

Software-Review

Rillsoft Project – A New Multi-Project Server For a Proven Planning Tool

by Dr. Mey Mark Meyer

Over the course of the last few years, Rillsoft Project has managed to establish itself as a facile yet powerful project management software system. This project management (PM) software is employed especially by the automotive industry and in mechanical and plant engineering and civic engineering, such as at Audi AG, Cegelec Anlagen und Automatisierungstechnik GmbH & Co.KG and System Industrie Electronic AG.

The single-user version of Rillsoft Project can be quickly installed. Until recently, this program was working file-based in multi-project environments. With its new Rillsoft Integration Server, the software smoothes the way for its application to large-scale multi-project environments. The server can be linked to SQL databases and also provides a sophisticated system of access rights. Project members can employ Rillsoft Project to report their working progress via a conventional web browser.

Powerful Task Planning and Scheduling

After having set up a new project, Rillsoft Project provides the user with a standard Gantt chart view. Due to its clear layout for menu and icon bars, anyone with experience in working with PM software will find the process of getting started quite intuitive. In addition to the Gantt chart, users can choose from 13 different views, such as a network diagram or a resource diagram. All views can be quickly accessed by using tabs. Detailed information is distributed on several tabs of the software's Properties window at the bottom part of the program window (Picture 1).

The user creates the work breakdown structure by grouping tasks as subprojects. Alternatively, existing templates can be used to create new project schedules. First, the user selects the template to use for the new project schedule. He then enters a new start date and selects the activities from the template he wants to use in his project. From these specifications, the software will then create an initial project plan that can be used as a starting point for further planning.

When scheduling is performed, Rillsoft Project provides the usual dependencies, time lags, and time leads, and, in addition, can consider tasks that cannot be performed concurrently. In this case, it is not relevant whether a task is a successor or a predecessor of another task as long as both tasks are not conducted at the same time. By including several bars in only one row of the Gantt chart, the user is able to compose a clearly arranged

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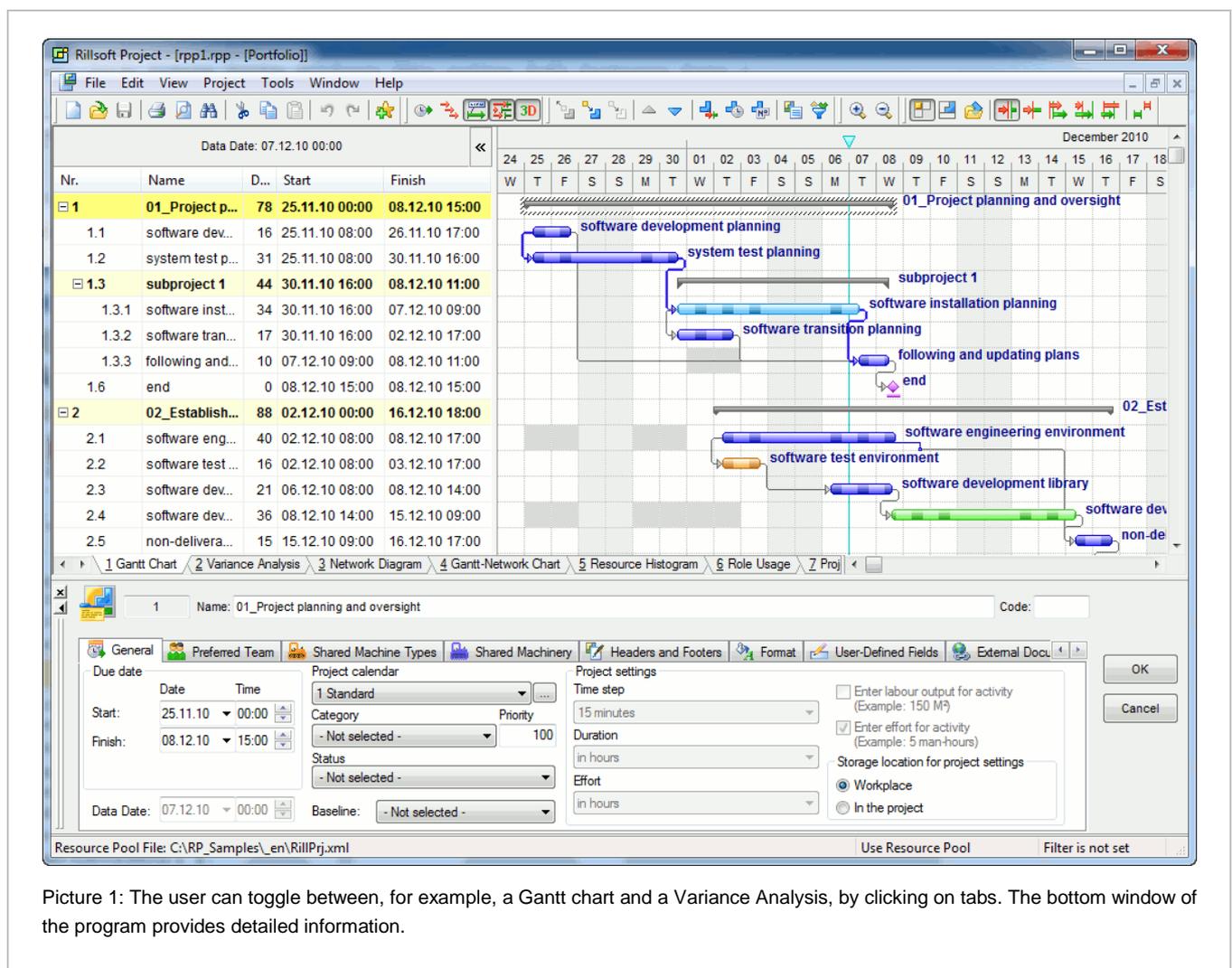
› [Rillsoft Project mit RIS \(Rillsoft Integration Server\) 5.3](#)

project schedule. Project managers confronted with complex processes will appreciate the network diagram. Overall, Rillsoft Project provides technically mature functionalities for task sequencing and scheduling.

Resources, Teams and Roles

A quick glance at the tabs for the available scheduling views already suggests that Rillsoft Project can facilitate more than task sequencing and scheduling. Tabs such as “Role utilization”, “Team utilization”, and “Capacity alignment personnel” indicate the main focus of the Rillsoft software development: The program includes advanced functions for resource planning of employees, material and machines.

Those planning a single project can save their resource’s master data along with the project file. In multi-project environments, where several projects share at least some resources, it makes sense to use the resource pool instead (Picture 2). The resource pool stores many types of resources as well as working time calendars in one central place.

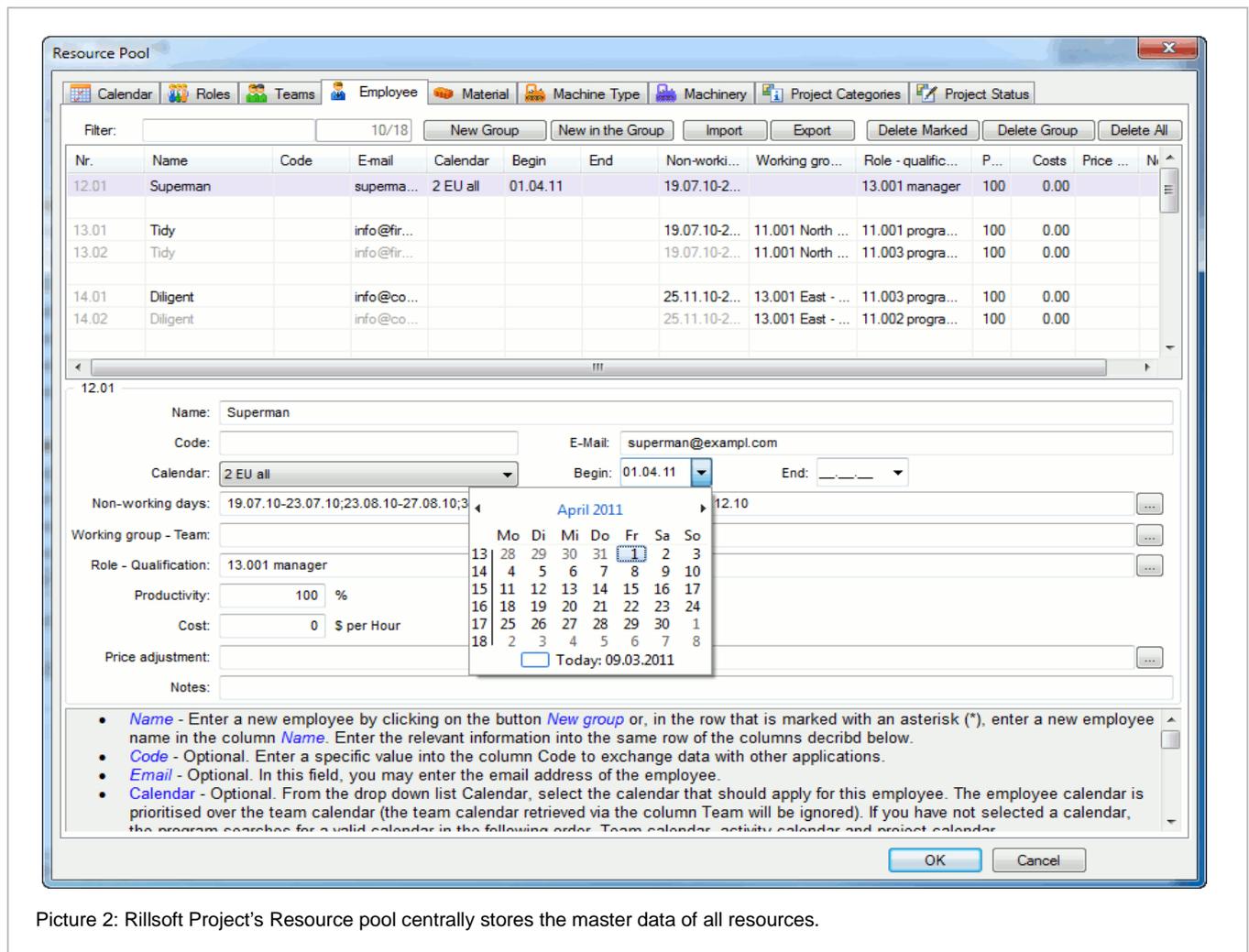


Picture 1: The user can toggle between, for example, a Gantt chart and a Variance Analysis, by clicking on tabs. The bottom window of the program provides detailed information.

The software allows the assignment of roles and qualifications to employees. As a result, in the early stages of the planning process, the user can assign roles such as “construction engineer” rather than assigning work to specific employees. Alternatively, a user may also define specific qualification requirements for a task, such as experience in working with a certain CAD system. Later on, these role assignments are then replaced by individual assignments. To do so, the user selects a task and the corresponding role with the mouse and then chooses one of the adequate resources from the list that is automatically shown by the program.

Resources can be grouped in teams using Rillsoft’s team planning features. As a result, overall team utilization is easily analyzed. If teams are declared to be preferred teams for a project, then the software can focus on these teams for capacity calculations and ignore others. This function may be particularly beneficial for assigning to a project only those employees who live near the place where the project’s tasks are going to be executed.

Moreover, Rillsoft Project shows notable strengths with regard to material and machine resources. While material can be used up, machines, not unlike employees, often require capacity leveling calculations. Similar to the initial early-stage assignment of roles instead of employees, the program can be used to first plan machinery types such as “wheel loaders” and then to later replace this assignment with a specific machine from the resource pool.



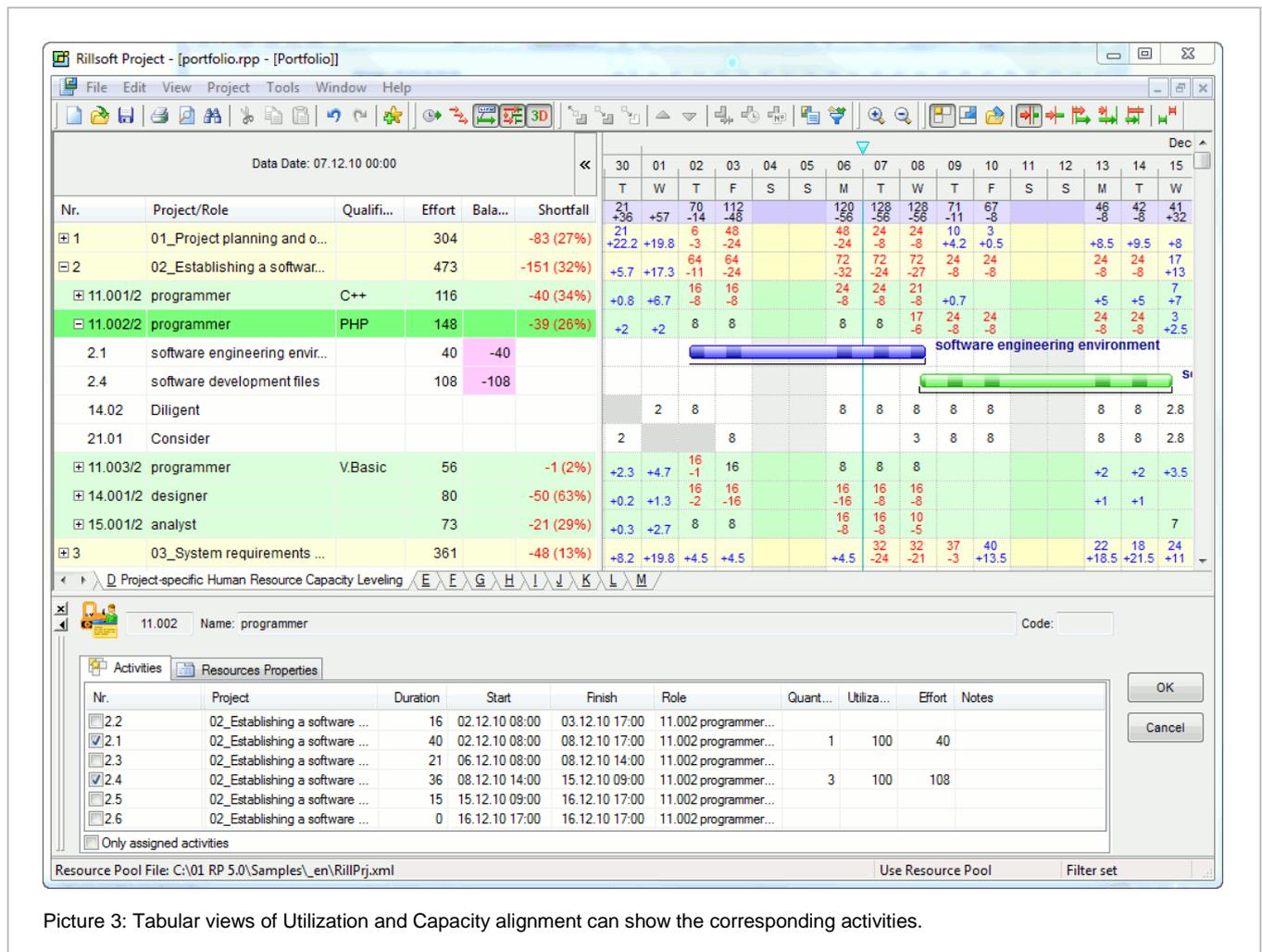
Picture 2: Rillsoft Project’s Resource pool centrally stores the master data of all resources.

Sharing machines is another interesting feature of Rillsoft Project. If, for example, several tasks at a construction can share the support of a single crane, the user can define a specific crane as a shared resource. The program will then schedule only one crane, even if two of these tasks are going to be executed concurrently.

Utilization and Capacity Leveling

Rillsoft Project unconventionally differentiates between terms for the utilization of resources and capacity leveling. Utilization is seen as the entire demand for one resource, which results from the resource's assignments within the projects. The software, however, will not compare these demands with the available capacity unless the capacity-leveling function is used. While utilization merely reflects the total sum of scheduled hours, the software's capacity-leveling view also shows whether this value either exceeds or falls short of the resource's available capacity (Picture 3). Data on the tabular view Capacity Leveling may be arranged quite flexibly. Rillsoft Project displays the demand for a particular resource in a single period and the deviation from the available capacity, be it positive or negative, in one table cell.

When working in multi-project environments, it is often helpful to see resource utilizations grouped by project. The program then indicates a shortfall in capacities for each of the displayed projects. If two projects require the same



Picture 3: Tabular views of Utilization and Capacity alignment can show the corresponding activities.

resource, the software will indicate the possible capacity shortfall for the project with the lower priority. Because in this view the project's tasks can be shown as bars, it is easy to track down resource overloads to single project tasks.

An individual cost rate is part of a resource's master data and can be used to complement the project plan with basic cost aspects. If cost rates are defined for roles and qualifications as well, even the early role-based resource planning will deliver first estimates for the ensuing costs. These estimations will become increasingly accurate each time roles are replaced with specific employees and their individual cost rates.

Using resource cost rates, the user can simultaneously create cost estimations while scheduling employees, material and machines. Resource costs can even vary from period to period, if key dates are entered. Activity costs will then be calculated with different resource cost rates based on their scheduled execution dates. However, Rillsoft Project lacks cost items for non-resource costs, such as fixed costs or external labor costs.

The Integration Server: From a File Portfolio to a Projects Database

The single-user version of Rillsoft Project works file-based. Projects and resource pools are stored in separate files. User access to specific projects is managed by granting file access via the Windows file system's permissions management. If several users are allowed to access projects and resource data, they may best store them on a central file server. Projects that are linked to each other and that share a resource pool must be saved by the user in a so-called project portfolio. Such a master file is meant to pool the single files of different projects, which allows to open all of them with one click.

These functions render cooperation possible among smaller planning teams without a need to first install comprehensive server software. In the event of larger teams, however, which include many users and a correspondingly high number of projects, working with file-based systems easily becomes noticeably complex. Moreover, each user may open the project information exclusively, even though a user may want to update the progress of only a single activity. For the duration of this editing process, the other users are granted read-only access rights so as not to disturb the first user's editing process.

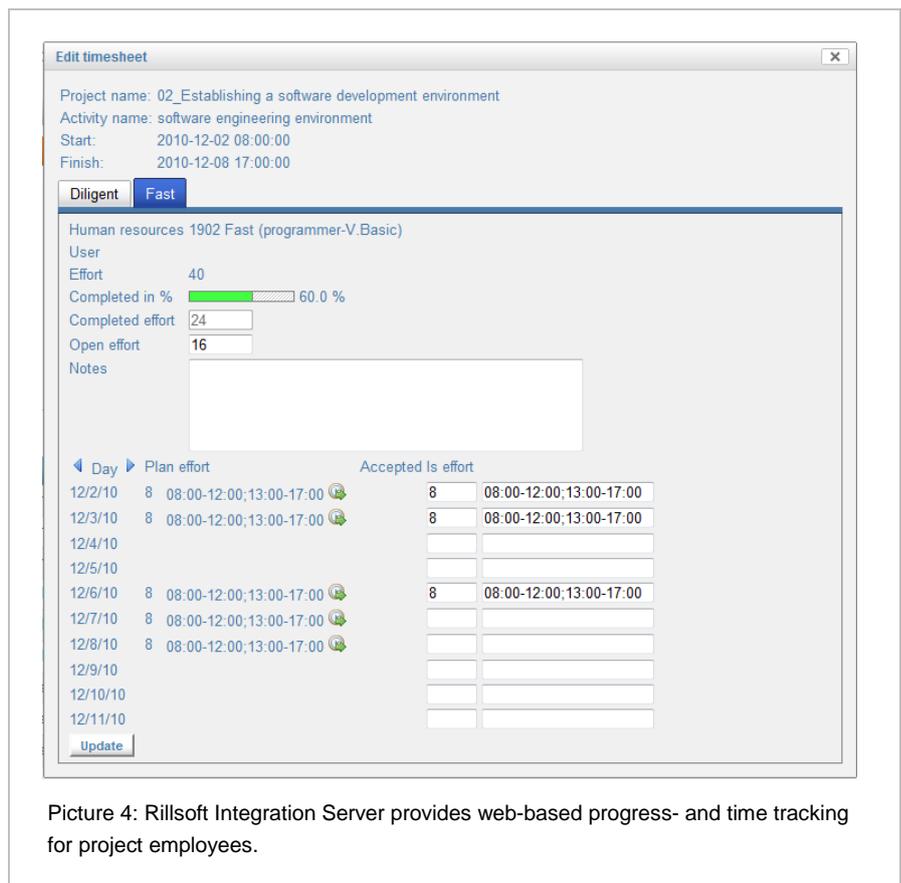
For larger teams, Rillsoft has added the Rillsoft Integration Server (RIS) to its line of products, which is a tool for managing projects and resources in a central database. This server provides a system of access rights that is significantly more differentiated than any file-based system would ever be. Even more importantly, with the web application included, some of the server-stored data can be accessed via any common web browser. This enhanced access facilitates the convenient reporting of project dates and working progress by users. Creating cross-project interdependencies is another option now available with RIS. The server version clearly helps Rillsoft Project to advance towards increasing the software's application in company-wide multi-project management.

With the Integration Server's time sheet interface, project team members can enter either the hours they have spent on a specific project or an estimated percentage of completion for their tasks. Users who enter the hours or other times on behalf of fellow project team members will find the time sheet forms for each of them clearly arranged in tabs (Picture 4). If, for instance, employees cannot access the system at a customer's site, users can have their data entered into the system by an authorized back office assistant. Reporting actuals, of course, does not alter the

project schedule in an instant. Rather, only after the project manager has confirmed the time sheet do these reports become integrated into a project's schedule as the new actual value.

If the size of the user group increases, then access rights usually need to be regulated more precisely. RIS's multi-tenant capacity even allows for a clear separation of user groups. Thus, different office or plant sites of a company or its daughter companies might use the same setup of the software without being granted access rights to each other's data. For each tenant, the RIS administrator can separately configure the rights of the users to access resource pools and projects. As for projects, these rights include the right to write, read, edit and delete as well as to lock / unlock a project. Altogether, Rillsoft Project's user permissions management is direct and powerful. In return, the software forgoes a more complex differentiation of access rights, as would be required for providing exactly defined access to single data fields.

The Integration Server's version control automatically takes momentary snapshots of the projects each time they are saved. These snapshots can be easily compared with one another by taking advantage of the software's table and chart evaluation tools. Users may even roll back the status of their project schedule to one of the formerly saved snapshot versions at any time.



Picture 4: Rillsoft Integration Server provides web-based progress- and time tracking for project employees.

System Requirements

Rillsoft Project is a Windows-based application and runs on all Windows operating systems newer than Windows 2000. For users, such as project managers, who want to edit the project schedule, it is necessary to obtain an installation of the Windows application by Rillsoft Projects. With the Integration Server, users who need only to update their progress information and time sheets will merely require a common web browser with an activated Java Script. Rillsoft Integration Server requires a web server with PHP installed as well as an Apache Tomcat application server. Thus, both Windows and Linux are appropriate server operation systems. As a database, MySQL, PostgreSQL, MS SQL server and Oracle are all suited.

Licensing Conditions

Rillsoft Project is provided in a variety of versions. The Light Version includes all functions necessary for a simple project workflow starting from 185 Euros. The 437-Euro Standard Version provides the purchaser with the additional feature of resource planning. To use advanced functions, such as roles and qualifications, the Professional Version, priced at 698 Euros, is required. The high end of Rillsoft's product line is completed by the Enterprise Version, which is available for 1,090 Euros; this version provides the user with the capacity-planning function.

All versions can also be obtained as RIS licenses, which include client access to an Integration Server. In this case, 1,837 Euros would be charged for the Enterprise license. Users who merely want to report their working hours and project progress to the server via the Web will not need an extra license. Apart from these numbers, Rillsoft offers a volume discount. Furthermore, by paying an additional 30% on top of the purchase price, users can obtain floating licenses to be shared by several users instead of named licenses.

The PC software can be downloaded as a 30-day trial version. For its RIS, Rillsoft provides a demo login on its website and, upon request, arranges a customized trial installation. A 300-page user manual, which is relatively technically oriented, helps provide the user with a quick start into using the software.

Conclusion

Rillsoft Project's functions are specifically devised for project planning, including task sequencing and scheduling as well as resource planning. The latter includes a sound and comprehensive scheduling capability for materials and machines. The software's file-based versions are designed to run in small-scale multi-project environments with many resources but relatively few planners, with the reporting of project progress carried out by the project manager only. It appears that civil and mechanical engineering are the most typical fields for its application because the degree of project completion can be determined by a look at the construction.

Rillsoft Project is provided in a variety of versions. Its product line ranges from pure time scheduling for individual projects to the detailed planning of several projects sharing the same resources. The new Rillsoft Integration Server complements this line in a reasonable way and, due to its connection to a database as well as its sophisticated access rights system, extends the range of application towards multi-project management. Especially because of its web-based progress tracking function, Rillsoft Project has now provided applications in fields where progress estimates are carried out by employees, such as those in planning offices, a feasible endeavor.

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