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FDD Project Management Application

User Guide



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Preface

FDDPMA was development by Serguei Khramtchenko, as an effort in completion of final project for ALM in IT (Harvard Extension School). That part of the project was complete in June 2005. Since then, FDDPMA became an open source project. The source code and binary releases are available for FREE download at http://sourceforge.net/projects/fddpma.

The application is deployed at http://www.fddpma.net. The intention is to keep this site as a free service to FDD community.



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1. Overview

What is FDD?

FDD stands for Feature Driven Development. This is one of the agile (aka lightweight) software development methodologies. One of the most famous agile methodologies is eXtreme Programming (XP). FDD emphasizes development in short iterations, each iteration adding a number of features into a product. A feature is a small piece of functionality that is useful for a customer. Unlike XP, FDD pays more attention to software modeling. It also includes reporting and tracking, which makes it attractive for corporate development. For more information visit the FDD community web site

What is the FDD Project Management Application?

FDDPMA is a web-based application that manages software projects. It facilitates iterative development by reducing FDD management overhead, producing graphical progress reports, providing a workplace where all the FDD related documentation is collected.

FDD development team members play four different roles:

- A project manager (PM) logs in to FDDPMA to see the progress reports: Summary Report, Plan View Report, Parking Lot Report, Trend Report etc.
- A chief programmer uses FDDPMA to initiate the project with a list of features, groups them into work packages, kickoff, and manages iterations.
- The developer accesses FDDPMA to obtain the information published for work packages and to participate in forum discussions.
- A customer logs in to FDDPMA to answer problem domain questions in the forums, report bugs, and watch progress reports.



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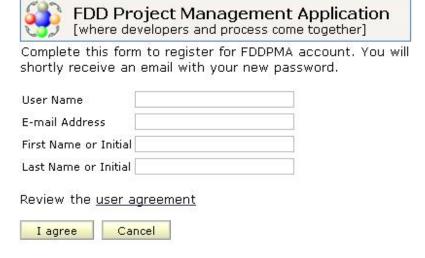
2. Creating a New Account

To start using FDDPMA, one must create an account. The account creation is a quick process that consists of these steps:

1. Type http://www.fddpma.net in the browser address. The FDDPMA opening page displays.



2. Click the <u>New Account Sign Up</u> link. *The registration form displays*.



- 3. Type a unique user name in the **User Name** box. If you enter a name that someone is already using, the application will display an error message. Simply choose another user name and try again.
- 4. Type a valid e-mail address in the **E-mail Address** box.



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- 5. Type your name in the **First Name or Initial** and **Last Name or Initial** boxes.
- 6. Click the <u>user agreement</u> link and read the agreement. Then click **I agree**. The application will display a message indicating that it created a new account and sent an email message with the password.
- 7. Click **Cancel** to return to the login screen.



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3. Logging In

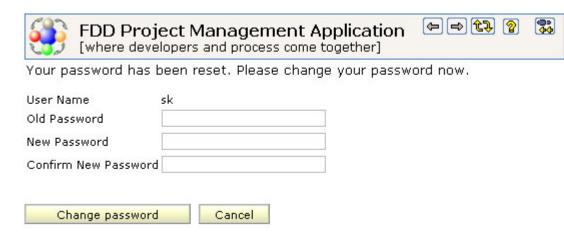
You should receive an e-mail message with your initial password within several minutes of completing the registration form.

To log in for the first time:

1. Type http://www.fddpma.net in the browser address. The FDDPMA opening page displays.



2. Type your user name and password in the **User** Name and **Password** boxes in the upper left hand corner of the page. Then click the **Login** button. *The password change page displays*.



3. Type your user name, your old password, your new password, and a confirmation of your new password. The confirmation must be the same as a newly chosen password. Then click the **Change password** button.

The FDDPMA summary page displays with a list of projects.

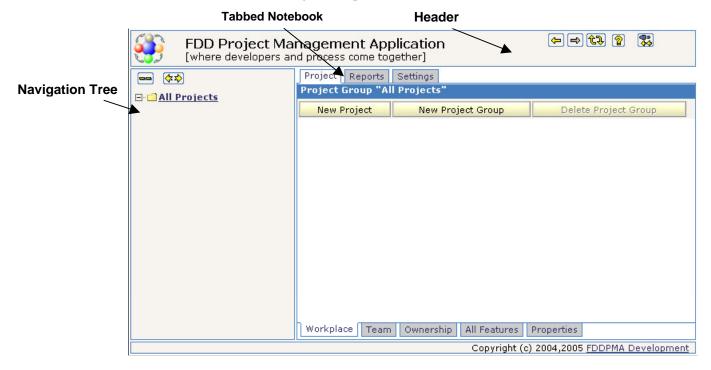


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4. Navigating

In this section you will learn how to navigate through the application. The same navigation rules apply to all the FDDPMA screens. After you read this section, you will understand the navigation principles that FDDPMA implements. A typical FDDPMA screen consists of tree areas:

- The header,
- The navigation tree
- The tabbed notebook featuring both top and bottom tabs





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4.1 Screen Header

The screen header is at the top of the screen. It displays the logo and a common toolbar. All of FDDPMA screens share this toolbar. The toolbar has several buttons.

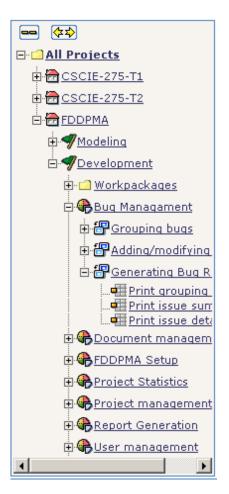
Toolbar Button	Function					
(Returns to the previous screen. If the screen is not available, the button is grayed out.					
	Advances to the next screen. If the screen is not available, the button is grayed out.					
Note: These buttons are different from the "Forward" and "Back" buttons available in your favorite web browser. The difference is that the browser's buttons often retrieve the web pages from the browser's local cache, not from FDDPMA website. As a result, the web browser displays some other page than FDDPMA remembers. For example, you may select an activity in FDDPMA, then move to another activity. Then you decide to delete the first one, so you go to the previous page using your web browser's back button, and click on the "Delete". Which activity will be deleted? To avoid such confusion FDDPMA application prohibits navigation with browser. Most of the times, you will discover that these buttons do not work. Instead, use and buttons.						
Refreshes the current screen. Unlike the similar button in a web browser, it also forces FDDPMA to read the latest data from the database.						
Displays the help topic for the current screen.						
Terminates the session and logs you out of FDDPMA.						



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4.2 Navigation Tree

The navigation tree is on the left of the screen. It displays the hierarchy of groups, projects, and project entries. Upon the first login, the navigation tree contains one group "All Projects," which is empty. This root project group is always present. All the groups and projects that you might create will be (grand) children of this root group. As you populate your projects with subject areas, activities, and features, you will see all of them in the navigation tree. The diagram below shows an example of the populated tree, along with a legend for the node icons.



Icon	Representation		
1	Root group or a folder for work packages		
000	Group of projects.		
=	Project		
7	Project stage		
•	Subject area		
Para Para Para Para Para Para Para Para	Activity		
	Feature		
£ ⊞	Work Package		

The tree displays the selected node with the bold font. It remembers the current selection and preserves it when you collapse or expand the nodes. The names of the nodes in the expanded tree may not be fully visible, especially if the names are long. There are three ways to display the node's name

- Move the mouse cursor over a node name and the hint will pop up
- Use the scroll bar at the bottom of the tree
- Adjust the tree width using the toolbar button 🖼; 🖃 button will collapse all the nodes.

Please note that the navigation tree is tab-sensitive. You will see different icon nodes on the Settings tab.



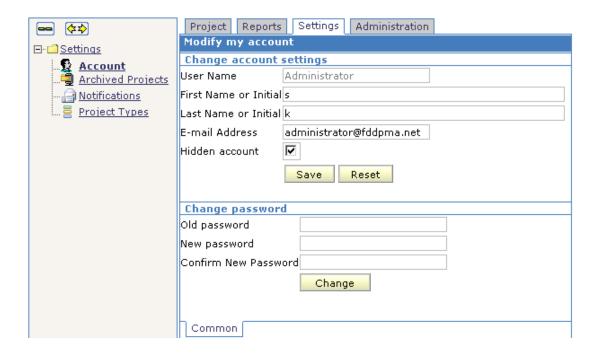
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4.3 Tabbed Notebook

The right side of the page is a tabbed notebook where FDDPMA displays its contents. The notebook has two sets of tabs. The top tabs allow access to the main areas of FDDPMA: project management, report generation and configuration. The sub-tabs are at the bottom and provide navigation within the selected area. Each top-level tab has its own set of sub-tabs and remembers the last selected one. For example, you may select the "Project" tab, the "Property" sub-tab and then start selecting different entries in the navigation tree. Since FDDPMA preserves tab selection, it will show properties for each selected node.

5. Modifying account settings

You may change your account settings at any time. Navigate to the Settings tab, then chose Account note. FDDPMA displays the account configuration.



You may change the following properties of your account:

- First and last name or initials: FDDPMA uses this information to display your name when you are an owner of an activity, a source code unit, as well as in various reports;
- Email address: FDDPMA will send notifications to this address when someone invites you to join the project, when your password is reset and in some other situations;
- Hidden account: FDDPMA allows searching its account database when a project manager is
 looking for the team members for a new project. If you mark your account as hidden, which
 is default for all new accounts, FDDPMA will not show it in the search results. In this case
 the project manager will have to know your user name to invite you to his or her project.
- Change password controls: use them to change your password. You need to know the old password before you can choose a new one. The users who forgot their passwords should follow "Forgot my password" link on the FDDPMA login screen.

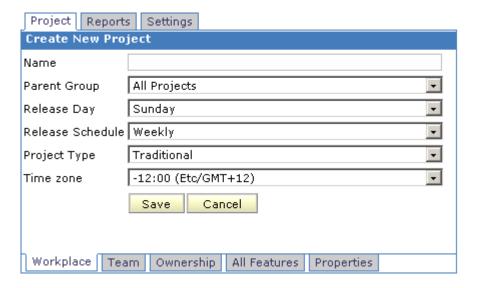


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6. Creating a new project

- 1. Navigate to the Project tab, then the Workplace sub-tab.
- 2. Select any project group in the navigation tree. If you have not created any project groups yet, use the default group.

 All projects in the group display.
- 3. Click New Project
 The Create New Project dialog box displays.



4. Enter the following required information:

Field	Description		
Name	The name for a new project, which must be unique among the all projects that you have access to		
Project Group	The parent group for a project. Once the project is created, yo may move it to any group, as described in the later section		
Release day	the day of the week when you plan to hold the release meetings. The release meeting is at the end of iteration		
Release schedule	defines the length of the iteration. 1 to 4 weeks schedules are available. The release schedule and the day of week often serve as a deadline when all of the iteration's features must be complete		
Project type	defines a number of stages in the software project. FDDPMA comes with the two predefined project types: "FDD" and "Traditional". You may create your own project types, as described in the later section "10.2 Create Custom Project Types"		



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Field	Description
Time zone	defines when the project's time turns over midnight. FDDPMA updates project status at midnight. For example, if a feature is not complete by its deadline, it will turn red at project's midnight time

- 5. Click Save to create a new project. FDDPMA updates the navigation tree
- 6. Select the newly created project. As the project creator, you automatically get the role of project manager.

The next section describes how you can add members to your project.



[where developers and process come together]

7. Building a Project team

This section describes how to build a team for a project. It starts with role definitions and then describes the actual windows where you can add or remove team members.

7.1 Project roles.

FDDPMA supports six roles:

- Project manager (PM) supervises the project. PM is responsible for overall project progress and has most of permissions in FDDPMA;
- Chief programmers (CP) report to PM. They manage the iteration teams and are responsible for the progress of the features that are included into the iteration. Each CP works with several developers. CPs also write the code themselves;
- Developers (D) implement the features by writing the code, testing it and reviewing each other's work;
- Customer (C) represents the project sponsor and answers the business logic questions that implementation team may have;
- Help Desk (HD) role is reserved for future use. Help desk personnel will be responsible for tracking issues (bugs, enhancements) in the post-implementation stage of the project.
- Guest (G) have read-only access to a project.

7.2 Permissions by Role

The following table lists permissions for every FDDPMA role. Please note that the same user can play different roles in different projects. For example, a user who is a guest in one project may create a new project and become a project manager there.

Permission	PM	CP	D	С	HD	G
Update project progress	+					
Delete project	+					
Archive project or extract from archive	+					
Create new project	+	+	+	+	+	+
Create new project type	+	+	+	+	+	+
Create new project group	+	+	+	+	+	+
Create new set of milestones	+	+	+	+	+	+
Modify account	+	+	+	+	+	+
View project hierarchy	+	+	+	+	+	+
View project reports	+	+	+	+	+	+
Modify project properties	+	+				
Create/update/delete subject areas	+	+				
Create/update/delete activities	+	+				



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Create/update/delete work packages	+	+				
Create/update/delete feature	+	+				
Add/delete source code units for a project	+	+	+			
Add/delete projects managers for a project	+					
Add/delete chief programmers for a project	+	+				
Add/delete developers for a project	+	+	+			
Add/delete customers for a project	+			+		
Add/delete help desk personnel for a project	+				+	
Add/delete guest for a project	+	+	+	+	+	
Import project members	+					

All the operations in FDDPMA are subject to security checks according to the above table. If a user does not have permission to perform a particular operation, the user will usually find the appropriate screen control disabled.

Security system in FDDPMA also includes the two special accounts: Guest and Administrator. The Guest account has read-only access to the application. The Administrator account can manage FDDPMA application, as described in section 21. Managing FDDPMA

Note the difference between the Guest account and Guest role:

- Guest account is the account that marked as "guest" in the database. This is typically an account with name "Guest". When a user logs in using this account, he/she has only read-only permissions in any project and cannot modify any application-wide settings.
- Guest role is one of the roles in FDDPMA. This role may be granted to any regular FDDPMA account. When a user has Guest role in a project, the user cannot modify the project. However, such a user may still modify other aspects/projects in FDDPMA



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8. Managing a Project Team

This section describes the FDDPMA pages where you can manage the project's team.

1. Choose a project in the navigation tree and select the Project tab, the Team sub-tab. FDDPMA displays a list of all project members. Initially the list has one member: you, the creator of the project.



2. Here you can perform the following operations:

Operation	How To
Modify member's roles	Click name of the user.
Revoke membership	Click trashcan icon in the last column.
Add new members	Click Add Members button.
Import members from another project	Click Import Members button.

3. Click Add Members FDDMPA displays the Add Project Members window.

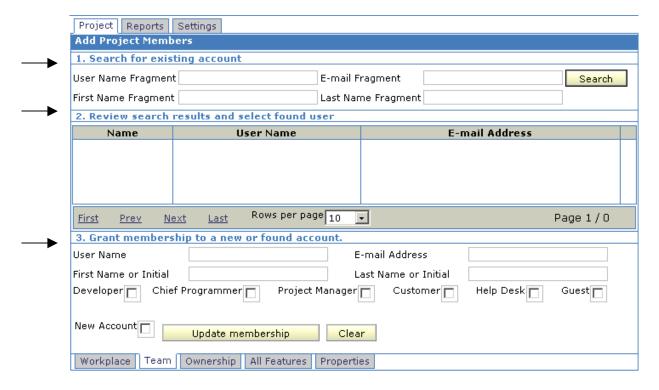


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8.1 Add a New Project Member

You can search for existing user accounts or create the new ones. The window has three sections that correspond to the steps you need to take.

- 1. Search for existing account
- 2. Review search results and select found user
- 3. Grant membership to a new or found account



Step 1 – Search for an existing account

- Define the search criteria to search for an account that already exists in the FDDPMA database.
- Click on the Search to start the search.

 A list of users that meet your criteria displays.

Step 2 – Review search results and select found user

- If the user you are searching for displays in the list, click on the icon in the last column.
 - FDDPMA copies the found account's information into the section 3 where you can grant the desired roles.
- If you did not find the account, one of the following situations exist:
 - The person does not have an account in FDDPMA. Proceed to step 3 to create a new account;



[where developers and process come together]

➤ The person has marked the account as "hidden." Talk to the person to learn the name of his or her account. Then proceed to step 3 to grant the desired roles.

Step 3 – Grant membership to a new or found account

- To create a new account, fill in all the input fields: user name, e-mail address, first name or initial, and last name or initial. Check the appropriate role. Then check New Account and click Update membership.
 FDDPMA creates a new account, grants the specified roles, and sends an invitation e-mail with the initial password.
- To grant roles to an existing account, uncheck New Account. Check the appropriate role.

Repeat steps 1 through 3 for every team member. Then click the Project tab.

8.2 Import team members.

If you wish to start a new project with an existing team, you may use the team import capabilities. This functionality is available for project managers.

1. Click on the "Import Members" button on the Project Team page. *FDDPMA displays the import members into project page*.



- 2. First, select the project from which you wish to import the existing members. *FDDPMA imports accounts into the project that is selected in the navigation tree*.
- 3. Click the appropriate option to resolve the conflict if a member participates in both projects.
- 4. Then click Import



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The following example best explains the conflict resolution options. Let us assume that a person is already a member of both projects and has a role of developer in the source project and a role of chief programmer in the destination project.

- **Preserve existing members** leaves the person as a chief programmer
- Merge roles makes the person both developer and chief programmer
- Overwrite existing members makes the person a developer



[where developers and process come together]

9. Organizing projects into groups

Note: You may safely skip this section if you have just a few projects.

Project groups are merely containers for projects. Use the groups if you have many projects and want to organize them in some consistent fashion. They are similar to the directories and files in the computer's file system. The directories simply contain the files, without affecting their content, and you may move a file from one directory to another. Similarly, project groups have a name and serve as containers for projects. You may freely move your project from one group to another. Since project groups are private, only the group's creator can see it.

Two FDDPMA users may create different group structures, even if they share the same projects, as shown in the example below.





User 1 User 2

Project groups help in the analysis of related projects. Many FDDPMA functions display summary information by group. You may also generate the FDD reports for a group of projects at once.



[where developers and process come together]

9.1 Create a Project Group

To create a new project group:

- 1. Navigate to the Project tab, the Workplace sub-tab.
- 2. Select any project group in the navigation tree and click

 The Create New Project Group page displays.

 New Project Group



- 3. Type a unique name for the group in the **Name** box.
- 4. Click to select a parent group from the drop0down list.
- 5. Click Save

Note: You may change the group's properties by navigating to the Project tab, the sub-tab.

9.2 Project Group Tips

This is a list of useful tips to remember when dealing with project groups:

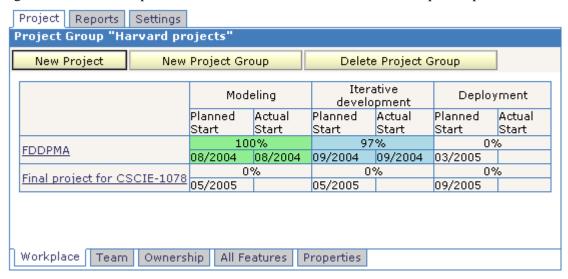
- The group may contain projects and other groups.
- You may always move a group into another group, as long as the destination group is not a child of a group to be moved.
- The deletion of a group will not delete the contained projects; it simply moves them to the parent of the deleted group.
- The root group "All Projects" is always present and cannot be deleted.
- You may grant someone membership in a project but not in a group.



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10. Defining Deadlines for Project Stages

Any project goes through a number of stages during its lifetime. A project that follows FDD methodology usually has modeling and implementation stages. A traditional project may have stages that include gathering user requirements, writing design documentation, and others. When a project group is selected in the navigation tree, FDDPMA displays the progress for each project of that group. For each project stage, FDDPMA shows planned and actual start dates, as well as the completion percent.



Each stage has a color code:

- Green completed
- Blue in progress
- Pink behind schedule
- **Grey** not yet started

FDDPMA uses the same color schema for progress reports. It chooses the color for the stage based on its completion percent and planned dates. The project manager can modify the progress information for any stage.



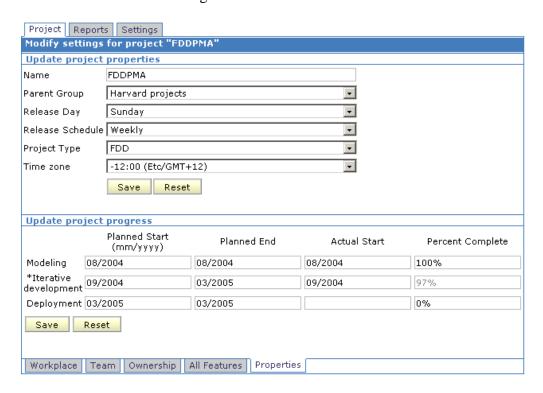
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10.1 Modify Project Progress

To modify the progress information:

- 1. Click on the project name link.
- 2. Select the Properties sub-tab.

 The Modify settings for project page displays.
- 3. Make the desired changes. Then click save to save the new progress data or to discard the changes.



The **Modify settings for project** page has the two sections.

1. Update project properties

The top section allows changing project properties you provided when creating the project.

2. Update project progress

The bottom section displays the progress information in a table. Each row corresponds to one project stage. The number of rows depends on the selected project type. Note that some stages are marked with an asterisk (*). These are the development stages. You cannot modify their completion percent. Instead, FDDPMA will automatically calculate the percent based on the number of completed features.

Note: If some stages have not yet started, or do not enter planned dates, you may leave the date inputs empty.



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10.2 Create Custom Project Types

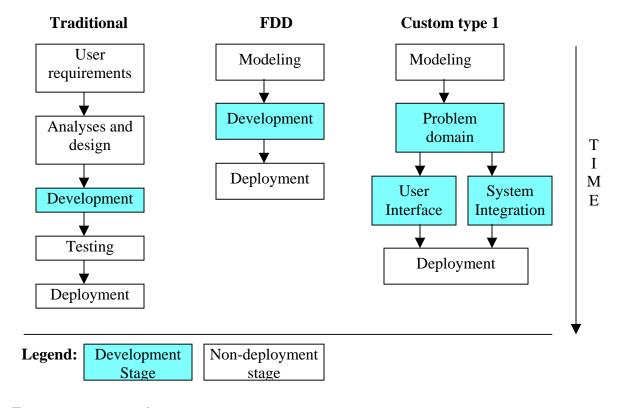
This section describes how to create a custom project type with the set of stages you need. Create the custom project types if the predefined ones do not fit your project. FDDPMA allows creation of custom project types that are visible only to their creators.

Any project type consists of stages. FDDPMA distinguishes the two types of stages: development- and non-development ones.

Development stage contains features. FDDPMA will automatically calculate completion percent of such a stage based on the number of completed features. Any development stage has a set of milestones associated with it. All the features within the development stage follow this given set of milestones. Different development stages may have different feature milestones.

Non-development stage does not have features. Optionally, it may have tasks. FDDPMA may calculate completion percent of non-development stages based on the tasks' completion status. It also allows project managers to manually update completion percent.

The following diagram displays the structure of various project types. Note that stages may overlap in time. FDDPMA does not enforce the order in which stages are to be completed. Project managers arrange timetable for stages in every particular project by providing planned start and end dates.

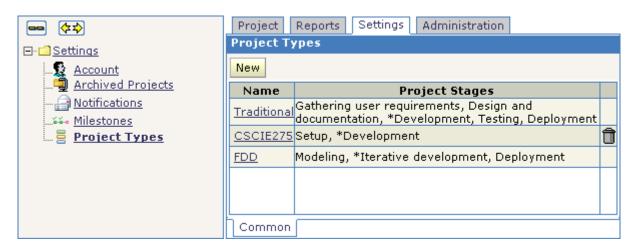


To create a custom project type:

1. Navigate to the Settings tab, then select "Project Types" node in the navigation tree. *FDDPMA displays a list of available project types*.

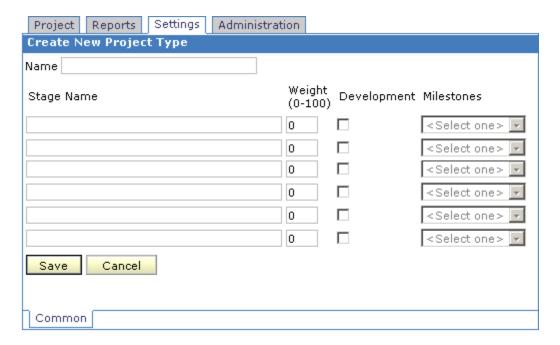


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Note: The list shows both built-in and user-created project types. For each type it shows the name and the list of stages. The stages that are marked with asterisk (*) are development stages. You can delete and edit the project types that you created. Click the name of project type to edit it. Click on the trashcan icon to delete the type. The built-in project types are read-only.

2. Click New . FDDPMA displays the Create New Project Type page.



- 3. Enter a unique project type name.
- 4. Add as many stages as you need. Assign relative weights to the stages. FDDPMA will use the weights to calculate completion percent for the whole project, based on the completion percent of the stages. Optionally, you may designate some stages as development stages by checking off the "Development" checkbox. For these, you will have to pick a set of milestones. FDDPMA comes with one predefined milestone set,



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which is standard for FDD development. If you need a custom set of milestones, you may create it in the similar fashion. See "Milestones" node in the navigation tree.

5. Click Save



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11. Setting Up the FDD Project Hierarchy

This section describes the general organization of FDD projects. It discusses the hierarchical structure of the project and what kind of project entries one should expect when dealing with FDD. The later sections describe how to manage each of the project entries.

Any FDD project starts with discovering a list of features. While the process of feature discovery is extremely important for FDD, it is out of scope for FDDPMA. We assume that you already have your list of features ready. The project hierarchy is nothing more than a way to organize the features into related groups.

A small set of features that describes a single operation is called an "Activity." The FDD literature may also call it a "feature set" or a "business activity." The development team often implements the features of single activity in one iteration. A set of related activities becomes a "subject area." The subject area covers a considerable part of a business with which the application helps. You may also find other names for subject areas, such as "major feature set". The subject areas are grouped under development stage(s) of a project. A project usually has one development stage, but may have several of them.

Let us consider an example project that explains the granularity of different levels in the project hierarchy. The project will have one development stage. Let us build an online banking system. Our application will handle the following subject areas:

- Security issues, such as secure login, "forgot my password functionality," intrusion detection, etc.
- Account management, where a user can see daily account balances, transfer money among the accounts, specify actions to take on account expiration, etc.
- Bill payment functionality where a user pays utility bills. This includes managing the list of payees.
- Self-service area, where a user can change his or her home address, request additional ATM cards, send e-mail to customer support, etc.

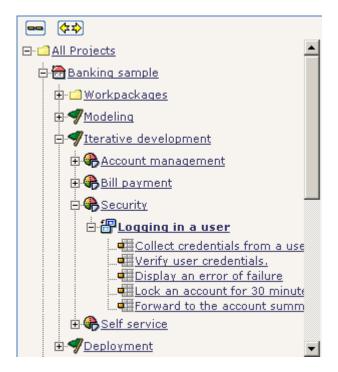
All four of these topics become subject areas. Let us drill down into "Security" subject area. The login operation becomes one of its activities. This activity may have five features:

- 1. Collect credentials from a user.
- 2. Verify user credentials.
- 3. Display an error in case of failure.
- 4. Lock an account for 30 minutes after 3 failed login attempt.
- 5. Forward to the account summary screen after successful login.

We have just created the first activity that contains five features. The picture below shows how such a project structure would look like in FDDPMA.



[where developers and process come together]



Similarly, we could create the whole project structure. The above considerations do not replace the formal feature extraction techniques, such as problem domain modeling, UML use cases, etc. They serve as an example of hierarchy in an FDD project only. It is important to record all of the features before the development starts. While FDDPMA allows adding and deleting features in the middle of the implementation stage, this will affect the project statistics. The trend report will show sudden drops, or surges in the completion percent, which may be hard to explain to a customer.

Use FDDPMA to create the discussed hierarchy upfront. Additionally, the project team creates the work packages as the development proceeds. The work package is a set of features that is selected for implementation in one iteration. They often map one-to-one to activities, but sometimes may differ. In the example above, the team may decide to exclude feature number 5 from the current iteration because it needs the account summary screen, which is not yet ready. The later section describes the work packages in detail.



[where developers and process come together]

12. Assigning Project Features

This section describes how to quickly record your list of features in FDDMPA. There are two ways to do it. Both ways achieve the same purpose, though the order of operations is different.

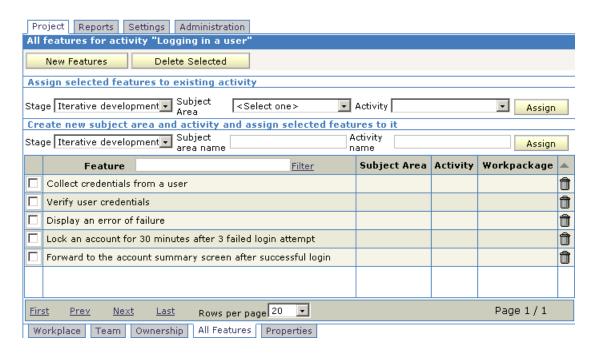
- 1. Create your project hierarchy and then add features to the appropriate activities.
- 2. Record all of the features for a project first. Then assign them to activities and subject areas.

The first way is better suited for maintenance operations during project lifetime. You may use it in the middle of the project if a customer requested some extra features. The second way is convenient at the beginning of the project, when you have a flat, not ordered list of features. This section describes the bulk feature creation, which corresponds to the second way: features first, then everything else.

12.1 Record Features Upfront

1. Select your project in the navigation tree and navigate to the "Project" tab, the "All Features" sub-tab.

FDDPMA will display a list of all the features in your project. Initially the list is empty.



- 2. Click New Features and type in your features, one feature per line. The names of the features must be unique in the scope of project.
- 3. Save the features.

FDDPMA returns to the "All Features" screen now filled with just created features. The new features are not yet assigned to any activity.



[where developers and process come together]

12.2 Organize into Activities

Now that you have recorded all of the features, you can sit back and think of how you want to organize them into activities and subject areas. The "All Features" screen lets you experiment. You may select a group of features and assign them to an existing activity.

Use the drop-down components in the upper part of the screen to find the activity. You may also create a new subject area, a new activity, and assign a group of features to it in one operation.

Use the middle part of the screen to specify the names for new objects. Make sure you have some features selected before you click the Assign button.

The grid, which shows all the features, allows sorting according to any of its columns. This helps finding the features that are not yet processed.

If you make a mistake, you can always reassign a feature to a different activity. You may also delete some features if needed. Use the trashcan icon in the last column.



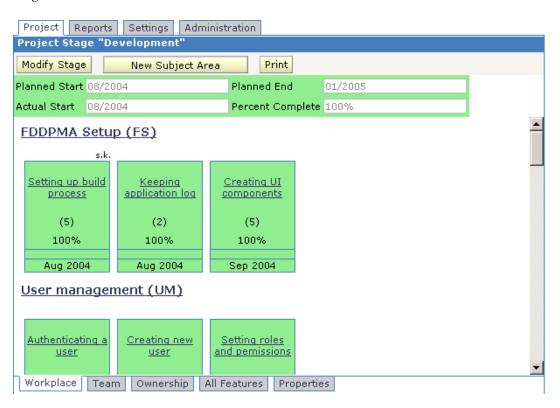
[where developers and process come together]

13. Modifying the Project Structure

The previous sections explained how to set up a project, record its features, and group them into activities and subject areas. This section describes the pages of FDDPMA that show the project from different perspectives and allow modification of its structure.

1. Select a development stage in the navigation tree, and navigate to the "Project" tab, the "Workplace" sub-tab.

FDDPMA displays stage summary page. This page shows the overall status of the project. It lists all the activities of the project, grouped in subject areas. The color of the activity defines its status and has the same meaning as the colors for project stages.



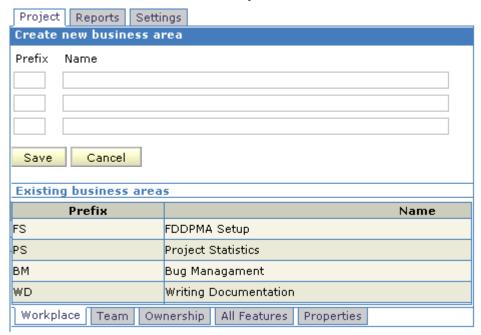
- 2. Additionally, some activities may have grey color if they do not have any features, or all of their features are cancelled. This screen provides several navigation choices:
 - Click the name of a subject area to jump to that subject area's summary screen.
 - Click the name of any activities to see its list of features.
 - Click on the "Modify stage" button to modify planned and actual dates for the stage.
 - Click on the "New Subject Area" button to create a new subject area.
 - Click on the "Print" button to create the "Parking Lot" report for the project.



[where developers and process come together]

14. Creating Subject Areas

FDDPMA allows creation of several subject areas at a time.



- 1. Provide a unique name and prefix for subject areas to be created. FDDPMA shows all the previously created subject areas in order to make a choice of a unique prefix easier. FDDPMA uses the prefix to number the features in the area. For example, it numbers the features in the subject area "Project Statistics" as PS001, PS002, PS003, etc.
- 2. Add as many subject areas as you need.
- 3. Click the Save to complete the operation. *FDDPMA saves your data and then offers to add more subject areas.*
- 4. Click Cancel to return to the project summary page.

14.1 Modify a Subject Area

FDDPMA allows modification of properties for the created subject areas. Select the subject area in the navigation tree and navigate to the "Properties" sub-tab. The property page accepts modifications by the authorized project members.



[where developers and process come together]

14.2 Delete a Subject Area

You may delete the subject area that is selected in the navigation tree. Use "Delete Subject Area" button. As rule, you should never delete subject areas once the development has started. Subject areas usually have many features, and their deletion will probably ruin the progress reports. This defeats the purpose of tracking project progress.

FDDPMA allows deletion of subject areas in order to support flexibility when building the project hierarchy. While deleting the areas, you may choose to delete all of the enclosed activities or to move them to a different subject area.



14.3 Manage Activities

The activity management follows the same pattern as subject area management:

- You may create several activities at a time. An activity has a name, an owner (usually chief programmer) and a month when it should be implemented;
- When deleting an activity, you have an option to delete the enclosed features or move them to another activity;
- The "Properties" sub-tab allows modifying the activity that is selected in the navigation tree.

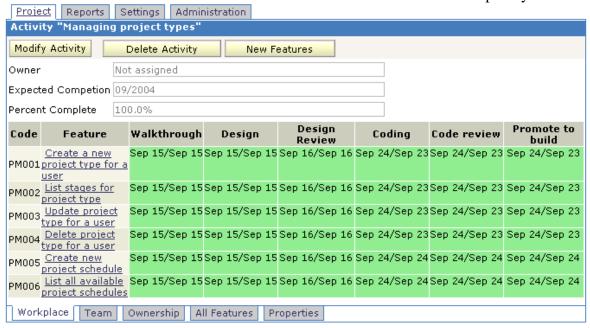


[where developers and process come together]

14.4 Record Features

FDDPMA distinguishes the two aspects of feature management: upfront setup and implementation. The previous sections described one way to do the upfront setup. Additionally, you may add the new features from the activity summary screen.

- 1. Click New Features
- 2. Then click the feature name to see its details or to delete a feature completely.



Note that each feature has a set of milestones. It is the same set of milestones for all the features in the development stage. This is the second aspect of feature management: the implementation schedule. It is the core of the FDD methodology. The development team implements the project feature-by-feature, tracking its progress along the way. FDDPMA calculates the overall progress of the project based on the number of features, and the progress of each feature.

Table 1 shows the weights of feature milestones in the standard milestone set. Once a feature is promoted to build, it is 100% complete.

Table 1- Weights for standard FDD milestones.

Feature Milestone	Weight (%)				
Walkthrough	1				
Design	40				
Design review	3				
Coding	45				
Code review	10				
Promote to build	1				

Each iteration of an FDD project implements a group of related features. In FDD terminology, such a group is called a work package. The next section describes how to create a new work package.



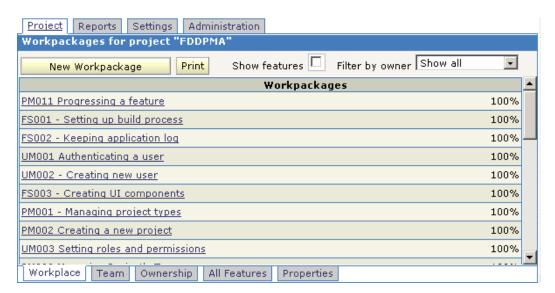
[where developers and process come together]

15. Creating a new work package

The work packages reflect the iterative nature of FDD. The team creates a new work package for every iteration. The work package includes the related features, often from the same activity. The required prerequisite is that all the dependent features of the work package are already implemented. If a development team is big enough, they implement more than one work package in one iteration. Typically every chief programmer is responsible for one work package. A chief programmer creates a work package before the iteration starts. For more information about activities that chief programmers perform during FDD iteration, see the document "Guide for Chief Programmers".

- 1. Select **Workpackages** node in the navigation tree. This is the first node under your project.
- 2. Navigate to the "Project" tab, the "Workplace" sub-tab.

 FDDPMA displays a list of all the existing work packages. Initially the list of work packages is empty.



3. Click New Workpackage to create a new one. Any work package consists of one or more features, optional attachments, and source code units.

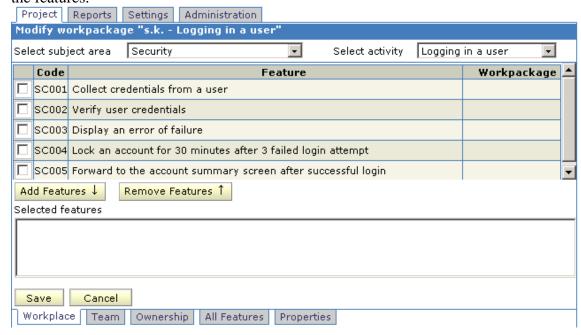




[where developers and process come together]

4. Provide a unique name and pick up a development stage of the project that this workpackage is for. Optionally provide a short description. You may provide the detailed description later.

5. Click Save & Add Features to save the workpackage and proceed to selecting the features.



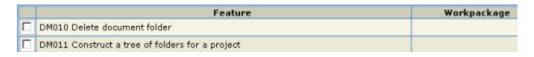
15.1 Select the Features for a Workpackage

When creating a new work package, you start with selecting features.

Select a subject area and an activity.
 FDDPMA displays a list of all the features in the activity.



2. Select the features that you want to implement as a part of this package. FDDPMA prohibits selection of the features that already belong to some other work package.



- 3. Click Add Features to add the selected features to the work package.
- 4. Repeat steps 1 through 3 until all the desired features are added.



[where developers and process come together]

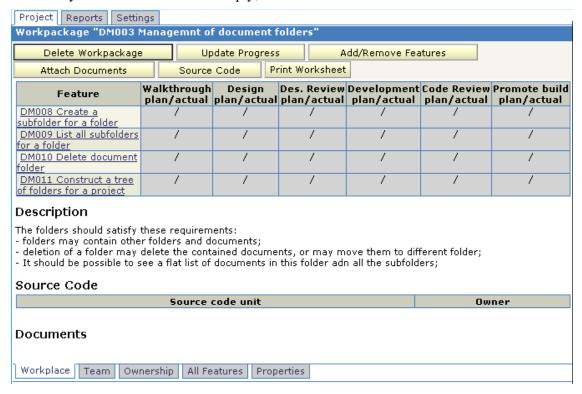
5. Click to complete. *FDDPMA displays the Workpackage Summary page*.



[where developers and process come together]

15.2 Work with the Workpackage Summary

The Workpackage summary page provides the functionality for all the work package related operations. Note that initially the milestone dates are empty; there are no documents or source code units attached.



The workpackage summary page allows performing the following operations.

Button	Function
Modify Workpackage	To modify workpackage name, owner and description
Add/Remove Features	To add or remove features to/from the workpackage
Update Progress	To provide planned/actual dates for feature milestones
Attach Documents	To manage the list of attached documents
Source Code	To select the source code units that will be modified when implementing this work package
Print Worksheet	To print a hard copy of this screen in PDF format
Delete Workpackage	To delete if you mistakenly created this work package. Deletion of the work package will also delete the attached documents. However, it will not delete features or source code units; neither will it erase the feature milestones



[where developers and process come together]

16. Assign Source Code Ownership.

This section describes how FDDPMA assigns source code owners. This section is optional. Skip it if you do not plan to maintain a list of source code files within FDDPMA.

Unlike XP, FDD encourages code ownership. One developer, who is an owner of a particular piece of source code, should do all the changes. It reduces a risk of introducing accidental problems, since the person who is not an owner may not fully understand the code.

If you decide to keep the code ownership in FDDPMA, you will have to record names of source code units. These names may mean different things: Java source files, Delphi code units, C source files, chapters within design documents, etc. FDDPMA has no specific requirements for the names of source units, except for their uniqueness. Once you record the names of the units, you receive a number of benefits:

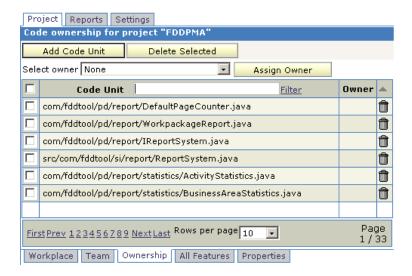
- You may attach the names of source code units to a work package. The owners of the code units will form a team for the iteration;
- You may keep track of developer's workload. The number of source code files per developer will help to estimate the workload. If a developer leaves the team, it becomes easy to identify the affected source code and reassign it to someone else;
- The future versions of FDDPMA may generate more ownership-related reports. One example is a number of bugs per developer.

Select your project in the navigation tree, and then click on the "Project" tab, the "Ownership" sub-tab. You will see a screen that lists all the source code units. Here you can perform all the source code related operations:

• Click Add Code Unit to bulk-insert the names of source code units;
Hint: to obtain list of all source code files in your project, navigate to the root folder of your project and type this command:

Windows: "dir /B/O/S >> files.txt" Unix: "ls -1 -R >> files.txt"

- Select a number of source code units and assign them to a developer;
- Remove the source code units that were re-factored out of project;
- Search for the source code units by a fragment of the name.
- Sort the data either by the name of the unit, or by the name of the developer.



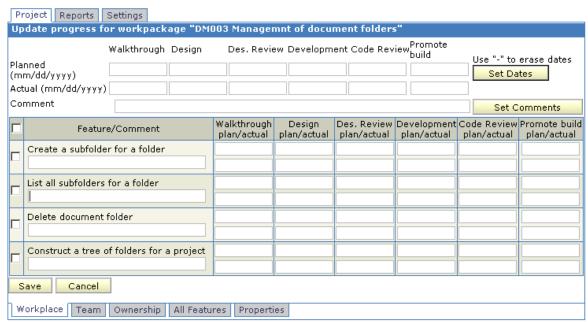


[where developers and process come together]

17. Updating Work Package Progress

A chief programmer creates a new work package before the beginning of an iteration. As the iteration progresses, a CP and developers will periodically return to the work package. The developers will use it as a reference. They will be looking at the attached documents and images, as well as at the planned milestone dates. It is quite common that a developer participates in several work packages at a time. The developers need to know the milestone dates in order to prioritize their work. A CP will come back to the work package after every milestone meeting and update the actual dates.

To update milestone date, click on the "Update Progress" button in the work package screen. FDDPMA displays the progress page.



The progress page allows bulk update of all the features in the work package. A CP usually performs the bulk update when all of the features achieve a milestone on the same day.

- 1. Fill in the planned and/or actual dates date at the top of the screen.
- 2. Select the features that need to be updated, and click FDDPMA populates the feature grid with provided dates.
- 3. Click save to save the changes.

If some features fall behind schedule, a CP may use this screen to provide the reason for being late. FDDPMA displays this reason in the plan view report, described in the later section.



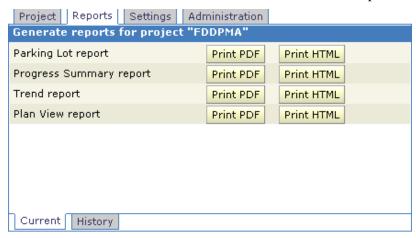
[where developers and process come together]

18. Generating progress reports

FDDPMA generates a number of progress reports that keep track of project progress. Quite often, the team posts the copies of the reports on the bulletin board so that customers and upper management can see the progress at a glance. Several types of reports are available. This section describes the reports that

are accessible from "Reports" tab of the application. Additionally, many FDDPMA screens have a button. You may choose to create reports in PDF, or HTML formats.

Click the Reports tab, the Current sub-tab to see the list of available reports.



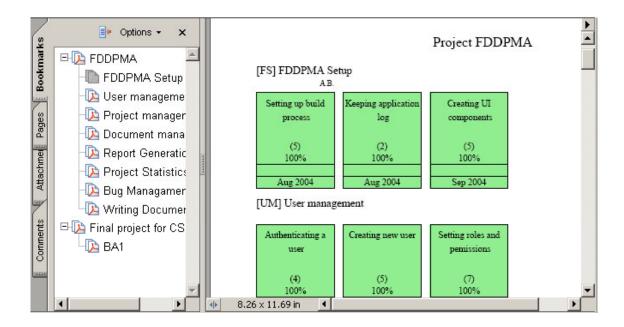
FDDPMA may generate the reports for a single project, or for a group of projects, depending on the selection in the navigation tree. When a project group is selected, the resulting report is a concatenation of reports for individual projects.



[where developers and process come together]

18.1 Parking Lot report

This is a high-level report that lists all the activities of a project, grouped by subject areas.



The report depicts the activities as rectangles. The initials of a CP who is responsible for an activity are above the upper right corner of the rectangle. The rectangle has three sections:

- The upper part shows the name, number of features, and the completion percent.
- The middle part serves as a graphical progress indicator.
- The bottom part shows the month when an activity is scheduled for completion.

The report provides bookmarks for each subject area of the project. Similar bookmarks are available in all types of the reports.



[where developers and process come together]

18.2 Progress summary report

This report has more information about activities than the Parking Lot report. It presents the information in text form.

Apr 02, 2005

Project FDDPMA

[FS] FDDPMA Setup							
Activity	Total Features	Not Started	In Progress	Behind Schedule	Completed	% Completed	Target Date
Setting up build process	5	0	0	0	5	100	Aug 2004
Keeping application log	2	0	0	0	2	100	Aug 2004
Creating UI components	5	0	0	0	5	100	Sep 2004
Business area total	12	0	0	0	12	100	
[UM] User management							
Activity	Total Features	Not Started	In Progress	Behind Schedule	Completed	% Completed	Target Date
Authenticating a user	4	0	0	0	4	100	Aug 2004
Creating new user	5	0	0	0	5	100	Sep 2004
Setting roles and pemissions	7	0	0	0	7	100	Oct 2004
Business area total	16	0	0	0	16	100	

For each activity, this report shows the total number of features, and the breakdown of features into the following categories:

- Not started
- In progress
- Behind schedule
- Completed.

The report also shows the completion percent and the planned completion month for every activity. The progress numbers are aggregated for the subject areas and for the whole project.



[where developers and process come together]

18.3 Trend report

This report shows history of project progress. It displays the breakdown in feature statistics for every week of development time. This report helps tracking problems in the project lifecycle.

Project FDDPMA

Week Ended	Total Features	No t Starte d	In Progress	Behind Schedule	Completed	Completed %
5-Feb-2005	151	17	4	0	131	87
12-Feb-2005	151	12	2	0	137	91
19-Feb-2005	151	8	3	0	140	93
26-Feb-2005	151	3	1	1	147	97

The numbers show trends in the development process:

- Completion percent should grow constantly. If it does not, then project team does not perform well. If this number drops, most probably new features have been added to a project;
- If the number of "in progress" features is small, the developers are idle. CPs need to schedule more work packages;
- Non-zero numbers in "behind schedule" column indicate problems;
- The number in "In progress" column should stay relatively small. If it grows, the team does
 not complete the started features. It may indicate some technical problems, such as inability
 to run unit tests. It may also indicate that many features depend on some functionality that is
 not yet complete. It has to be completed first, so that dependent features may proceed;



[where developers and process come together]

18.4 Plan View report

This is a detailed report that shows the milestones for all the features in the project. This report is helpful at the release meetings when the project manager and chief programmers discuss the state of the project.

[DM] Document management

-	ng documents (4)	*** ** **		<u>.</u>				a					
Code	Description					Des. Review MM/dd/yy		Coding MM/dd/yy				Promote build MM/dd/yy	
		Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
DM001	Upload a document to FDDPMA	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	01/05/05	01/06/05	01/05/05	01/06/05	01/05/05	01/06/0:
DM002	Verify uniqueness of the document	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	01/05/05	01/06/05	01/05/05	01/06/05	01/05/05	01/06/0:
DM003	Find document by ID	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	01/05/05	01/06/05	01/05/05	01/06/05	01/05/05	01/06/0:
DM004	Obtain binary content for a document	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	12/27/04	01/05/05	01/06/05	01/05/05	01/06/05	01/05/05	01/06/05
Dragnace	sum for features in activity "Uploading documents":	100.0	0.6										
riogress		100.0	/0										
_	d completion date:	02/20											
Expecte	d completion date:												
Expecte	,												
Expecte	d completion date:		05 rough	Design MM/dd/	yy	Des. Rev		Coding MM/dd/	vv	Code Re		Promote MM/dd/	
Expecte Generat	d completion date: ting documents in PDF (3)	02/20 Walkthi	ough		1		yy		_		уу		yy
Expected General Code	d completion date: ting documents in PDF (3)	Walkthi MM/dd/ Planned	ough yy Actual	MM/dd/ Planned	Actual	MM/dd/ Planned	yy Actual	MM/dd/ Planned	Actual	MM/dd/ Planned	yy Actual	MM/dd/	y Actual
Expected General Code DM005	d completion date: ting documents in PDF (3) Description	Walkthi MM/dd/ Planned 01/10/05	ough yy Actual 01/10/05	MM/dd/ Planned 01/10/05	Actual 01/10/05	MM/dd/ Planned 01/10/05	Actual 01/10/05	MM/dd/ Planned 01/14/05	Actual 01/14/05	MM/dd/ Planned 01/14/05	yy Actual 01/14/05	MM/dd/ Planned	Actual 01/14/0:
Expected General Code DM005 DM006	d completion date: ting documents in PDF (3) Description Create empty PDF report	02/20 Walkthi MM/dd/ Planned 01/10/05 01/10/05	ough yy Actual 01/10/05 01/10/05	MM/dd/ Planned 01/10/05 01/10/05	Actual 01/10/05 01/10/05	MM/dd/ Planned 01/10/05 01/10/05	Actual 01/10/05 01/10/05	MM/dd/ Planned 01/14/05 01/14/05	Actual 01/14/05 01/14/05	MM/dd/ Planned 01/14/05 01/14/05	Actual 01/14/05 01/14/05	MM/dd/ Planned 01/14/05	Actual 01/14/0: 01/14/0:
General Code DM005 DM006 DM007	d completion date: ting documents in PDF (3) Description Create empty PDF report Create a new page in PDF report	02/20 Walkthi MM/dd/ Planned 01/10/05 01/10/05	ough yy Actual 01/10/05 01/10/05	MM/dd/ Planned 01/10/05 01/10/05	Actual 01/10/05 01/10/05	MM/dd/ Planned 01/10/05 01/10/05	Actual 01/10/05 01/10/05	MM/dd/ Planned 01/14/05 01/14/05	Actual 01/14/05 01/14/05	MM/dd/ Planned 01/14/05 01/14/05	Actual 01/14/05 01/14/05	MM/dd/ Planned 01/14/05 01/14/05	Actual 01/14/05 01/14/05

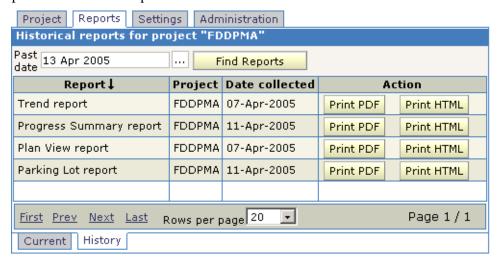
The report groups features into activities and subject areas. It calculates the completion percent for each group.



[where developers and process come together]

19. Viewing Historical Versions of Progress Reports

FDDPMA keeps historical versions of the reports for audit purposes. It periodically generates and stores the reports. The stored reports never change. The changes in the project structure, such as activity creation or deletion, do not affect previously generated reports. Click the Reports tab, the History sub-tab to find the past versions of the reports.



Initially the grid is empty. Type or select the past date and click Find Reports. FDDPMA will find and display the reports generated on, or before the specified date. The application does not store the progress reports if progress information did not change since the last report generation time. If a project does not progress, then the difference between the specified and found dates may be significant.



[where developers and process come together]

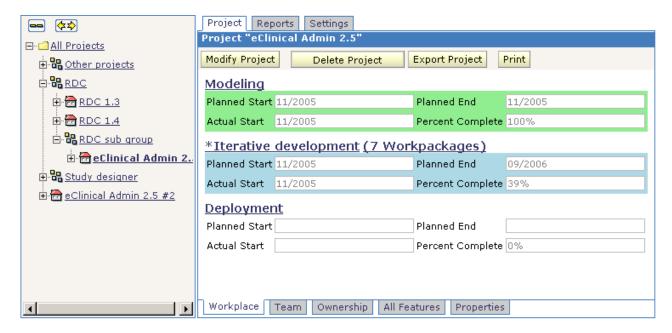
20. Exporting/importing projects

This section explains export and import capabilities built into FDDPMA application. The FDDPMA supports FDD Interchange format (FDDI) and therefore should be compatible with various software applications that support this format. Here are a few reasons for using export and import:

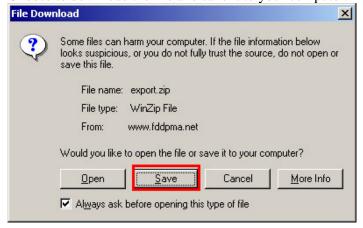
- 1. Data backup. You may download the exported data for backup purposes.
- 2. Data interchange. You may export data from other FDDI compliant tools and import it into FDDPMA. You may also export FDDPMA project and import it into other FDDI-compliant software.
- 3. Moving your projects between various FDDPMA installations. For example, you may start you project using the free version of FDDPMA at http://www.fddpma.net. If during the course of the project you find that you need more storage space, better security etc, you may move your project to a paid service.

20.1 Exporting a project

In order to export the project, select it in the navigation tree and click the Export Project button.



Choose to download the file and save it to your computer.





[where developers and process come together]

The exported data comes in the form of zipped archive. The archive includes several types of files:

- fddi_project.xml: the file containing FDDI-compliant XML document with project information;
- *.xsd files: the XML schemas that describe elements in the above XML file;
- various project's artifact files: attached documents, historic reports etc.

When importing the project back into FDDPMA, you may import the ZIP archive as a whole. When importing data into other FDDI compliant software, use the fddi_project.xml file.

20.2 Importing a project

In order to import a project, select any project group in the navigation tree and click the Import Project button.



FDDPMA will offer to pick up a file to be imported. It supports the two types of files:

- ZIP archived created when exporting projects from FDDPMA
- XML file created by other FDDI-compliant tools

Note that XML file may contain information about many projects, and ZIP archive may have more than one XML file.

Select or type name of the file to import, then click Import button.



Once the file is processed, FDDPMA will display the log of generated messages. Read them to determine status of each project. Note that imported projects always appear in the root project group. You may always move them into other groups as needed. See section 9. Organizing projects into groups.



[where developers and process come together]

21. Managing FDDPMA

This section describes administrative features of FDDPMA. It may be useful for those who are responsible for installation and maintenance of FDDPMA. The rest of users may skip this section.

FDDPMA is designed in such a way that it requires little or no maintenance efforts. Project members have enough permissions to manage their projects on their own. The minimal management facilities of FDDPMA include:

- Detection and deletion of non-active projects
- Email notifications to the users

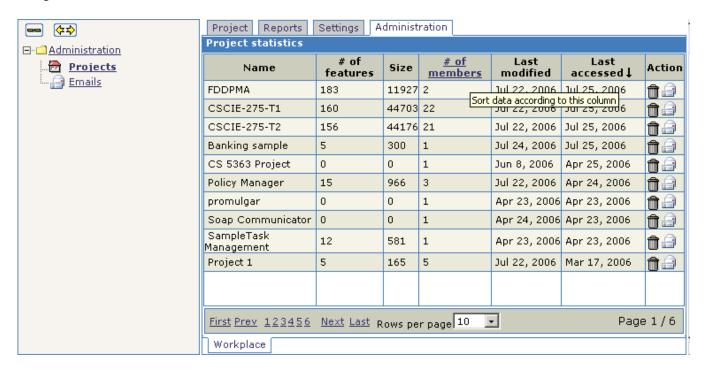
These administration capabilities are available only to the users with administrative permissions. The administrative permissions may be given to any account via SQL command interface of FDDPMA database. In order to grant administrative permissions to an account, login to FDDPMA database and execute the following SQL statement, replacing 'Administrator' with the name of account of interest:

```
update FDDPMA_USER set IS_ADMIN = 1 where USER_NAME = 'Administrator'
```

Once a user with administrative permissions logs in FDDPMA, the application will display additional top-level tab "Administration".

21.1 Examining list of projects

In order to examine the list of projects, select Administration tab, then click on the "Projects" node in the navigation tree.



The grid displays all the projects in FDDPMA. Click on column header to sort the grid according the column's data. The sorted grid allows for easy identification of inactive projects. Once the administrator identifies the project of interest, he/she may use one of these actions:



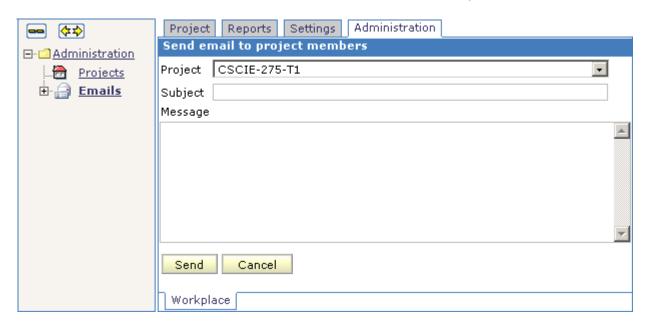
[where developers and process come together]

- Click on the trashcan icon to permanently delete the project from FDDPMA application
- Click on the letter icon to send email to project members. FDDPMA will display an email page

21.2 Email notifications

An Administrator may want to send emails to FDDPMA users for various reasons, such as notification of upcoming project deletion, application downtime, etc. FDDPMA allows to sent email to all application users, or to all members of the selected project.

Click on Administration tab, and then select the "Emails" node in the navigation tree.



- 1. Select a project to send email to its members, or select "All projects" to send email to all users of FDDPMA.
- 2. Provide Subject and text of the message.
- 3. Click on Send button to send the email. Once all emails are processed, FDDPMA will display the number of successful messages sent.