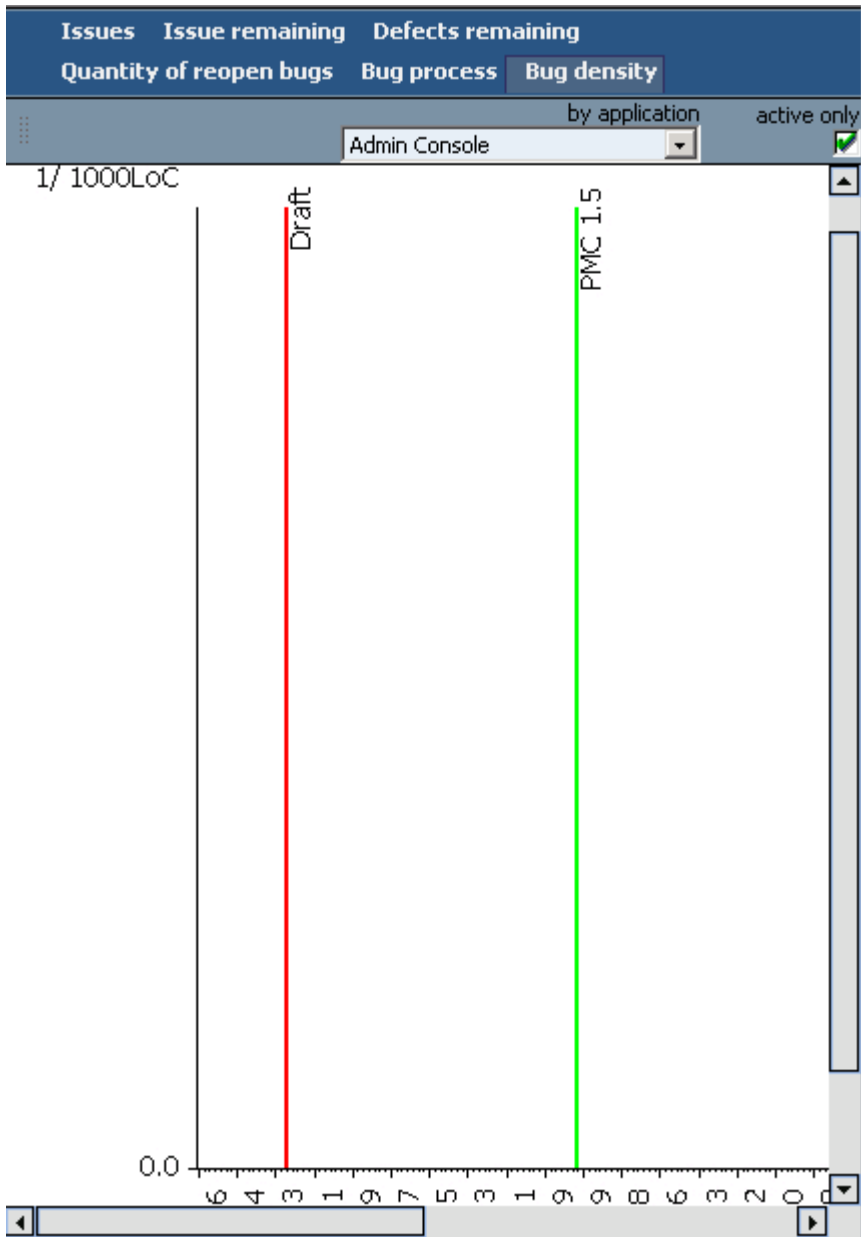


Figure 307. Project charts quality bug density

8.2.14.9.4. Info / Project / Charts / Stability

[158:PmcClientProjectChartsStability.html](#)

The **Project** tab **Charts** subtab **Stability** displays project stability charts.



Figure 308. Project charts stability tabs

The following types of charts are available

- [8.2.14.9.4.1. Info / Project / Charts / Stability / Requirements \(page 423\)](#)
- [8.2.14.9.4.2. Info / Project / Charts / Stability / Requirement flow \(page 425\)](#)
- [8.2.14.9.4.3. Info / Project / Charts / Stability / Code \(page 427\)](#)

8.2.14.9.4.1. Info / Project / Charts / Stability / Requirements

[159:PmcClientProjectChartsStabilityRequirements.html](#)

The **Project** tab **Charts** subtab **Stability** subtab **Requirements** displays project requirements stability charts.

Header

x

by category

x

by source

x

by state

x

Graph

x

x: week

x

y: count

x

total

x

clarified

x

changed

x

changed trend

x

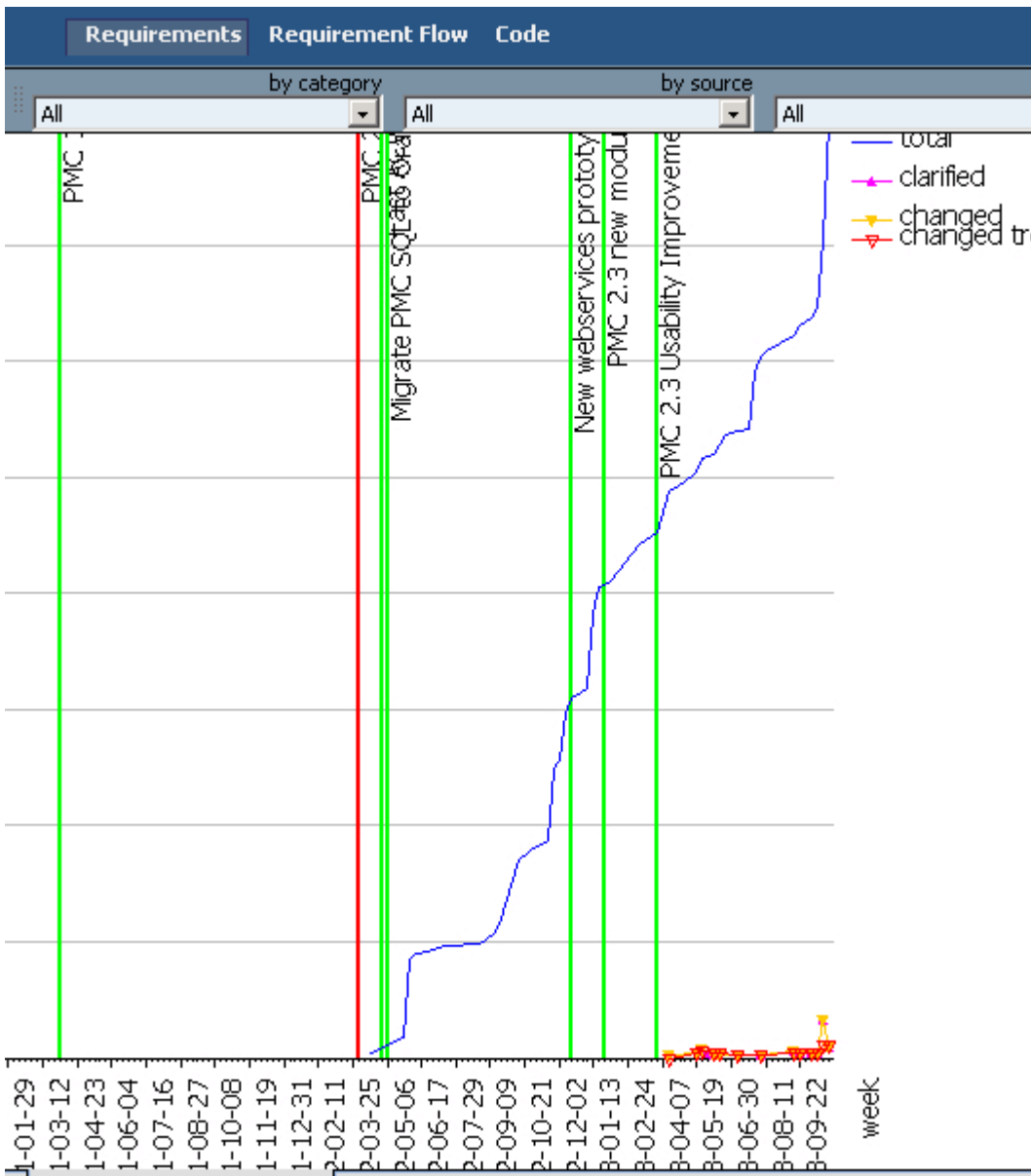


Figure 309. Project charts stability requirements

8.2.14.9.4.2. Info / Project / Charts / Stability / Requirement flow

[160:PmcClientProjectChartsStabilityRequirementFlow.html](#)

The **Project** tab **Charts** subtab **Stability** subtab **Requirement flow** displays project requirement flow stability charts.

Graph

x

x: week

x

y: count

x

new

x

analyzed

x

incorporated

x

declined

x

open

x

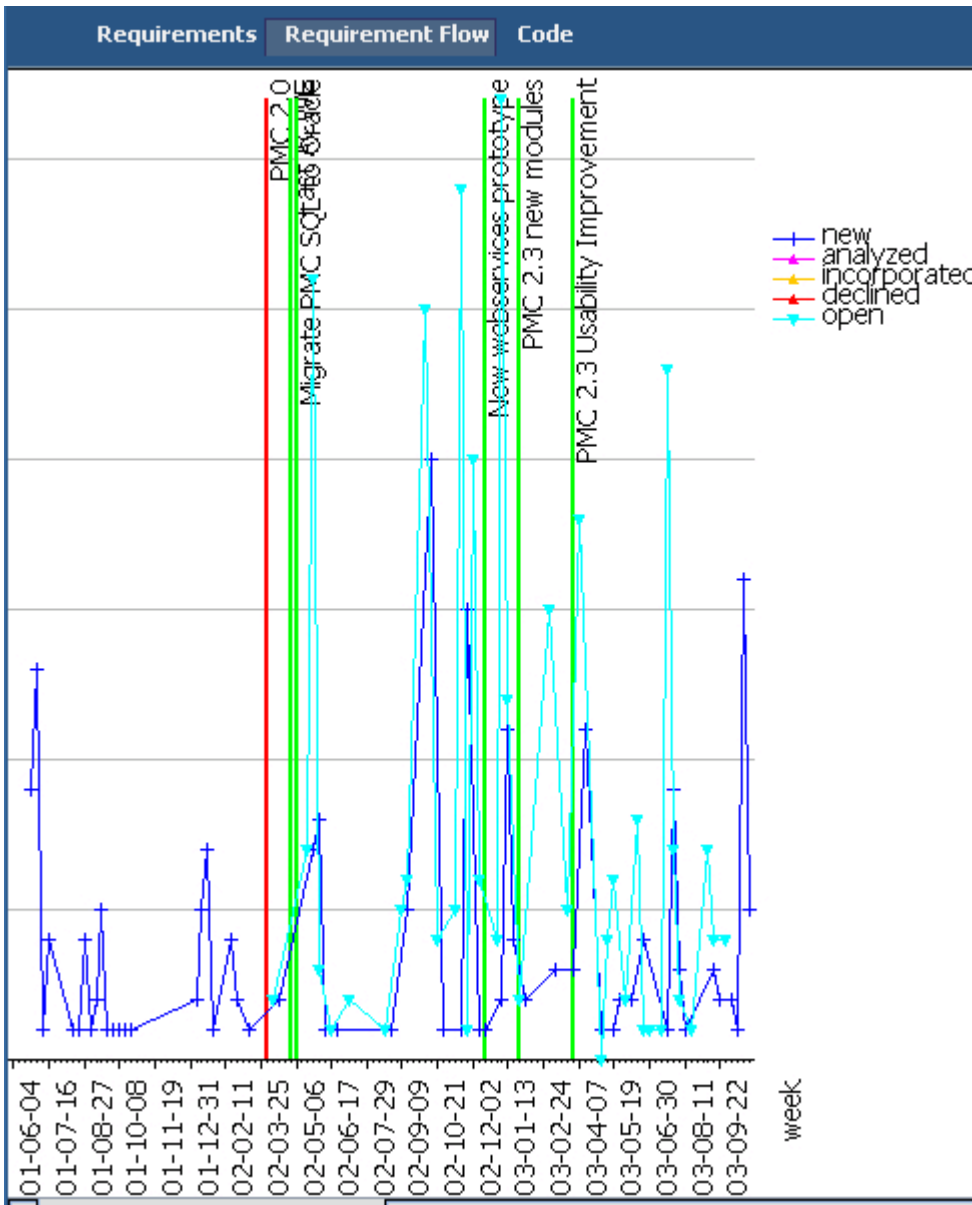


Figure 310. Project charts stability requirement flow

8.2.14.9.4.3. Info / Project / Charts / Stability / Code

161:PMCClientProjectChartsStabilityCode.html

The **Project** tab **Charts** subtab **Stability** subtab **Code** displays project code stability charts.

Header

x
by application

x
active only

Graph

x
x: week

x
y: %%



Figure 311. Project charts stability code

8.2.14.10. Info / Project / Customize

`162:PmcClientProjectCustomize.html`

The **Project** tab **Customize** displays customization information.

to home

click to return.

The following types of subtabs are available

- [8.2.14.10.1. Info / Project / Customize / Workload profile \(page 430\)](#)
- [8.2.14.10.2. Info / Project / Customize / Thresholds \(page 432\)](#)
- [8.2.14.10.3. Info / Project / Customize / Skills \(page 433\)](#)
- [8.2.14.10.4. Info / Project / Customize / Tabs \(page 434\)](#)
- [8.2.14.10.5. Info / Project / Customize / Bug status \(page 435\)](#)



Figure 312. Info / Project / Customize tabs

8.2.14.10.1. Info / Project / Customize / Workload profile

163:PmcClientProjectCustomizeWorkloadProfile.html

The **Project** tab **Customize** subtab **Workload profile** displays workload profile customization information.

Toolbar

x

Add

x

8.2.14.10.1.1. Info / Project / Customize / Workload profile / New(Add)/View/Edit (page 431)

View

x

8.2.14.10.1.1. Info / Project / Customize / Workload profile / New(Add)/View/Edit (page 431)

Edit

x

8.2.14.10.1.1. Info / Project / Customize / Workload profile / New(Add)/View/Edit (page 431)

Delete

x

Profile list area

x

Start date

x

End date

x

Total

x

Workload profile		Thresholds	Skills	Tabs	Bug status	to home
+ Add View Edit Delete						
Start date	End date					
11/5/03	11/5/04					
Total :1						

Figure 313. Workload profile

8.2.14.10.1.1. Info / Project / Customize / Workload profile / New(Add)/View/Edit

164:PmcClientProjectCustomizeWorkloadProfileNewViewEdit.html

The **Project** tab **Customize** subtab **Workload profile** has the following subdialogs

- **Add**. Creates a workload profile.
- **View**. Displays a workload profile.
- **Edit**. Modifies a workload profile.

Toolbar

X

Save New (new)

X

Cancel insert (new)

X

Close (view)

X

Edit (view)

X

Save (edit)

X

Cancel (edit)

X

Toolbar

X

Start/End date

X

(role)

X

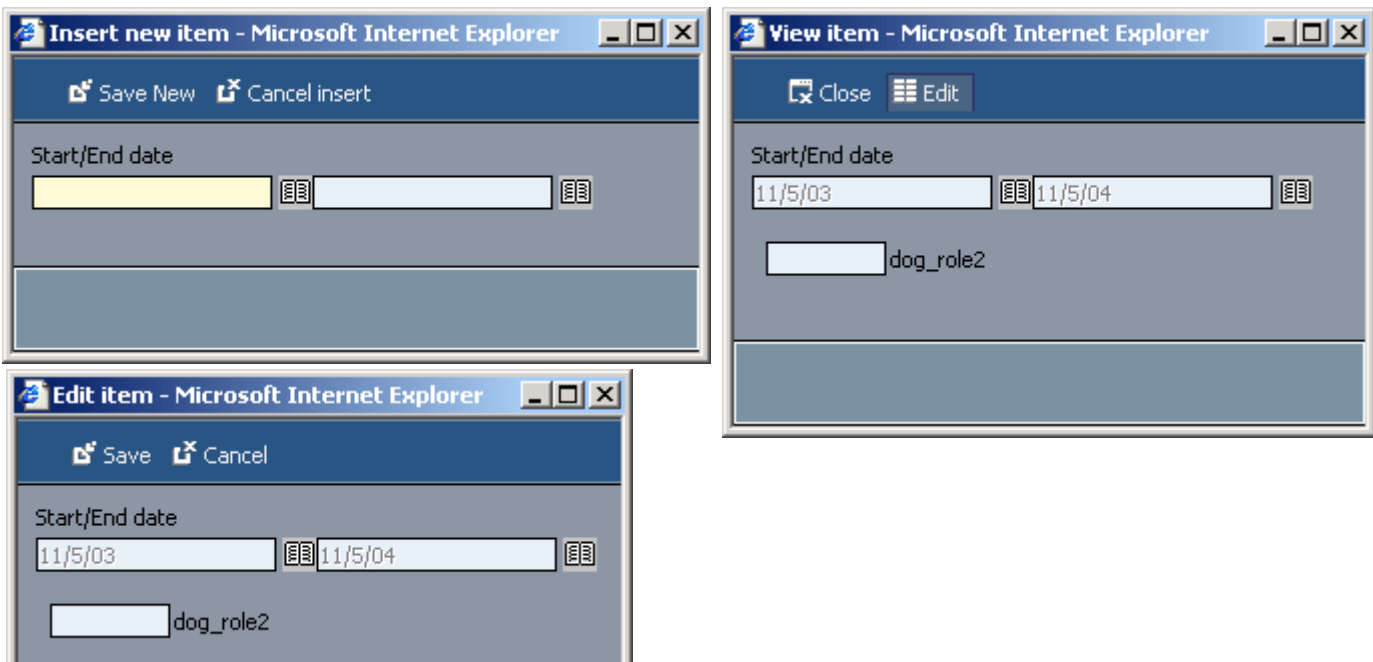


Figure 314. Add/view/edit workload profile

8.2.14.10.2. Info / Project / Customize / Thresholds

[165:PmcClientProjectCustomizeThresholds.html](#)

The **Project** tab **Customize** subtab **Thresholds** displays threshold customization information.

task actual vs. planned, %%

x

bug verified vs. planned, %%

x

effort actual vs. planned, %%

x

issue open vs. total, %%

x

bug density, 1/1000LoC

x

Workload profile	Thresholds	Skills	Tabs	Bug status
------------------	-------------------	--------	------	------------

task actual vs. planned, %%	<input type="text" value="0"/>	<input type="text" value="0"/>
bug verified vs. planned, %%	<input type="text" value="0"/>	<input type="text" value="0"/>
effort actual vs. planned, %%	<input type="text" value="0"/>	<input type="text" value="0"/>
issue open vs. total, %%	<input type="text" value="0"/>	<input type="text" value="0"/>
bug density, 1/1000LoC	<input type="text" value="0"/>	<input type="text" value="0"/>

Figure 315. Thresholds

8.2.14.10.3. Info / Project / Customize / Skills

166:PMCClientProjectCustomizeSkills.html

The **Project** tab **Customize** subtab **Skills** displays skills customization information.

(skills list)

x

(checkbox)

x

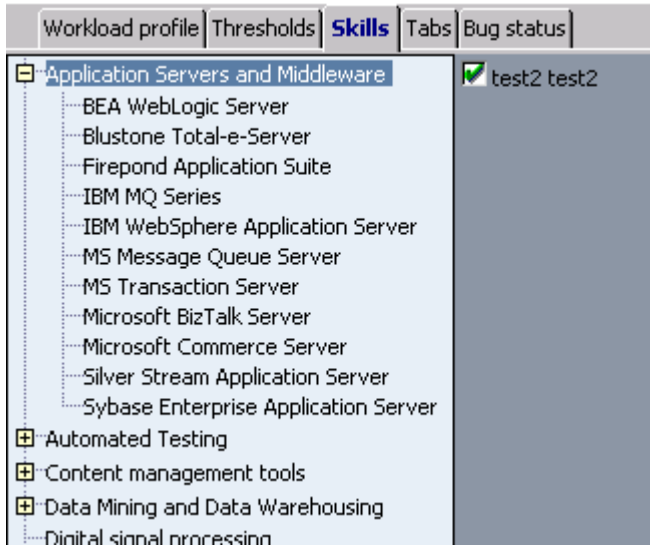


Figure 316. Skills

8.2.14.10.4. Info / Project / Customize / Tabs

167:PmcClientProjectCustomizeTabs.html

The **Project** tab **Customize** sub **Tabs** displays tabs customization information.

(checkboxes)

x

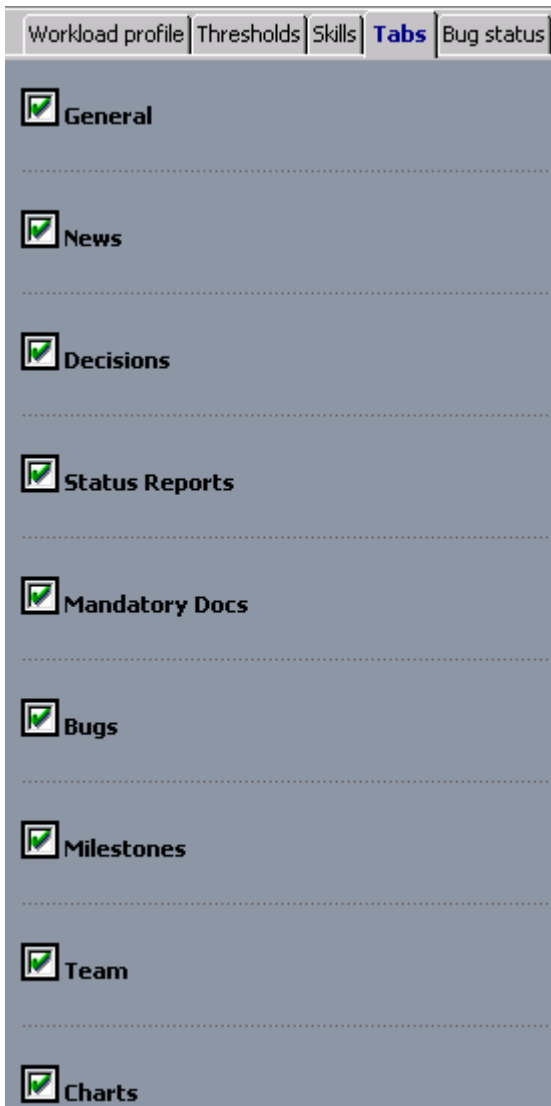


Figure 317. Tabs

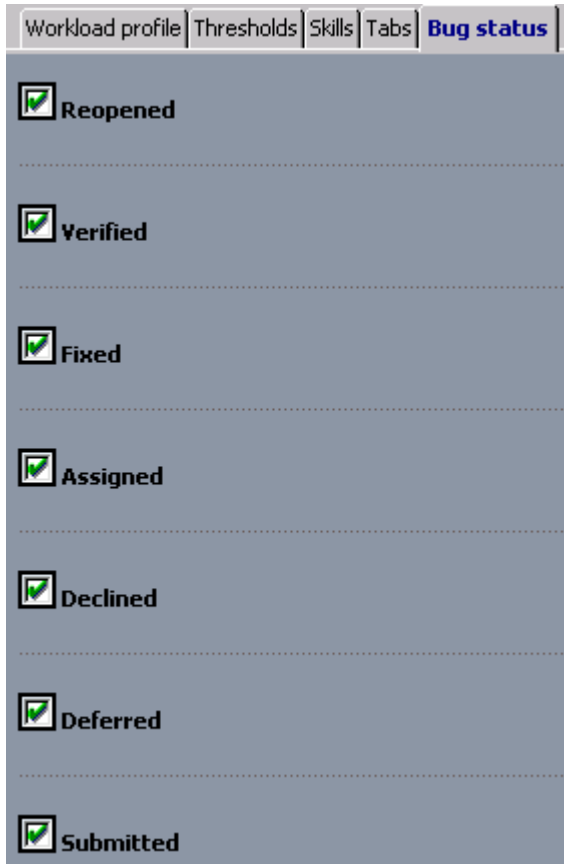
8.2.14.10.5. Info / Project / Customize / Bug status

168:PmcClientProjectCustomizeBugStatus.html

The **Project** tab **Customize** sub **Bug status** displays bug status customization information.

(checkboxes)

x



The screenshot shows a tabbed interface with the following tabs: Workload profile, Thresholds, Skills, Tabs, and Bug status. The Bug status tab is active and displays a list of seven bug status categories, each with a checked checkbox:

- Reopened
- Verified
- Fixed
- Assigned
- Declined
- Deferred
- Submitted

Figure 318. Bug status

8.2.15. Manage / Folders

169:PmcClientManageFolders.html

The dialog **Folders** displays the project folders.

Toolbar

xxx

Add

[8.2.15.1. Manage / Folders / New\(Add\)/View/Edit \(page 438\)](#)

View

xxx

Edit

xxx

Delete

xxx

Step in

xxx

Document folders (drop-down list)

xxx

Show / hide tree ...

xxx

Folder list

xxx

Folder

xxx

Subfolders

xxx

Items

xxx

Footer

xxx

[This portion messages: ###] [Page: #] [Portion: #]

xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx

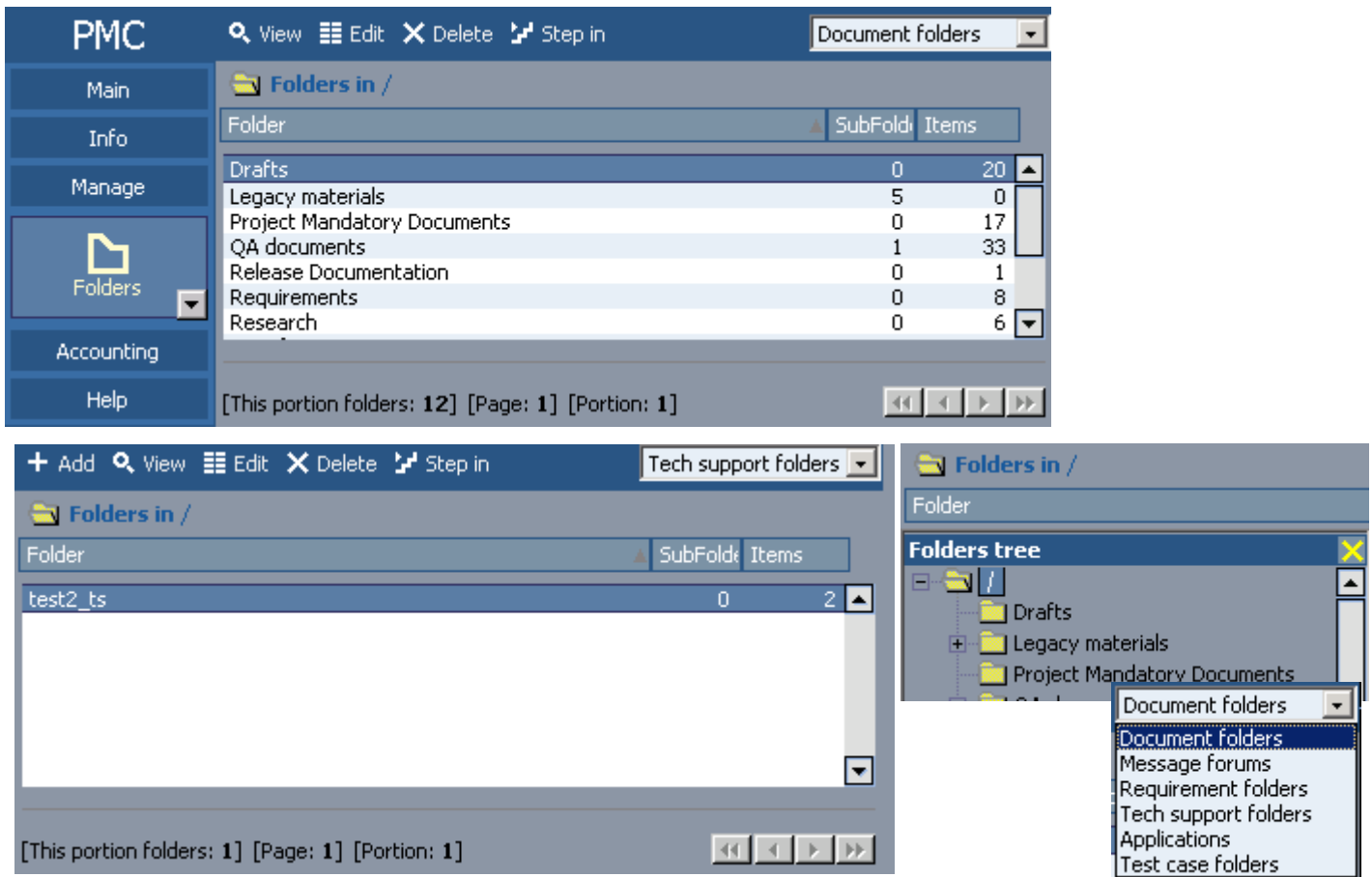


Figure 319. Folders

8.2.15.1. Manage / Folders / New(Add)/View/Edit

170:PmcClientFolderNewViewEdit.html

The dialog **Folders** has the following subdialogs

- **Add.** Creates a folder.
- **View.** Displays a folder.
- **Edit.** Modifies a folder.

Toolbar

xxx

Save (new,edit)

save

Edit (view)

x

Delete (view)

x

Cancel (edit)

x

Close

xxx

History (view)

xxx

Folder area

xxx

Add bookmark

xxx

Name

xxx

Folder

xxx

Created

xxx

Changed

xxx

Right column

xxx

[8.2.22. Right frame \(page 471\)](#)

[8.2.15.2. Manage / Folders / View / Subscribe / Advanced \(page 440\)](#)

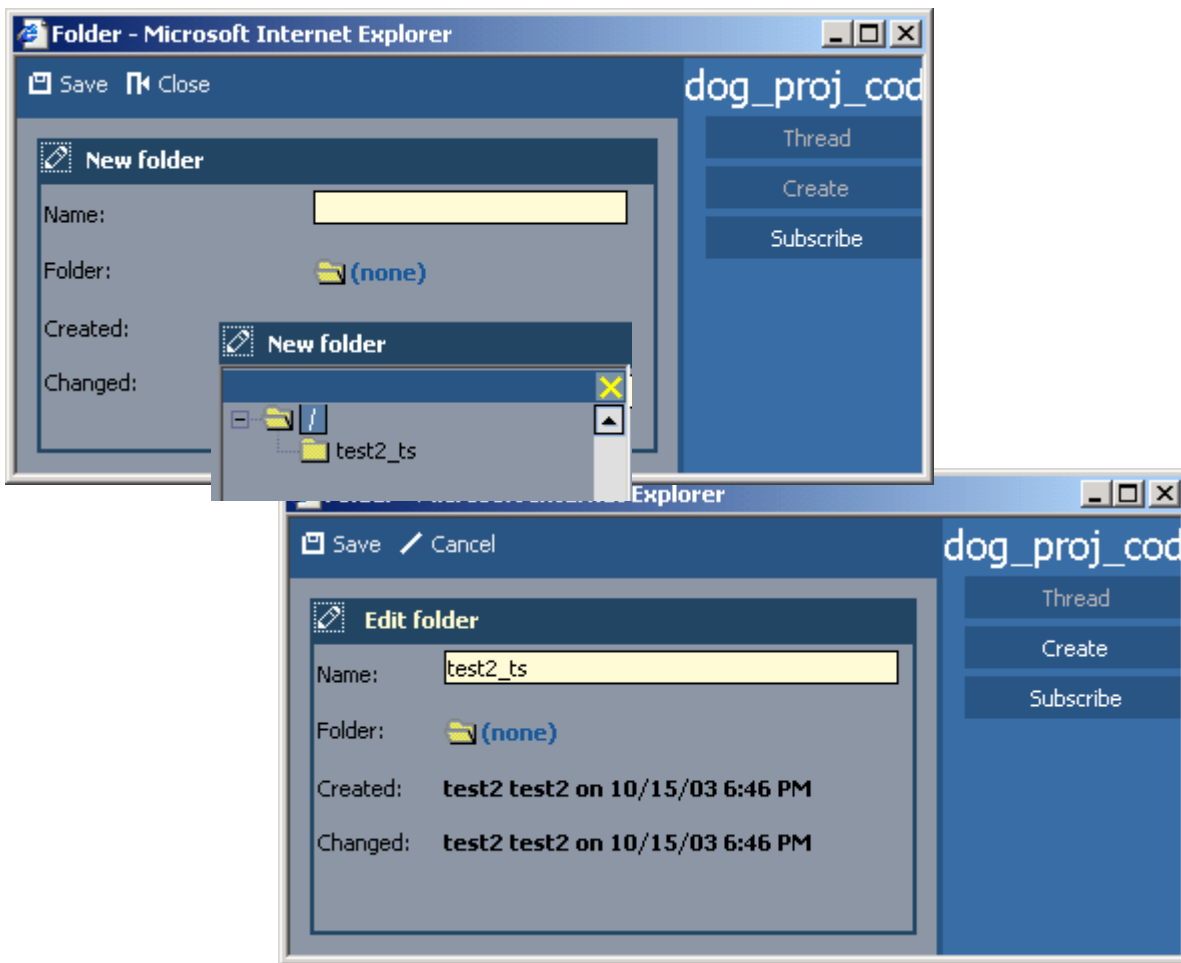


Figure 320. Submit/view/edit folder

8.2.15.2. Manage / Folders / View / Subscribe / Advanced

171:PmcClientFolderViewSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a folder.

??

XXX

Select / clear all

XXX

OK / Cancel / Apply

XXX

Subscribe me / others

XXX

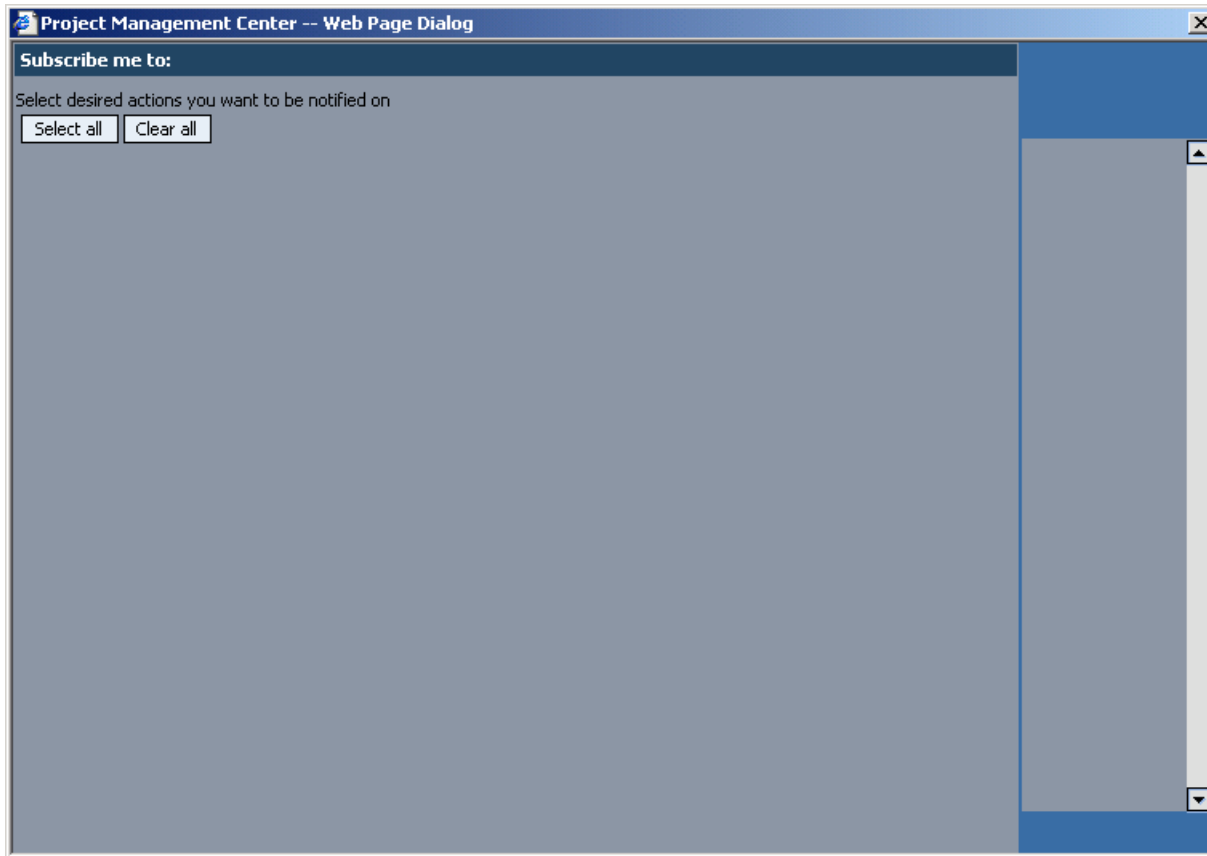


Figure 321. Subscribe folder

8.2.16. Manage / My subscriptions

[172:PmcClientManageMySubscriptions.html](#)

The dialog **My subscriptions** displays your subscriptions.

Toolbar

xxx

Add subscription

xx

[8.2.16.1. Manage / My subscriptions / Add \(object\) \(page 443\)](#)

[8.2.16.2. Manage / My subscriptions / Add \(item\) \(page 444\)](#)

Edit

xxx

Delete

xxx

Subscriptions

xxx

Subscription tree

xxx

View: All actions

xxx

View: Checked only

xxx

View: Changed only

xxx

Apply

xxx

Set on all items

xxx

Cancel

xxx

Search bar

xxx

(text field)

xxx

Find

xxx

Clear

xxx

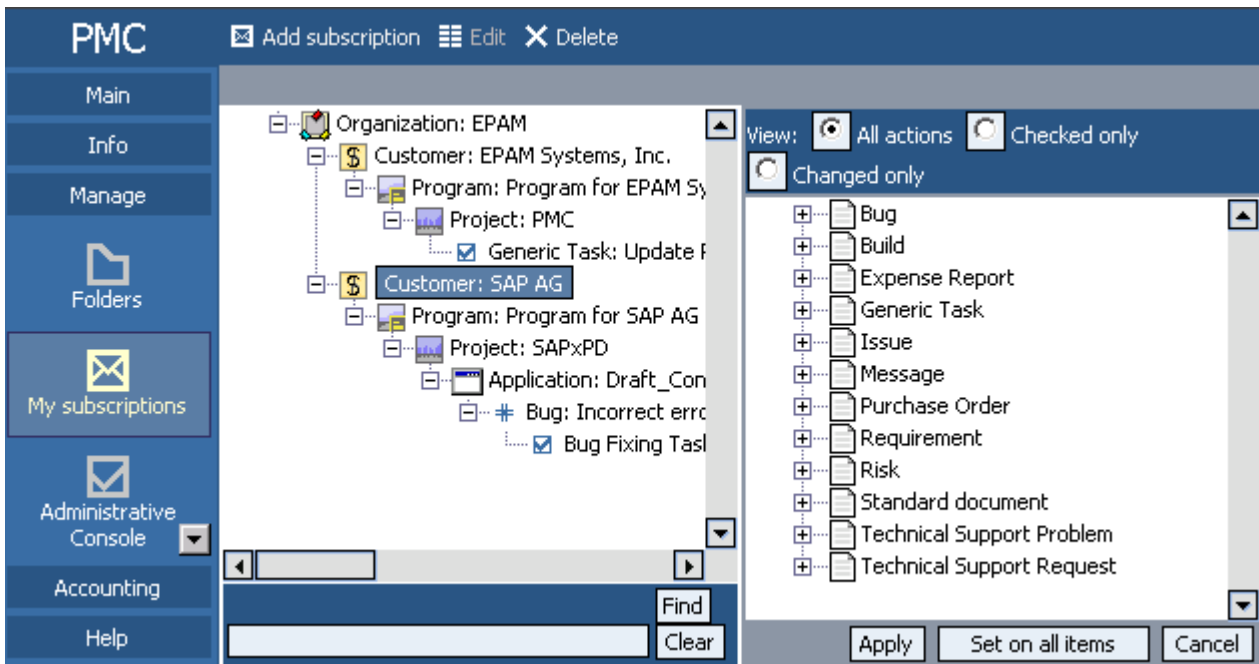


Figure 322. My subscriptions

8.2.16.1. Manage / My subscriptions / Add (object)

173:PmcClientManageMySubscriptionsNewObject.html

The dialog **My subscriptions** has the following subdialogs

- **Add object.** Creates a new subscription object.

Navigate on

xxx

Select objects to set notifications on

xxx

(text field) / Find

xxx

Select desired notifications

xxx

Object subscription

xxx

OK

xxx

Cancel

xxx

Apply

xxx

Object subscription

xxx

Item subscription

xxx

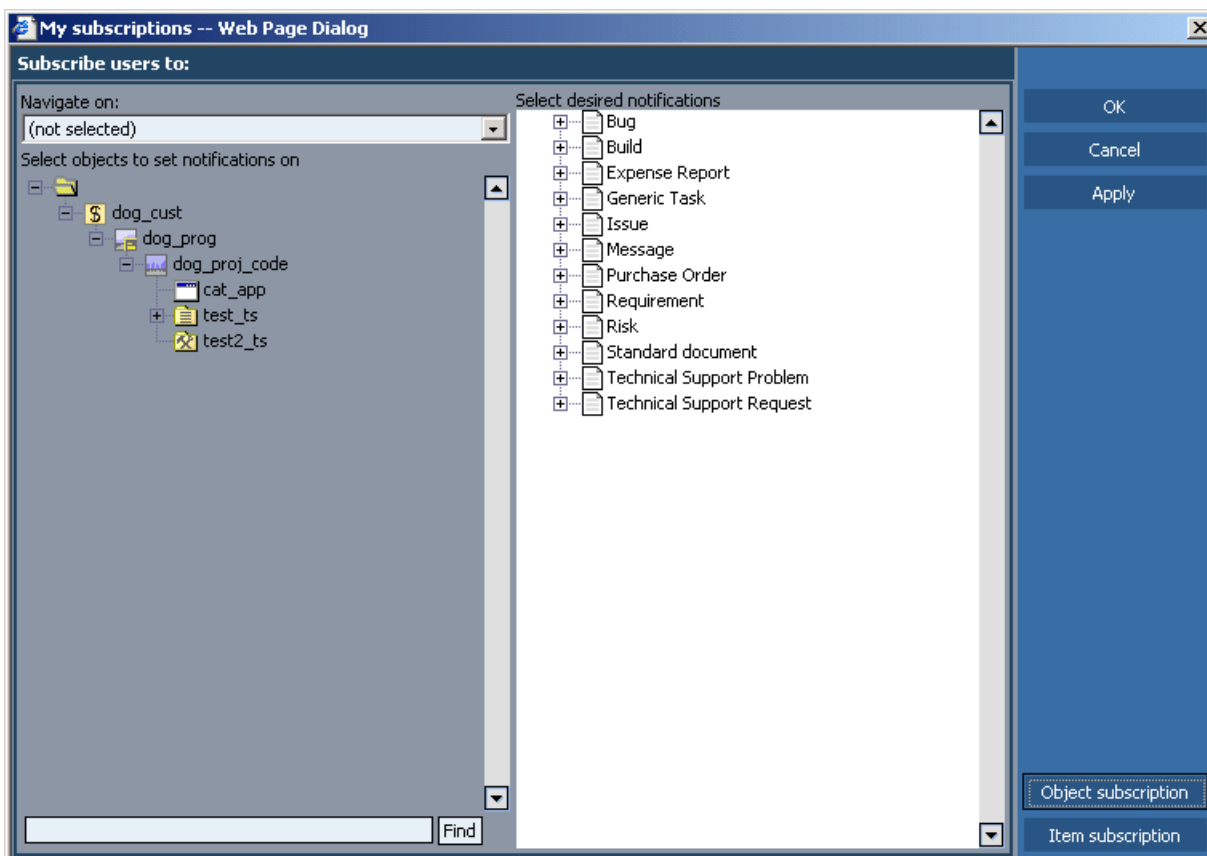


Figure 323. Add my subscription object

8.2.16.2. Manage / My subscriptions / Add (item)

174:PmcClientManageMySubscriptionsNewItem.html

The dialog **My subscriptions** has the following subdialogs

- **Add item.** Creates a new subscription item.

Select items to view

XXX

Name

XXX

(text field) / Find

XXX

(list of items)

XXX

Select all / clear all

XXX

OK

XXX

Cancel

XXX

Apply

XXX

Object subscription

XXX

Item subscription

XXX

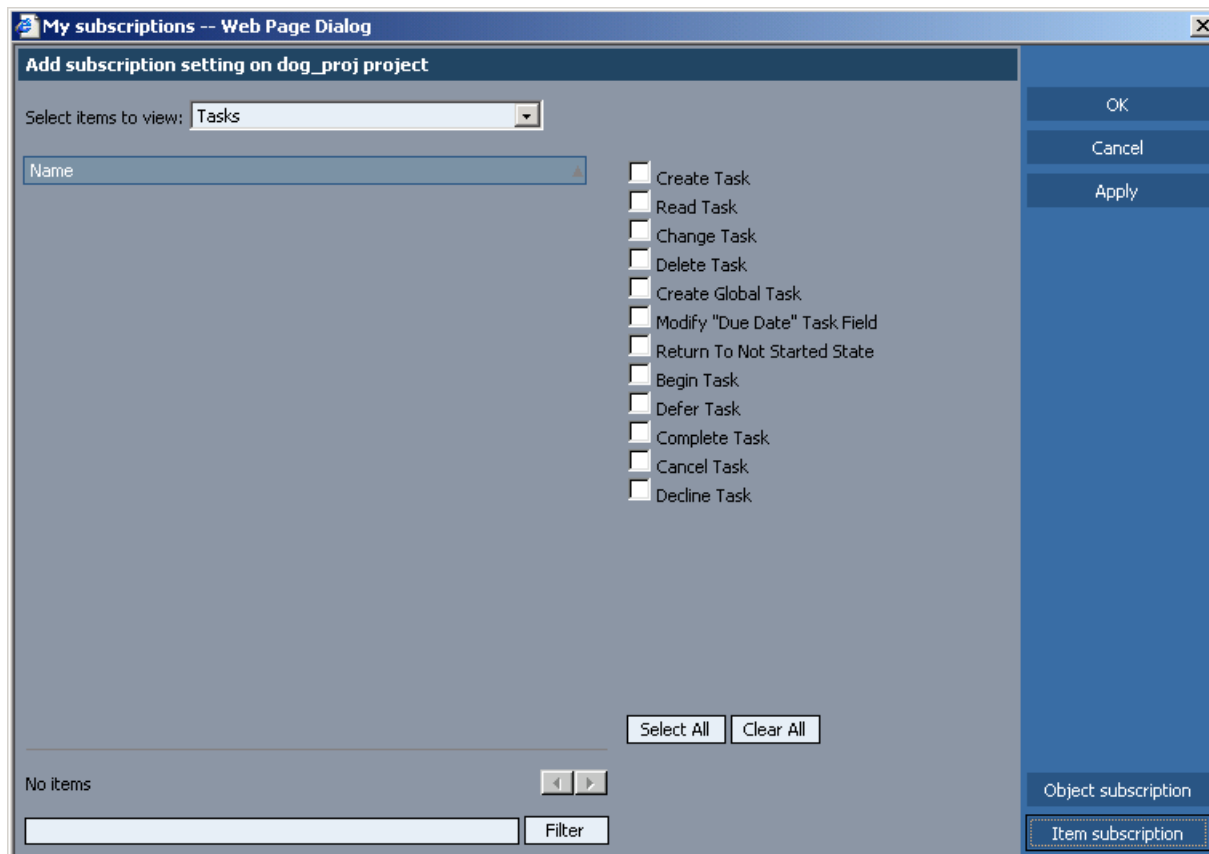


Figure 324. Add my subscription item

8.2.17. Accounting / Time journal

[175:PmcClientTimeJournal.html](#)

The dialog **Time journal** displays time journal information.

Toolbar

xxx

Add

xx

[8.2.17.1. Accounting / Time journal / Add/Copy/Edit \(page 447\)](#)

Copy

xxx

[8.2.17.1. Accounting / Time journal / Add/Copy/Edit \(page 447\)](#)

Edit

xxx

[8.2.17.1. Accounting / Time journal / Add/Copy/Edit \(page 447\)](#)

Delete

xxx

Data export

xxx

QuickBooks

xxx

Time Journal for

xxx

Filter by period

xxx

(period drop-down list)

xxx

All (drop-down list)

xxx

Open filter editor

xxx

TimeJournal

xxx

TimeReport

xxx

[8.2.17.2. Accounting / Time journal / Time report / Project \(page 448\)](#)

[8.2.17.3. Accounting / Time journal / Time report / Organizational \(page 449\)](#)

TimeSheet

xxx

[8.2.17.4. Accounting / Time journal / Time sheet \(page 450\)](#)

List header

xxx

Sort by: Approving status

xxx

User

xxx

Date

XXX

Hours

XXX

Task

XXX

Activity

XXX

List

XXX

Footer

XXX

[This portion reports: ###] [Page: #]

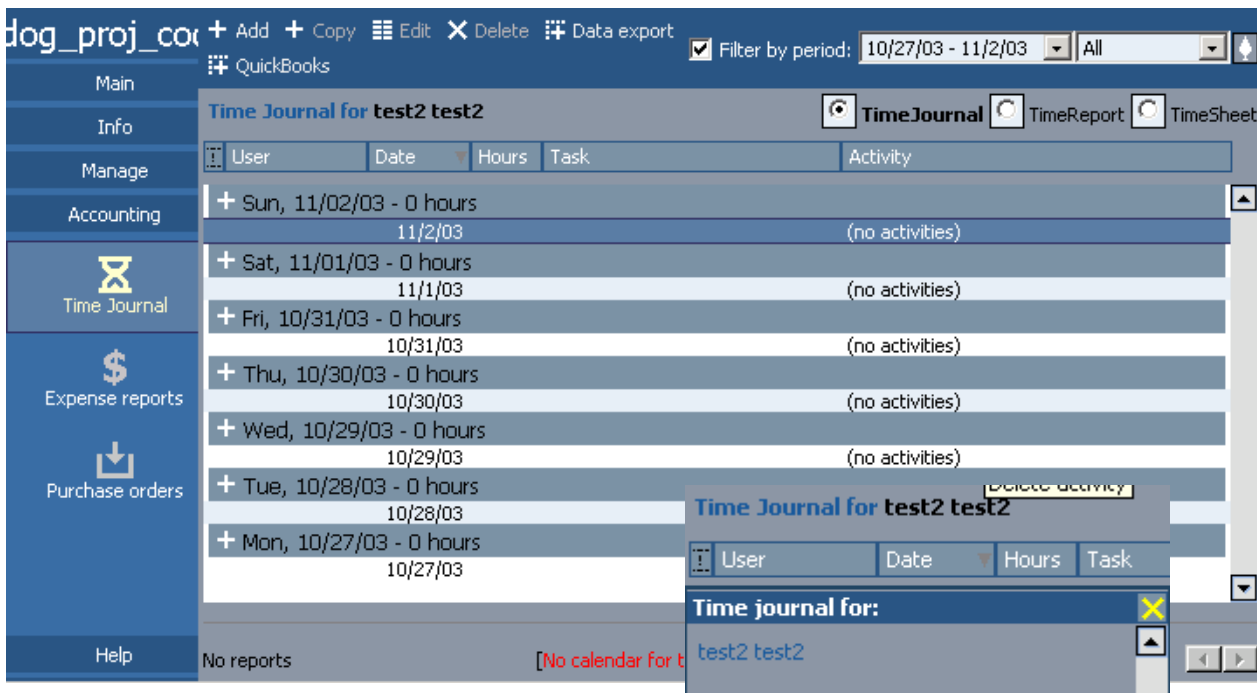
XXX

[Norm=## / Fact=##]

XXX

Go to previous/next page 

XXX



dog_proj_cox + Add + Copy Edit X Delete Data export Filter by period: 10/27/03 - 11/2/03 All

Main QuickBooks

Time Journal for test2 test2 TimeJournal TimeReport TimeSheet

User	Date	Hours	Task	Activity
+ Sun, 11/02/03 - 0 hours				
	11/2/03			(no activities)
+ Sat, 11/01/03 - 0 hours				
	11/1/03			(no activities)
+ Fri, 10/31/03 - 0 hours				
	10/31/03			(no activities)
+ Thu, 10/30/03 - 0 hours				
	10/30/03			(no activities)
+ Wed, 10/29/03 - 0 hours				
	10/29/03			(no activities)
+ Tue, 10/28/03 - 0 hours				
	10/28/03			(no activities)
+ Mon, 10/27/03 - 0 hours				
	10/27/03			(no activities)

Time Journal for test2 test2

User	Date	Hours	Task
Time journal for:			
			test2 test2

Help No reports [No calendar for t

Figure 325. Time journal

8.2.17.1. Accounting / Time journal / Add/Copy/Edit

176:PmcClientTimeJournalNewCopyEdit.html

The dialog **Time journal** has the following subdialogs

- **Add**. Creates a time journal entry.
- **Copy**. Copies a time journal entry.
- **Edit**. Modifies a time journal entry.

Toolbar

xxx

Save

xx

Save & Add

xx

Cancel

xx

Entry

xxx

(User)

xxx

Date

xxx

Hours

xxx

Task

xxx

Activity

xxx

User	Date	Hours	Task	Activity
Terry Taylor	10/28/03		Business Trip for PMC	

Figure 326. Add/copy/edit time journal

8.2.17.2. Accounting / Time journal / Time report / Project

[177:PMCClientTimeReportProject.html](#)

The dialog **Time journal** subtab **Time report** subtab **Project** displays a project time report.

Toolbar

xxx

Period drop-down list

xxx

Project

xxx

[8.2.17.2. Accounting / Time journal / Time report / Project \(page 448\)](#)

Organizational

xxx

[8.2.17.3. Accounting / Time journal / Time report / Organizational \(page 449\)](#)

TimeJournal

xxx

TimeReport

xxx

TimeSheet

xxx

[8.2.17.4. Accounting / Time journal / Time sheet \(page 450\)](#)

List

xxx

Project / User / Activity

xxx

Hours

xxx

Billable

xxx

Approved

xxx

Project / User / Activity	Hours	Billable	Approved
EPMARK	114	<input type="checkbox"/>	<input type="checkbox"/>
Alena Tsishkova	25	<input type="checkbox"/>	<input type="checkbox"/>
Alexei Rogovcev	Time Report absent		
Alexey Tcherniak	Time Report absent		
Arkadiy Dobkin	Time Report absent		
Bill Gargano	Time Report absent		
Igor Ovsianik	Time Report absent		
Larysa Kupava	40	<input type="checkbox"/>	<input type="checkbox"/>

Figure 327. Project time report

8.2.17.3. Accounting / Time journal / Time report / Organizational

178:PmcClientTimeReportOrganizational.html

The dialog **Time journal** subtab **Time report** subtab **Organizational** displays an organizational time report.

Toolbar

xxx

Apply

xxx

Period drop-down list

xxx

Project

xxx

[8.2.17.2. Accounting / Time journal / Time report / Project \(page 448\)](#)

Organizational

xxx

[8.2.17.3. Accounting / Time journal / Time report / Organizational \(page 449\)](#)

TimeJournal

xxx

TimeReport

xxx

TimeSheet

xxx

[8.2.17.4. Accounting / Time journal / Time sheet \(page 450\)](#)

List

xxx

Unit / User / Project / Activity

xxx

Hours

xxx

Billable

xxx

Approved

xxx

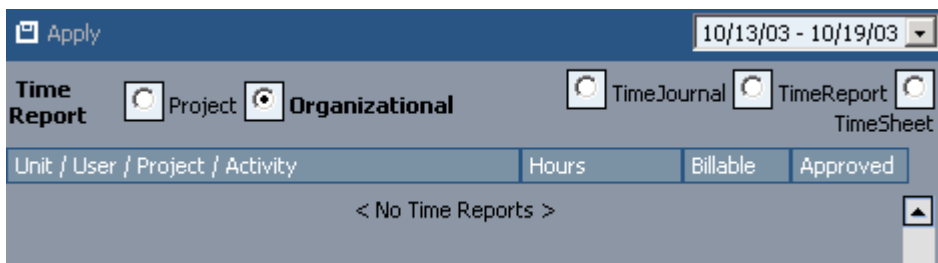


Figure 328. Organizational time report

8.2.17.4. Accounting / Time journal / Time sheet

179:PmcClientTimeSheet.html

The dialog **Time journal** subtab **Time sheet** displays a time sheet report.

Toolbar

XXX

Edit

XXX

Save (edit)

XXX

Cancel (edit)

XXX

Time Sheet for

XXX

[Norm=## / Fact=##]

XXX

TimeJournal

XXX

TimeReport

XXX

[8.2.17.2. Accounting / Time journal / Time report / Project \(page 448\)](#)

[8.2.17.3. Accounting / Time journal / Time report / Organizational \(page 449\)](#)

TimeSheet

XXX

[8.2.17.4. Accounting / Time journal / Time sheet \(page 450\)](#)

Table

XXX

Task name

XXX

Mon ... Sun

XXX

The screenshot shows a software dialog box titled "Time Sheet for Terry Taylor". At the top, there is a date range "10/13/03 - 10/19/03" and a status bar "[Norm=40 / Fact=40]". Below the title, there are radio buttons for "TimeJournal", "TimeReport", and "TimeSheet", with "TimeSheet" selected. The main area displays the week dates "[10/13/03 - 10/19/03]" and a table with columns for days of the week and rows for task names. The "Update PMC documentation" task shows 8 hours for each day from Monday to Thursday.

Task name	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Update PMC documentation	8	8	8	8			
Business Trip for PMC							
EXV							
Illness							
Non business activity							
OVT							
Out of office							
POV							
Vacation							

Figure 329. Time sheet

Save / Cancel 10/13/03 - 10/19/03

Time Sheet for Terry Taylor [Norm=40 / Fact=40] TimeJournal TimeReport TimeSheet

Week
 [10/13/03
 -
 10/19/03]

Task name	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Update PMC documentation	8	8	8	8			
Business Trip for PMC							
EXV							
Illness							
Non business activity							
OVT							
Out of office							
POV							
Vacation							

Figure 330. Edit time sheet

8.2.18. Accounting / Expense reports

[180:PmcClientExpenseReports.html](#)

The dialog **Expense reports** displays the project expense reports.

Toolbar

xxx

Add

xxx

[8.2.18.1. Accounting / Expense reports / New\(Add\)/View/Edit \(page 454\)](#)

View

xxx

[8.2.18.1. Accounting / Expense reports / New\(Add\)/View/Edit \(page 454\)](#)

Edit

xxx

[8.2.18.1. Accounting / Expense reports / New\(Add\)/View/Edit \(page 454\)](#)

Delete

xxx

Data export

xxx

All (drop-down list)

xxx

Open filter editor

xxx

[8.2.18.3. Accounting / Expense reports / Filter \(page 459\)](#)

Expense reports

xxx

Expense report list header

xxx

Description

xxx

From

xxx

To

xxx

Advances

xxx

Expenses

xxx

Balance

xxx

Status

xxx

Reporter

xxx

Verifier

xxx

Approver

xxx

Bil.

xxx

Ref.

xxx

(list of expense reports)

Double-click to open.

Footer

xxx

(# of reports)

xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx

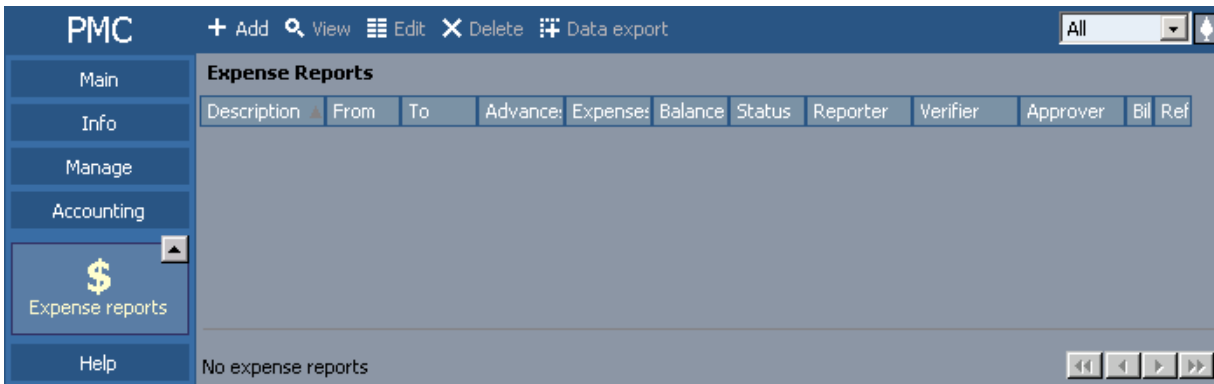


Figure 331. Expense reports

8.2.18.1. Accounting / Expense reports / New(Add)/View/Edit

181:PmcClientExpenseReportNewViewEdit.html

The dialog **Expense reports** has the following subdialogs

- **Add.** Creates a new expense report.
- **View.** Displays an expense report.
- **Edit.** Modifies an expense report.

Toolbar

xxx

Save (new/edit)

xx

Edit (view)

xx

Delete (view)

xx

Cancel (edit)

xx

Close

xx

Submit (view)

xx

Attachments

xx

Export (view)

xx

Export to QuickBooks (view)

xx

Print (view)

xx

History log (view/edit)

xx

Expense report area

xxx

Add bookmark 

xxx

Project

xxx

Period from / to

xxx

Status

xxx

Balance

xxx

Approved balance

xxx

Is refunded to reporter

xxx

Reporter

xxx

Verifier

xxx

Approver

xxx

Accountant

xxx

Budget #

xxx

Is billable to customer

xxx

Billable expenses

xxx

Invoice #

xxx

Money received

xxx

Receipts archived

xxx

Description

xxx

Expenses table

xxx

Insert new empty row 

xxx

Delete selected row 

xxx

Row state 

xxx

Date

xxx

Description

xxx

Amount

xxx

Currency

xxx

Rate

xxx

Amount (USD)

xxx

Approved (USD)

xxx

Payment method

XXX

Category

XXX

Attendees

XXX

Vendor

XXX

Rec.

XXX

Bil.

XXX

Advances table

similar to expenses table

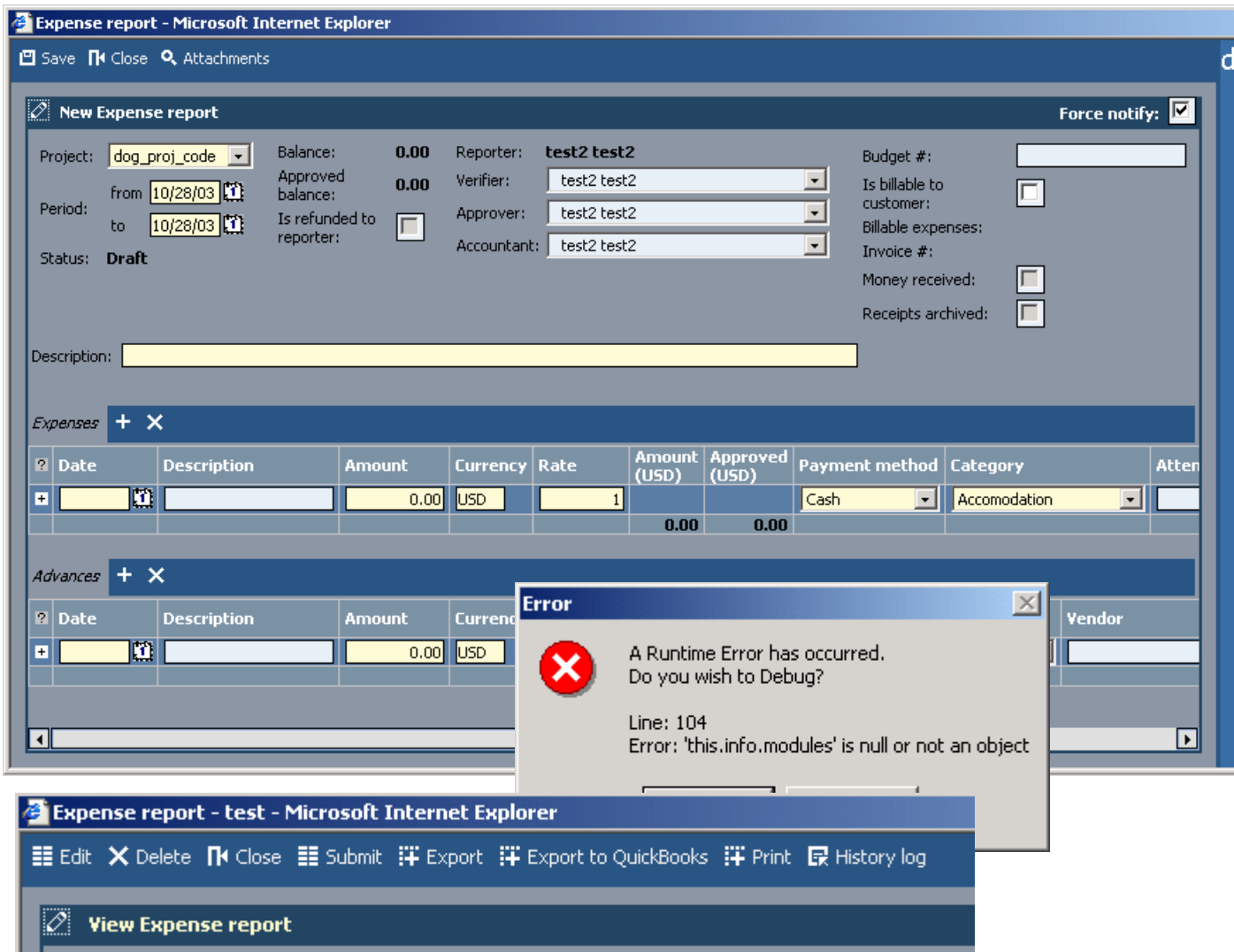


Figure 332. Add/view/edit expense report

8.2.18.2. Accounting / Expense reports / Edit / Subscribe / Advanced

[182:PmcClientExpenseReportSubscribe.html](#)

The dialog **Advanced** displays the advanced subscription settings for an expense report.

View expense report

xxx

Create expense report

xxx

Modify expense report

xxx

Delete expense report

xxx

Submit expense report

xxx

Reject expense report

xxx

Verify expense report

xxx

Approve expense report

xxx

Mark as invoiced

xxx

Close expense report

xxx

Not accept expense report

xxx

Accounting check

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

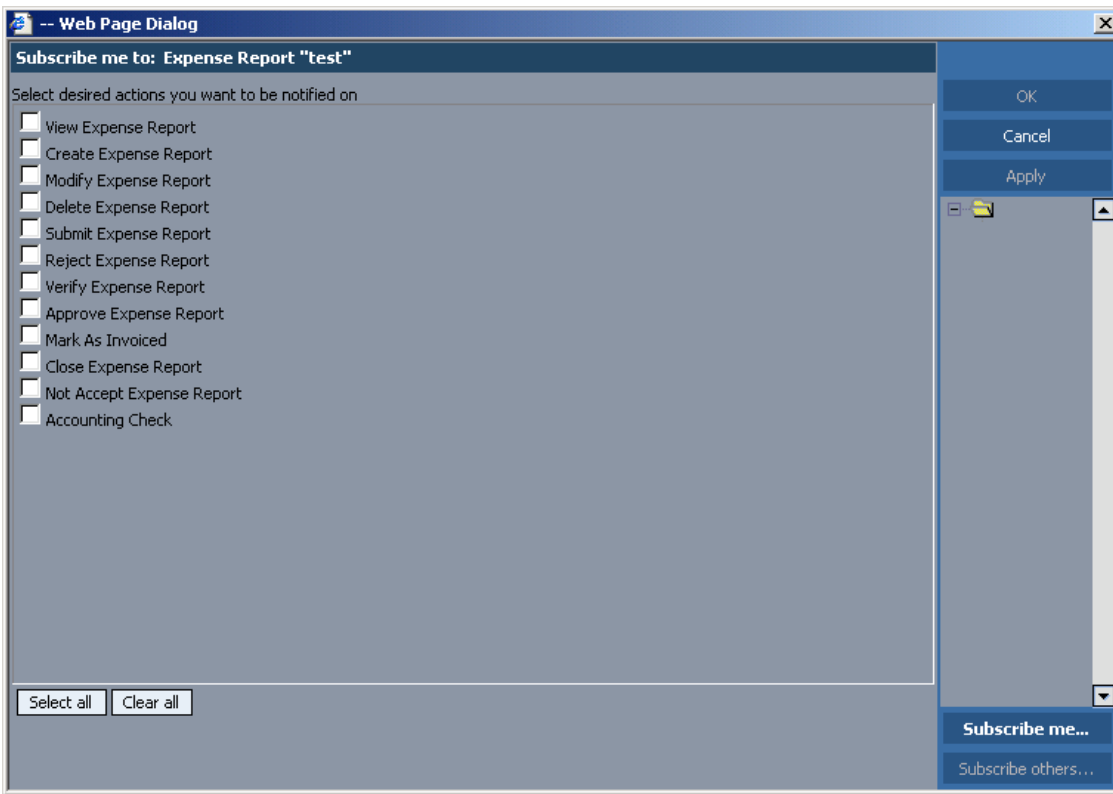


Figure 333. Subscribe expense report

8.2.18.3. Accounting / Expense reports / Filter

183:PmcClientExpenseReportFilter.html

The dialog **Filter** displays the filter settings for expense reports.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

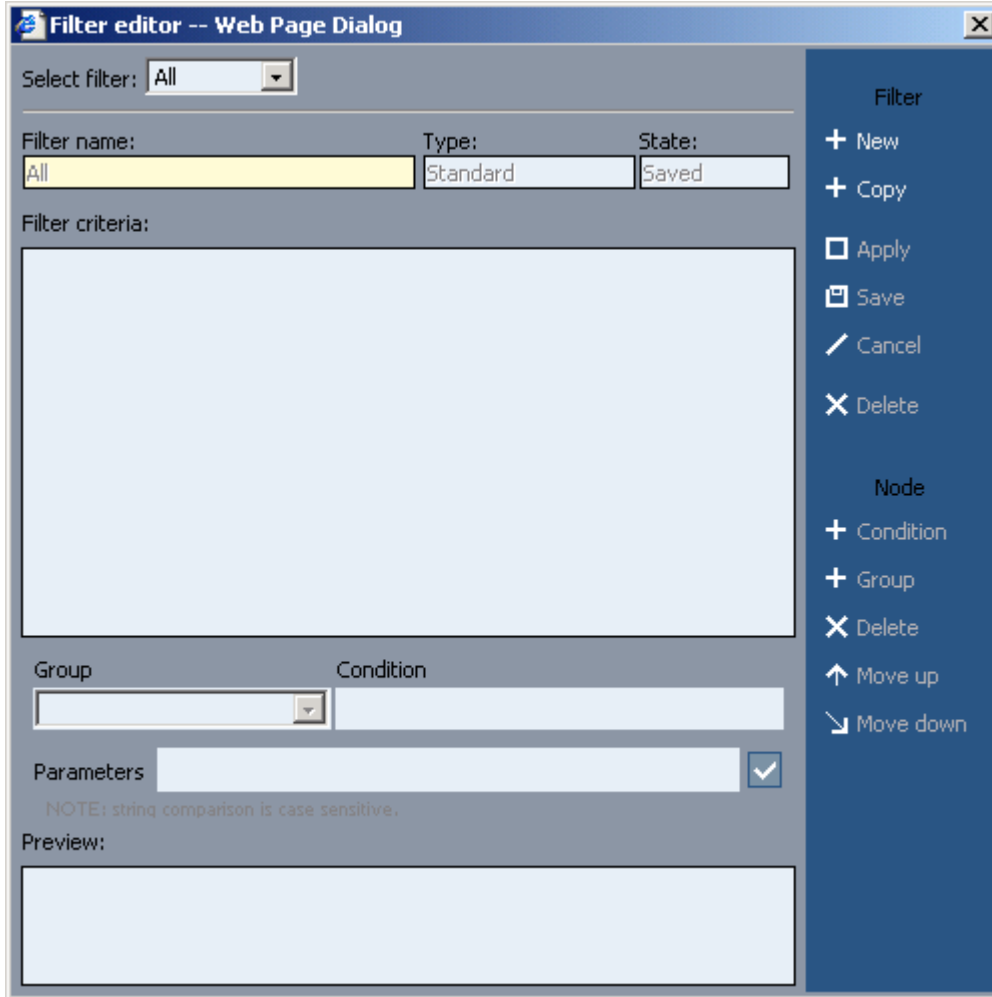


Figure 334. Filter expense reports

8.2.19. Accounting / Purchase orders

[184:PmcClientPurchaseOrders.html](#)

The dialog **Purchase orders** displays the project purchase orders.

Toolbar

XXX

Add

XXX

[8.2.19.1. Accounting / Purchase orders / New\(Add\)/View/Edit \(page 462\)](#)

View

XXX

[8.2.19.1. Accounting / Purchase orders / New\(Add\)/View/Edit \(page 462\)](#)

Edit

XXX

[8.2.19.1. Accounting / Purchase orders / New\(Add\)/View/Edit \(page 462\)](#)

Delete

XXX

Data export

XXX

Switch flagged

XXX

All (drop-down list)

XXX

Open filter editor

XXX

[8.2.19.3. Accounting / Purchase orders / Filter \(page 467\)](#)

Purchase order list header

XXX

Sort by: Is new

XXX

Sort by: Is flagged

XXX

Number

XXX

Name

XXX

Order date

XXX

Date needed

XXX

Est. total

XXX

Total

XXX

Status

XXX

Initiator

xxx

Verifier

xxx

Approver

xxx

(list of purchase orders)

Double-click to open.

Footer

xxx

(# of purchase orders)

xxx

Getting previous/next portion of data 

xxx

Go to previous/next page 

xxx

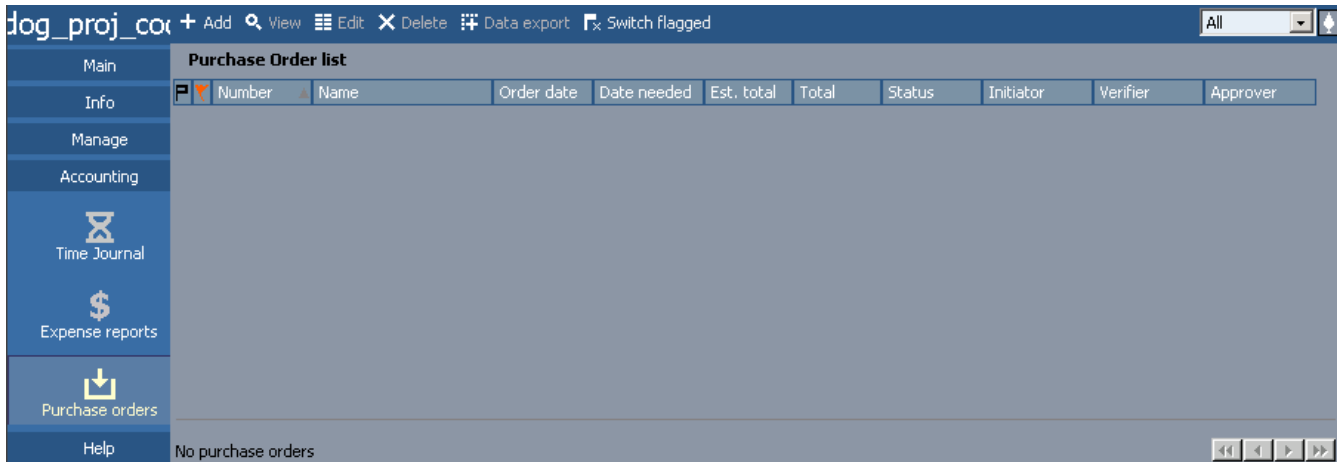


Figure 335. Purchase orders

8.2.19.1. Accounting / Purchase orders / New(Add)/View/Edit

185:PmcClientPurchaseOrderNewViewEdit.html

The dialog **Purchase orders** has the following subdialogs

- **Add.** Creates a new purchase order.
- **View.** Displays a purchase order.
- **Edit.** Modifies a purchase order.

Toolbar

xxx

Save (new/edit)

xx

Edit (view)

xx

Delete (view)

xx

Cancel (edit)

xx

Close

xx

Submit (view)

xx

Attachments

xx

Switch flagged (view/edit)

xx

History log (view/edit)

xx

Expense report area

xxx

Add bookmark 

xxx

Force notify

xxx

Project

xxx

Budget number

xxx

Category

xxx

PO#

xxx

Order date

xxx

Date needed

xxx

Preferred vendor

xxx

Ship to location

xxx

Est. total

xxx

Est. total (USD)

xxx

Invoice #

xxx

Invoice date

xxx

Currency

xxx

Rate

xxx

Total

xxx

Total (USD)

xxx

State

xxx

Initiator

xxx

Verifier

xxx

Approver

xxx

Name

xxx

Note

xxx

Purchase order table

xxx

Insert new empty row 

xxx

Delete selected row 

xxx

Row state 

xxx

Code

xxx

Name

xxx

Estimated quantity

xxx

Estimated price

XXX

Estimated amount

XXX

Quantity

XXX

Price

XXX

Amount

XXX

Closed

XXX

Purchase order - Microsoft Internet Explorer

Save Close Attachments

New purchase order Force notify:

<i>Target</i>	<i>Main</i>	<i>Execution</i>	<i>Workflow</i>
Project: dog_proj_code	PO#: 3431234	Invoice#:	State: Draft
Budget number:	Order date: 10/28/03	Invoice date:	Initiator: test2 test2
Category: Computer software	Date needed:	Currency: USD	Verifier: test2 test2
	Preferred vendor:	Rate: 1	Approver: test2 test2
	Ship to location: ddfadfsd	Total:	
	Est. total:	Total (USD):	

Name: dddd

Note: ddfdfd

Purchase order entries

Code	Name	Estimated quantity	Estimated price	Estimated amount	Quantity	Price	Amount	Closed
2343	ddfdfd	2	2	4.00	3	3	9.00	<input type="checkbox"/>
				4.00			9.00	

Purchase order - adfadsfsdfasdf - Microsoft Internet Explorer

Edit Delete Close Submit Switch flagged History log

View purchase order Close window

Purchase order - adfadsfsdfasdf - Microsoft Internet Explorer

Save Cancel Close Attachments Switch flagged History log

Edit purchase order

Figure 336. Add/view/edit purchase order

8.2.19.2. Accounting / Purchase orders / Edit / Subscribe / Advanced

186:PmcClientPurchaseOrderSubscribe.html

The dialog **Advanced** displays the advanced subscription settings for a purchase order.

Create purchase order

xxx

Read purchase order

xxx

Edit purchase order

xxx

Delete purchase order

xxx

Submit

xxx

Verify

xxx

Approve

xxx

Close order

xxx

Account

xxx

Cancel order

xxx

Select / clear all

xxx

OK / Cancel / Apply

xxx

Subscribe me / others

xxx

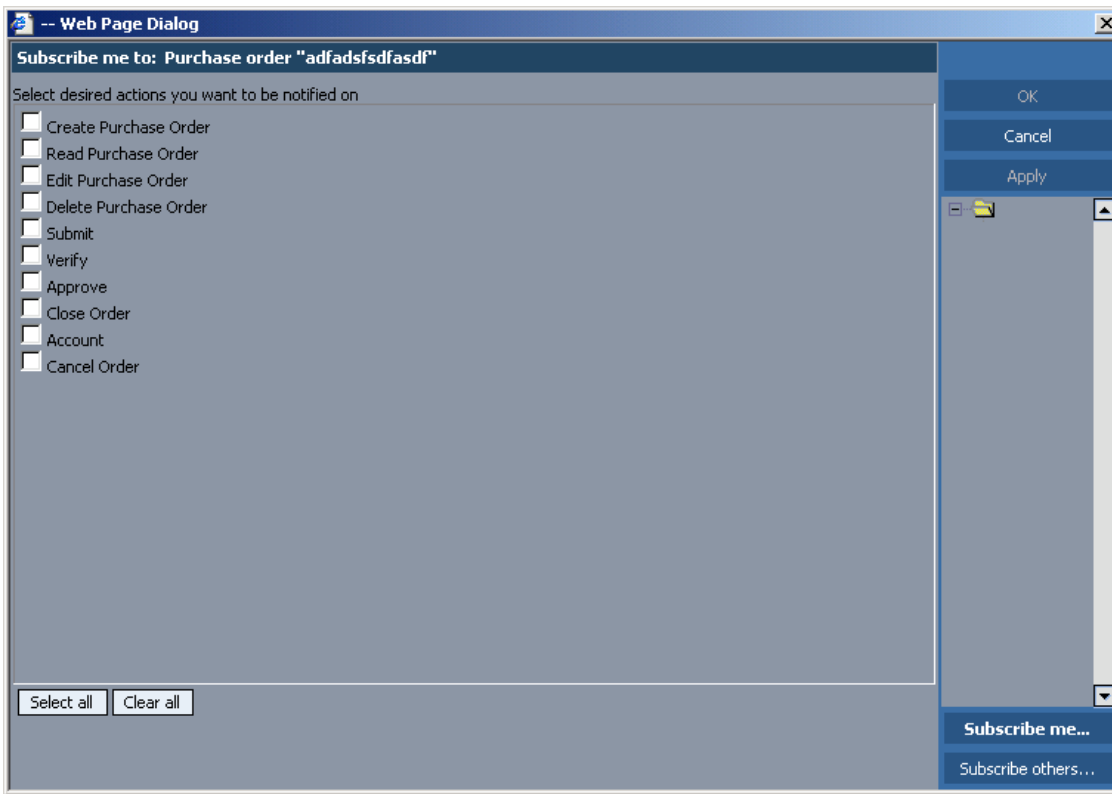


Figure 337. Subscribe purchase orders

8.2.19.3. Accounting / Purchase orders / Filter

187:PmcClientPurchaseOrderFilter.html

The dialog **Filter** displays the filter settings for purchase orders.

For a general description of the filter dialog see 8.2.21. Filter (page 469).

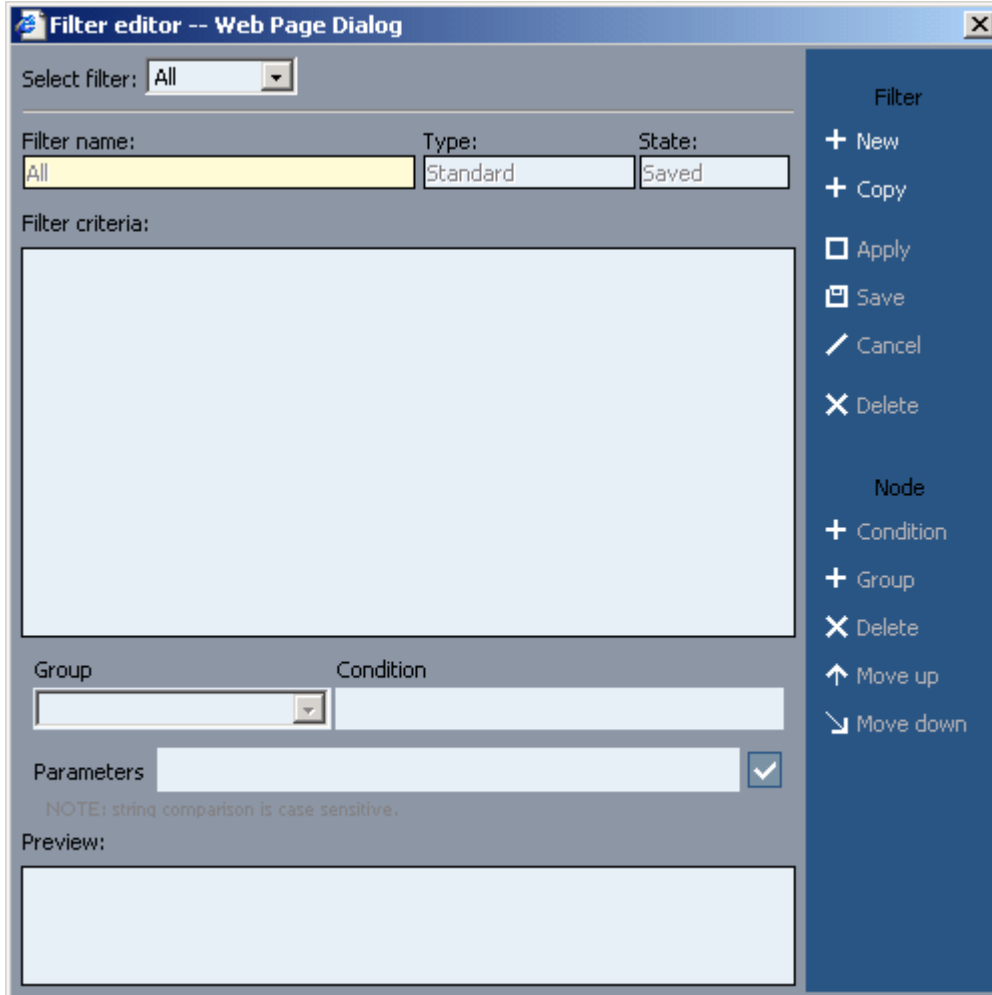


Figure 338. Filter purchase orders

8.2.20. Attachments list

[188:PmcClientAttachmentsList.html](#)

The dialog **Attachments list** displays the list of attachments.

View

open attachment in registered application.

Insert

add attachment

Edit

xxx

Delete

xxx

Attachments list: Edit/Insert

xxx

Upload

xxx

Cancel

xxx

Attachment type

File name for upload (file stored in PMC)

xxx

External resource description (external resource)

xxx

URL for external resource (external resource)

xxx

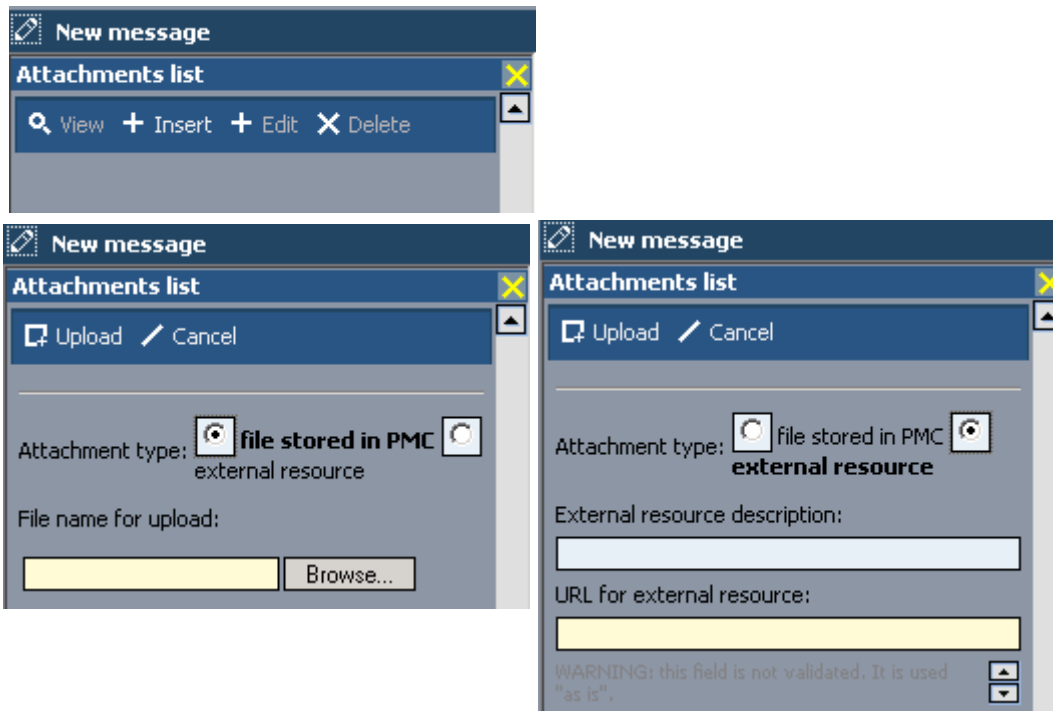


Figure 339. New message attachments

8.2.21. Filter

189:PmcClientFilter.html

The dialog **Filter** displays the filter settings.

Select filter

xxx

Filter name

xxx

Type

xxx

State

xxx

Filter criteria

xxx

Group

xxx

Condition

xxx

Parameters

xxx

Preview

xxx

Filter

xxx

New

xxx

Copy

xxx

Apply

xxx

Save / Cancel

xxx

Delete

xxx

Node

xxx

Condition

xxx

Group

xxx

Delete

xxx

Move up / down

xxx

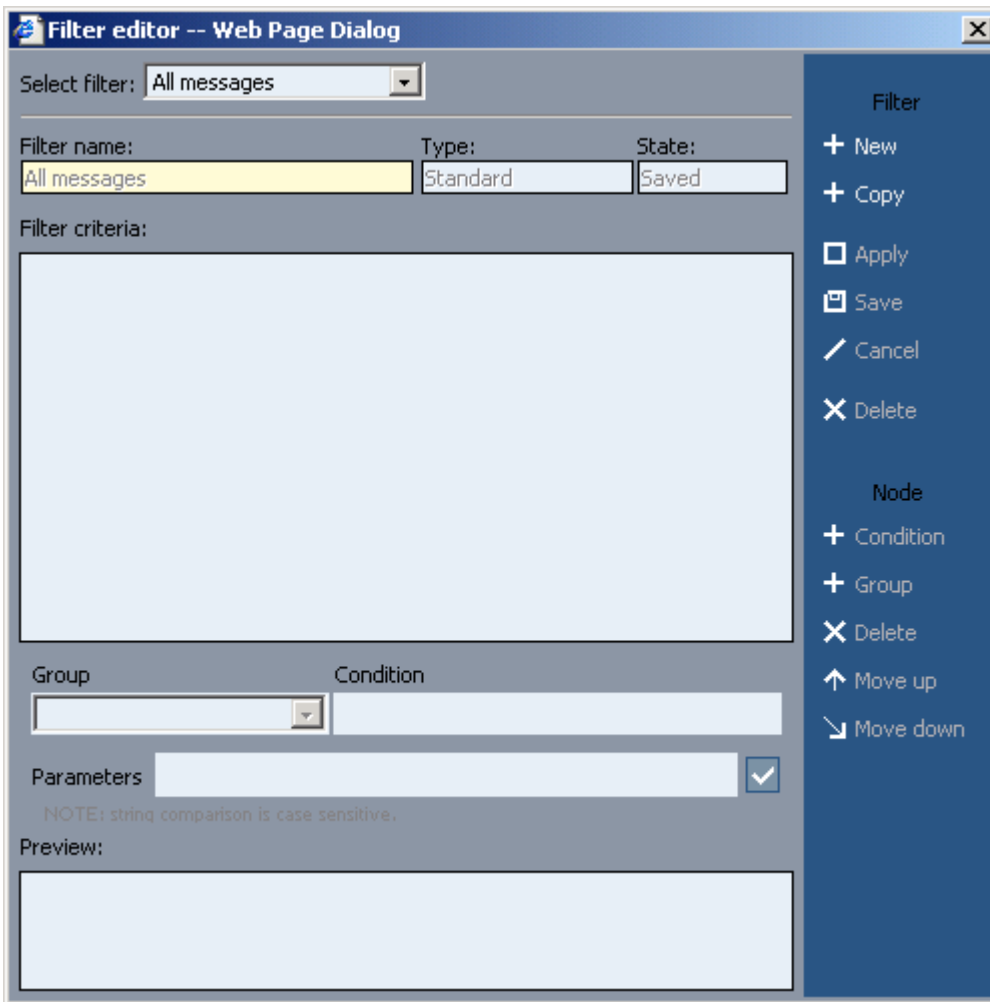


Figure 340. Filter

8.2.22. Right frame

190: PmcClientRightColumn.html

The right frame of many dialogs displays various information.

(project name)

xxx

Thread

not a button. ??

Create

click to show the buttons.

selected unlinked to not be linked with the parent item.

Subscribe

this is normally done in admin console.

however, here you can subscribe additional persons, who will receive via outlook (thanx to pmc mail) a message when something happens to the task.

User list (Subscribe)

xxx

Apply (Subscribe)

xxx

Advanced... (Subscribe)

xxx

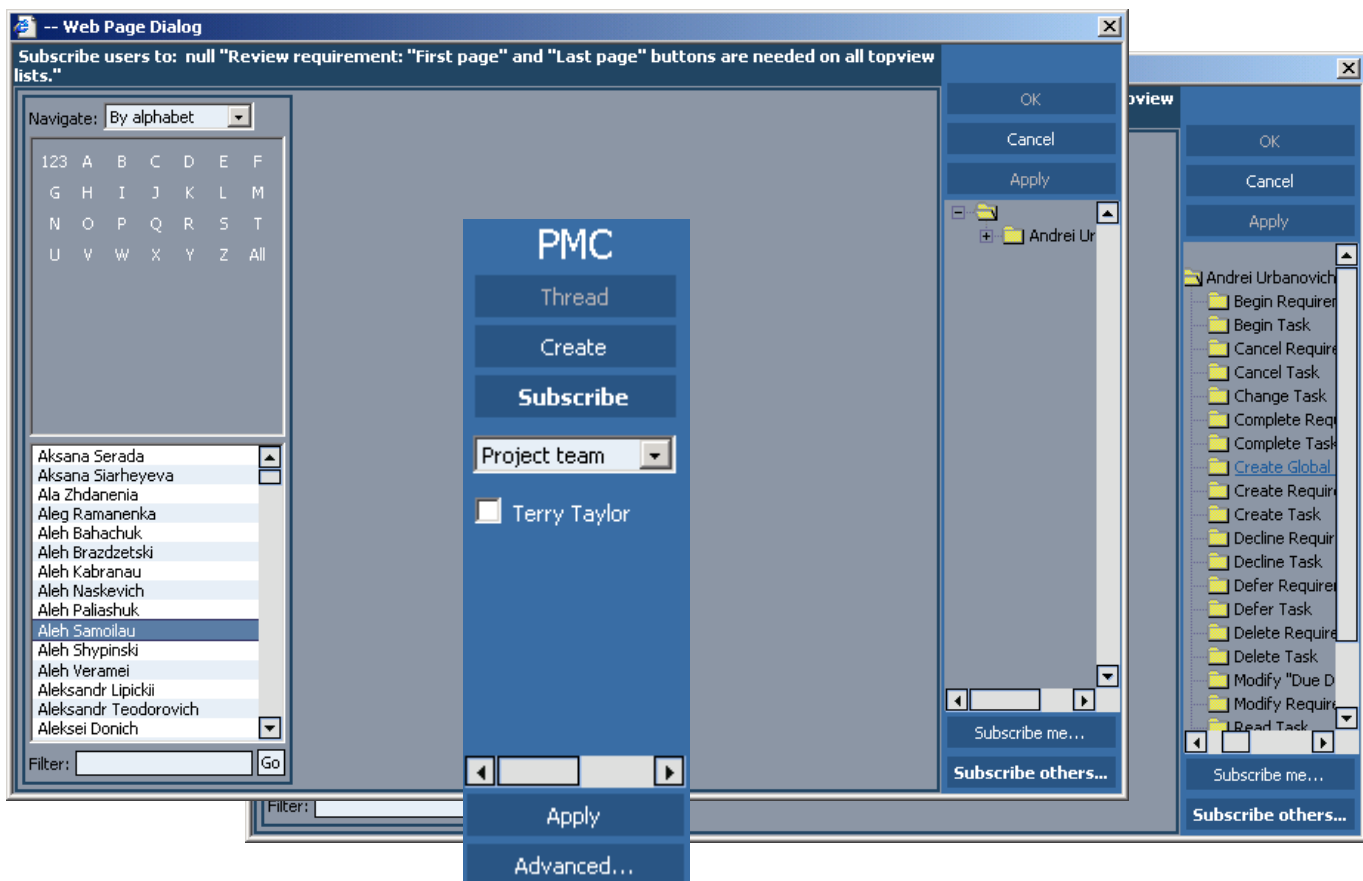


Figure 341. Right column

8.3. PMC ESR

191: Esr.html

10_pmc_ui_3_esr.fm

(EPAm Star Reporter)

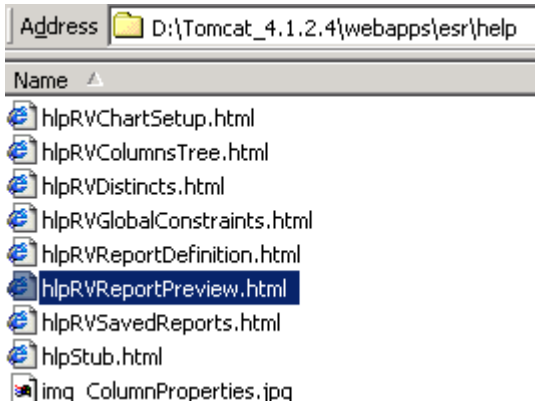


Figure 342. existing help files

localhost/esr/init



User Name: Password:

 Login

Figure 343. esr login screen

8.3.1. View reports

192:EsrViewReports.html

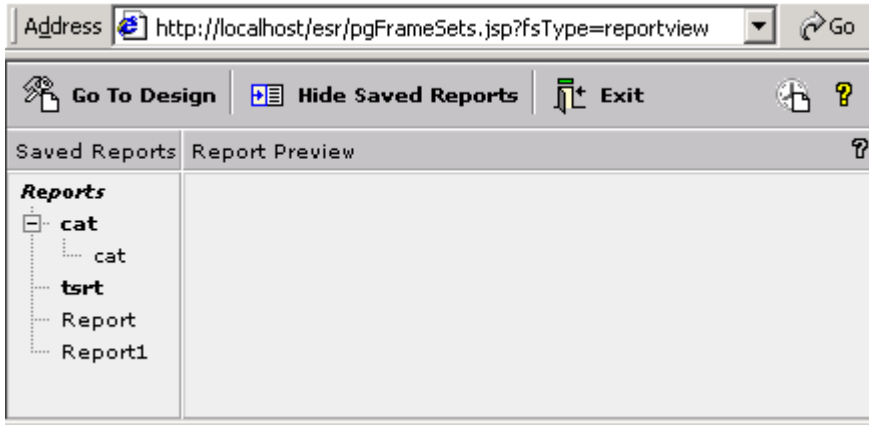


Figure 344. View reports

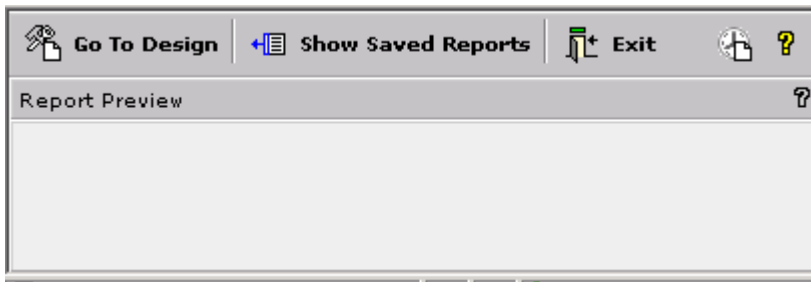


Figure 345. Hide saved View reports

8.3.1.1. Save reports pane

193:helpRVSavedReports.html



Figure 346. Save reports pane

This pane shows already saved reports in tree view. Reports are organized in folders. The user can click the Report title to view the report in the Report Preview pane as a print preview.

8.3.1.2. Report preview

194:hlpRVReportPreview.html

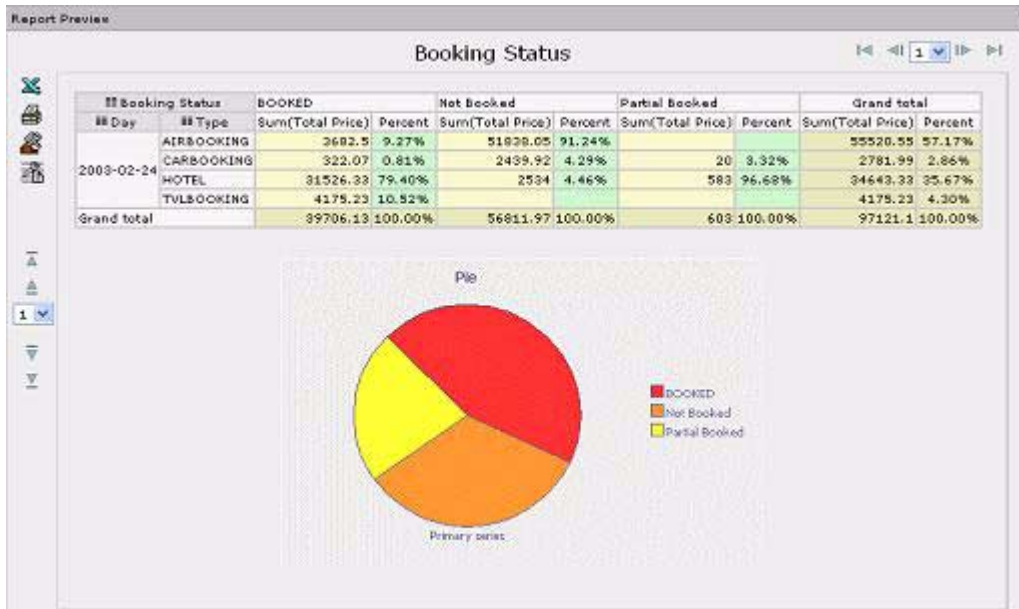


Figure 347. Report preview

This pane shows the report as it will look when printed. The user can export the report to Excel from here, print the report, build the chart for this report, set up the report preferences, scroll the report up and down using the toolbar buttons on the left **Toolbar**

- **Export to Exel** - Export the report to Microsoft Exel
- **Print Current Page** - Prints the report
- **Chart Setup** - The chart setup parameters appear in the Report Review pane.
- **Report Preferences** - The Report preferences window appears.
- **Scrolling arrows** - if located on the left from the report then scroll the report by rows if located in the top of the report - scroll by columns

8.3.1.2.1. Export to Excel

195:EsrPreviewReportsExportToExcel.html

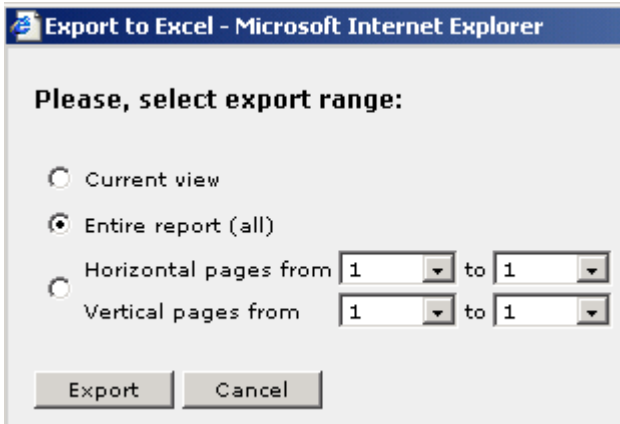


Figure 348. Export to Excel

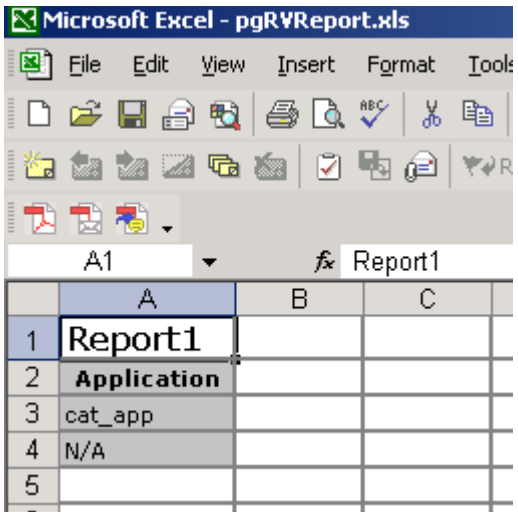


Figure 349. Excel table

8.3.1.2.2. Chart setup

[196:helpRVChartSetup.html](#)

The user can flexibly configure charts using the Star Reporter.

Apart from this, the following buttons are available on the chart setup:

- *Report View* - using this button the user can go back to report viewing
- *Build Chart* - using this button the user view the report, i.e. go from the chart setup to chart viewing.
- *New Chart* - creates a new chart
- *Delete Chart* - deletes existing chart

The following links are available in the chart setup screen:

8.3.1.2.2.1. General

197:EsrPreviewReportsChartSetupNewChartGeneral.html

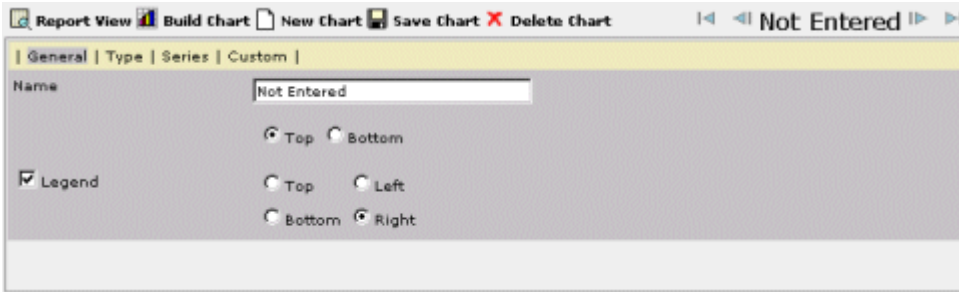


Figure 350. Chart setup

General - here the user can type in the chart name, to indicate where this name will be situated and indicate if it's necessary to display the legend (explanation of colors and symbols used) and the place (top, bottom, left, right of the report) where this explanation will be situated.

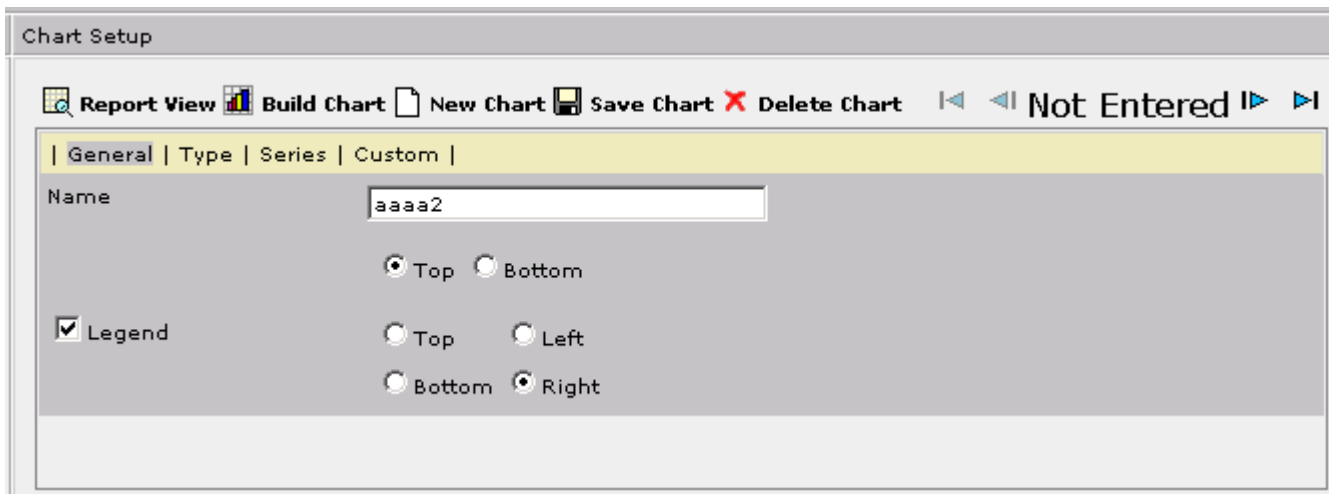


Figure 351. Chart setup / new chart / General

8.3.1.2.2.2. Type

198:EsrPreviewReportsChartSetupNewChartType.html

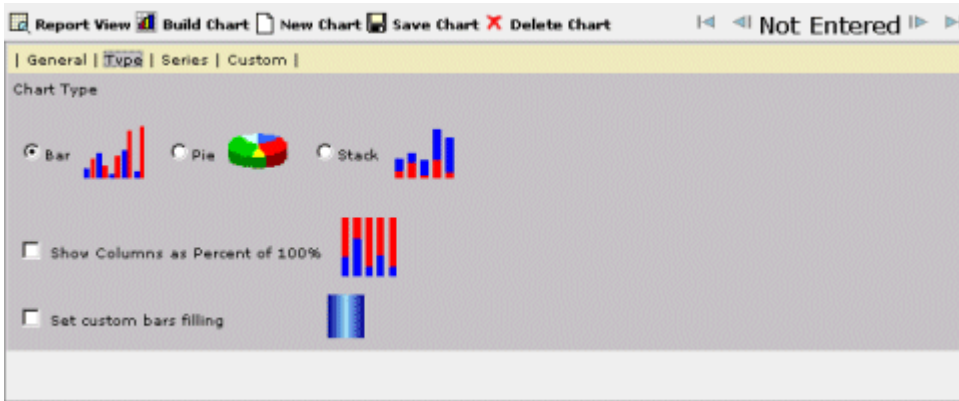


Figure 352. Chart setup

Type - here the user can set up a chart type. May have different values depending on the category column.

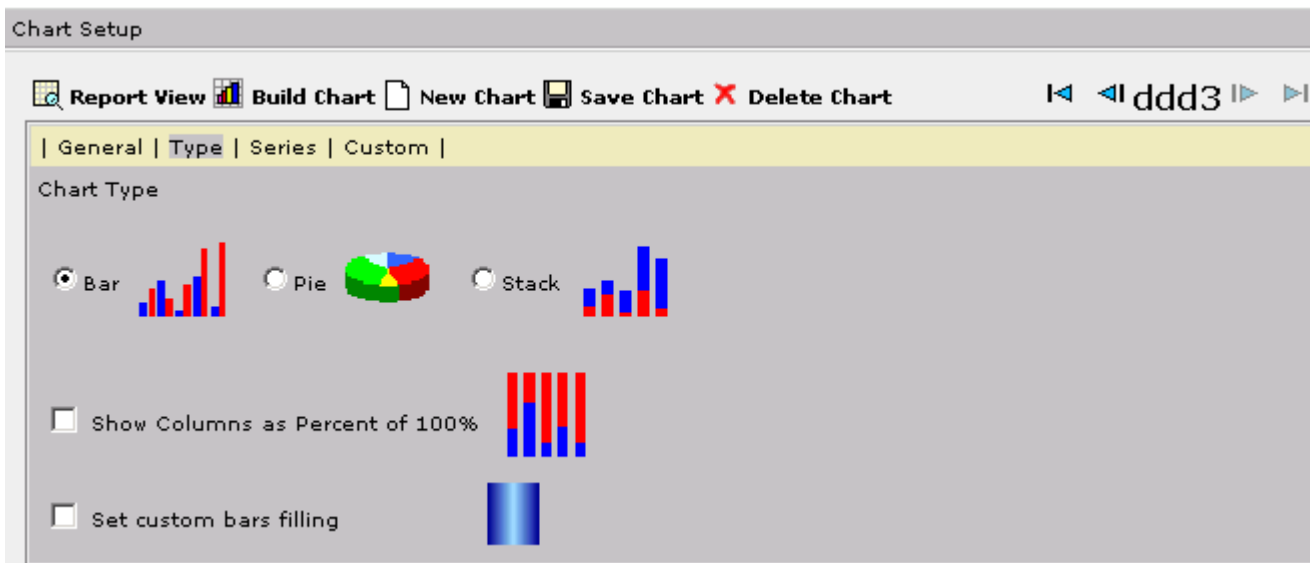


Figure 353. Chart setup / new chart / type

8.3.1.2.2.3. Series

199:EsrPreviewReportsChartSetupNewChartSeries.html

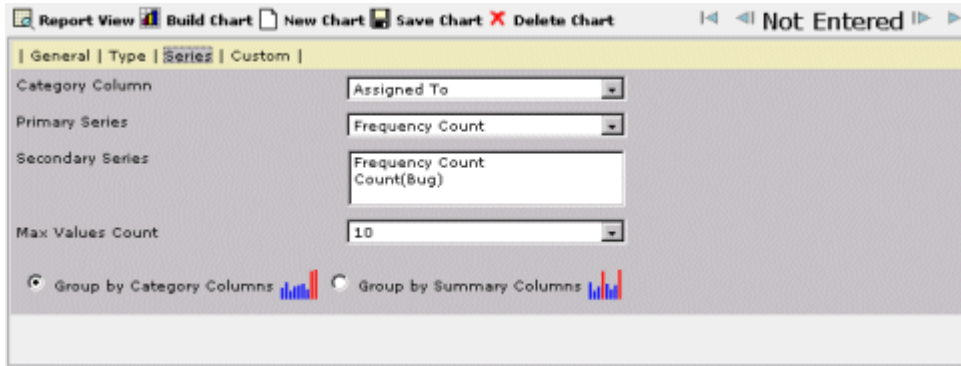


Figure 354. Chart setup

Series - here the user sets up the following chart parameters:

- *Category Column* - The "white" column that is charted.
- *Primary series* - The user can select one of the aggregated columns in the report or count to be charted. This column will be used as a main criterion for data selection, being displayed in the chart (if not all data, used in the report can be displayed in chart)
- *Secondary series* - The user can select additional aggregated columns to be charted.
- *Max Values Count* - sets up the maximal quantity of the category column values, which will be in the chart.
- *Group by Category Column* - Horizontal axis has a separate value for each value of the category column, different summary columns appear together (the picture 3-5 demonstrates this type of chart grouping).
- *Group by Summary Column* - Horizontal axis has a separate value for each aggregated summary column that is charted, different values of the category column are grouped together.

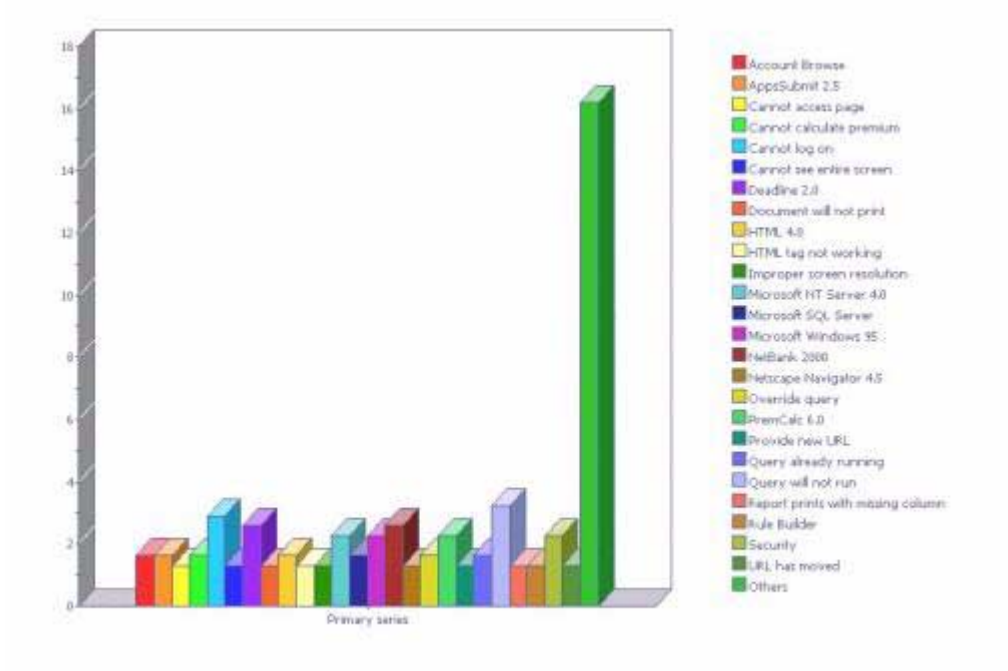


Figure 355. Chart setup

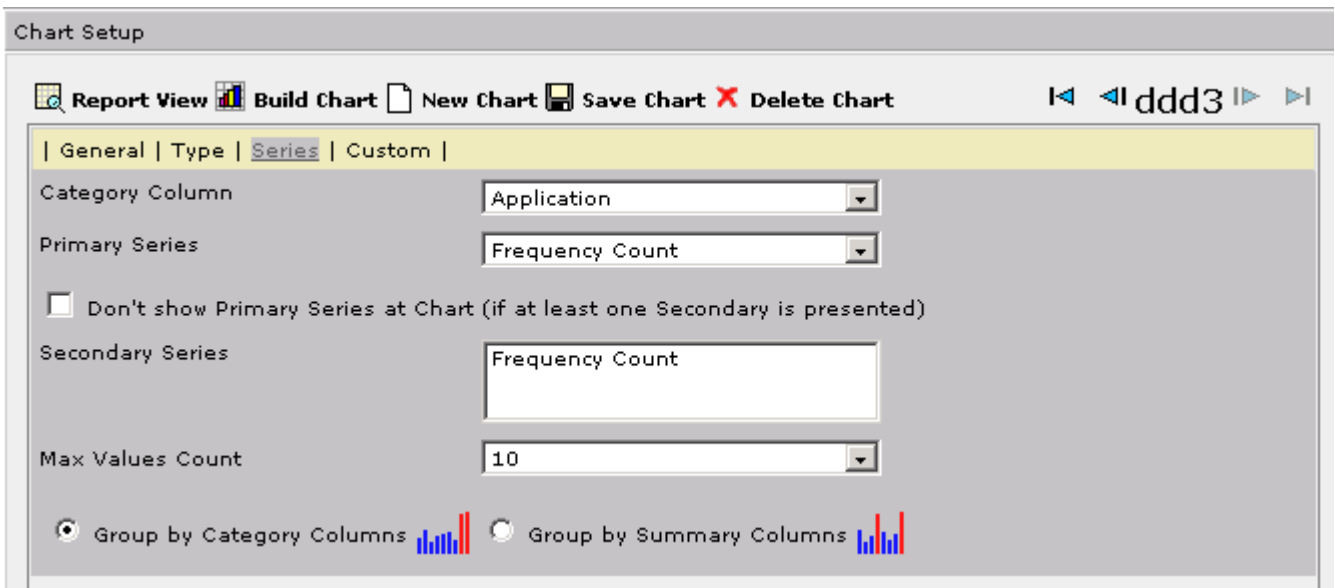


Figure 356. Chart setup / new chart / series

8.3.1.2.2.4. Custom

200:EsrPreviewReportsChartSetupNewChartCustom.html

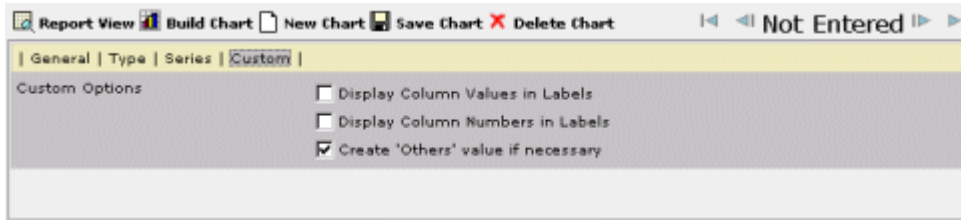


Figure 357. Chart setup

Custom - here the user sets additional display parameters for a chart. If to check the checkbox *Display Column Values in Labels* then for every value of the category column the corresponding Primary Series values are included into the descriptions to the category column values (labels).

If the option *Display Column Number in Labels* is checked, in description for the category column the number is included. The option *Create 'Others' Value if necessary* is for forming of an additional value 'Others' in the category column. This value can be necessary if not all the data, used in the report, is displayed in the chart (due to lack of place). In this case all data, which not included in the chart, are summarized exactly by this value and summarized Primary and Secondary Series are created for it.

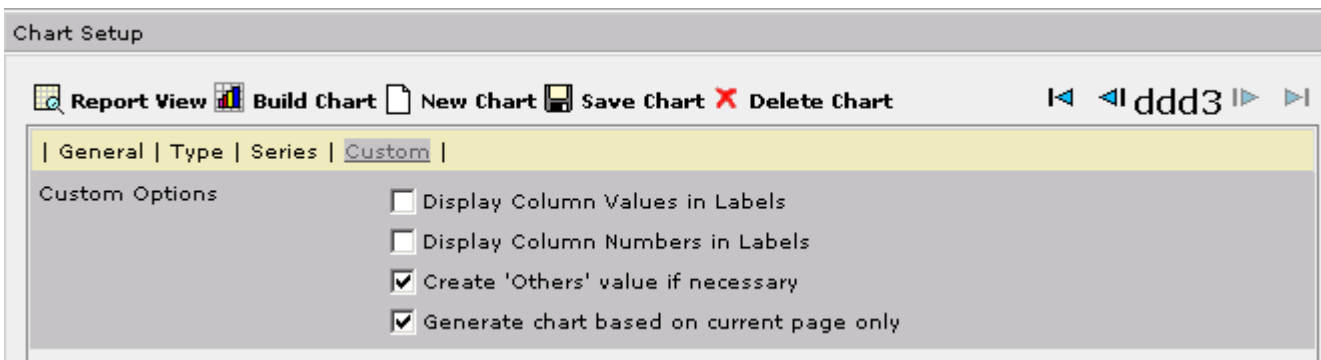


Figure 358. Chart setup / new chart / custom

8.3.1.2.2.5. Build chart

201:EsrPreviewReportsChartSetupBuildChart.html

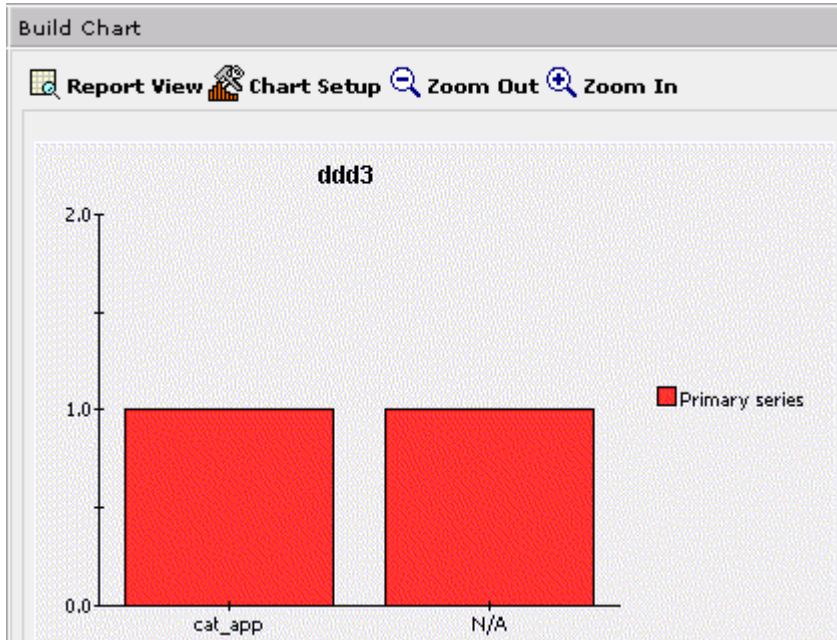


Figure 359. Chart setup / build chart

8.3.1.2.3. Report preferences

[202:EsrPreviewReportsReportPreferences.html](#)

Using the button "Report Preferences" from the Report preview pane the user can set up report preferences such as rows count per page, splitting of the report, suppressing of equal value at the report, show global constraints to the report, and to indicate totals position.

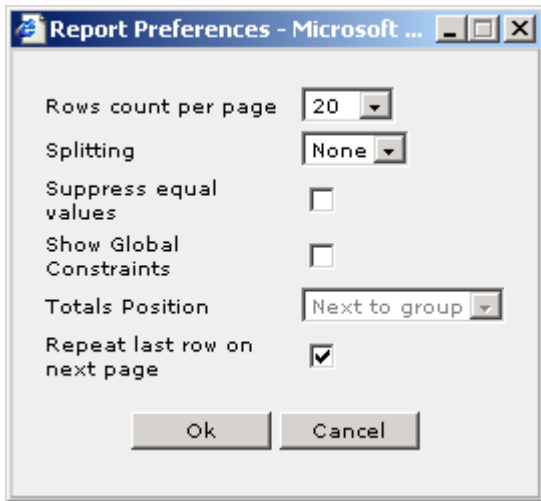


Figure 360. Report preferences

8.3.1.2.4. Schedule setup

203:EsrPreviewReportsScheduleSetup.html

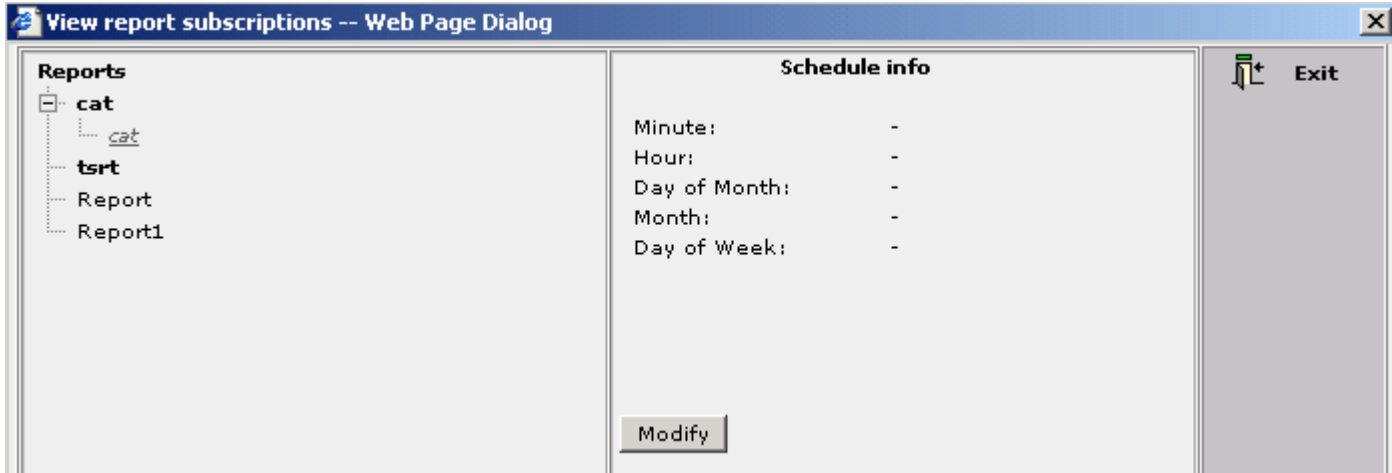
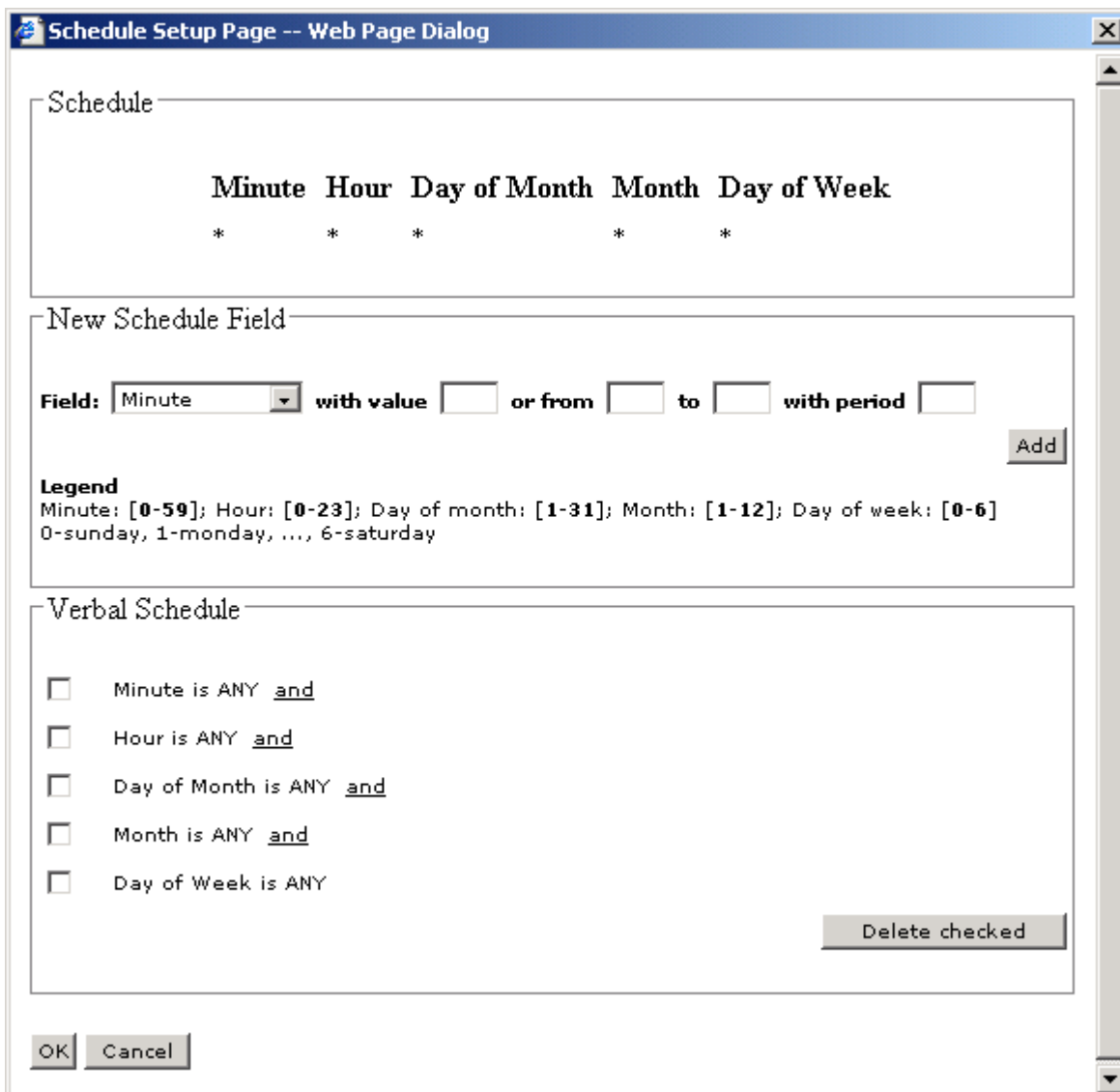


Figure 361. Schedule setups (report subscriptions)



| *Figure 362. Schedule setup*

8.3.2. Design reports

204:EsrDesignReports.html

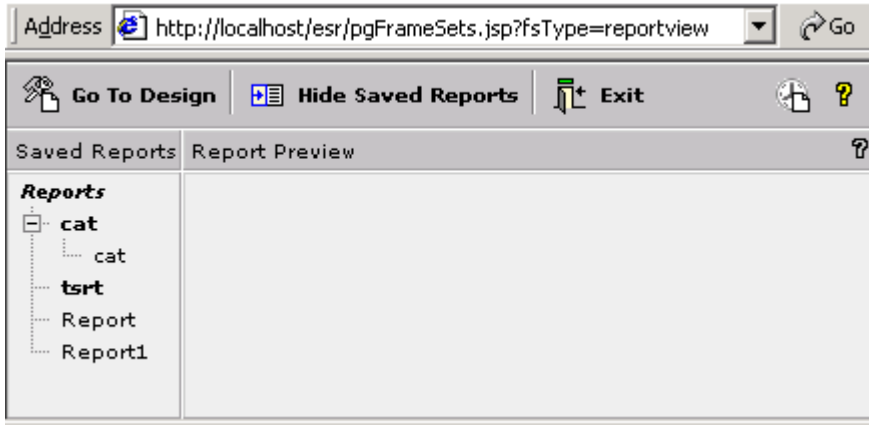


Figure 363. Reports view

8.3.2.1. Columns tree pane

205:EsrDesignReportsPaneColumnsTree.html

206:helpRVColumnsTree.html

Columns tree pane shows columns in the current tree, organized in tree view. There can be the following items against each node:

Icon	Description
white	A regular column. User can click the icon to add a column to the report.
yellow	<i>Aggregated column</i> . User can click the icon to add a column to the report.
green	<i>Special measure column</i> . User can click the icon to add the column to the report, if there are aggregated columns in the report.

The user can also click on a **column name** (only for non-aggregated columns) to display all distinct column values in the **Distincts** pane.

8.3.2.2. Distincts pane

207:EsrDesignReportsPaneDistincts.html

208:hlpRVDistincts.html

The pane displays all distinct values for the non-aggregated column selected in the Columns Tree pane. Here the user can specify global constraints and constraints on the aggregated (yellow) columns. The difference between two types of the constraints is the following:

Global constraints: Only the records with columns that have a specified value are included into the report.

Constraints on aggregated (yellow) column: All the records are included in the report, but value of the aggregated column is calculated only for records, satisfying the constraint.

Toolbar

The following buttons are there on the Distincts Toolbar Pane.

Add Values - Apply changes made to the constraints.

Check All- Check all checkboxes for the current page of values.

Uncheck All - Uncheck all checkboxes for the current page of values. Change color - Switches between "white" and "yellow" mode for adding constraints. In the "white" mode the user can specify global constraints. In the "yellow" mode the user can specify constraints for aggregated columns. This button is enabled only if there are aggregated (yellow) columns in the report.

Show filter - Toggles the on/off Filter sub pane. Filter is used when there are a lot of distincts values in each column and a user needs to find specific value(s). On the filter subpane the user can search for values starting with or including specific letters or text. The button Apply applies filter to the list of values. The Clear button displays all values.

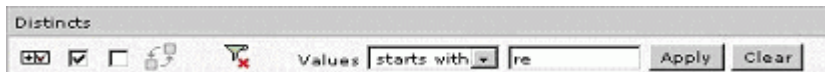


Figure 364. Filter subpane

The arrows help to scroll the report by columns in a distincts pane.

8.3.2.3. Global constraints pane

[209:EsrDesignReportsPaneGlobalConstraints.html](#)

[210:helpRVGlobalConstraints.html](#)








Global constraints pane shows all the global constraints applied to the report. Constraints can be specified in the Distinct pane. Each constraint contains the following controls:

Icon	Description
	Deletes the constraint.
In/not in	Clicking the link reverses constraints. For example, the constraint "include only value A into report" changes to "include all values except value A into report".

Light grey denotes that the interval up to the value, is included in the constraint, but the value itself is not.

8.3.2.4. Report definition pane

211:EsrDesignReportsPaneReportDefinition.html

Icon	Description
	Deletes the column from the report.
 In/not in in the yellow (aggregated) column	Clicking the link reverses the local constraints. For example, the constraint "include only value A into report" changes to "include all values except value A"
 Group	Groups the report by the column.
 Total	Calculates the total value for a column
 Grand Total	Calculates the total value for the report
	Moves the column to the left
	Moves the column to the right

NOTE: Totals and grand totals are not available, if there are no aggregated columns in the report.

NOTE: Clicking on a name of the column launches the window of column properties, where the user can view and set up the information on a selected column.

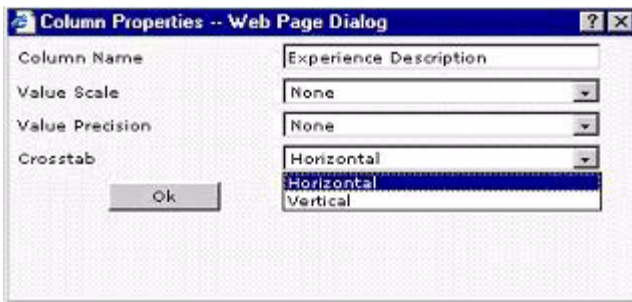


Figure 365. Column properties

For columns the following properties are available:

- Unit measure (can be set up by the user)
- Precision (can be set up by the user)
- Also the user can set up the place where the column will be situated (vertical or horizontal heading). If there is at least one column in the vertical heading, then a crosstab is built. This property is not available if there are no aggregated columns.

8.3.2.5. change star

212:EsrDesignReportsChangeStar.html

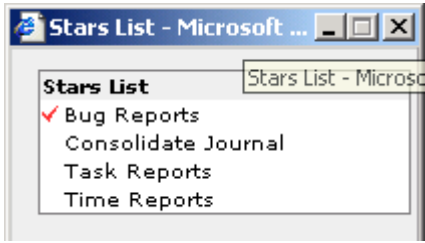


Figure 366. Change star

8.3.2.6. load

213:EsrDesignReportsLoad.html

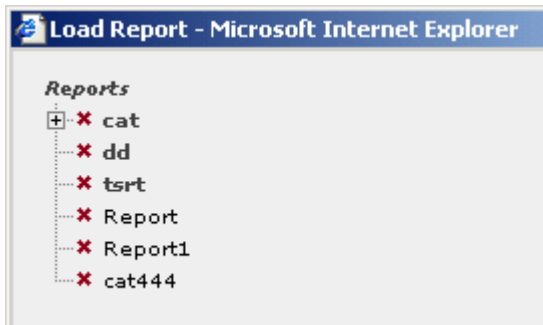


Figure 367. Load

8.3.2.7. save

214:EsrDesignReportsSave.html

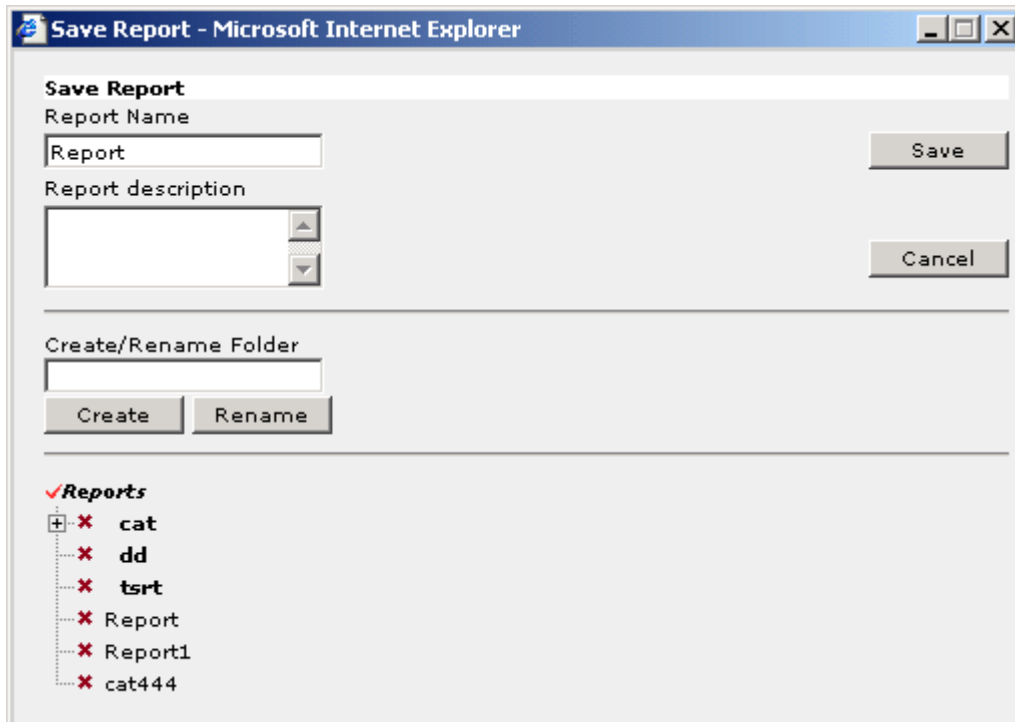


Figure 368. Save

8.3.2.8. header

215:EsrDesignReportsHeader.html

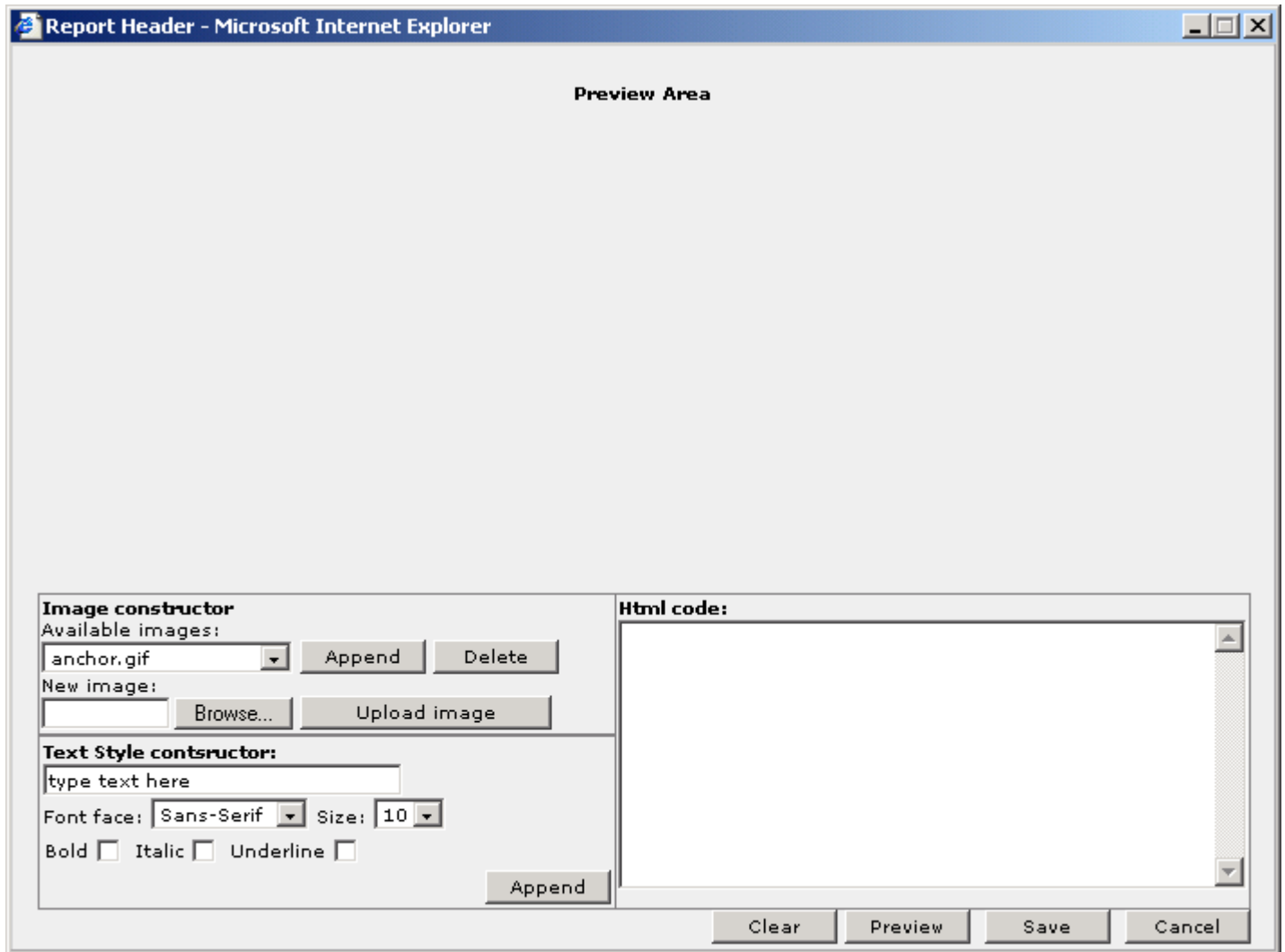


Figure 369. Header

8.3.2.9. design column

216:EsrDesignReportsDesignColumn.html

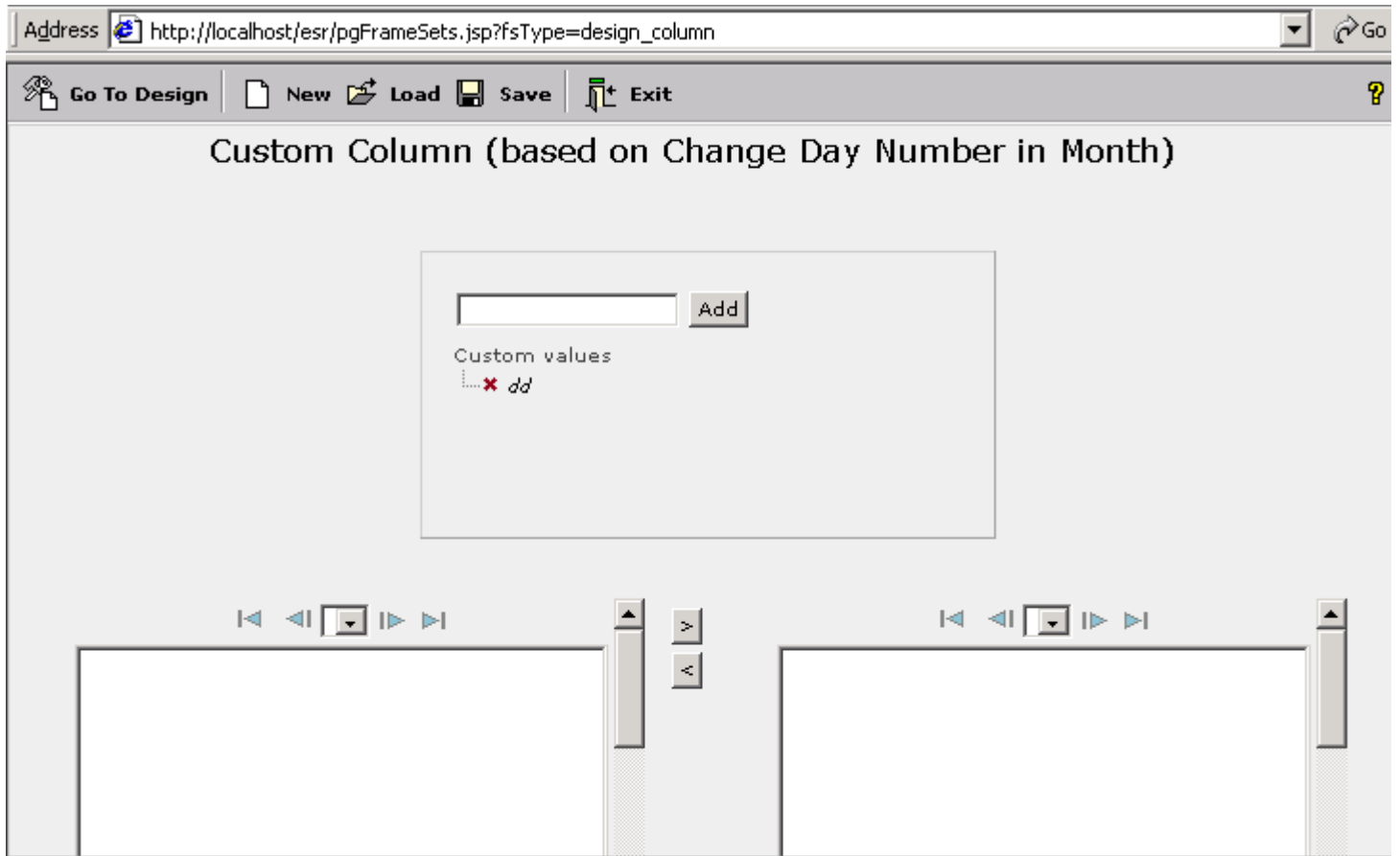


Figure 370. Design column

8.3.2.9.1. new

217:EsrDesignReportsDesignColumnNew.html

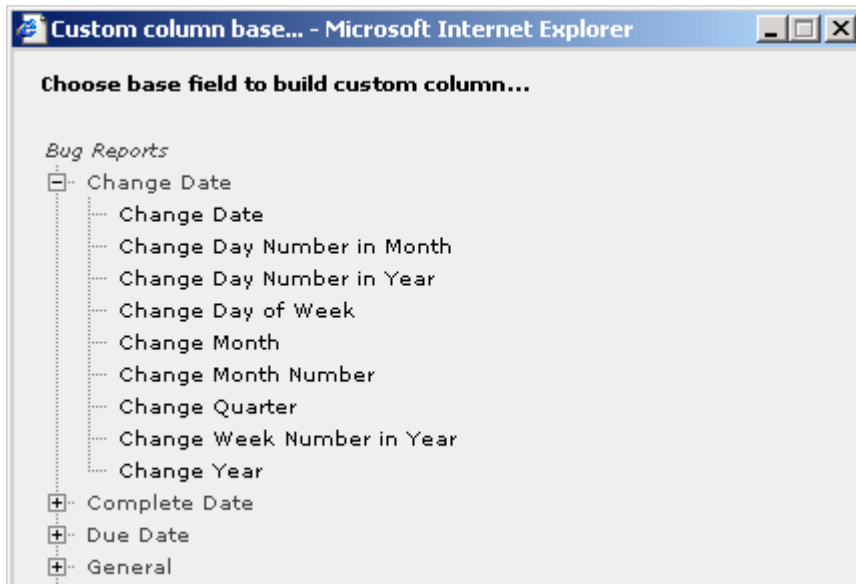


Figure 371. Design column / New

8.3.2.9.2. load

218:EsrDesignReportsDesignColumnLoad.html



Figure 372. Design column / Load

8.3.2.9.3. save

219:EsrDesignReportsDesignColumnSave.html

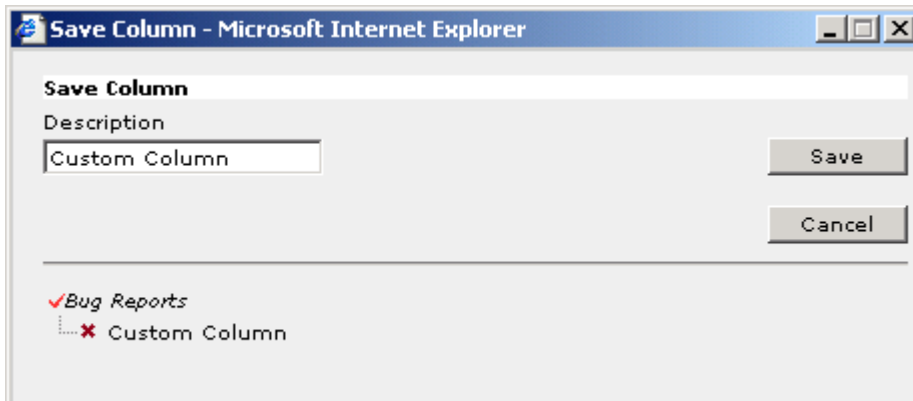


Figure 373. Design column / Save

8.3.2.10. parameter design

220:EsrDesignReportsParameterDesign.html

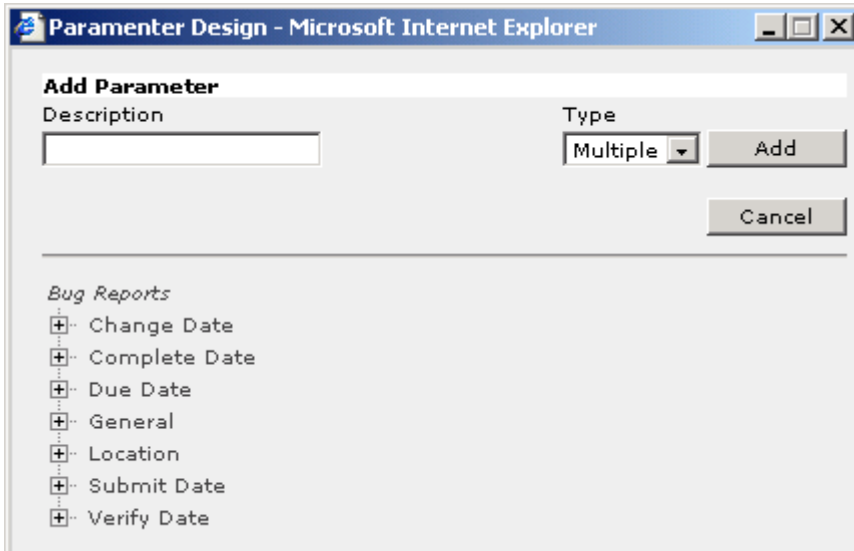


Figure 374. Parameter design

8.4. PMC OMS CLIENT

[221:OmsClient.html](#)

[10_pmc_ui_4_oms.fm](#)

If after the first start of OMS, the list “Today’s Calendar” contains some Activities, the main list is switched to the mode “Activities”, and the details pane will have the information about the first Activity in the list. If the list “Today’s Calendar” doesn’t contain anything, the main list is switched to the mode “Opportunities”, and the details pane displays the information about the first Opportunity in the list.

- [8.4.1. Logon \(page 504\)](#)
- [8.4.2. View selector \(page 506\)](#)
- [8.4.3. View: My Day \(page 507\)](#)
- [8.4.4. View Opportunities \(page 511\)](#)
- [8.4.5. View: Activities \(page 525\)](#)
- [8.4.6. View: Accounts \(page 538\)](#)
- [8.4.7. View: Contacts \(page 555\)](#)
- [8.4.8. View: Calendar \(page 568\)](#)

8.4.1. Logon

[222:OmsClientLogon.html](#)

After you have started OMS, you see Login window. To login the system, it is necessary to have a system right “Login to OMS” (this right is assigned by Administrator to every user).

The registration window in OMS looks like the following:

The screenshot shows a web browser window with the address bar containing the URL `http://127.0.0.1:8099/oms/m_pg_loginpage.jsp`. The page content is a login form with a green header. The header includes the text "Manager Contact" and a "help" link with a question mark icon. The form fields are: "User Name:" with the value "terry", "Password:" with the value "*****", and "Language:" with a dropdown menu set to "English (US)". There is a "Submit" button and a "Change password" link. The footer of the page displays "Version: 3.0", "Build: 3.0.002", and "mailto: System Administrator".

Figure 375. xxx

On this page enter your user name and password in the fields “User Name” and “Password”. After that- press the button “Submit” and if the registration was successful, the OMS module “My Day” opens.

If the registration was not successful, the system displays the text “Invalid User Name and Password specified”, and it means that the user doesn’t have OMS login rights. In present OMS is fully internationalized for Russian and English languages: choice of language is made by checkbox “Language:” – with that the system is immediately switching to a corresponding language (if, of cause, user computer supports this language).

xxx

- [8.4.1.1. Change password \(page 505\)](#)

8.4.1.1. Change password

223:OmsClientChangePassword.html

To change the password, click the link "Change password" on Login page and you will see this window:



The image shows a standard Windows-style dialog box titled "Change login informatio...". It contains four text input fields stacked vertically, each with a label above it: "Login:", "Enter your old password:", "Enter your new password:", and "Confirm new password:". At the bottom of the dialog, there are two buttons: "Submit" and "Reset".

Figure 376. xxx

From this window it is necessary to fill in all the fields and after that - press the button "Submit". If the password is correctly changed this text is displayed: "Password has been changed successfully."

If there is a mistake, the following text is displayed "Login failed!" or "Failed to change password!"

Use, please the button "Reset" to clear all the fields on this page.

8.4.2. View selector

[224:OmsClientViewSelector.html](#)

At the left of List Toolbar there is an element of modules selection to select any module “My Day”, “Opportunity”, “Account”, “Contact”, “Activity”, “and Calendar”.

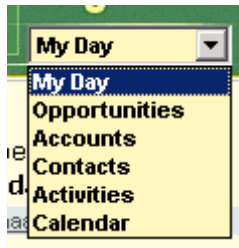


Figure 377. xxx

8.4.3. View: My Day

225:OmsClientViewMyDay.html

In the upper part of the window there is the pane List Toolbar, and in the module "My Day" the buttons "Options..." (OMS settings) and "Refresh" (data update) are available.

- [8.4.3.1. List of lists \(page 508\)](#)
- [8.4.3.2. Selected list \(page 509\)](#)
- [8.4.3.3. Selected from list \(page 510\)](#)

8.4.3.1. List of lists

226:OmsClientViewMyDayListOfLists.html

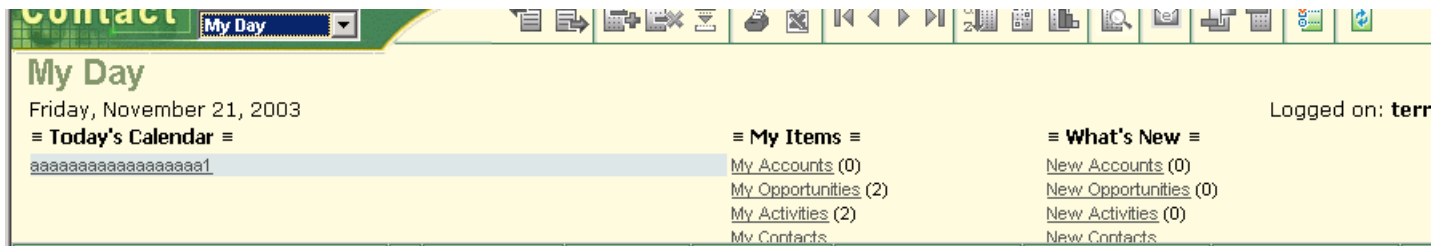


Figure 378. xxx

Today's Calendar. Displays list of Activities, assigned to the current registered user (field "Assigned To" in Activity), who has the current system date as "Planned Start Date". If you select any element in this list, the main list displays Activities, and selected Activity becomes current in the main list. If this list has some data, there is always a current record (cursor). The cursor is of different color.

- Today's Calendar (list of activities): 8.4.5. View: Activities (page 525)
- My Items / My Accounts: 8.4.6. View: Accounts (page 538)
- My Items / My Opportunities: 8.4.4. View Opportunities (page 511)
- My Items / My Activities: 8.4.5. View: Activities (page 525)
- My Items / My Contacts: 8.4.7. View: Contacts (page 555)

What's New Displays the information about new (not viewed by the registered user) Opportunities, Accounts, Activities. If you select a category from this list the corresponding category is displayed in the main list. With that only new elements are shown. For Activities the condition of assignment to the current registered user is additionally applied. If the list has some data, there is always a current record (cursor). The cursor is of different color.

- Whats new / New Accounts: 8.4.6. View: Accounts (page 538)
- Whats new / New Opportunities: 8.4.4. View Opportunities (page 511)
- Whats new / New Activities: 8.4.5. View: Activities (page 525)
- Whats new / New Contacts: 8.4.7. View: Contacts (page 555)

8.4.3.2. Selected list

227:OmsClientViewMyDaySelectedList.html

Main list. Displays the list of elements, for corresponding category of elements, selected in the panes "Today's Calendar" or "What's New". To sort the list by descent or ascent order, click the header of the column. Rows, new for the current user, are displayed bolded.

Activity		Type	Priority	Status	Planned Start	Planned
aaaaaaaaaaaaaaaaaaaa1		Activity	Normal	Not Started	11/21/03 10:30 AM	11/21/03

Figure 379. xxx

8.4.3.3. Selected from list

228:OmsClientViewMyDaySelectedFromList.html

Between the main list and details there is a pane Detail Toolbar, set of buttons of this pane depends on the current selected category (main list) and subcategory (details). It has the buttons "Save", "Create new", "Delete" and so on to work with the selected detail.

Details. Displays detailed information about the current element, selected in the main list. Here the information about selected subcategory is displayed.

In the lower part of the screen, under the detail pane there is a Shortcut Bar pane. Shortcut Bar serves to switch between subcategories of the current category.

In the right lower corner there is the pane Shortcut Bar Navigator for horizontal scrolling of Shortcut Bar.

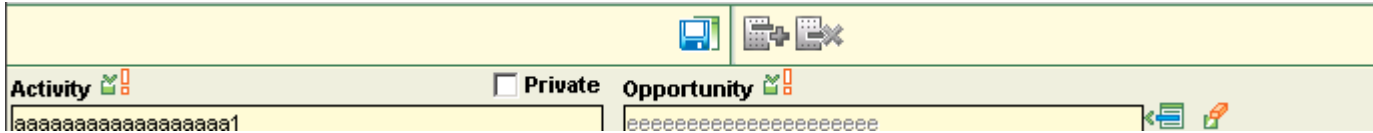


Figure 380. xxx

8.4.4. View Opportunities

[229:OmsClientViewOpportunities.html](#)

The module is developed to create, modify and delete Opportunities and else to work with accompanying Opportunity information (as Contacts, Attachments, Notes). Sales Team (Opportunity Team) is being formed from this module. It is possible also to work here with child OMS- elements (Activities here) and edit the “parent” Account.

- [8.4.4.1. Opportunities toolbar \(page 512\)](#)
- [8.4.4.2. Opportunities list filter \(page 515\)](#)
- [8.4.4.3. Opportunities list \(page 516\)](#)
- [8.4.4.4. Selected opportunity \(page 517\)](#)

8.4.4.1. Opportunities toolbar

230:OmsClientViewOpportunitiesToolbar.html

In the upper part of the window the pane List Toolbar is situated. Availability of the buttons is defined by the list (empty list, list at Insert etc., and by Security rights). The toolbar has the following buttons:

 Undo. Cancels the last command, performed in OMS (if it's possible)

 Redo. Repeats the last command, performed in OMS (if it's possible)


 Create new Opportunity. Create new Opportunity.

 Delete Opportunity. Delete Opportunity.

 Create new Opportunity based on selected

Make a copy of the selected record. The field "Activity" is filled with the name of the current Account with prefix "Copy of ". This button is disabled if the user doesn't have rights to create Account

 Print Report. Generate HTML-page with information about Opportunity, about Activities, created in scope of Opportunity, information about its Contacts, Notes, Sales Team staff.

 Previous page. Display the previous page of data from the database. The size of the page is defined in the window "Options", available by the button "Options..." from List Toolbar of any module. This button is disabled, if there is no previous page.

 Next Page. Display the next page of data from the database. The size of the page is defined in the window "Options", available by the button "Options..." from List Toolbar of any module. This button is disabled, if there is no next page.

 Sort Opportunity list. Toggle on/off the sorting pane:

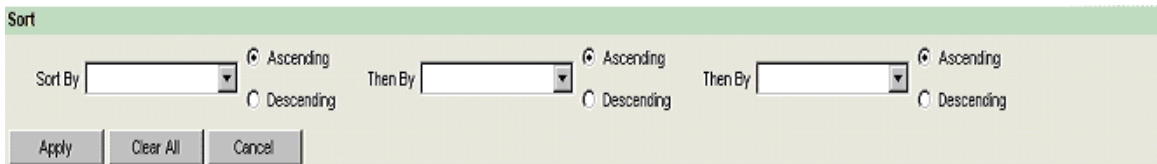


Figure 381. xxx

 Custom filter. Toggle on/off custom filter. Filter pane looks like the following:

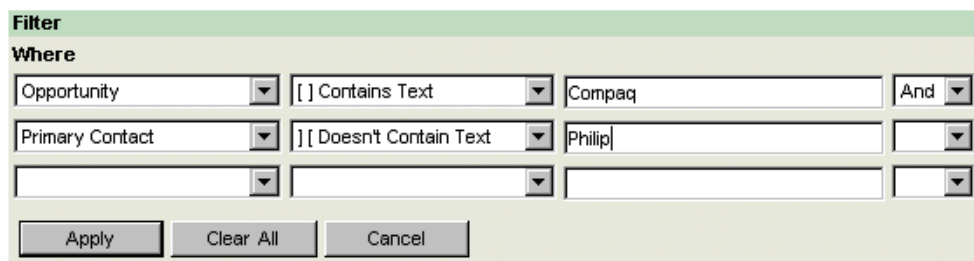



Figure 382. xxx

 Chart. Show the chart of quantitative and monetary relationship between Opportunities. It is possible to group the current list of Opportunities in the main list by the fields "Year", "Quarter", "Month", "Week" – according to the creation date Opportunity, and "Status", "Probability", "Account". This button is disabled if the list is empty. The chart pane looks as the following:

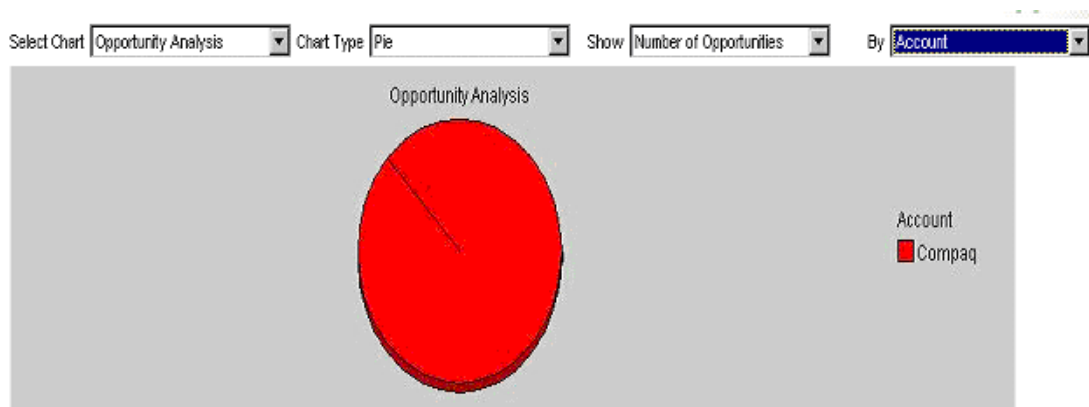




Figure 383. xxx

 Send E-mail to Contacts. Distribution of E-mails to all Contacts of the given Opportunity with the flag preset “Is Active” and clear flag “Do Not Contact”. This command launches the mail client on your machine and the form to write a letter is displayed. The button is disabled if the list is empty.

 Set/Remove Flag. Toggle the flag on/ off for the current Opportunity (Opportunity with a cursor).

 Customize Opportunity list fields. Setting of main list's columns- if you uncheck the checkbox against the field, the corresponding column disappears from the main list excluding the first column, as it's a column of cursor. The settings window for “Opportunity” module looks like the following:

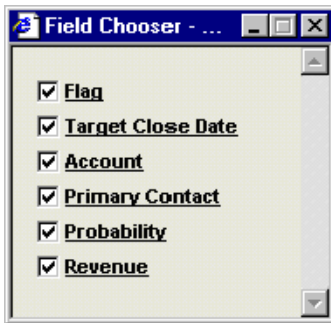



Figure 384. xxx

 Options... Allows user to select the number of rows and the ratio of the vertical split: The options window looks like the following:

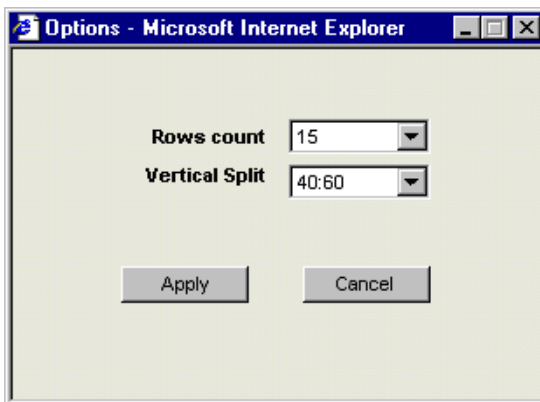


Figure 385. xxx

To save the changes click the button “Apply” and “Cancel” – to cancel settings.



Refresh. Refresh. Refresh the data. With that all values and details are updated from the database (and this is really useful when several users are working in the module).

- At the left of List Toolbar there is an element of modules' selection. Using this element it's possible to select any module "My Day", "Opportunity", "Account", "Contact", "Activity", "Calendar".
- At the right of List Toolbar, there are symbols "help" and "<EPAM>", (see description of the module "My Day").
- Simple filter to the right from the List Toolbar applies a predefined filter to the main list. The list of filters contains the most used filters. To set up the filters it is necessary to open the pane "Custom filter" and by simple selection, set up the filter's restrictions. Simple Filter in the module "Account" contains the following elements:
 - New Opportunities – Opportunities, for which the flag "New" for the current user is set.
 - Flagged Opportunities – Opportunities with a preset flag (the field "Flag" or "Is Flagged").
 - All Opportunities– All Opportunities (default filter)
- Between the main list and details there is a pane Detail Toolbar, set of buttons of this pane depends on the current selected category (main list) and subcategory (details). It has the buttons "Save", "Create new", "Delete" and so on to work with the selected detail. Detail Toolbar is used to work with lists in subcategories.
- In the lower part of the screen, under the detail pane there is a Shortcut Bar pane. Shortcut Bar serves to switch between subcategories of the current category (see. 4.1. – 4.8.).
- In the right lower corner there is the pane Shortcut Bar Navigator for horizontal scrolling of Shortcut Bar.

8.4.4.2. Opportunities list filter

231:OmsClientViewOpportunitiesFilter.html

8.4.4.3. Opportunities list

232:OmsClientViewOpportunitiesList.html

- Main list. Displays the list of Opportunities.

If you click on "Header" the list will be sorted by descent or ascent.

If the list has some rows, one record will be current (cursor). The cursor is of different color. The rows of the list, new for a registered user are bolded.

8.4.4.4. Selected opportunity

[233:OmsClientViewOpportunitiesSelected.html](#)

- **Details.** Displays the detailed information about the current Opportunity, selected in the main list. The information about selected subcategory is displayed here as well.

- 8.4.4.4.1. Details (tab general) (page 518)
- 8.4.4.4.2. Related account (page 519)
- 8.4.4.4.3. Contacts (page 520)
- 8.4.4.4.4. Related activities (page 521)
- 8.4.4.4.5. Sales team (page 522)
- 8.4.4.4.6. Attachments (page 523)
- 8.4.4.4.7. Notes (page 524)

8.4.4.4.1. Details (tab general)

234:OmsClientViewOpportunitiesSelectedDetails.html

Opportunity	<input checked="" type="checkbox"/> Is Active	Account	<input type="text" value="cussss1"/>			
<input type="text" value="eeeeeeeeeeeeeeeeeeee"/>						
Description	Primary Contact					
<input type="text" value="3444444444413 241324 123412341234132"/>	<input type="text" value=""/>					
Opportunity Type	Currency	Target Close Date				
<input type="text" value="CAD/CAM Integration"/>	<input type="text" value="American Dollar"/>	<input type="text" value=""/>				
Sales Stage	Revenue	Actual Close Date				
<input type="text" value="Loss"/>	<input type="text" value=""/>	<input type="text" value=""/>				
Probability	Reason Won/Loss	Owner				
<input type="text" value="0%"/>	<input type="text" value="Features"/>	<input type="text" value="terry"/>				
Created By:	terry	Date Created:	11/21/03 12:52 PM			
Updated By:	terry	Last Updated:	11/21/03 12:52 PM			
General	Account	Contacts	Activities	Sales Team	Attachments	Notes

Figure 386. xxx

8.4.4.4.2. Related account

235:OmsClientViewOpportunitiesSelectedRelatedAccount.html













     										
Account Name   <input type="text" value="cussss1"/>	<input checked="" type="checkbox"/> Is Active	Primary Contact <input type="text" value="tttttttt ttttttttttttttttttt"/>	E-mail <input type="text" value="terry_taylor@epam.com"/> 							
Account Type <input type="text" value="Customer"/>	Owner   <input type="text" value="Super User"/> 	Primary Industry <input type="text" value="Pharma & Biotech"/>								
Currency <input type="text" value="American Dollar"/>	Annual Revenue <input type="text"/>									
Created By: Super User		Date Created: 11/20/03 9:46 PM								
Updated By:		Last Updated: 11/20/03 9:46 PM								
<table border="1"> <tr> <td>General</td> <td>Account</td> <td>Contacts</td> <td>Activities</td> <td>Sales Team</td> <td>Attachments</td> <td>Notes</td> </tr> </table>				General	Account	Contacts	Activities	Sales Team	Attachments	Notes
General	Account	Contacts	Activities	Sales Team	Attachments	Notes				

Figure 387. xxx

8.4.4.4.3. Contacts

236:OmsClientViewOpportunitiesSelectedContacts.html

The screenshot shows a web-based contact management interface. At the top, there is a toolbar with icons for save, delete, and other actions. Below the toolbar is a list of contacts, with the first one selected. The main area is a form for editing the selected contact. The form is organized into several sections:

- Name Section:** Includes fields for First Name (with a checkmark and a warning icon), Middle Name, and Last Name (with a checkmark and a warning icon). There is also a checkbox for "Do Not Contact".
- Account Section:** Includes a text field for "Account" (containing "cussss1") and a dropdown menu for "Category" (set to "Competitor").
- Job Information Section:** Includes text fields for "Job Title", "Division/Department", and "Reports To".
- Phone Numbers Section:** Includes text fields for "Business Phone", "Business Fax", "Mobile Phone", and "Home Phone".
- E-mail Section:** Includes a text field for "E-mail" (containing "terry_taylor@epam.com") and a small icon to the right.
- Comment Section:** Includes a large text area for "Comment".
- Metadata Section:** Located at the bottom right, it shows "Created By: terry", "Updated By: Super User", "Date Created: 11/20/03 9:59 PM", and "Last Updated: 11/21/03 1:32 PM".
- Navigation Section:** At the bottom, there are several tabs: "General", "Account", "Contacts" (which is currently selected), "Activities", "Sales Team", "Attachments", and "Notes".

Figure 388. xxx

8.4.4.4. Related activities

237:OmsClientViewOpportunitiesSelectedRelatedActivities.html

Activity		<input type="checkbox"/> Private		Opportunity	
aaaaaaaaaaaaaaaaaa1		aaaaaaaaaaaaaaaaaa1		eeeeeeeeeeeeeeeeeee	
Type Activity		Priority Normal		Account cussss1	
Status Not Started		<input type="checkbox"/> Billable		Primary Contact _____	
Planned Start Date 11/21/03 10:30 AM				Estimated hours: _____	
Planned End Date 11/21/03 11:00 AM				Reminder <input type="checkbox"/> 0 minutes	
Completed Date _____					
Assigned To terry			Comment _____		
Assigned By terry					
Created By: terry			Date Created: 11/21/03 12:55 PM		
Updated By:			Last Updated: 11/21/03 12:55 PM		
General		Account		Contacts	
Activities		Sales Team		Attachments	
Notes					

Figure 389. xxx

8.4.4.4.5. Sales team

238:OmsClientViewOpportunitiesSelectedSalesTeam.html



Figure 390. xxx

8.4.4.4.6. Attachments

239:OmsClientViewOpportunitiesSelectedAttachments.html

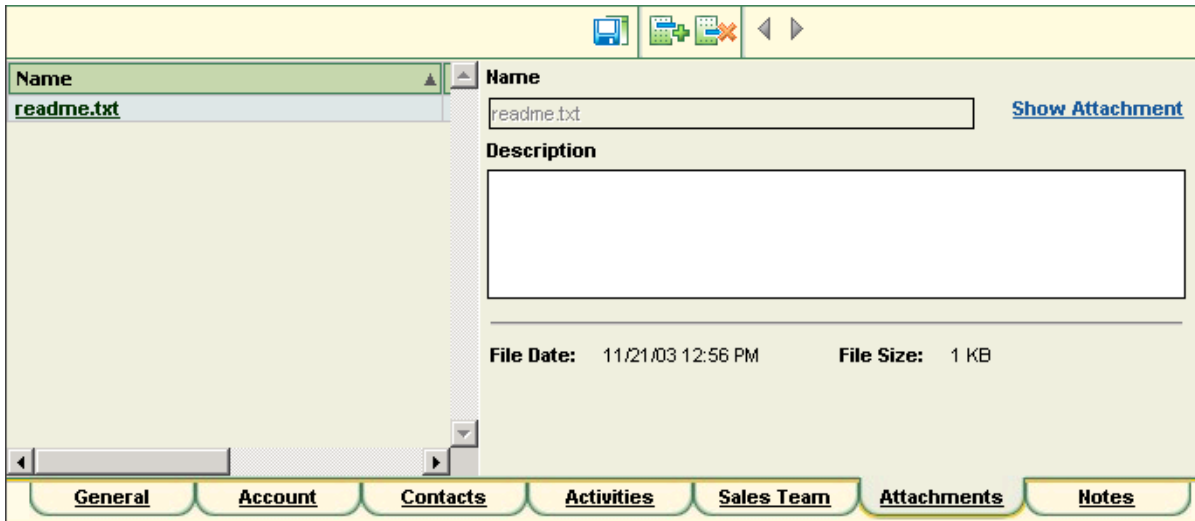


Figure 391. xxx

8.4.4.4.7. Notes

240:OmsClientViewOpportunitiesSelectedNotes.html



Figure 392. xxx

8.4.5. View: Activities

241:OmsClientViewActivities.html

- [8.4.5.1. Activities toolbar \(page 526\)](#)
- [8.4.5.2. Activities list filter \(page 528\)](#)
- [8.4.5.3. Activities list \(page 529\)](#)
- [8.4.5.4. Selected activity \(page 530\)](#)

8.4.5.1. Activities toolbar

242:OmsClientViewActivitiesToolbar.html



Figure 393. xxx



Sort

Sort By Ascending Descending

Then By Ascending Descending

Then By Ascending Descending

Apply Clear All Cancel

Figure 394. xxx



Filter

Where

Account Name <=> Not Equals Compaq Or

City = Equals New York

Apply Clear All Cancel

Figure 395. xxx



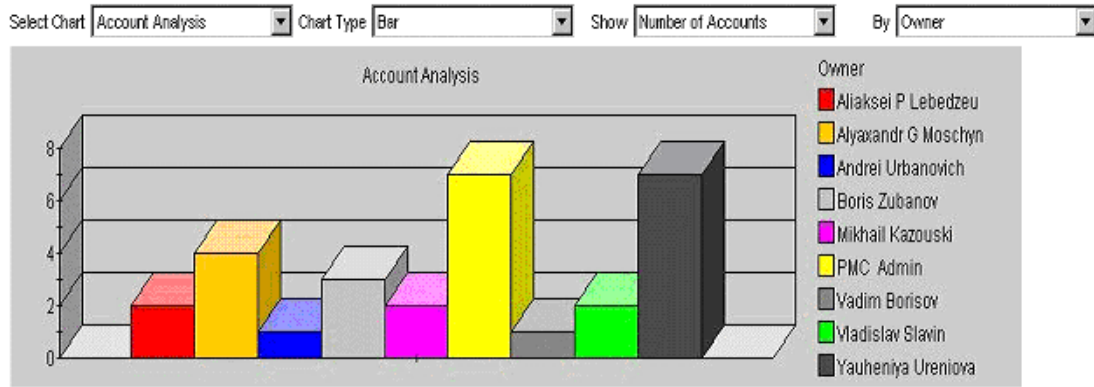


Figure 396. xxx

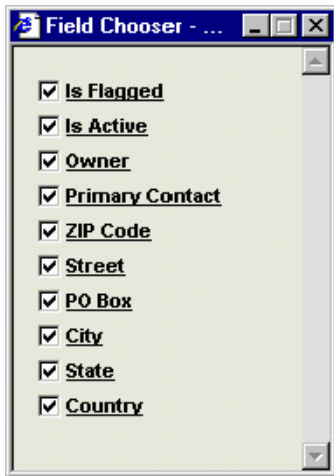


Figure 397. xxx

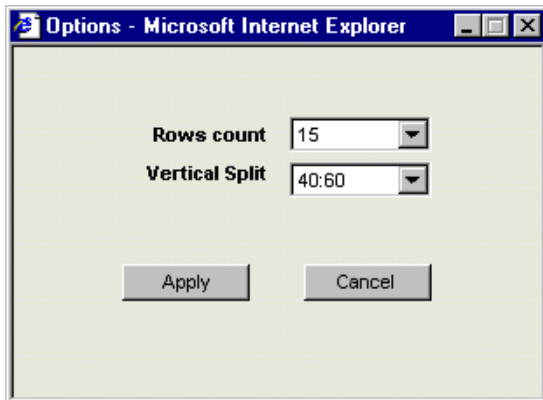


Figure 398. xxx



8.4.5.2. Activities list filter

243:OmsClientViewActivitiesFilter.html

8.4.5.3. Activities list

244:OmsClientViewActivitiesList.html

Activity	Type	Priority	Status	Planned Start	Planned End	Assignee
aaaaaaaaaaaaaaaaa1	Activity	Normal	Not Started	11/20/03 8:00 PM	11/20/03 8:30 PM	terry
aaaaaaaaaaaaaaaaa1	Activity	Normal	Not Started	11/21/03 10:30 AM	11/21/03 11:00 AM	terry

Figure 399. xxx

8.4.5.4. Selected activity

245:OmsClientViewActivitiesSelected.html

- 8.4.5.4.1. Details (tab general) (page 531)
- 8.4.5.4.2. Related opportunity (page 532)
- 8.4.5.4.3. Related account (page 533)
- 8.4.5.4.4. Related contacts (page 534)
- 8.4.5.4.5. Attachments (page 535)
- 8.4.5.4.6. Notes (page 536)
- 8.4.5.4.7. Time journal (page 537)

8.4.5.4.1. Details (tab general)

246:OmsClientViewActivitiesSelectedDetails.html

Activity <input type="checkbox"/> Private		Opportunity	
aaaaaaaaaaaaaaaaa1		00000000002	
Type Activity	Priority Normal	Account cussss1	
Status Not Started	<input type="checkbox"/> Billable	Primary Contact _____	
Planned Start Date 11/20/03 8:00 PM		Estimated hours: _____	
Planned End Date 11/20/03 8:30 PM		Reminder <input type="checkbox"/> 0 minutes	
Completed Date _____			
Assigned To terry	Comment _____		
Assigned By terry			
Created By: terry	Date Created: 11/20/03 10:07 PM		
Updated By:	Last Updated: 11/20/03 10:07 PM		
General	Opportunity	Account	Contacts
	Attachments	Notes	Time Journal

Figure 400. xxx

8.4.5.4.2. Related opportunity

247:OmsClientViewActivitiesSelectedRelatedOpportunity.html

Opportunity		<input checked="" type="checkbox"/> Is Active	Account								
<input type="text" value="0000000002"/>		<input type="text" value="cussss1"/>									
Description		Primary Contact									
<input type="text" value="opprotuntiy22222222"/>		<input type="text" value="xxxxxxxxxxxxxxxxxxxxxxxxxxxx"/>									
Opportunity Type		Currency	Target Close Date								
<input type="text" value="CAD/CAM Integration"/>		<input type="text" value="American Dollar"/>	<input type="text"/>								
Sales Stage		Revenue	Actual Close Date								
<input type="text" value="Loss"/>		<input type="text"/>	<input type="text"/>								
Probability		Reason Won/Loss	Owner								
<input type="text" value="0%"/>		<input type="text" value="Features"/>	<input type="text" value="terry"/>								
Created By: terry		Date Created: 11/20/03 9:55 PM									
Updated By: terry		Last Updated: 11/20/03 9:55 PM									
<table border="1"> <tr> <td>General</td> <td>Opportunity</td> <td>Account</td> <td>Contacts</td> <td>Attachments</td> <td>Notes</td> <td>Time Journal</td> </tr> </table>					General	Opportunity	Account	Contacts	Attachments	Notes	Time Journal
General	Opportunity	Account	Contacts	Attachments	Notes	Time Journal					

Figure 401. xxx

8.4.5.4.3. Related account

248:OmsClientViewActivitiesSelectedRelatedAccount.html

The screenshot displays a web-based form for account management. At the top, there are navigation icons for save, print, and delete, along with back and forward arrows. The form is organized into several sections:

- Account Name:** A text input field containing "cussss1".
- Is Active:** A checkbox that is checked.
- Primary Contact:** A dropdown menu showing a masked name "tttttttt ttttttttttttttttttt".
- E-mail:** A text input field containing "terry_taylor@epam.com" with a small icon to its right.
- Account Type:** A dropdown menu showing "Customer".
- Owner:** A dropdown menu showing "Super User" with a small icon to its right.
- Currency:** A dropdown menu showing "American Dollar".
- Primary Industry:** A dropdown menu showing "Pharma & Biotech".
- Annual Revenue:** An empty text input field.

Below the main form fields, there is a metadata section:

- Created By:** Super User
- Date Created:** 11/20/03 9:46 PM
- Updated By:**
- Last Updated:** 11/20/03 9:46 PM

At the bottom of the form, there is a tabbed interface with the following tabs: **General**, **Opportunity**, **Account** (which is the active tab), **Contacts**, **Attachments**, **Notes**, and **Time Journal**.

Figure 402. xxx

8.4.5.4.4. Related contacts

249:OmsClientViewActivitiesSelectedRelatedContacts.html

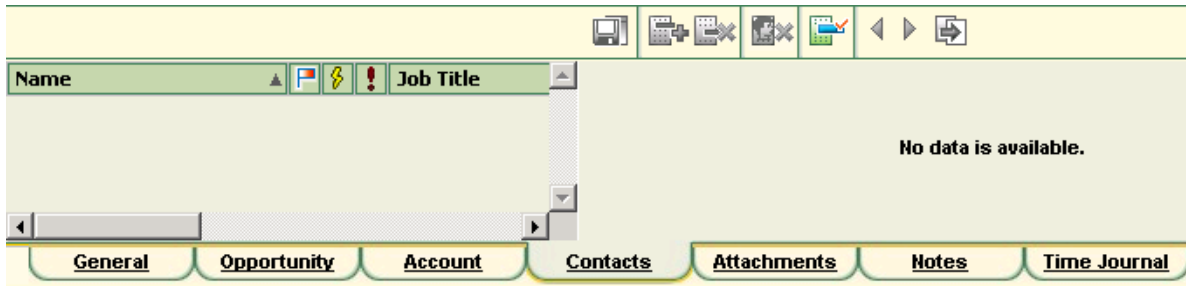


Figure 403. xxx

8.4.5.4.5. Attachments

250:OmsClientViewActivitiesSelectedAttachments.html

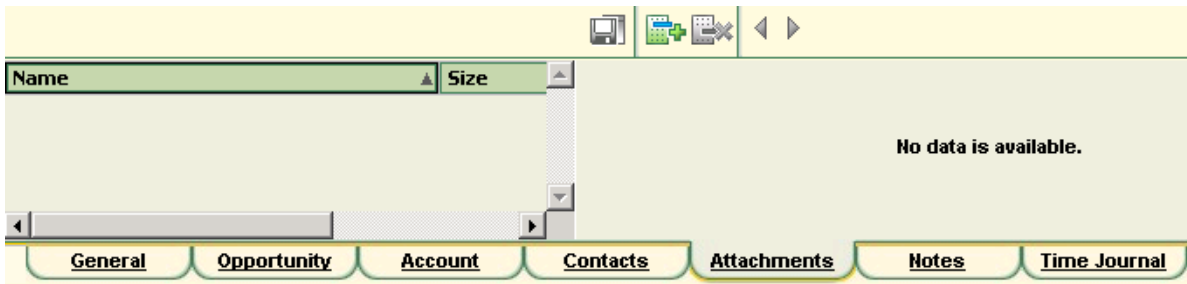


Figure 404. xxx

8.4.5.4.6. Notes

251:OmsClientViewActivitiesSelectedNotes.html

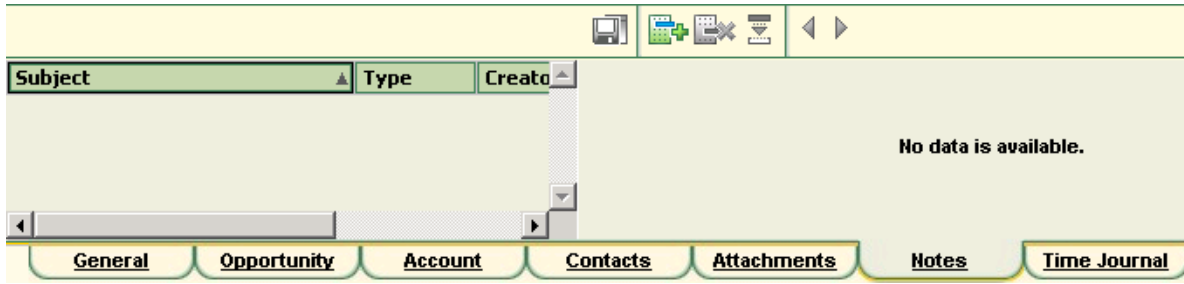


Figure 405. xxx

8.4.5.4.7. Time journal

252:OmsClientViewActivitiesSelectedTimeJournal.html

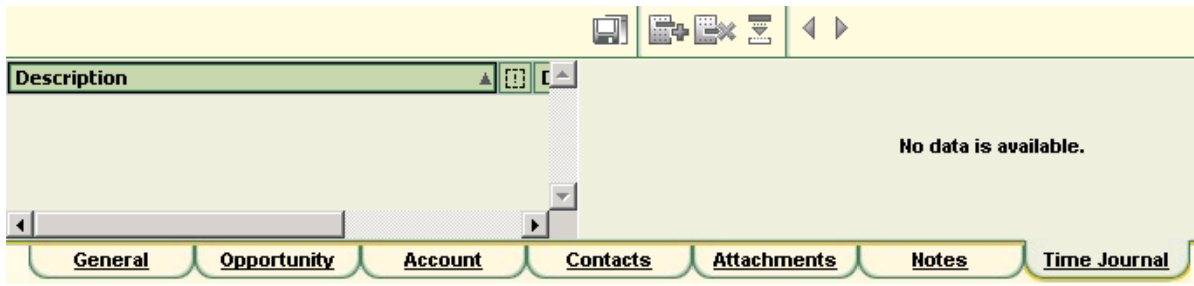


Figure 406. xxx

8.4.6. View: Accounts

[253:OmsClientViewAccounts.html](#)

Selection of this module is made by the element for modules selection, situated in the left upper part of the window, or using the button “Go to Account category” in “Detail Toolbar” from the subcategory “Account”.

The module helps create, modify and delete Accounts and work with accompanying information (Addresses, Contacts, Attachments, and Notes). Account Team is formed from this module. Work with OMS-elements, which are child elements (Opportunities, Activities) of Account is possible here as well.

- [8.4.6.1. Account Toolbar \(page 539\)](#)
- [8.4.6.2. Accounts list filter \(page 542\)](#)
- [8.4.6.3. Accounts list \(page 543\)](#)
- [8.4.6.4. Selected account \(page 544\)](#)

8.4.6.1. Account Toolbar

254:OmsClientViewAccountsToolbar.html

xxx

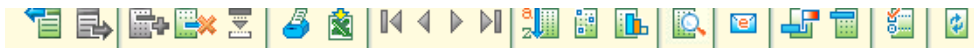











Figure 407. xxx

The buttons of List Toolbar pane are described below:

-  Undo Cancels the last command, performed in OMS (if it's possible)
-  Redo. Repeats the last command, performed in OMS (if it's possible)
-  Create new Account. Create new Account. Insert a new row with default values at the bottom of the list. This button is disabled, if the registered user does not have rights to create new Account.
-  Delete Account. Delete selected Account. This button is disabled if the list is empty or the user doesn't have rights to delete selected Account.
-  Create new Account based on selected. Make a copy of the selected record. Values of some fields are not copied: for example the field "Owner" is filled in with the name of currently registered user. The field "Account Name" is filled with the name of the current Account with prefix "Copy of ". This button is disabled if the user doesn't have rights to create Account.
-  Print Report. Generate HTML- page with detailed report about selected Account.
-  Previous page. Display the previous page of data from the database. The size of the page is defined in the window "Options", available by the button "Options..." from List Toolbar of any module. This button is disabled, if there is no any previous page.
-  Next Page. Display the next page of data from the database. The size of the page is defined in the window "Options", available by the button "Options..." from List Toolbar of any module. This button is disabled, if there is no next page.
-  Sort Account list. Open/Close the Sort pane. The Sort pane looks like the following:

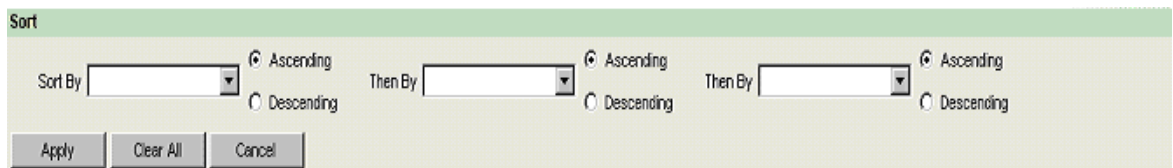


Figure 408. xxx

-  Custom filter. Open/Close user filter pane. The Filter pane looks like the following:

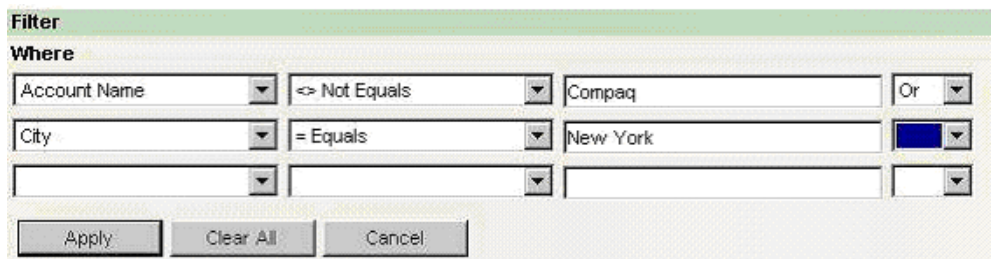


Figure 409. xxx

-  Chart. Graph the data in the displayed list. Grouping of the current list can be made by the fields "Type", "State", "City", "Owner" (taking into account all current filters, like Simple Filters etc.). This button is disabled if the list is empty. The chart pane looks like the following:

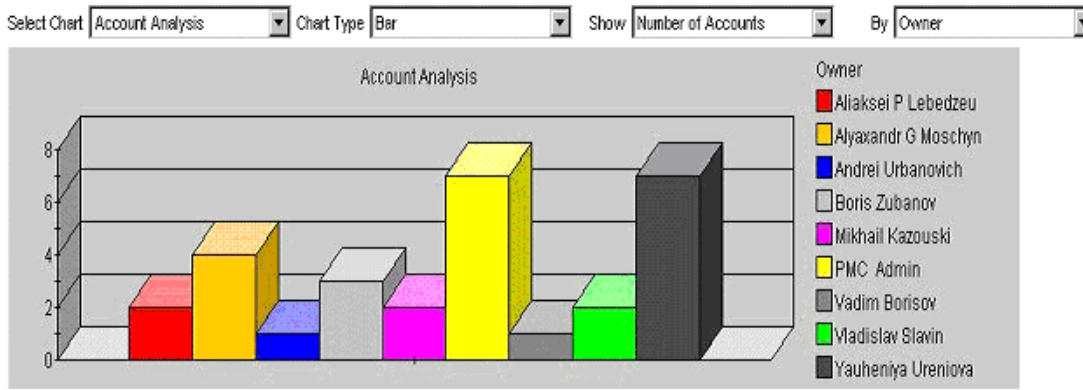





Figure 410. xxx

-  Send E-mail to Contacts. Send e-mail to selected Contacts of the current Account, with the flag preset to “Is Active” and clear flag “Do Not Contact”. The command will launch your mail system and you will see the form to send a letter. The field “To:” will contain the list of E-mail addresses of all the Account’s Contacts. The button is disabled if the list is empty.
-  Set/Remove Flag. Toggle the flag on/off for the selected record. The button is disabled if the list is empty.
-  Customize Account list fields. Set buttons, displayed in the main list. If you uncheck the checkbox against the field, the corresponding column will disappear from the main list, except the first column of the list. The settings window for the Account module looks like the following:

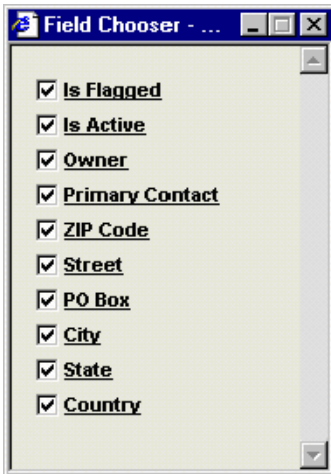



Figure 411. xxx

-  Options... Allows user to select the number of rows and the ratio of the vertical split: The settings window looks like the following:

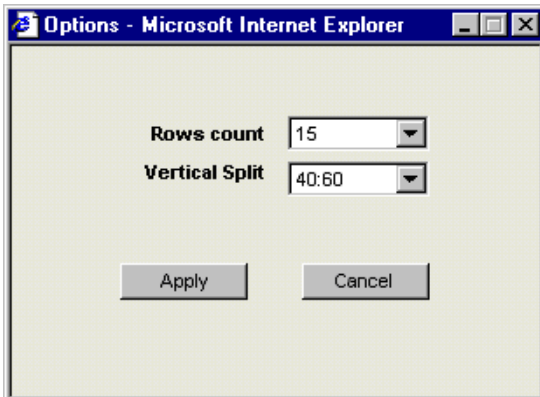



Figure 412. xxx

The button “Apply” saves the OMS settings; the button “Cancel” cancels all the settings.

 Refresh. Refresh the data. With that all values and details are updated from the database (and this is really useful when several users are working in the module).

- At the left of List Toolbar there is an element of modules' selection. Using this element it's possible to select any module “My Day”, “Opportunity”, “Account”, “Contact”, “Activity”, “Calendar”.
- At the right of List Toolbar, there are symbols “help” and “<EPAM>”, (see description of the module “My Day”).
- Simple filter at the right of the List Toolbar applies a predefined filter to the main list. The list of filters contains the most used filters. To set up the filters it is necessary to open the pane “Custom filter” and by simple selection, set up the filter's restrictions. Simple Filter in the module “Account” contains the following elements:
 - New Accounts – Accounts, for which the flag “New” for the current user is preset.
 - My Accounts – Accounts, Owner of which – the current registered user.
 - Flagged Accounts – Accounts with a preset flag (the field “Flag” or “Is Flagged”).
 - Active Accounts – Accounts, with a preset flag “Is Active”.
 - All Accounts – All Accounts (default filter).
- Between the main list and details there is a pane Detail Toolbar, set of buttons of this pane depends on the current selected category (main list) and subcategory (details). It has the buttons “Save”, “Create new”, “Delete” and so on to work with the selected detail. Detail Toolbar is used to work with lists in subcategories.
- In the lower part of the screen, under the detail pane there is a Shortcut Bar pane. Shortcut Bar serves to switch between subcategories of the current category (see. 4.1. – 4.8.).
- In the right lower corner there is the pane Shortcut Bar Navigator for horizontal scrolling of Shortcut Bar.

8.4.6.2. Accounts list filter

255:OmsClientViewAccountsFilter.html

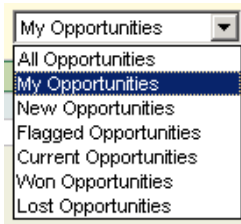


Figure 413. xxx

8.4.6.3. Accounts list

256:OmsClientViewAccountsList.html

- Main list. To sort the list by descent or ascent, click the header of the column. Rows, new for the current user, are displayed bolded

Opportunity ▲	Owner	Target Close Date	Account	Primary Contact	Probability
eeeeeeeeeeeeeeeeeeee	terry		cussss1	tttttttt tt	0 %
ooooooooo2	terry		cussss1	tttttttt tt	0 %

Figure 414. xxx

8.4.6.4. Selected account

257:OmsClientViewAccountsSelected.html

- [8.4.6.4.1. Details \(tab General\) \(page 545\)](#)
- [8.4.6.4.2. Addresses \(page 547\)](#)
- [8.4.6.4.3. Related opportunities \(page 548\)](#)
- [8.4.6.4.4. Related contacts \(page 549\)](#)
- [8.4.6.4.5. Related activities \(page 551\)](#)
- [8.4.6.4.6. Team \(page 552\)](#)
- [8.4.6.4.7. Attachments \(page 553\)](#)
- [8.4.6.4.8. Notes \(page 554\)](#)

8.4.6.4.1. Details (tab General)

258:OmsClientViewAccountsSelectedDetails.html

- Details. Displays the detailed information for the current Account, selected in the main list. Here the information on selected subcategory is displayed.

Figure 415. xxx

The following buttons are available in Detail Toolbar:

Save Account. Save information about Account in the database. The button is disabled if the user does not have rights to modify the current Account.

The fields, compulsory to be filled are yellow (for example "Account Name"). Additionally, a required field is marked by the symbol .

The fields of type "Web address" (for example "Web Site Address") are marked by the symbol , if you click on this symbol, the corresponding page opens.

The fields of the type "E-mail" (for example "E-mail") are marked by the symbol , if you click this symbol, the mail program opens.

The fields, filled in by the data from the lists- references (for example "Account Type" etc.) are developed as drop-down lists, from which you can select one of available values.

The fields, filled in as values from other modules (for example "Owner") are developed in Read-Only layout. To the right from such fields, if it is allowed, the following buttons are enabled:

Selection from the list. This button allows selecting of available value from the list. List of selection "Owner" is the following:

Name	Org_Position	Full Location
Aksana Siarheyeva	Senior Technical Support Engin	EPAM/EPAM/QA/Technical Support
Aleh Bahachuk	Group Manager	EPAM/EPAM/QA/Performance&Optimization
Aleh Brazdzetski	Programmer	EPAM/EPAM/Technology/(Viktar Kruhlikau) Solutions

Figure 416. xxx

This list contains all EPAm employees. Selection is made by clicking on the link- name of EPAm employee. After this the listing window is automatically closing. In the upper part of the window there is a filter pane.

To apply a filter it is necessary to select a value from the "Look in" drop down and to type in the text in the field "Look for".

To find people which names start by the letter A it's enough to type "A" in the field "Look for" and select "Name" in the "Look in" drop down list. After that, press the button "Apply".



Clear. This button serves to clear the field.

In the bottom part of the details pane, there is some information about creator/date of creation and last editor/edit date of the selected Account (fields "Created By", "Date Created", "Updated By", and "Date Updated").

At the right part of the details pane there is a box "Address" to view information about addresses. If Account does not have any address, a drop down list "Address Type" will contain types of all possible addresses. Against this list there is a ReadOnly CheckBox "Primary Address", displaying the "Primary" address. If you open the subcategory "General" for the first time, in the address box there will be displayed Primary-address for Account (if it exists).

8.4.6.4.2. Addresses

259:OmsClientViewAccountsSelectedAddresses.html

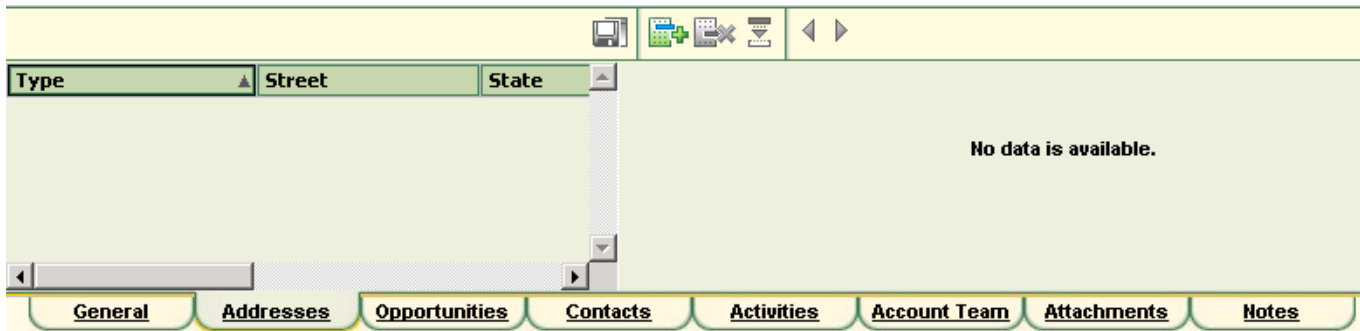






Figure 417. xxx

At the left of the details pane there is displayed the list of addresses, at the right -detail for selected in the list address. Only one address of Account can be Primary. The first address being created has a preset flag "Primary". The following buttons are available for this subcategory in Detail Toolbar:

-  Save Address. Save the current address.
-  Create new Address. Create new address for Account.
-  Delete Address. Delete the current address, selected in the list of addresses.
-  Create new Address based on selected. Make a copy of the selected record.

In the bottom part of the details pane, there is some information about creator/date of creation and last editor/edit date of the selected Account (fields "Created By", "Date Created", "Updated By", and "Date Updated").

8.4.6.4.3. Related opportunities






260:OmsClientViewAccountsSelectedRelatedOpportunities.html

The screenshot shows a software interface for managing opportunities. On the left, a list of opportunities is displayed with the following entries: **Opportunity**, **eeeeeeeeeeeeeeeeeeee**, **oooooooooooo2**, and **project1**. The main area displays the details for the selected opportunity, including fields for Description, Account (cussss1), Primary Contact, Opportunity Type (CAD/CAM Integration), Currency (American Dollar), Target Close Date, Sales Stage (Loss), Revenue, Actual Close Date, Probability (0%), Reason Won/Loss (Features), and Owner (terry). A metadata section at the bottom shows 'Created By: terry', 'Updated By: terry', 'Date Created: 11/21/03 12:52 PM', and 'Last Updated: 11/21/03 12:52 PM'. A toolbar at the top contains icons for Save, Create, Delete, Copy, and Go to Opportunity category. A tabbed interface at the bottom includes 'General', 'Addresses', 'Opportunities', 'Contacts', 'Activities', 'Account Team', 'Attachments', and 'Notes'.

Figure 418. xxx

At the left of the details pane there is displayed a list of Opportunities, at the right – detail by selected in the list Opportunity. New rows of the list are bolded. For more information about the work with Opportunity can be found in the chapter, describing Opportunity.

The following buttons are available in Detail Toolbar:

-  Save Opportunity. Save the current Opportunity in the database.
-  Create new Opportunity. Create new Opportunity for a selected Account.
-  Delete Opportunity. Delete the current Opportunity.
-  Create new Opportunity based on selected. Make a copy of the selected record. Values of some fields are not copied: for example the field “Owner” is filled by the name of currently registered user. The field “Opportunity” is filled with the name of the current Account with prefix “Copy of ”. This button is disabled if the user doesn’t have rights to create Account
-  Go to Opportunity category. Open the module “Opportunity”.

8.4.6.4.4. Related contacts

261:OmsClientViewAccountsSelectedRelatedContacts.html

The screenshot shows a web-based application interface for managing contacts. On the left, there is a list of contacts with the name 'duck' selected. The main area is a form for editing the selected contact. The form is organized into several sections:

- Name:** Fields for First Name (empty), Middle Name (empty), and Last Name (filled with 'duck'). There is a checked 'Is Active' checkbox and a 'Do Not Contact' checkbox.
- Account Information:** Fields for Account (filled with 'cussss1'), Category (dropdown menu showing 'OMS Contact'), Job Title (empty), and Division/Department (empty).
- Phone Numbers:** Fields for Business Phone, Business Fax, Mobile Phone, and Home Phone, all currently empty.
- Other Fields:** E-mail (empty), Reports To (empty), and a large text area for Comment.
- Metadata:** 'Created By: Super User', 'Date Created: 11/21/03 1:55 PM', 'Updated By:', and 'Last Updated: 11/21/03 1:55 PM'.







 At the bottom, there are several tabs: General, Addresses, Opportunities, Contacts (which is active), Activities, Account Team, Attachments, and Notes. A toolbar above the form contains icons for saving, creating, deleting, copying, and unassigning contacts.

Figure 419. xxx

At the left of the details pane there is displayed a list of Contacts, at the right – detail by selected in the list Contact. New, for a current registered user, rows of the list are bolded. For more information about the work with Contact can be found in the chapter, describing Contact.

One of the Contacts in this list can be Primary. The corresponding field “Primary Contact” in the subcategory “Account - General” is selected from the drop down list, filled in by all the Contacts, presented in the subcategory “Account - Contacts”. Procedure of creation of Contacts for Account is the following: first of all the list of Contacts is created in the given subcategory, then at General-subcategory one of them can be assigned as Primary.

The following buttons are available in Detail Toolbar for this subcategory:

-  Save Contact. Save the current Contact in the database.
-  Create new Contact. Create new Contact.
-  Delete Contact. Delete Contact.
-  Create new Contact based on selected. Make a copy of the selected record. The field “Last Name” is filled with the name of the current Contact with prefix “Copy of”. This button is disabled if the user doesn’t have rights to create Contact
-  Unassign Contact from Account. Unassign the Contact from selected Account. If Contact was Primary for Account – Account loses Primary Contact. This button is disabled if the user doesn’t have rights to modify Account or if the list of Contacts is empty.
-  Select existing Contact from list. Assign Contact from the list to a selected Account. When you press this button the right part of the pane will display the list of Contacts, not assigned to any Accounts. In the upper part of the window the filter pane is situated. When you click the Contact to be assigned– corresponding Contact appears in the list “Account - Contacts”. The button is disabled, if the user doesn’t have rights to modify Account.

After the list of Contacts to be assigned is displayed the details pane looks like the following:

The screenshot shows a 'Select Contact' dialog box. It contains a search area with a 'Look for:' text box, an 'Apply' button, a 'Look in:' dropdown menu set to 'Name', and a 'Clear' button. Below this is a table of search results:

Name	Account	Job Title	Business Ph	Mobile Phon	E-mail	Do Not Co
<u>John Malkovich</u>		CEO			John_Malkovich	
<u>Klint Eastwood</u>		Director			Klint_Eastwood	

At the bottom of the window is a navigation bar with the following tabs: General, Addresses, Opportunities, Contacts, Activities, Account Team, Attachments, and Notes. The 'Contacts' tab is currently selected.

Figure 420. xxx



Go to Contact category. Open the module "Contact".

8.4.6.4.5. Related activities

262:OmsClientViewAccountsSelectedRelatedActivities.html






The screenshot displays a web-based application interface for managing activities. On the left, a list of activities is shown with the identifier 'aaaaaaaaaaaaaaaa1' and the first two rows are bolded. The main pane shows details for the selected activity, including:

- Activity:** aaaaaaaaaaaaaaaaa1
- Opportunity:** 0000000002
- Account:** cussss1
- Type:** Activity
- Priority:** Normal
- Status:** Not Started
- Billable:**
- Planned Start Date:** 11/20/03 8:00 PM
- Planned End Date:** 11/20/03 8:30 PM
- Completed Date:** (empty)
- Estimated hours:** (empty)
- Reminder:** 0 minutes
- Assigned To:** terry
- Assigned By:** terry
- Comment:** (empty text area)
- Created By:** terry
- Date Created:** 11/20/03 10:07 PM
- Updated By:** (empty)
- Last Updated:** 11/20/03 10:07 PM

At the bottom, a navigation bar contains tabs for: General, Addresses, Opportunities, Contacts, Activities, Account Team, Attachments, and Notes.

Figure 421. xxx

At the left of the details pane there is displayed a list of Activities, at the right – detail by selected Activity. New, for a current registered user, rows of the list are bolded. For more information about the work with Activity can be found in the chapter, describing Activities.

-  Save Activity. Save the current Activity in the database.
-  Create new Activity. Create new Activity for the selected Account.
-  Delete Activity. Delete the current Activity.
-  Create new Activity based on selected. Make a copy of the selected record. The field “Activity” is filled with the name of the current Account with prefix “Copy of”. This button is disabled if the user doesn’t have rights to create Account
-  Go to Activity category. Open the module “Activity”.

8.4.6.4.6. Team

263:OmsClientViewAccountsSelectedTeam.html

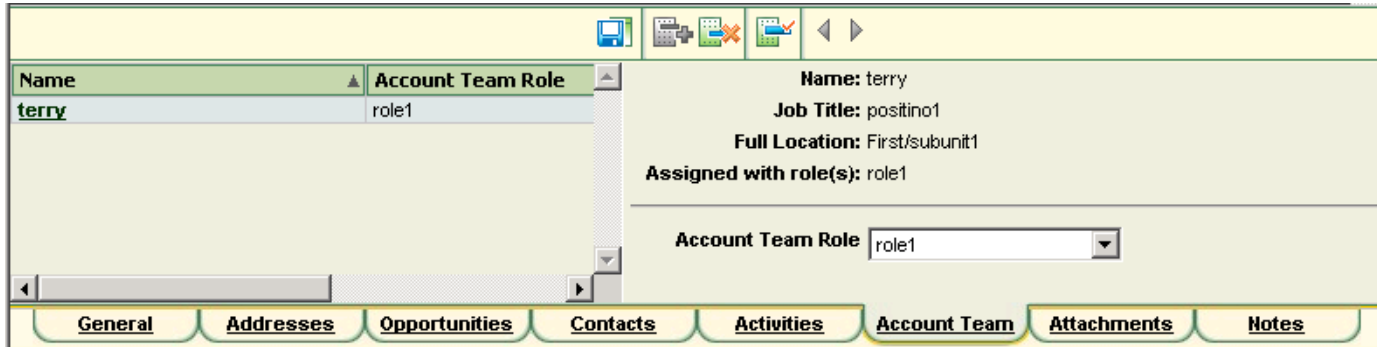


Figure 422. xxx

At the left of the details pane there is displayed a list of Account Team, at the right – detail by selected in the list team Member. The subcategory “Account – Account Team” is developed to create Account Team from the general number of EPAM employees. When an employee is placed in Account Team the employee is assigned with a role (field “Account Team Role” in the list Account Team). One employee can be presented in Account Team with several roles: in this case in the list Account Team there will be several rows for one employee (to have the possibility to delete one concrete role).

The following buttons are available in Detail Toolbar:

Delete Account team member from team. Delete an employee with the role assigned from Account Team. “Owner of Account” has always the right to delete a team member.

Select existing Employee. Select an employee from the main list of EPAM employees and define it in Account Team with a role. List of selection “Select Employee” is the following:

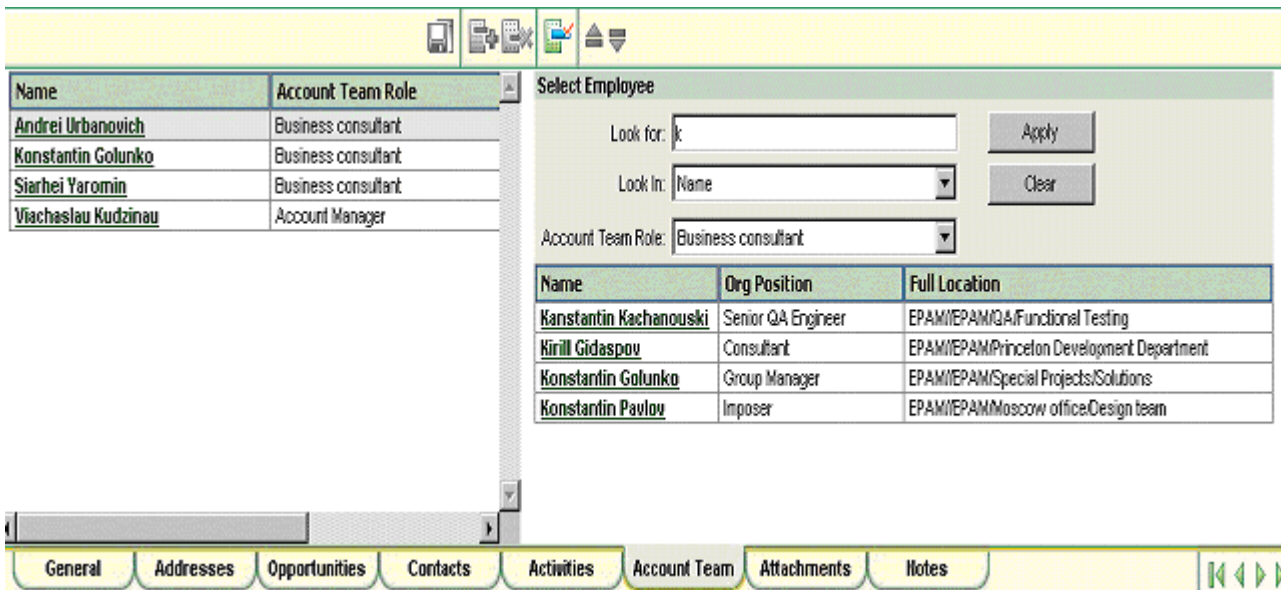


Figure 423. xxx

In the upper part of the list there is a filter pane and the element of role’s selection for an employee into Account Team: Account Team Role (a drop down list with predefined roles). To define an employee in Account Team it is necessary to define first a role for him/her, and then select an employee (column “Name” in the list of EPAM employees). This button is disabled if the user doesn’t have rights to create program team in Account. “Owner of Account” has always the right to perform this operation.

8.4.6.4.7. Attachments

264:OmsClientViewAccountsSelectedAttachments.html

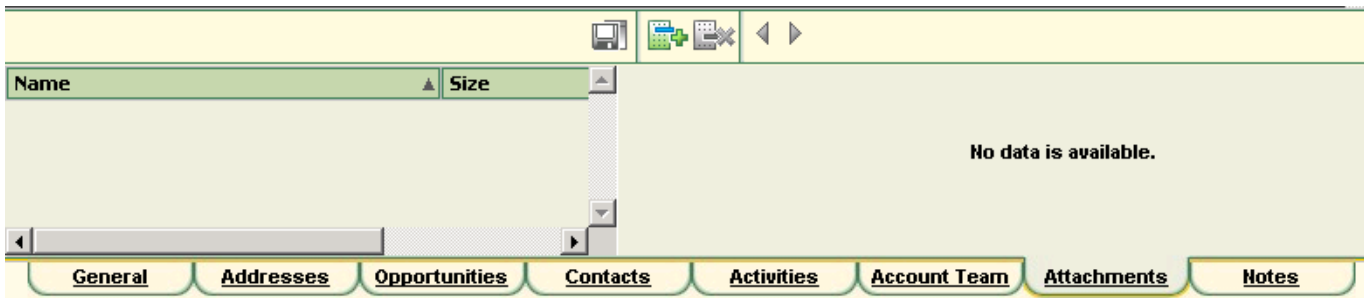




Figure 424. xxx

At the left in the details pane there is the list of Attachments, at the right – detail by selected Attachment. This subcategory is developed to keep a list of accompanying documents, relating to Account (specifications, presentations etc.). Actually, the documents are being created in your subsystems of paper work and only ready documents are being added into this subcategory. These documents can be deleted here; some test can be created/ changed in the field “Description”. In the mode of viewing /edition of the document it’s possible to change “Description” in the details pane and to view the document in the program, associated with this kind of program. To view the document, select the link “Show Attachment”. The bottom part of details pane Attachment contains the information about the date of last document upload from the disk (field “File Date”) and document’s size (field “File Size”).

The following buttons are available in Detail Toolbar for this subcategory:

-  Save Attachment. Save the current document in database.
-  Upload new Attachment. Upload the document from the disk. The details pane will look like the following:

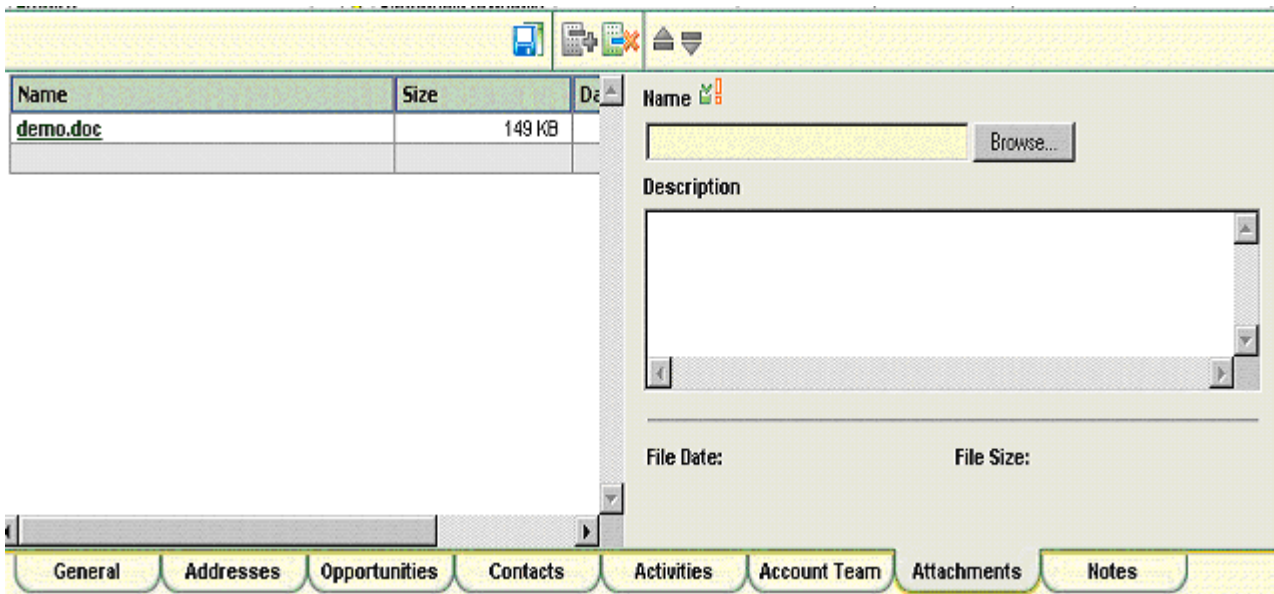


Figure 425. xxx

The button “Browse...” on Attachment details pane selects the document on the disk or from the network. The result of this selection will be placed in the field “Name”. The field “Description” will be filled with accompanying text about the document. If you press the button “Save Attachment” the document will be uploaded from the disk to OMS database. Document upload can be canceled using the button “Delete Attachment”. This button will be disabled if the user doesn’t have rights to modify the current Account.

-  Delete Attachment. Delete the current Attachment.

8.4.6.4.8. Notes

265:OmsClientViewAccountsSelectedNotes.html



Figure 426. xxx

At the left of the details pane there is displayed a list of Notes, at the right – detail by selected Note. New, for a current registered user, rows of the list are bolded.

This subcategory is developed to keep the list of short post-it-style notes, related to Account (messages, notes, announcements etc.). In the bottom part of the details pane Note there is the information about date of creation / last modification and creator/modifier of Note (fields “Created By”, “Date Created”, “Updated By”, “Last Updated”).

The following buttons are available in Detail Toolbar for this subcategory:



Save Note. Save the current Note in database.



Create new Note. Create new Note for selected Account.



Delete Note. Delete the current Note.



Create new Note based on selected. Equal to the command “Create new Note” and it substitutes the values from currently selected Note.

8.4.7. View: Contacts

266:OmsClientViewContacts.html

- [8.4.7.1. Contacts toolbar \(page 556\)](#)
- [8.4.7.2. Contacts list filter \(page 558\)](#)
- [8.4.7.3. Contacts list \(page 559\)](#)
- [8.4.7.4. Selected contact \(page 560\)](#)

8.4.7.1. Contacts toolbar

267:OmsClientViewContactsToolbar.html



Figure 427. xxx



Sort

Sort By Ascending Descending

Then By Ascending Descending

Then By Ascending Descending

Apply Clear All Cancel

Figure 428. xxx



Filter

Where

Account Name <=> Not Equals Compaq Or

City = Equals New York

Apply Clear All Cancel

Figure 429. xxx



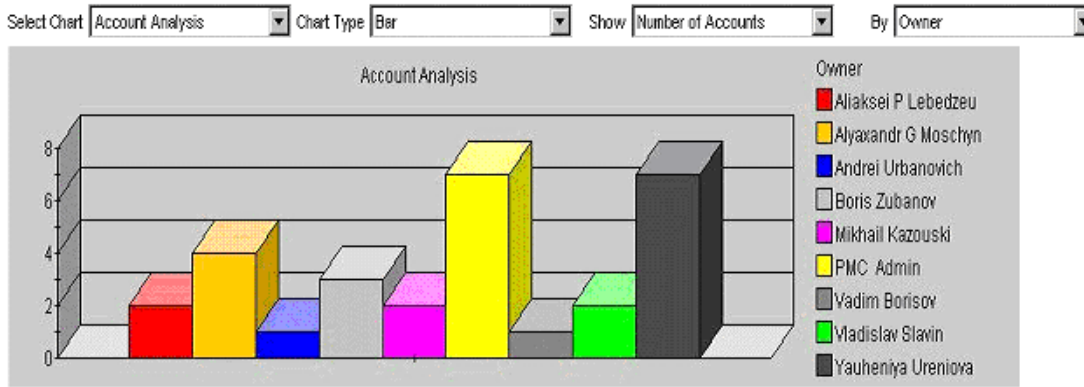


Figure 430. xxx



Figure 431. xxx

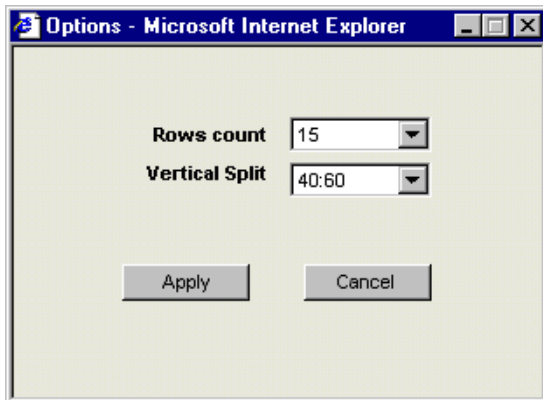


Figure 432. xxx



8.4.7.2. Contacts list filter

268:OmsClientViewContactsFilter.html

8.4.7.3. Contacts list

269:OmsClientViewContactsList.html

Name	Account	Job Title	Business Phone	Mobile Phone	E-mail	Do Not Co
XXXXXXXXXXXXXXXXXXXX	cussss1				terry_taylor@epam.com	

Figure 433. xxx

8.4.7.4. Selected contact

270:OmsClientViewContactsSelected.html

- [8.4.7.4.1. Details \(tab general\) \(page 561\)](#)
- [8.4.7.4.2. Addresses \(page 562\)](#)
- [8.4.7.4.3. Related opportunities \(page 563\)](#)
- [8.4.7.4.4. Related account \(page 564\)](#)
- [8.4.7.4.5. Related activities \(page 565\)](#)
- [8.4.7.4.6. Attachments \(page 566\)](#)
- [8.4.7.4.7. Notes \(page 567\)](#)

8.4.7.4.1. Details (tab general)

271:OmsClientViewContactsSelectedDetails.html








  										
First Name   <input type="checkbox"/> Is Active <input type="text" value="tttttttt"/>	Account <input type="text" value="cussss1"/>	Business Phone <input type="text"/>								
Middle Name <input type="text"/>	Category <input type="text" value="Competitor"/>	Business Fax <input type="text"/>								
Last Name   <input type="text" value="tttttttttttttttt"/>	Job Title <input type="text"/>	Mobile Phone <input type="text"/>								
<input type="checkbox"/> Do Not Contact	Division/Department <input type="text"/>	Home Phone <input type="text"/>								
E-mail <input type="text" value="terry_taylor@epam.com"/>	Reports To <input type="text"/>									
Comment <input type="text"/>										
Created By: terry Updated By: Super User		Date Created: 11/20/03 9:59 PM Last Updated: 11/21/03 1:32 PM								
<table border="1"> <tr> <td>General</td> <td>Addresses</td> <td>Opportunities</td> <td>Account</td> <td>Activities</td> <td>Attachments</td> <td>Notes</td> </tr> </table>				General	Addresses	Opportunities	Account	Activities	Attachments	Notes
General	Addresses	Opportunities	Account	Activities	Attachments	Notes				

Figure 434. xxx

8.4.7.4.2. Addresses

272:OmsClientViewContactsSelectedAddresses.html

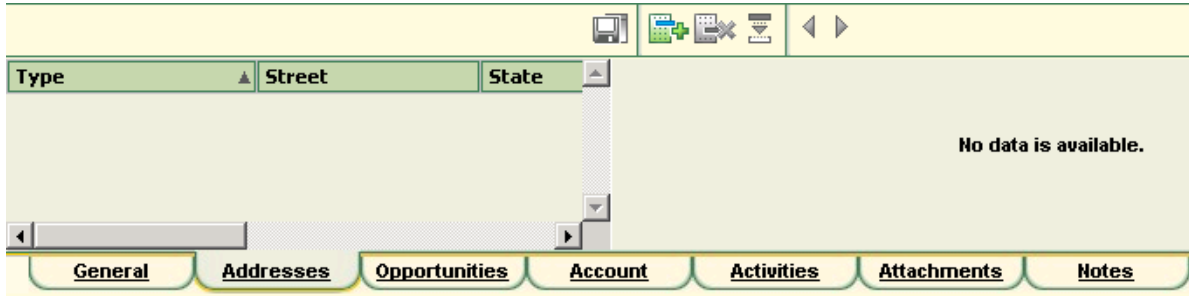


Figure 435. xxx

8.4.7.4.3. Related opportunities

273:OmsClientViewContactsSelectedRelatedOpportunities.html


The screenshot displays a detailed view of an Opportunity record in a CRM system. The interface is organized into several sections:

- Header:** Includes a toolbar with icons for navigation and actions, and a title bar for the record.
- Basic Information:**
 - Opportunity:** A text field containing a long alphanumeric string.
 - Description:** A text field containing a long alphanumeric string.
 - Account:** A dropdown menu showing 'cussss1'.
 - Primary Contact:** A text field containing a long alphanumeric string.
- Advanced Fields:**
 - Opportunity Type:** A dropdown menu showing 'CAD/CAM Integration'.
 - Currency:** A dropdown menu showing 'American Dollar'.
 - Target Close Date:** A date selection field.
 - Sales Stage:** A dropdown menu showing 'Loss'.
 - Revenue:** A text input field.
 - Actual Close Date:** A date selection field.
 - Probability:** A dropdown menu showing '0%'.
 - Reason Won/Loss:** A dropdown menu showing 'Features'.
 - Owner:** A dropdown menu showing 'terry'.
- Metadata:**
 - Created By:** terry
 - Updated By:** terry
 - Date Created:** 11/21/03 12:52 PM
 - Last Updated:** 11/21/03 12:52 PM
- Navigation:** A bottom bar with tabs for 'General', 'Addresses', 'Opportunities', 'Account', 'Activities', 'Attachments', and 'Notes'.

Figure 436. xxx

8.4.7.4.4. Related account

274:OmsClientViewContactsSelectedRelatedAccount.html







Account Name  <input type="text" value="cussss1"/>	<input checked="" type="checkbox"/> Is Active	Primary Contact <input type="text" value="tttttttt ttttttttttttttttttttt"/>	E-mail <input type="text" value="terry_taylor@epam.com"/> 							
Account Type <input type="text" value="Customer"/>		Owner  <input type="text" value="Super User"/> 								
Currency <input type="text" value="American Dollar"/>		Primary Industry <input type="text" value="Pharma & Biotech"/>								
Annual Revenue <input type="text"/>										
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">Created By: Super User</td> <td style="width: 30%;">Date Created: 11/20/03 9:46 PM</td> </tr> <tr> <td>Updated By:</td> <td>Last Updated: 11/20/03 9:46 PM</td> </tr> </table>				Created By: Super User	Date Created: 11/20/03 9:46 PM	Updated By:	Last Updated: 11/20/03 9:46 PM			
Created By: Super User	Date Created: 11/20/03 9:46 PM									
Updated By:	Last Updated: 11/20/03 9:46 PM									
<table border="0" style="width: 100%; margin: 0 auto;"> <tr> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px; margin-right: 5px;"><u>General</u></td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px; margin-right: 5px;"><u>Addresses</u></td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px; margin-right: 5px;"><u>Opportunities</u></td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px; margin-right: 5px;"><u>Account</u></td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px; margin-right: 5px;"><u>Activities</u></td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px; margin-right: 5px;"><u>Attachments</u></td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 2px 10px;"><u>Notes</u></td> </tr> </table>				<u>General</u>	<u>Addresses</u>	<u>Opportunities</u>	<u>Account</u>	<u>Activities</u>	<u>Attachments</u>	<u>Notes</u>
<u>General</u>	<u>Addresses</u>	<u>Opportunities</u>	<u>Account</u>	<u>Activities</u>	<u>Attachments</u>	<u>Notes</u>				

Figure 437. xxx

8.4.7.4.5. Related activities

275:OmsClientViewContactsSelectedRelatedActivities.html

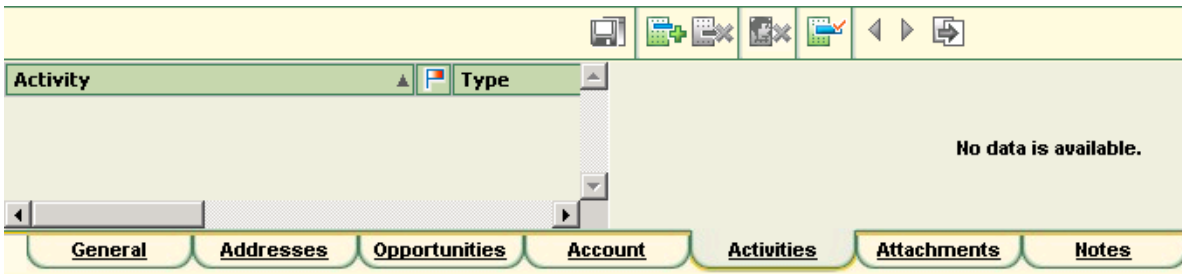


Figure 438. xxx

8.4.7.4.6. Attachments

276:OmsClientViewContactsSelectedAttachments.html

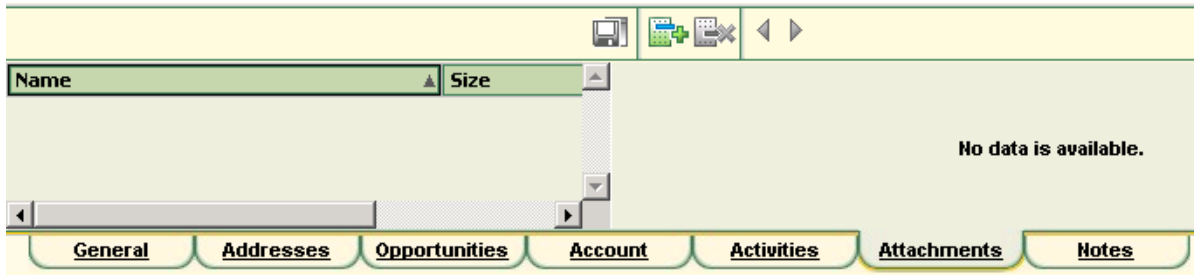


Figure 439. xxx

8.4.7.4.7. Notes

277:OmsClientViewContactsRelatedNotes.html

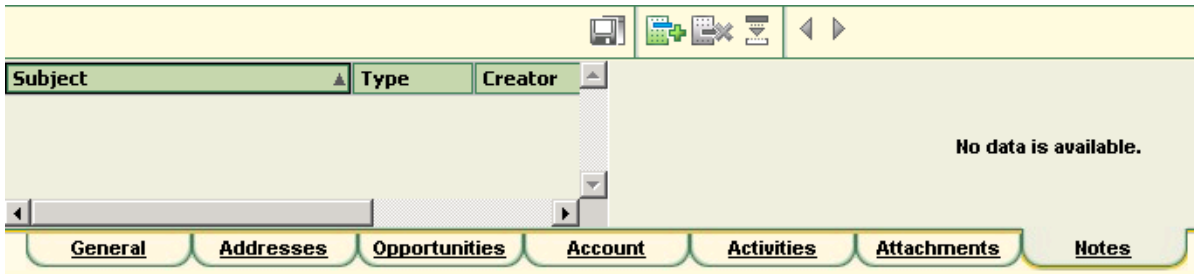


Figure 440. xxx

8.4.8. View: Calendar

278:OmsClientViewCalendar.html

- [8.4.8.1. Calendar toolbar \(page 569\)](#)
- [8.4.8.2. Calendar \(page 570\)](#)
- [8.4.8.3. Related activites \(page 571\)](#)

8.4.8.1. Calendar toolbar

279:OmsClientViewCalendarToolbar.html

8.4.8.2. Calendar

280:OmsClientViewCalendarCalendar.html

The screenshot shows a web-based calendar application. At the top, there is a green header with the text "Manager Contact" and a dropdown menu labeled "Calendar". Below the header is a toolbar with various navigation icons. A "Team Member:" label is followed by a dropdown menu showing "Terry". The main content area displays a calendar grid for three months: November 2003, December 2003, and January 2004. The date 21st of November 2003 is highlighted in blue.

November 2003							December 2003							January 2004						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
						1		1	2	3	4	5	6					1	2	3
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	31
30																				

Figure 441. xxx

8.4.8.3. Related activities

281:OmsClientViewCalendarRelatedActivities.html

The screenshot shows a web-based form for managing activities. The form is organized into several sections:

- Activity Information:** Includes fields for Activity ID (aaaaa1), Type (Activity), Priority (Normal), Status (Not Started), and a checkbox for Billable.
- Opportunity and Account:** Includes fields for Opportunity ID (e), Account ID (cussss1), and Primary Contact.
- Scheduling:** Includes Planned Start Date (11/21/03 10:30 AM), Planned End Date (11/21/03 11:00 AM), and Completed Date.
- Estimated Hours and Reminder:** Includes a field for Estimated hours and a Reminder dropdown set to 0 minutes.
- Assignment and Comments:** Includes Assigned To (terry), Assigned By (terry), and a large text area for Comments.
- Metadata:** Includes Created By (terry), Date Created (11/21/03 12:55 PM), Updated By, and Last Updated (11/21/03 12:55 PM).

At the bottom left, there is a tab labeled "Activities".

Figure 442. xxx

8.5. PMC HRM WORKLOAD

[282:HrmWorkload.html](#)
10_pmc_ui_5_workload.fm
<http://epmsd016/workload-terry>
<http://epmw229:8080/wrks/>

8.5.1. login page

283:HrmWorkloadLoginPage.html

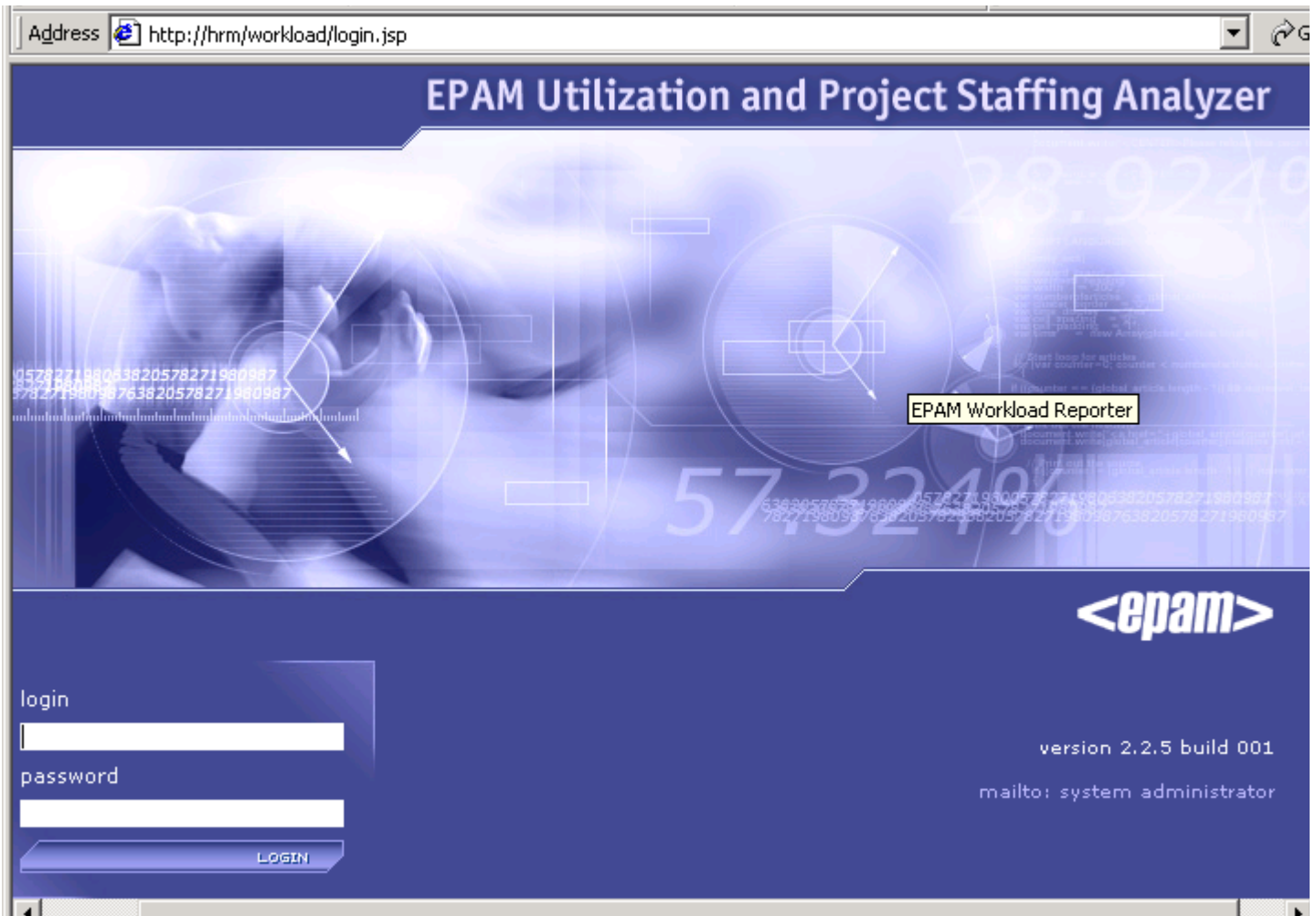


Figure 443. xxx 703

8.5.2. header (initial page?)

284:HrmWorkloadFirstPage.html
there is none right now.... should there be?
or make this help for search/toolbars

Figure 444. xxx 7xx

8.5.3. search results

285:HrmWorkloadSearchResults.html

Workload Skills Resource Request Open Positions Statistics Log Out			
Search Result			
NAME	MANAGER	WORKLOAD	PROJECT NAME
OLEG PIGAL	MAX BOGRETSOV	COMPGEN - \$15% NUMGLI - \$90%	TOTAL FOUND 0 PROJECT(S)
OLEG PAUCHKOV	ALEXANDER IVANOV	BRCORE - \$100%	
OLEG DOBRODEI	IGOR OVSIANIK	GENPRD - 80% PMC - 20%	
OLEG SHEVCHUK	YURY ANTANIUK	PRIMGEN - \$100%	
OLEG MINYUK	ANDREI MARDZIUK	AMEXICO - \$50% EPMME - 50%	
OLEG DANILOV	SIARHEI YAROMIN		
OLEG SHABAN	LYUDMILA SHATKO	BRBMB - 100%	

Figure 445. xxx 705

8.5.4. workload

286:HrmWorkloadWorkload.html

Figure 446. xxx 7xx

8.5.4.1. workload / by resource pool

287:HrmWorkloadWorkloadByResourcePool.html

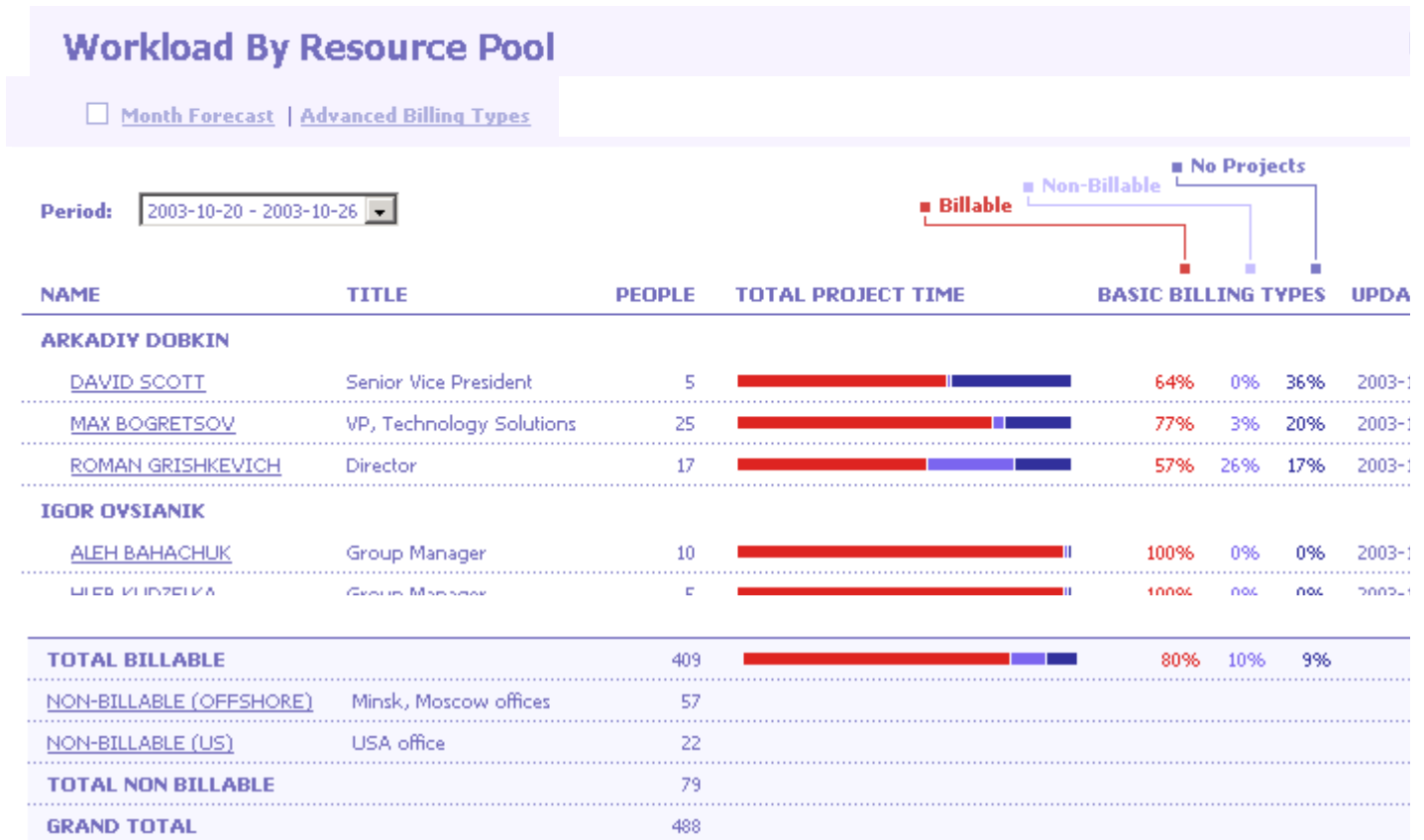


Figure 447. xxx 707,709

8.5.4.2. workload / by job function

288:HrmWorkloadWorkloadByJobFunction.html

Workload by Job Function

Period:



<u>SOFTWARE ENGINEERING (DEVELOPERS & QA)</u>	PEOPLE	US OFFSHORE	TOTAL PROJECT TIME	BASIC BILLING TYPES		
<u>PROJECT MANAGEMENT</u>	35	(13 22)		64%	16%	20%
<u>BUSINESS ANALYST</u>	6	(1 5)		19%	38%	43%
<u>DEVELOPMENT</u>	237	(13 224)		85%	8%	7%
<u>FUNCTIONAL TESTING</u>	71	(0 71)		88%	8%	4%
<u>PERFORMANCE TESTING</u>	9	(0 9)		99%	0%	1%
<u>DESIGN</u>	16	(1 15)		66%	11%	23%
<u>DOCUMENTATION</u>	6	(0 6)		57%	25%	18%
<u>MAINTAINANCE & SUPPORT</u>	20	(1 19)		70%	20%	10%
TOTAL ENGINEERS	400	(29 371)		81%	10%	9%
NON BILLABLE						
<u>SYSTEM/NETWORK ADMINISTRATION</u>	13	(2 11)				
<u>MANAGEMENT</u>	14	(4 10)				
<u>SALES/MARKETING</u>	8	(1 7)				
<u>ADMINISTRATIVE/OTHER</u>	35	(5 30)				
<u>NON BILLABLE</u>	3	(0 3)				
<u>STUDENTS</u>	7	(0 7)				
<u>CONTRACTORS</u>	8	(7 1)				
TOTAL NON BILLABLE	88	(19 69)				

Figure 448. xxx 710

8.5.4.3. workload / by project

289:HrmWorkloadWorkloadByProject.html



Figure 449. xxx 711

8.5.4.3.1. workload / by project / map / projects

290:HrmWorkloadWorkloadByProjectMapProjects.html

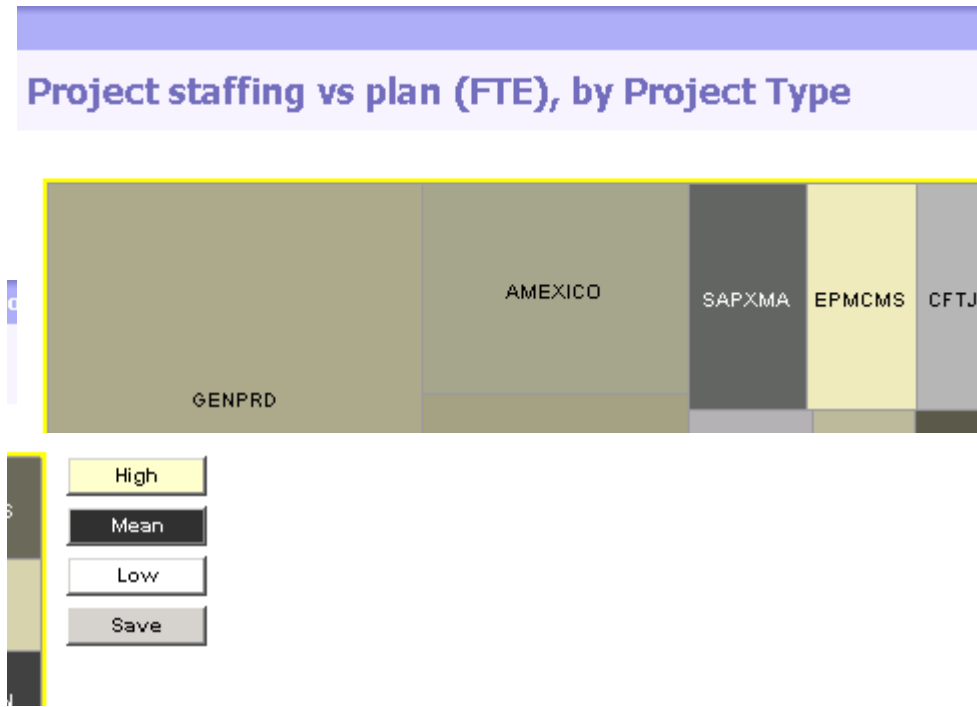


Figure 450. xxx 713

8.5.4.3.2. workload / by project / map / employee

291:HrmWorkloadWorkloadByProjectMapEmployees.html

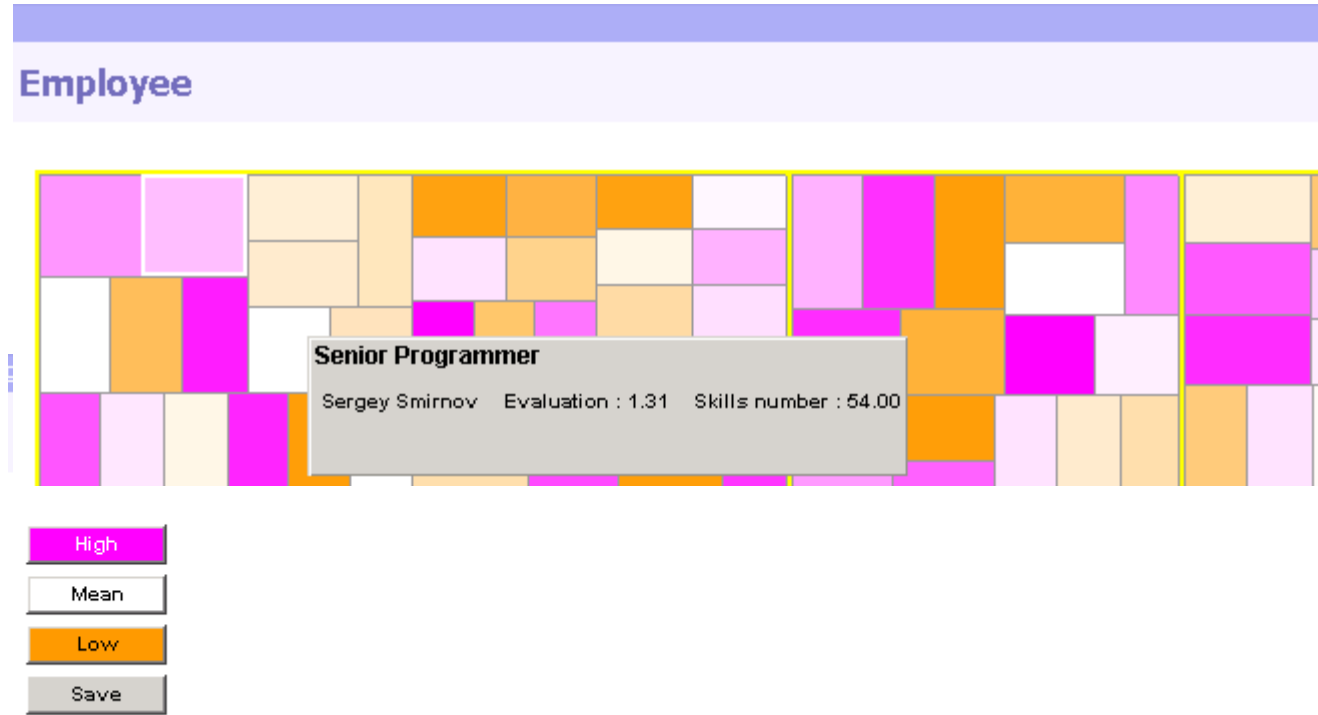


Figure 451. xxx 714

8.5.5. skills

292:HrmWorkloadSkills.html

Figure 452. xxx 7xx

8.5.5.1. skills / target people

293:HrmWorkloadSkillsTargetPeople.html

Figure 453. xxx 7xx

8.5.5.2. skills / target project

294:HrmWorkloadSkillsTargetProject.html

Figure 454. xxx 7xx

8.5.6. resource request

295:HrmWorkloadResourceRequest.html

Figure 455. xxx 7xx

8.5.6.1. resource request / project

296:HrmWorkloadResourceRequestProject.html

Figure 456. xxx 7xx

8.5.6.1.1. resource request / project / add

297:HrmWorkloadResourceRequestProjectAdd.html

Figure 457. xxx 7xx

8.5.6.2. resource request / initiation

298:HrmWorkloadResourceRequestInitiation.html

Figure 458. xxx 7xx

8.5.6.2.1. resource request / initiation / add

299:HrmWorkloadResourceRequestInitiationAdd.html

Figure 459. xxx 7xx

8.5.7. open positions

300:HrmWorkloadOpenPositions.html

Figure 460. xxx 7xx

8.5.7.1. open position / add

301:HrmWorkloadOpenPositionsAdd.html

Figure 461. xxx 7xx

8.5.8. statistics

302:HrmWorkloadStatistics.html

Figure 462. xxx 7xx

8.5.8.1. statistics / headcount

303:HrmWorkloadStatisticsHeadCount.html

Figure 463. xxx 7xx

8.5.8.2. statistics / unprofiled employees

304:HrmWorkloadStatisticsUnprofiledEmployees.html

Figure 464. xxx 7xx

8.5.8.3. statistics / unprofiled projects

305:HrmWorkloadStatisticsUnprofiledProjects.html

Figure 465. xxx 7xx

8.5.8.4. statistics / newcomers

306:HrmWorkloadStatisticsNewcomers.html

Figure 466. xxx 7xx

8.5.8.5. statistics / dismissals

307:HrmWorkloadStatisticsDismissals.html

Figure 467. xxx 7xx

8.5.8.5.1. statistics / dismissals / details

308:HrmWorkloadStatisticsDismissalsDetails.html

Figure 468. xxx 7xx

8.5.8.5.2. statistics / dismissals / summary

309:HrmWorkloadStatisticsDismissalsSummary.html

Figure 469. xxx 7xx

8.5.8.6. statistics / maps

310:HrmWorkloadStatisticsMaps.html

Figure 470. xxx 7xx

8.5.8.6.1. statistics / maps / project

311:HrmWorkloadStatisticsMapsProject.html

Figure 471. xxx 7xx

8.5.8.6.2. statistics / maps / employee

312:HrmWorkloadStatisticsMapsEmployee.html

Figure 472. xxx 7xx

8.5.9. resource plan

313:HrmWorkloadResourcePlan.html

Figure 473. xxx 7xx

8.5.9.1. resource plan / summary

314:HrmWorkloadResourcePlanSummary.html

Figure 474. xxx 7xx

8.5.9.1.1. resource plan / summary / by project

315:HrmWorkloadResourcePlanSummaryByProject.html

Figure 475. xxx 7xx

8.5.9.1.2. resource plan / summary / by manager

[316:HrmWorkloadResourcePlanSummaryByManager.html](#)

Figure 476. xxx 7xx

8.5.9.2. resource plan / breakdown

317:HrmWorkloadResourcePlanBreakdown.html

Figure 477. xxx 7xx

8.5.9.2.1. resource plan / breakdown / by project

[318:HrmWorkloadResourcePlanBreakdownByProject.html](#)

Figure 478. xxx 7xx

8.5.9.2.2. resource plan / breakdown / by manager

319:HrmWorkloadResourcePlanBreakdownByManager.html

Figure 479. xxx 7xx

8.6. PMC HRM APPLICANTS

320:HrmApplicants.html

10_pmc_ui_6_applicants.fm

Figure 480. xxx 7xx

8.6.1. skills

Figure 481. xxx 7xx

8.6.2. applicants

Figure 482. xxx 7xx

8.6.3. statistics

Figure 483. xxx 7xx

8.7. PMC HRM SURVEY

321:HrmSurvey.html
10_pmc_ui_7_survey.fm

Figure 484. xxx 7xx

8.7.1. survey list

Figure 485. xxx 7xx

8.8. EWW

322:Eww.html
10_pmc_ui_8_eww.fm

Figure 486. xxx 7xx

8.9. LIBRARY

323:Library.html
10_pmc_ui_9_library.fm

Figure 487. xxx 7xx

9. FAQ

324:FAQ.html
11_pmc_faq.fm

Question	Answer
xxxxxxx	xxxxxxx
xdfasdfsdfs	asdfasdfsdfas

10. Trouble-shooting

325:Ts.html

12_pmc_ts.fm

Problem	Cause	Solution
INSTALLATION esr		Copy esr.war to [TomcatHome]\webapps\D:\Tomcat_4.1.2.4\webapps
INSTALLATION esr		ocijdbc8.dll to wrapper.Id_path
INSTALLATION esr		Add ocijdbc8.dll from
INSTALLATION esr		[OracleHome]\bin to wrapper.Id_path)
INSTALLATION esr		modify wrapper.properties
INSTALLATION esr		Modify [TomcatHome]\conf\jk\wrapper.properties
INSTALLATION esr		modify PMCBusinessDSO in application.xml
INSTALLATION esr		Modify "PMCBusinessDSO" resource in [ROOT_FOLDER]\proto\xml\application.xml properties "Password" and "User" - must
INSTALLATION esr		hold correct values of Login\Password to PMC database.
INSTALLATION esr		edit install.properties Properly set all properties in [ROOT_FOLDER]\installation\install.properties for resource_folder - folder where uploaded images resides. log_folder - folder where application writes its logs. admin_account - DB manager account (system). admin_password - DB manager password. Note: resource_folder and log_folder properties must point to already existing folders. All '\' character in log_folder property must be escaped by '\\', but in resource_folder property these character must be escaped by '\\'. All folder must end with escaped '\\.
INSTALLATION esr		create TNS ESR for PMC DB
INSTALLATION esr		Create Oracle TNS "ESR" for your instance of Oracle where PMC DB is reside

Problem	Cause	Solution
INSTALLATION pmc		Change application URL for build release notification in file <Tomcat dir>/Tomcat/webapps/<app name>/WEB-INF/classes/com/epam/pmc/build/properties.xml to <property id="server.name">http://epgsd002/pmc</property>
INSTALLATION pmc		Trust Security Authorization (TSA) engine settings are specified in <workfolder>\WEB-INF\classes\trust.xml
INSTALLATION pmc		Add/remove from PMC taskbar additional servers for launching other applications
INSTALLATION pmc		In file <Tomcat home>\conf\server.xml section Server\ContextManager uncomment these lines: <Http10Connector port="8443" secure="true" >
INSTALLATION pmc		SSL tuning for Tomcat only configuration. This configuration is deprecated and can be user ONLY for devel-opment.
INSTALLATION pmc		Execute from command line
INSTALLATION pmc		Add SSL certificates of each server to SSL trusted certificates store of all other servers participating in TSA. For this on each server run in <JAVA_HOME>\jre\lib\security keytool -import -keystore cacerts -alias <server name> -file <certificate file> Where <server name> and <certificate file> must be taken from all other servers in series.
INSTALLATION pmc		Adjust TSA settings in <workfolder>\WEB-INF\classes\trust.xml.
INSTALLATION pmc		dbgout.props
INSTALLATION pmc		d_oracle.xml Adjust Database connection settings. change content of the "<attribute id="url">" tag in <workfolder>\WEB-INF\classes\com\epam\pmc\d_oracle.xml.

Problem	Cause	Solution
INSTALLATION pmc		data.xml Adjust Database connection settings. change content of the "<url>" tag in <workfolder>\WEB-INF\classes\data.xml
INSTALLATION pmc		Adjust debug logging settings in: <workfolder>\WEB-INF\classes\com\epam\pmc\application.xml.
INSTALLATION pmc		mod_jk.conf
INSTALLATION pmc		Deploy Oracle JDBC driver: Copy <Oracle home>\jdbc\lib\classes12.jar (or maybe *.zip) to 1 of the following locations: <Java home>\jre\lib\ext\classes12.jar (preferred if all applications are to use the same Oracle JDBC driver) <Tomcat dir>\lib\apps\classes12.jar
INSTALLATION pmc		SSL tunung for using Trust Security Authorization. In "jre/lib/security/java.security" file following lines must present: security.provider.3=com.sun.net.ssl.internal.ssl.Provider
INSTALLATION pmc		(optional) Modify default NLS_TERRITORY value used in all connections: Enter country ISO code into tag <country>GB</country> By default Monday is first day of week
INSTALLATION pmc admin		copy classes12.jar D:\oracle\ora92\jdbc\lib / D:\Tomcat_4.1.2.4\shared\lib
INSTALLATION pmc admin		Deploy Oracle JDBC driver. For this copy the file <Oracle home>\jdbc\lib\classes12.jar (maybe *.zip) to one of the following locations: <Java home>\jre\lib\ext\classes12.jar (preferred if all applications in the JDK will use the same Oracle JDBC driver). <Tomcat dir>\lib\apps\classes12.jar
INSTALLATION pmc admin		adjust acwe.xml Adjust ACWE (Access Control Workflow Engine) settings in WEB-INF\classes\ACWE.xml.
INSTALLATION pmc admin		D:\Tomcat_4.1.2.4\webapps\pmc_admin\WEB-INF\classes

Problem	Cause	Solution
INSTALLATION pmc admin		modify mod_jk.conf Check up servlet mapping for Apache in mod_jk.conf. Actual state is: JkMount /pmc_admin/*.jsp ajp13 JkMount /pmc_admin/upload ajp13 JkMount /pmc_admin/logon ajp13
INSTALLATION pmc admin		edit props.xml Adjust welcome message template settings in WEB-INF\classes\props.xml. ATTENTION! Do not change, or delete text, closed in symbols, such as "login" or "user_name" and others.
INSTALLATION pmc admin		config db connect edit shell.xml
INSTALLATION pmc admin		edit dbgout.props Adjust DbgOut service settings in WEB-INF\classes\dbgout.props. Recommended <trace level>;<log level> values for all debug sources during testing are the following:
JAVA_HOME		\bin\keytool -genkey -alias tomcat -keyalg RSA For certificate generation: enter password "changeit", fill other attributes with some fake information
Open the admin console		http://localhost/pmc_admin/pages/workplace/login.jsp
Username root		
Password 0		

11. Glossary

326:Glossary.html

13_pmc_glossary.fm

- OMS Account (later Account) – an organization, using EPAm resources. Account stores short information (list of contacts). In scope of Account, Opportunities and Activities are being created, according to which EPAm resources are being planned and scheduled, and expenses are calculated etc.
 - o Account Team – a list of EPAm employees, performing tasks in scope of all created Opportunities for Account.

- OMS Opportunity (later Opportunity) – describes area of relationship with Account, i.e. Opportunity is a project, being realized for Account and including all, from the idea itself till satisfaction of Account’s needs and benefit from developments for Account. Opportunity unites development status, necessary effort and EPAm resources, business- anticipation, marketing information and performance analysis. Opportunity is always being created for one concrete Account.
 - o Sales Team (Opportunity Team) – a list of EPAm employees, performing the tasks, described by Activities, created in scope of Opportunity.

- OMS Activity (later Activity) – is a concrete task, given to an EPAm employee, performed in scope of a concrete Opportunity. Activity serves to control time of EPAm employee, spent for Activity’s fulfillment, to manage EPAm human resources, to calculate expenses, and to draw a bill to Account. Activity always relates to one concrete Opportunity, and accordingly to a concrete Account.

- OMS Contact (later Contact) – is a person, a contact, related to concrete Account, Opportunity, Activity. Contact is an independent person – i.e. he/she is not an EPAm employee. Formally it can be an external consultant, representative of Account, former EPAm employee. Yet, the process of assignment supposes that Contact which we would like to attach (assign), be a Contact for instances of one level higher. The same for Opportunity (Contact for Opportunity can be only a person from the list of Contacts Account). Contact for Account can become a Contact, not assigned to any existing Account (some exception here). In the list Contacts for every OMS instance there can be only one Contact, which is Primary for this instance.

Term	Definition
access control workflow engine	Xxx
Action	The granular operation, which can be performed with item.
acwe	access control workflow engine
Apache 2.0.46	(webserver)
application	Xxx
Applications	
authorization	Xxx
billable	Xxx
bug	
bug fixing task	
build	
calendar	xxx
calendar mapping	xxx
confirmable document	

Term	Definition
custom fields	xxx
customer type	xxx
customers	xxx
DbgOut service v.1.16	xx
Divisions of modules	grouping of modules. PMC groups are Main, Info, Manage, Accounting
document folder	xxx
Effective permissions	All permissions that grantee has thanks to his direct and indirect permission settings, and thanks to permissions inheritance.
ePAM Star Reporter Web Application	xxx
esr	EPAM Star Reporter Web Application
everyone	xxx
eww	xxx
expense report	
fields	xxx
Filters	restrictions, applied to the list of items, using which it?s easier to find/view items
folder (project)	xxx
Folders	the item that is aimed to contain other items or folders. Can be of the following types in PMC- Document folders
Forums	
general actions	xxx
generic task	
grantee	xxx
Grantee	Entity permissions can be granted to. There are four possible grantees: users, groups, roles and role templates.
granter	xxx
Group	A list of logically aggregated users or other groups. Groups are managed via PMC Administrative Console. It?s convenient to grant permissions to one group of users, not to separate users.
head of unit	xxx
hierarchy	xxx
issue	
issue reolution task	
Item	Item is a general word to call any object in one of the Project Management Center modules. It can be a message, a document, a project member, a folder, a bug, and a project itself, etc. Item has properties, but these properties differ for different types of items.

Term	Definition
Item	Any entity that PMC suite application can manipulate with. Items include entities one can see through the user interface, such as bugs, builds, folders, applications and so on. They also include entities that one cannot see, such as soft links. While describing access control model, we should say the item is the object of permissions granting. An item can function as a logical repository for other items. If an item can hold other items, it is called a container; if it does not have this capability, it is called a non-container. Repository, or containing function, in access control scope means that container items propagate their permissions to containing items.
Item	Any entity that PMC suite application can manipulate with. Items include entities one can see through the user interface, such as bugs, builds, folders, applications and so on. They also include entities that one cannot see, such as soft links. While describing access control model, we should say the item is the object of permissions granting.
jDK 1.4.1.05	xxx
location (geographic)	xxx
message forum	xxx
Module	combines items of one type (?) in one PMC entity
notifications	xxx
Notifications	e-mails, received to subscribers about any changes, occurred to items. Notifications can be of two types- ?by subscription? and ?force notifications?.
object permissions	xxx
object tree	xxx
object-related permission set	xxx
oms	xxx
oracle9i DB 9.2.0.1	(database server
org employees	xxx
organization	xxx
organizational id number	xxx
own permissions	xxx
Owner	A user who created the item. Each item has its owner. Owner has ability to read, modify and delete his item.
Permission	An authorization to execute an action. If user has some permission, it?s said, ?permission is granted to this user?.
permission set	xxx
permissions	xxx
person	xxx
pmc	project Management Center is actually a suite, which includes two applications: Project Management Center (PMC itself) and Project Management Center Administration Console (PMC AdminConsole). Project Management Center (PMC itself) First application is designed for managing business activity;
PMC AdminConsole	administer this activity

Term	Definition
pmc db	xxx
position	xxx
program	xxx
program category	xxx
project	xxx
project modules	xxx
Project scope	Items and actions stored or performed within a concrete project.
purchase order	
requirement folder	xxx
requirement implementation task	
requirement version	
Requirements folders	
requirement analyze task	
resources t	xxx
risk	
risk management task	
Role	A set of permissions. Role can be granted to any grantee, except a role, as usual permission. It's planning to cut off Role entity at all. First, permissions can be granted to a group also. If we include another group to this group, or we include a user to this group, we'll get the same affect as for role granting to a group or a user. That's why role is superfluous entity.
Role template	A set of object type permissions. Role template can be applied only on participation types. Key feature of role template is the following.
role-related permission set	xxx
standard document	
state transitions	xxx
Subscription	An action to subscribe oneself for receiving notifications about item's change.
subscriptions	xxx
super user	xxx
system action permissions	xxx
system actions	xxx
system permissions	xxx
team	xxx
tech support folder	xxx
Tech support folders	
technical support task	

Term	Definition
technical support request	
test case	
test case folder	xxx
test scenario	
Thread	Thread is a way to unite related items of any type. For example, a tester submits a bug. Project coordinator assigns task ?fix the bug ?and adds it to the same thread. Later Message ?The bug is fixed? is added to the thread too. Thread helps to find the related information, track history and quickly switch to any of the related items. Thread can be as well considered as Discussion Topic uniting several items of different types.
time report	
TNS_NAME pmc	xxx
TomCat 4.1.24	(application server)
Trust Security Authorization (TSA) engine	xxx
TSA	Trust Security Authorization engine
unit / subunit	xxx
User	Any person mentioned in PMC who has login attributes specified (UserID and password). Users are managed via PMC Administrative Console. There is one predefined user, which cannot be deleted, and his UserID cannot be changed. His predefined UserID is root, and PMC administrator sets his password on his own.
Vacation	TRANSITION
Workflow	items? states and transitions. PMC has six main workflows- Builds?, Bugs?, Documents?, Tasks?, Notifications?, Expense Reports?
workload dashboard	xxx

12. List of figures

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91_pmc_LOF.fm

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