

RailOpt® WEB - Bidirectional communication by web application

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RailOpt® WEB is the portal for communication between planners and personnel across the Internet.

The system consists of the following components:

- ▶ Personnel Reporting System
- ▶ Absence Manager
- ▶ Vacation Planner
- ▶ Time sheeting

RailOpt® is based on the many years of experience of leading European railway companies, planning experts and development engineers.

Application and product description

Purpose

The web application is used for the online management of the following personnel-related data:

- ▶ Retrieval of day-to-day service plans and notification of delays and variations

- ▶ Absence query and approval procedures
- ▶ Processing of vacation requests
- ▶ Retrieval of detailed day-to-day work times for payroll purposes

Area of application

RailOpt WEB is the communication platform between the RailOpt planner and the personnel. Data are transmitted and provided

across the Internet, allowing the information to be retrieved via web browser – including a mobile device – from any location.

Products within the RailOpt®-Suite

The RailOpt®-Suite is a comprehensive resource management solution for railway companies. It covers the key areas with the following products:



RailOpt® Passenger
Planning of all passenger traffic resources



RailOpt® Cargo
Planning of all freight traffic resources



RailOpt® Depot
Planning of activities and resources for idle times



RailOpt® People
Planning of all shift personnel



RailOpt® DIS
Integrated driver information system with all the details required for driving trains

Add-on products

The following add-on products will enable you to expand a RailOpt installation with professional add-ons.



RailOpt® DSS
Configurable assistance system for planners to automate and optimise tasks



RailOpt® WEB
Integrated communication systems for communication between planners and personnel, e.g. to notify delays and enter and manage vacation requests and absences via the Internet

System overview

Data and planning basis

The RailOpt planning results of personnel planning are the basic data that personnel can retrieve, supplement or edit via RailOpt WEB. RailOpt WEB consists of the following modules:



Personnel Reporting System

The Personnel Reporting System offers personnel direct access to personnel rotations and service information planned in RailOpt.

In addition, personnel can enter delays or shift changes for the operations supervisor to consider.



Absence Manager

Absence Manager allows personnel to enter and manage short-term and longterm absences or rotation requests.

These are sent to the planner automatically and can then be considered or rejected immediately in the personnel planning process.



Vacation Planner

RailOpt WEB makes the whole process of producing vacation plans much simpler for the vacation planner. This means that different checking and approval systems for allocating vacations can be configured and used.



Time sheeting

Time sheeting allows personnel to view all work times worked in detail via the Internet.

Planning and functionality

RailOpt WEB gives personnel direct access to the current planning results of the RailOpt “Personnel Rotation Planning” and “Operations Management” planning modules. This allows the planned personnel to communicate directly with the planner in order, for instance, to transmit preferred work times, vacations or actual times in the relevant planning phase.

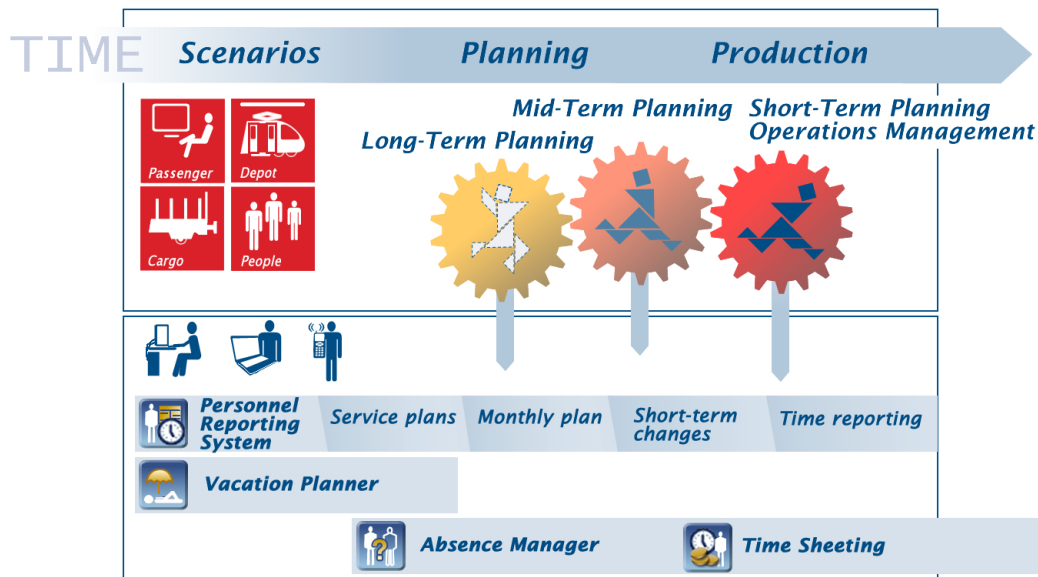


Figure: Example of the integration of RailOpt WEB into a RailOpt planning process

User-friendly operation and consistent interface design

Uniform operation steps and the consistent interface design guarantee smooth, flowing procedures within RailOpt WEB. This is demonstrated in practical use, e.g. with extensive sorting and selection

criteria for requesting absences and vacation requests based on a checking and authorisation system with direct transfer to RailOpt personnel planning.

Start Page
Show Calendar

Absence Manager

Filter
Date From: Date To: Status:

Type	Date	Days	Begin	End	Comment	Creation Date	Status	Reason
Compensation Day (Request)	22.10.2010	1	00:00	00:00	Hochzeitstag	11.08.2010 13:04	Pending	
Compensation Day (Request)	24.04.2009	1	00:00	00:00	Hochzeitstag	11.04.2009 13:40	Confirm	
Paid Vacation (Request)	08.11.2008	1	00:00	00:00			Pending	

Figure: Example of entered absence notifications

Data exchange

Data are exchanged between the RailOpt-Suite and RailOpt WEB in real time over the Internet via bidirectional communication in the browser. This makes it possible to access RailOpt WEB without the need to install RailOpt on the personnel's computer.

Planners and personnel can interact in the following cases:

- ▶ Notification of delays
- ▶ Notification of the preferred time for the latest service end
- ▶ Vacation requests
- ▶ Detailed logging of the work performed
- ▶ Other

Complete planning overview

Reports allow the personnel to get a fast, easy overview of their work times.

Figure: Example of a report in table form - personnel

Pool: Depo_Basel Date: 09.02.2009																		
B-Basler Leonie (P101)																		
Time	Vehicle	From	Avail	Parking	Pre-	Train	Veh. Pool	From	To	Dep.	Arr.	Post-	Vehicle to	Need	Parking	Comment		
																Pre	Train Run	Post
1	05:57																	Service Start
2		8127	01:16			8000	RABe525 1014	BS	ZUE	OL	06:10	07:08		8502	07:19			
3		8402	07:39			8503	RABe525 1003	ZUE	OL	07:58	08:33			8406	08:45			
4						Deathhead Run			OL	ZUE	08:48	09:18						
5						Short Break			ZUE	ZUE	09:18	09:43						*
6		8406	09:39			8507	RABe525 1003	ZUE	OL	09:58	10:33			8410	10:45			
7						Break			OL	OL	10:43	12:15						
8		8506	10:13			8413	RABe525 1002	OL	ZUE	OL	12:25	13:00		8514	13:19			
9		8414	13:39			8515	RABe525 1003	ZUE	OL	13:58	14:33			8418	14:45			
10						Deathhead Run			OL	BS	15:02	15:40						
11	15:40																	Service End
Time	Vehicle	From	Avail	Parking	Pre-	Train	Veh. Pool	From	To	Dep.	Arr.	Post-	Vehicle to	Need	Parking	Comment		

RailOpt WEB makes the personnel an integrated part of the planning process. That's because communication between the personnel and the planners or operations supervisors is automated and hence more efficient. Examples of transparency

- and communication include the following:
 - ▶ Personnel see changes in their service plan marked in colour
 - ▶ Personnel get an overview of all approved absences and the vacation planning
 - ▶ Other

Approval processes

The preferred work time, vacation and absence times requested by the personnel, as well as corrections of actual times, must be approved by the RailOpt planner. He can adopt the times straight into the planning, or reject the requests. The personnel

can see the relevant decision as soon as the planner has finished dealing with it. The Vacation Planner is particularly worth mentioning here: it maps a multi-layered approval process based on a complex ranking system.

Figure: Example of the Vacation Planner start page in RailOpt WEB

Start Page

Refresh

RailOpt WEB - Vacation Planner

Vacation Year:	<input type="text" value="2008"/>	Selected Vacation Weeks:	0
Calendar Mode:	Write-protected	Credit Vacation Weeks:	5
		Start Activation:	01.01.2008 14:52
		End of Activation:	01.01.1970 01:00

Wochne	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Gewürkung	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Periode 1																																						
Periode 2																																						
Periode 3																																						

Purchase Vacation Days

Recording planning corrections

Personnel can make things easier for the operations supervisor by entering actual times straight into the service plan. This means that the changes are sent directly to the operations supervisor or post-

processor, who can adopt the changes by confirming them. The RailOpt data of relevance for the payroll, such as overtime and bonuses, are updated automatically.

Technical basics

RailOpt was developed in the Java programming language and is therefore platform-independent. All RailOpt products are based on PlanOpt®, Qnamic's own generic and modular software framework, which guarantees a high degree of flexibility when dealing with customised expansions.

RailOpt WEB is an application that is run on a web server. Data are exchanged with the user solely via an Internet browser.

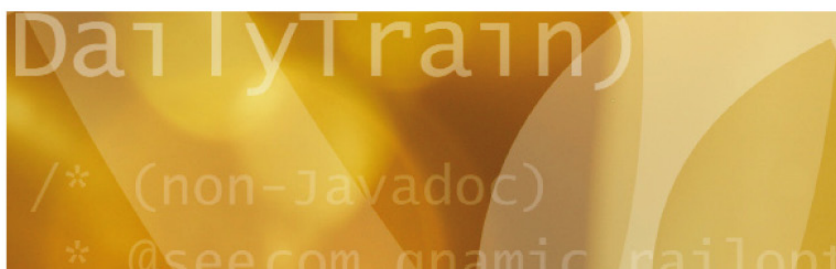
This removes the need for a local RailOpt installation on the personnel's computer.

Summary

1. The link to RailOpt is via bidirectional web interfaces. These allow data to be exchanged directly between planners and personnel over the Internet, e.g. by mobile device or computer
2. Planning data are retrieved, exchanged and edited in real time. There is no need for a local RailOpt installation
3. Print, send and save reports and service plans in standard data formats
4. Configurable vacation planning to consider company-specific vacation allocation rules based on a ranking system
5. Enquiries can be handled quickly and directly and completed work times corrected - no multi-stage communication paths

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August 2010 © Qnamic Inc.
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