Onepoint Project 07

Tutorial

1 Introduction

■ Onepoint Project is the first open source project leadership software integrating project planning, controlling, monitoring and reporting into a single, easy to use solution.

1.1 Project Leadership Software

We are using the term "project leadership software", because the functionality provided by Onepoint Project is somewhere between traditional Project and Portfolio Management (PPM) and Enterprise Project Management (EPM) systems with a strong focus on providing always up to date key information which is required in order to really *lead* projects (rather than just to manage/administrate them).

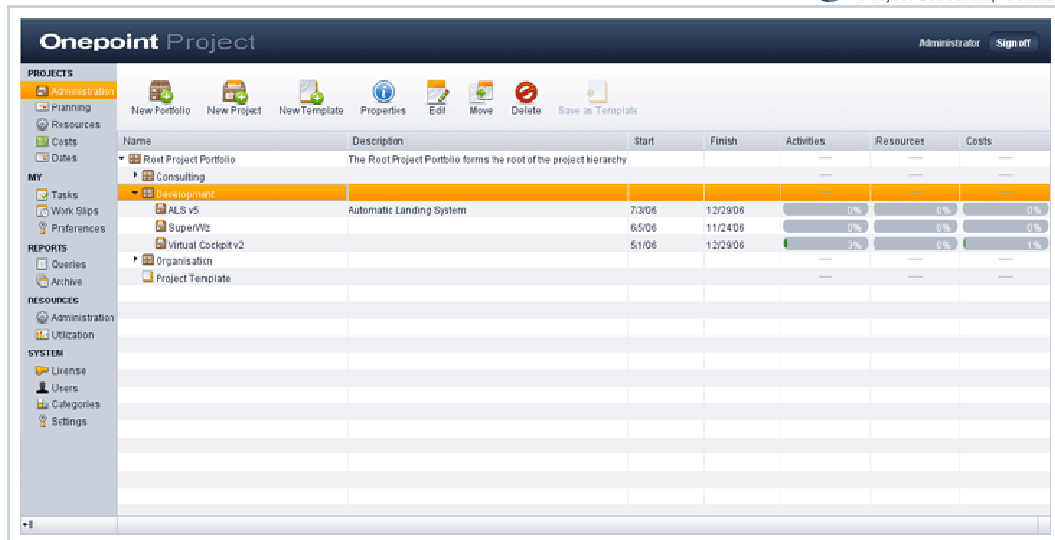There are currently two versions of Onepoint Project available:

- **Onepoint Project Open Edition** which is available free of charge and as open source download from http://sourceforge.net/projects/opproject

- **Onepoint Project Team Edition** which is commercial software and adds additional functionality to the Open Edition (www.onepoint.at)

While the Open Edition is primarily targeted at small companies and startups, the Team Edition provides more advanced functionality which is important for medium sized companies and projects such as, e.g., an integrated work breakdown structure (WBS), mandatory project templates, activity categories and a report archive.

1.2 User Interface

Onepoint Project's user interface is designed to be easy to learn and to use:

- We intentionally stayed away from complex menus in favor of clearly visible tool bars

- All functionality is displayed on the left hand side of the application and is grouped into functional groups (we call this the "tool dock" consisting of "tool groups" and "tools")

- All tools are structured the same way (mostly tabular overviews, dialog-based new and edit functionality, selection-based delete and move functions) in order that the transition from one tool to the other is easy

- All functionality is intended to be transparent and understandable (for instance, projections are always linear in order that one can easily conceive system calculated values)

ⓘ **Please note that all screenshots in this tutorial are taken from the Team Edition and that some features are not available in the Open Edition of the software.**

2 Basic Concepts

■ Projects, resources (strict resource management, assignments, responsible users), templates (only available in Team Edition), work slips (including estimations), projections (linear; including deviations), permissions (static inheritance, role-based, object-based), etc.

2.1 Projects vs. Resources

Onepoint Project integrates project and resource management concepts into a single solution and, thus, making functionality possible such as an ad hoc resource utilization view for spotting resource conflicts, or the automatic calculation of base personnel costs based on hourly rates and planned efforts. In order for this to work, a strict resource management is necessary, i.e., all resources which are intended to be used in project plans have to be prior

- **explicitly created as resources** using the resource administration tool, and

- **assigned to the project** by the responsible resource manager.

Resources and Responsible Users

Resources are not equal to the users of the system. Instead, each resource can have exactly one user which is responsible for the resource (while one user can have multiple resources he or she is responsible for): This user gets all e-mail notifications, contributor role access to the resource's projects and his or her personal task list includes all tasks of the resource.

2.2 Effort and Duration

You might know that Microsoft Project always links effort and duration: If you change the one the other is calculated based on various criteria. In contrast, Onepoint Project allows you (as the project manager) to choose if you want to plan **effort-based** (thus, linking effort and duration) or if you want to plan effort and duration **independently**. In addition, you can choose whether you want to enter and see resource assignments in percentages (%) or in hours.

ⓘ **The combination of independent planning of effort and duration and the assignment of resources in hours is especially helpful if you need to schedule long durations where only a few hours of work have to be done.**

2.3 Work Slips, Projections and Deviations

Actual values (work hours, costs, and estimations) are reported by the responsible users of the resources themselves, i.e., by the project contributors. Especially the optional possibility for project contributors to estimate the remaining effort for completing the task frees the project manager from the tedious task of constantly asking all people working on the project whether their tasks are complete and/or how much longer it will take them to complete certain tasks.

As soon as a work slip is created or updated, all monitoring and controlling data is recalculated and all ad hoc views are automatically kept up to date.

ⓘ **Base-actual comparisons are always calculated against the last checked-in project plan. Projective views for the working version of a project plan are planned for a future release of the software.**

2.4 Roles and Permissions

Onepoint Project provides four access roles which are hierarchically organized, meaning that the first role is the weakest and the last one the strongest (always inheriting all permissions from the previous role):

- **Observers** can only view information, but they are not allowed to change it

- **Contributors** can contribute to information, but they do not own it. The contributor role is currently only used for projects where the contributors are typically automatically managed on basis of the responsible users of the assigned resources and are allowed to report actual work hours, costs and estimations and to comment on tasks

- **Managers** own information like, e.g., only the managers of a resource are allowed to assign it to a project and only project managers are allowed to change the project plan

- **Administrators** own the object itself and its permission, i.e., the administrator of an object can do everything a manager can and, in addition, is allowed to change the object's permissions

All permissions are managed on a per-object level where objects are basically projects, portfolios (project folders), project templates, resources and resource pools. When creating a new object, its permissions are automatically copied from the parent object (for instance, a resource originally inherits the permissions of its pool it is created in). The administrator of the object can then change these permissions either at creation time or later on when editing it.
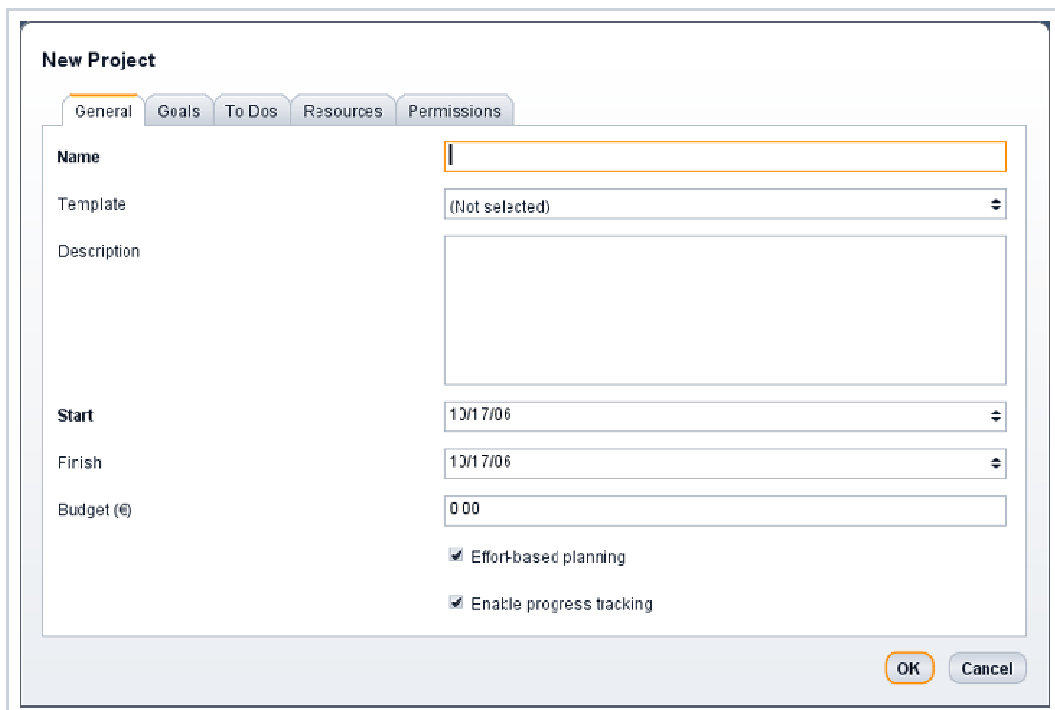
Modeling Matrix Organizations

Matrix organizations, i.e., project organizations where the resource responsibility (team managers) is strictly separated from the project responsibility (project managers) can be easily modeled, because of Onepoint Project's strict resource management: The project manager is not allowed to plan a resource before it was explicitly assigned to his or her project by the resource's manager.

3 Project and Resource Administration

■ **Project and resource administration is strict: All projects and resources must be explicitly created, but creating a project or a resource is really simple. It is also mandatory that each resource is assigned to a project by the resource's manager before the project manager is allowed to use it in the project plan.**

3.1 Creating a New Project

In order to create a new project, you first have to select the "Administration" tool in the "Projects" tool group: You will now see the current project and portfolio structure (if you are looking at a plain, new installation you will only see the "Base Project Portfolio"). Now, you simply select the portfolio you want to create the project in and press the "New Project" tool button of the tool bar. Note that you need manager permissions on the portfolio in order to be allowed to create new projects in the portfolio.

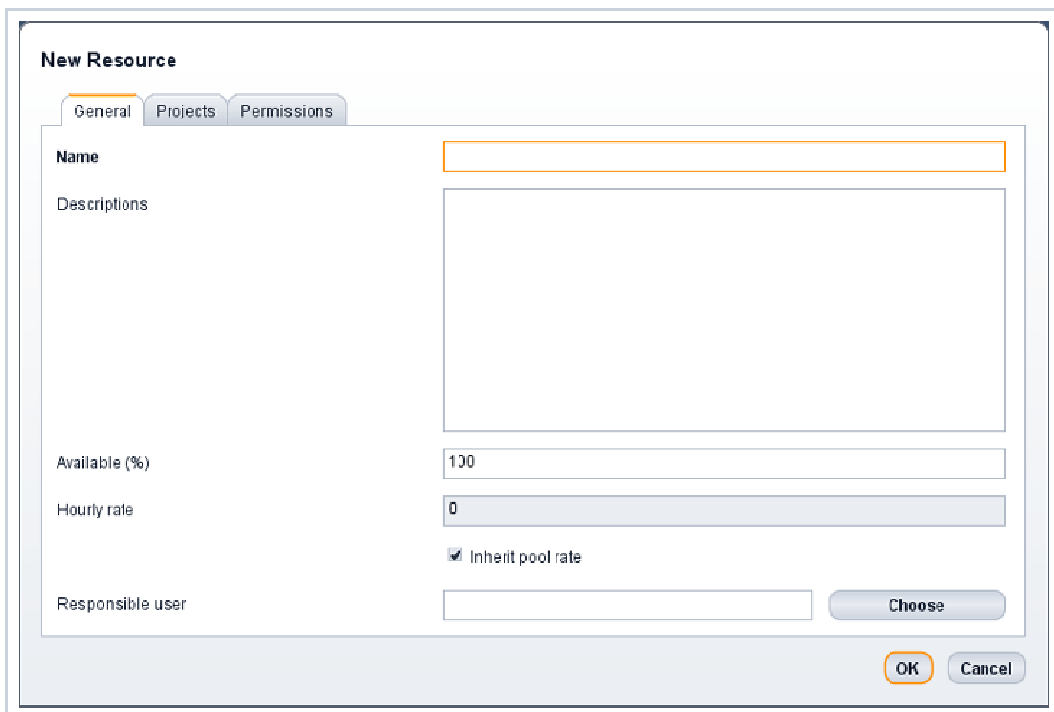There are only two fields which are mandatory in the "New Project" dialog:

- A **unique project name**

- A **start date** (pre filled out with the current date as a default value)

One thing you will want to decide when creating a new project is whether it should be progress tracked or not ("Enabled progress tracking" check box), because you cannot change this setting later on:

- If a project is **progress tracked** the responsible users of the resources involved in the project will provide time-to-complete estimations (remaining estimated effort) and the % complete of activities will not be editable by the project manager, but be calculated on basis of a linear projection using this estimations

- If a project is **not progress tracked** the project manager will be responsible for maintaining a realistic % complete value (basically all calculations for expected values in the controlling tools take this value into account)

3.2 Creating a New Resource

Creating a new resource is very similar to creating a new project: You first change into the "Administration" tool of the the "Resources" tool group, after that, you select a resource pool where you want to create the resource in (you again need manager permissions on the pool in order to be allowed to do this) and finally, you press the "New Resource" tool button of the tool bar.

The only mandatory field for a resource is the **unique resource name**. The hourly rate is used for calculating base and actual personnel costs; the global availability (in %) provides an upper limit for utilizing this resource in a single activity and at the same time is used for checking the resource's utilization level in the resource utilization view.

3.3 Assigning a Resource to a Project

As mentioned before, a resource must be explicitly assigned to a project by its manager in order that it can be used by the project manager for planning purposes. For your convenience, there are three possibilities for assigning resources to a project:

- The "Projects" tab of the "New Project" and "Edit Project" dialogs allow you to add resources to your project (but note that you still need to have manager permissions on the resource): Simply click on the "+" button to select a project from the project chooser

- The "Projects" tab of the "New Resource" and "Edit Resource" dialogs can be used in the same way

- The "Assign to Project" tool button in the resource administration tool provides an effective way to assign multiple resources conveniently to a project at once
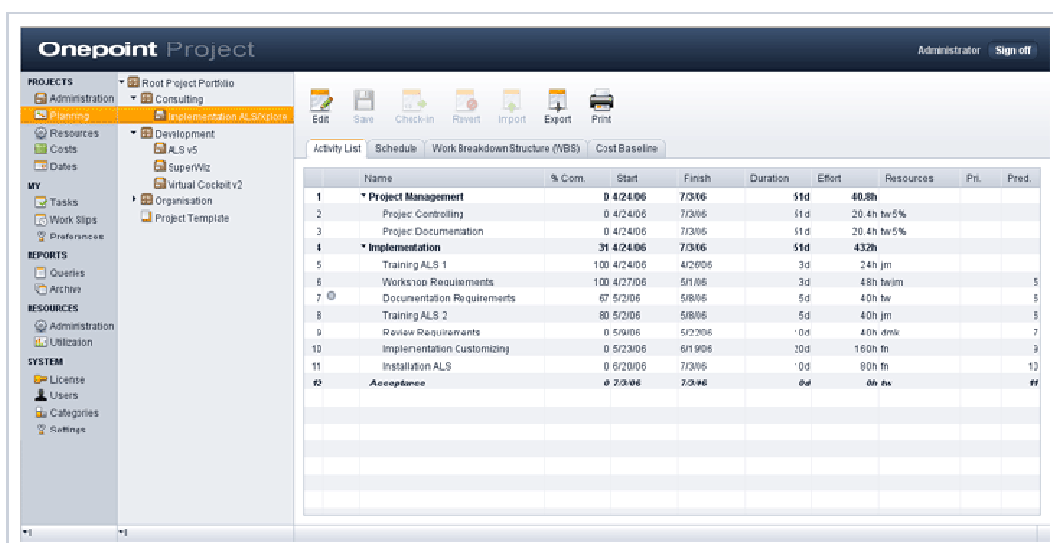
4 Project Planning and Resource Utilization

■ **Onepoint Project provides four different planning views: The work breakdown structure (WBS), the activity list, the schedule and the cost baseline. All four views are synchronized and every view allows you to add new activities and tasks. In addition, there is the resource utilization chart which helps you to identify and resolve resource conflicts across projects.**

4.1 Creating or Editing a Project Plan

In order to create a project plan for a newly created project or edit an existing plan you first have to select the "Planning" tool of the "Projects" tool group. Now you select the project in the project navigator which appears just to the right of the tool dock. Finally, you press the "Edit" tool button which results in a **personal working copy** being created for you on the server. Please note that you need to have manager permissions in order to edit a project plan.

Now you can add activities to the project plan by either simply clicking with the mouse into the activity list or the cost baseline and enter the name, start date etc. as you would do in an Excel spreadsheet, or you can use the drawing tools (provided in the edit tool bars below each view) in order to draw activities, set milestones, or draw connections between activities (in order to define predecessor-successor relationships).

Resource assignments are also created by simply typing the resource names into the resource column. If you have more than one resource working on a specific activity you can enter a list of resources where you separate the resources semicolons (";"). You can also use percentages (e.g., "cs 50%") or assignments in hours (e.g., "cs 20h") in order to define partial assignments. Simple assignments can also be managed using the resource chooser which appears when clicking on the arrow shown in an active resources table cell.

When you are finished editing the project plan and you want to distribute the tasks to the responsible users of the resources, you have to **check in the project plan**. Simply click on the "Check in" tool button: This will update the project plan using the data you just entered into your personal working copy of the plan and recalculate all controlling data. In addition, each planned task will now appear in the personal task lists of the responsible user.

ⓘ **The "+" buttons in the activity list and the cost baseline are only there for "completeness": These two views work very similar to a spreadsheet application such as Microsoft Excel. Simply click into a cell and start typing in order to enter data. Navigating between cells is also done as usual by using the cursor, tab, and "Enter" keys.**

4.2 Identifying Resource Conflicts

Resource conflicts can be identified by using the resource utilization chart which shows the planned utilization for all expanded resource pools on the resource level across all projects. In order to view the resource utilization chart you select the "Utilization" tool of the "Resources" tool group and expand the resource pools you are interested in.

Detailed, tabular utilization information can then be obtained by simply moving the mouse cursor over one of the colored utilization bars and waiting about a second. The detail view will open similar to a tool tip and show which projects and activities are involved as well as the percentage utilization and the total planned hours providing you with the necessary information to start resolving the resource conflict
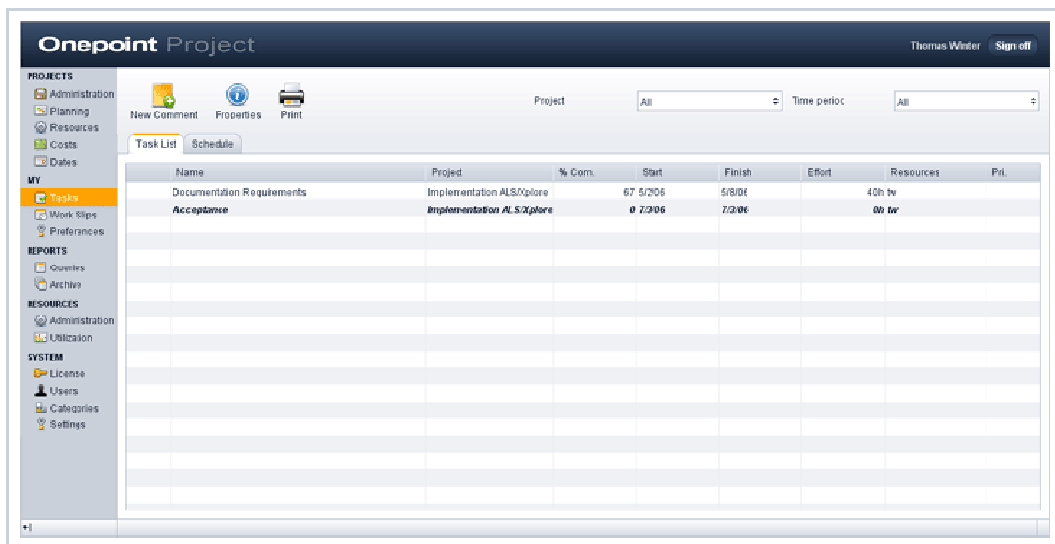

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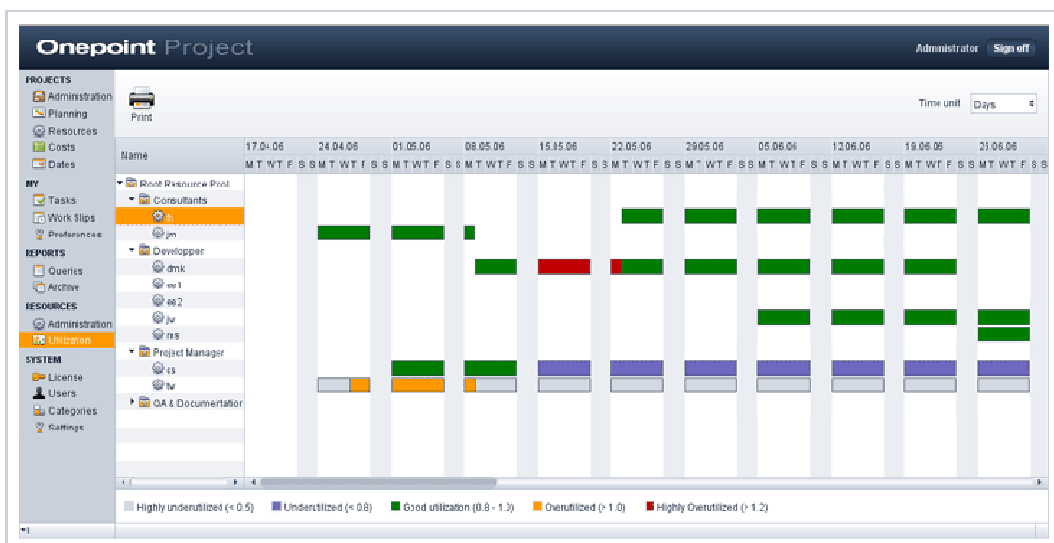
5 Progress Tracking, Monitoring and Controlling

■ **The integration of progress tracking and ad hoc project controlling provides you with a real time view of your project status. Tracking of actual work hours, costs and estimations of remaining effort is accomplished using work slips. All project controlling tools are located in the "Projects" tool group – right below the "Planning" tool.**

5.1 Viewing Your Tasks and Tracking Progress

In order to view your personal task list, select the "Tasks" tool in the "My" tool group: It contains all activities which are assigned to one of the resources you are responsible for and which are not yet completed. By default, the activities are sorted by start date and priority.
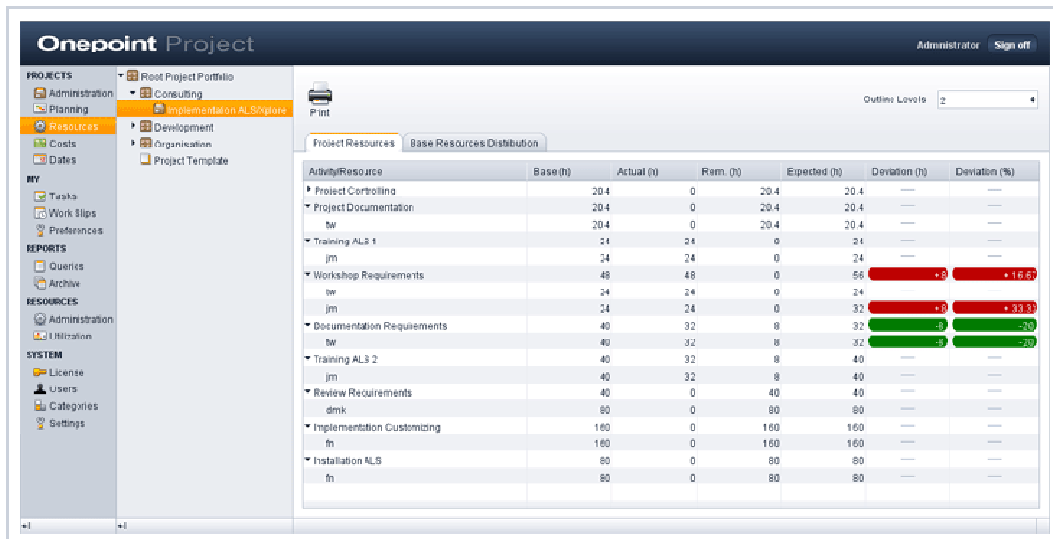

For tracking progress you have to change to the "Work Slips" tool. Now press the "New Work Slip" tool button to create a new work slip. You are now able to enter progress information (actual work hours, costs and estimations of remaining effort) in the same way as project managers can edit a project plan: Simply click into a table cell and start typing – the user experience is very similar to that of an Excel spreadsheet.

5.2 Monitoring and Controlling Your Project

Every time a new project plan is checked in, all controlling data for the project is recalculated. Partly recalculations also occur each time a work slip is created or edited which affect the project in question.

The "Projects" tool group provides three tools which help you with project monitoring and controlling:

- The "**Dates**" tool shows a schedule history, a milestone table and a milestone trend analysis for controlling activity and milestone dates. Especially the milestone trend analysis provides a good, visual monitoring tool for spotting trends in milestone delays early on

- The "**Resources**" tool provides a tabular base-actual comparison including a linear projection ("Expected", based on remaining effort estimations and remaining effort estimations, or % complete values)

- Finally, the "**Costs**" tool provides similar information as the resources tool, but on the project costs side

6 Integrated Reporting

■ **Onepoint Project features a powerful, integrated project reporting system with a plug-in concept for any number of custom reports. Beside classical reports, there are so called "quick queries" which result in simple, tabular answers and can be used to get fast access to specific key numbers which are not available in the real time/ad hoc views.**

6.1 Running a "Quick Query"

In order to run a quick query you first have to select the "Queries" tool inside the "Reports" tool group. Then select a report from the report navigator appearing right beside the tool dock which supports a quick query. Please note that not all reports support quick queries: A quick query is only possible if the result is displayable as a simple table.
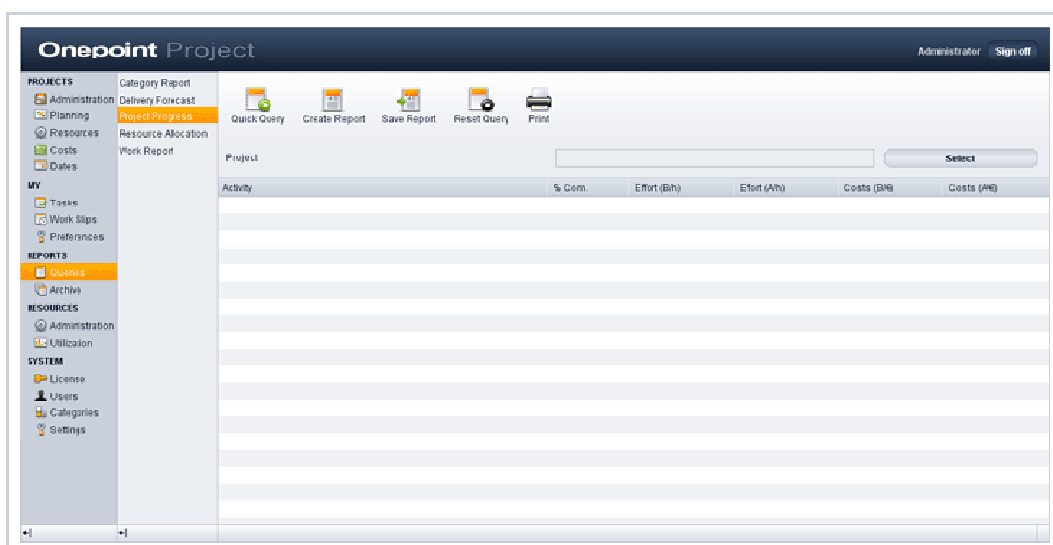
Now simply fill in the required fields of the report query form part and press the "Quick Query" tool button. The result will appear in the table displayed right below the query form.

6.2 Creating a Report

In contrast to a quick query, a report is rendered in PDF by the report engine and displayed in a separate window. In order to create a report you have to again select a report from the report navigator, fill out the required forms in the query part and, finally, hit the "Create Report" tool button. After a few seconds the printable PDF report will show up in a separate window.

6.3 Archiving a Report

Alternatively, you can use the "Save Report" tool button in order to create a report and instantaneously save it to the report archive (instead of viewing it on screen). The report archive is intended as a place where you can store reports which are relevant for multiple persons (for instance, a project progress report for the weekly project controlling meeting) or if you want to save a snapshot of a report for future reference.