

Information Logistics



▲ **DiLoc® | Rail, DiLoc® | Bus, DiLoc® | Ship**

Lösungen für Disposition, Fahrgastinformation und Lokalisierung im Schienen-, Bus- und Schiffsverkehr

▲ **DiLoc® | OnBoard**

Systemlösung (Hard- und Software) für Fahrgastinformation im Zug, im Bus und auf dem Schiff

▲ **InnoScreen®**

Innovative Anzeiger-Technologie in superflachem Design

▲ **DiLoc® | Sync**

Kommunikationsplattform für Lokführer und mobiles Personal

▲ **IT-Beratung**

Projektmanagement
Softwareentwicklung
Systemanalyse

▲ **IT-Personal**

Für Projekte und Festanstellung

▲ **DiLoc® | Rail, DiLoc® | Bus, DiLoc® | Ship**

Solutions for dispatching, passenger information and positioning for rail, bus and shipping traffic

▲ **DiLoc® | OnBoard**

System solution (hard- and software) for passenger information on trains, busses and ships

▲ **InnoScreen®**

Innovative display technology in a super flat design

▲ **DiLoc® | Sync**

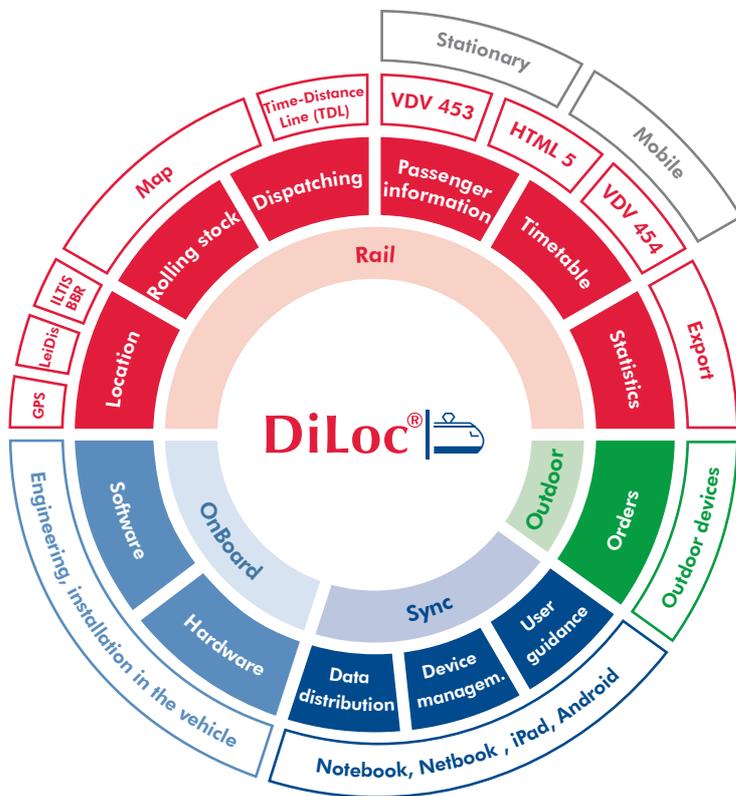
Mobile communication for train drivers and driving personnel

▲ **IT consulting**

*Project management
Software development
Systems analyse*

▲ **IT experts**

For temporary project work and permanent assignments



Information Logistics

CN-Consult offers solutions for dispatching, passenger information and positioning, as well as advice and support for your IT projects with experts both for temporary project work and permanent assignments.

We provide customer-specific, integrated solutions, particularly in the areas of project management, systems analysis and operating process design, quality management, software development, IT infrastructure administration and IT security.

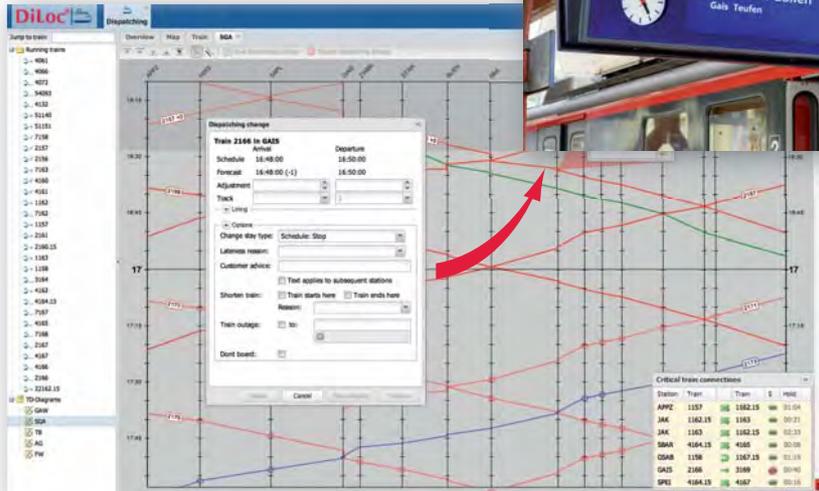


DiLoc|Rail, DiLoc|Bus + DiLoc|Ship

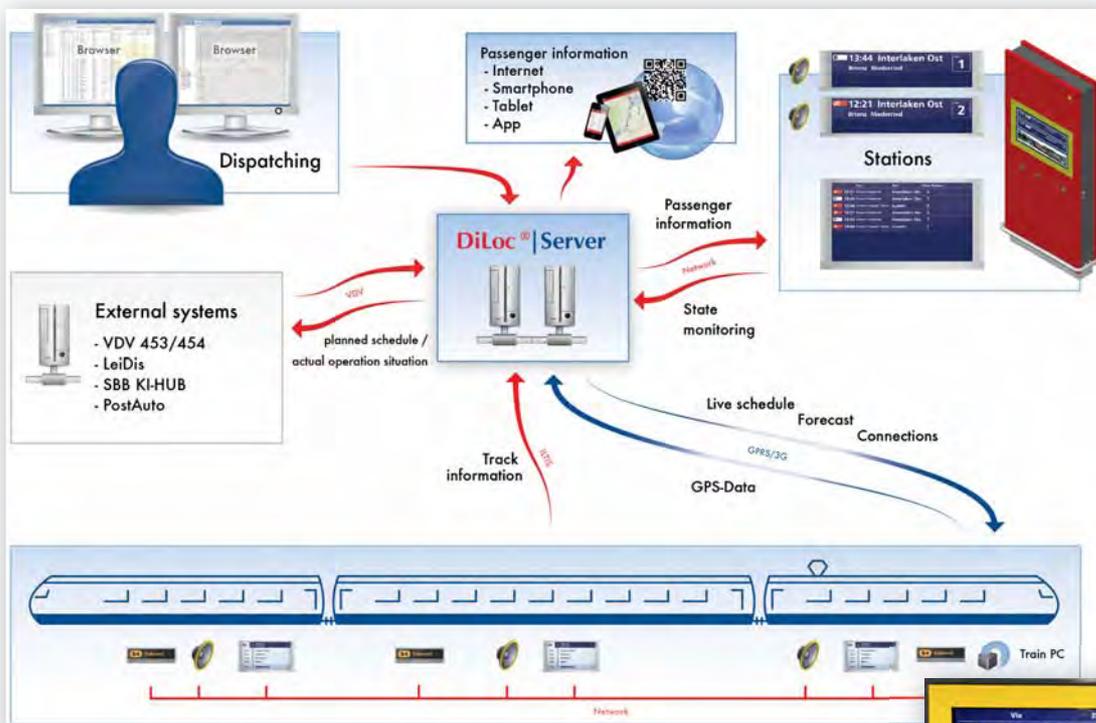
Schlüsselfertige Lösungen für Disposition,
Fahrgastinformation und Lokalisierung

- Precise dispatching with **real-time data** from GPS, LeiDis, ILTIS, etc.
- Quick overview using configurable **time-distance line diagrams**
- Intuitive **timetable manager** for annual timetables through to individual daily adjustments
- Calculating **predictions** and **missed connections** based on target and actual data with output to business partner via **VDV interfaces** inbound and outbound
- Direct control and supervision of **train destination displays, departure boards, pillars and train announcement systems** as well as direct control of **passenger information in the vehicle** showing **target and actual data** from DiLoc|Rail
- Real-time passenger information with **DiLoc|App** and **QR codes** on stations and in vehicles
- **Statistical assessment** and **documentation** of train movements
- Preparation and **export** of the data in various data formats
- **DiLoc|Sync** - Communications platform for staff on the move (e.g. train drivers)
- **DiLoc|OnBoard** - System solution (hard- and software) for passenger information on trains, busses and ships
- **DiLoc|Outdoor** - Communications platform for staff in the outdoor area
- **InnoScreen** - Innovative display technology in a super flat design

Event-oriented, automatic management of all displays and monitors directly from the time-distance line diagram



DiLoc | Rail How It Works



DiLoc | Rail - the central system for dispatching and dynamic passenger information - stationary and on the train



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04/2016

Wkt	Ziel	Gals Minsw
17:03	Unschlch Herznach	Gossau SG 4A
17:08	Gals Teufen	St. Gallen 3A
17:30	Unschlch Herznach	Wasserzuen 3B
17:33	Unschlch Herznach	Gossau SG 4A
17:36	Gals Teufen	St. Gallen 3A
18:03	Unschlch Herznach	Wasserzuen 3B
18:03	Unschlch Herznach	Gossau SG 4A
18:08	Gals Teufen	St. Gallen 3A
18:30	Unschlch Herznach	Wasserzuen 3B

System-Info:
System-Datei: 2013-03-25 16:38:01
Lizenz-Nummer: 2013-03-01 03:01:44
API-Version: 0.6.1
Display-Konfiguration: OK
Display-Software Manager Version: 0.5.0
Display-Schwarz: LAUF

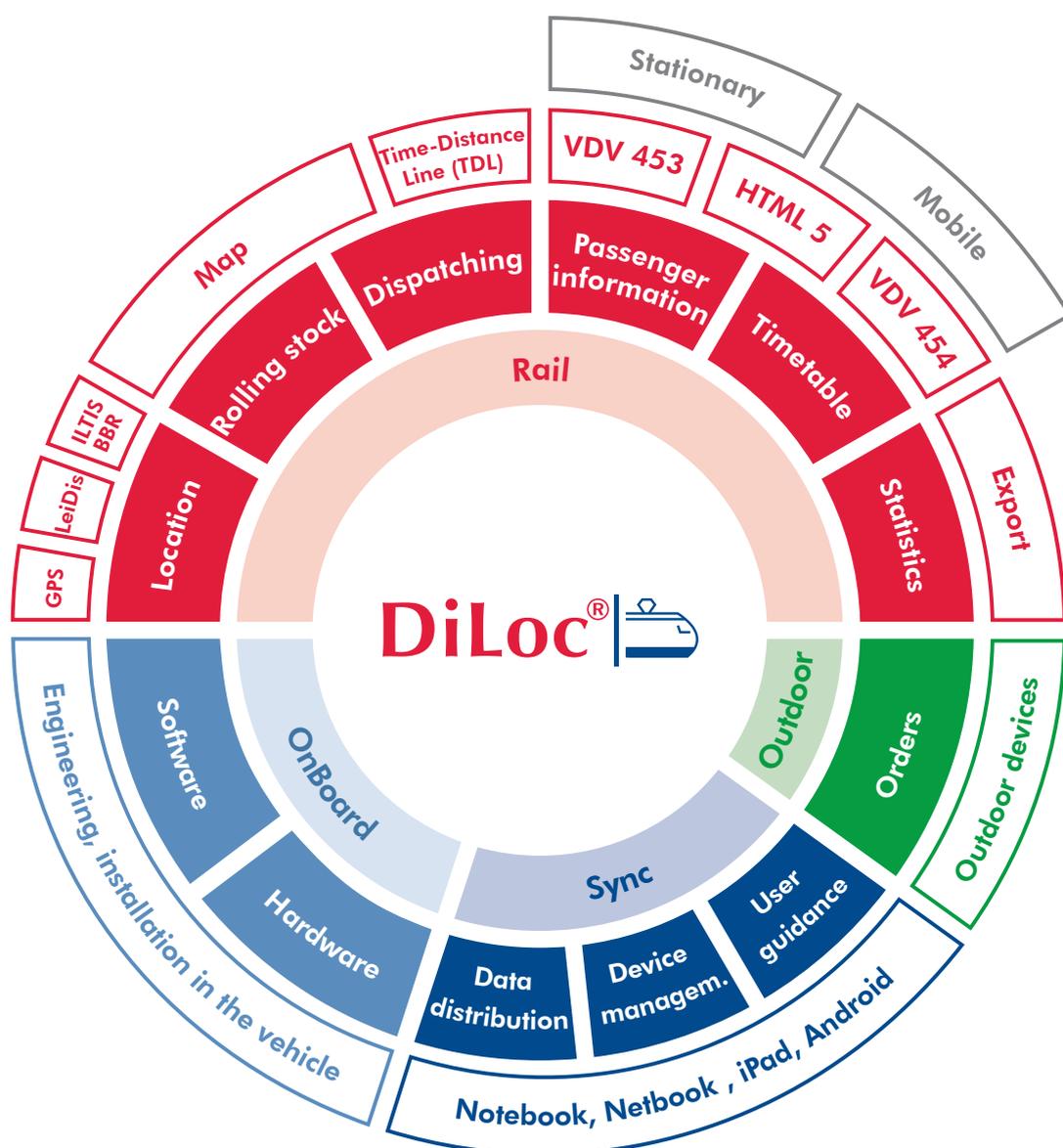
Live monitoring of all display units directly from DiLoc

Data Hub

Consistent, up-to-date data for everyone

Rail customers expect continuous up-to-date and accurate information about their trains, today more than ever.

Rail companies can provide this only if they themselves have such information available in electronic form so that they can provide it to passengers via various media. It is important that such information is consistent, so that the passenger always receives the same information, for instance about delays or connections, irrespective of how it is presented.





To ensure this, the DiLoc core operates as a hub into which all the information flows, and which outputs consistent data to all the information channels. This process can handle a variety of data sources (the rail transport company's own information, other rail transport companies, network operators, etc.) and data types (location data, connection information, timetable data, documents, brake test results, etc.).

DiLoc ensures that the receiving systems are always provided with the correct, up-to-date data in real time. The architecture selected for the software means these data can be accessed via various interfaces or by subscription to active delivery through DiLoc.

This architecture also makes it possible to create special interfaces with the rail transport companies' existing systems and to integrate DiLoc into the company's existing IT systems.



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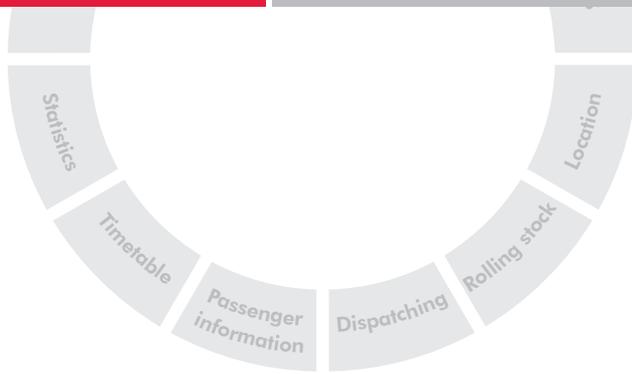
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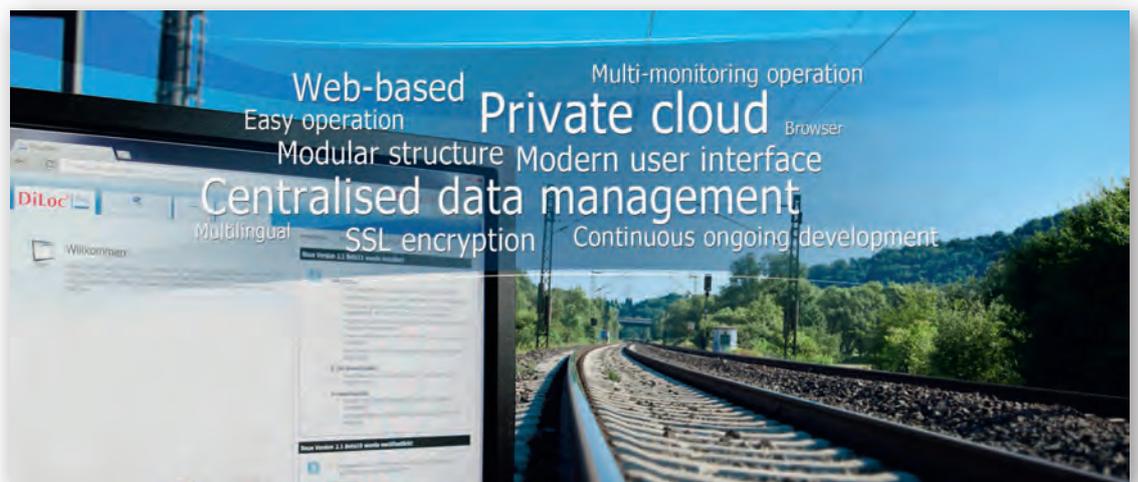
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Basic Package

- ▲ Administration module
- ▲ Train movement data browser
- ▲ Data security

The basic package provides the principal functions of the DiLoc software. It includes the web-based user interface and the data hub which operates in the background to save and distribute data.



User-friendly

DiLoc is characterised by a user-friendly operator interface that is particularly easy to learn and simple to use thanks to its intuitive design.

As the user guidance corresponds to conventional office systems, DiLoc is particularly well accepted by staff.

Modern architecture

DiLoc operates as a web-based private cloud solution. This means maximum flexibility for the user while at the same time ensuring security since the cloud server is operated exclusively for DiLoc customers. (As distinct from

public cloud solutions, which everyone can access.) This web-based architecture has the advantage that no software installation is required at the workstations, which use only a web browser.

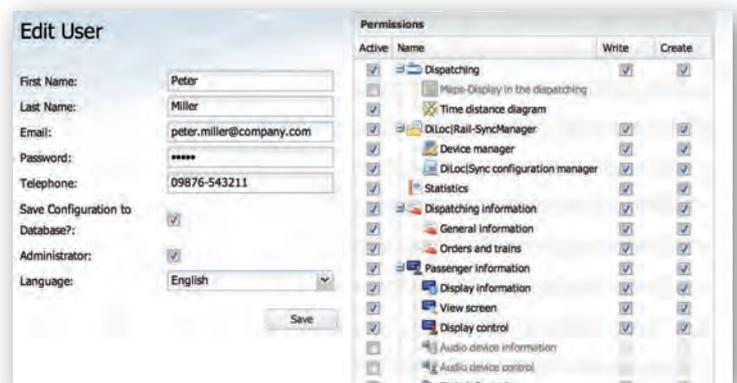
Security

So as to guarantee the required data security, all servers are operated on HTTPS domains, so that the entire data transfer is encrypted. This operates to the same security standard as used for online banking. DiLoc servers can also optionally be operated within in-house customer networks.

Basic functions

DiLoc's user interface is designed to be **multilingual**, so users can choose between the various languages. German and English are available as standard. Additional languages can be added as required.

The option to use DiLoc in **multi-monitoring** mode is already incorporated in the basic package. The number of monitors is limited only by the computing power of the client PC and the number of monitors physically available.



The **user and licence concept** provides each company with access authorisation for as many users as they need. Only the number of concurrent users is charged.

User administration allows users to be set up, edited and assigned individual authorisations. This ensures that each user sees only what they need.

All train arrival notifications are displayed in table format in the **train movement data browser**. The notifications can be displayed in ascending or descending order, in groups or individually by showing or hiding the columns.

A	Train number	Train origin	Time	Station	Track	Type	Lateness	Lateness-code	Info text
	2229	Interlaken Ost	21.03.2013 16:24:12		1	Departure	-	-	
	3680	Luzern	21.03.2013 16:24:36		2	Arrival	-	-	
	2230	Luzern	21.03.2013 16:24:54		-	Pass through	-	-	
	3681	Engelberg	21.03.2013 16:25:12		1	Departure	-	-	
	3680	Luzern	21.03.2013 16:25:12		2	Departure	-	-	
	2227	Interlaken Ost	21.03.2013 16:25:36	GI - Giswil	-	Arrival	-	-	
	21563	Giswil	21.03.2013 16:25:54	ADF - Alpnach Dorf	1	Arrival	-	-	
	21563	Giswil	21.03.2013 16:26:42	ADF - Alpnach Dorf	1	Departure	-	-	
	21564	Luzern	21.03.2013 16:27:24	AST - Alpnachstad	2	Arrival	-	-	
	2228	Luzern	21.03.2013 16:27:36	BRW - Brienzwiler	-	Arrival	-	-	
	3681	Engelberg	21.03.2013 16:29:06	SSTA - Stanestad	3	Arrival	-	-	
	2230	Luzern	21.03.2013 16:29:12	GI - Giswil	-	Arrival	-	-	
	2227	Interlaken Ost	21.03.2013 16:29:12	GI - Giswil	-	Departure	-	-	
	21564	Luzern	21.03.2013 16:29:12	AST - Alpnachstad	2	Departure	-	-	
	21563	Giswil	21.03.2013 16:29:12	AST - Alpnachstad	1	Arrival	-	-	
	2228	Luzern	21.03.2013 16:29:36	BRW - Brienzwiler	-	Departure	-	-	



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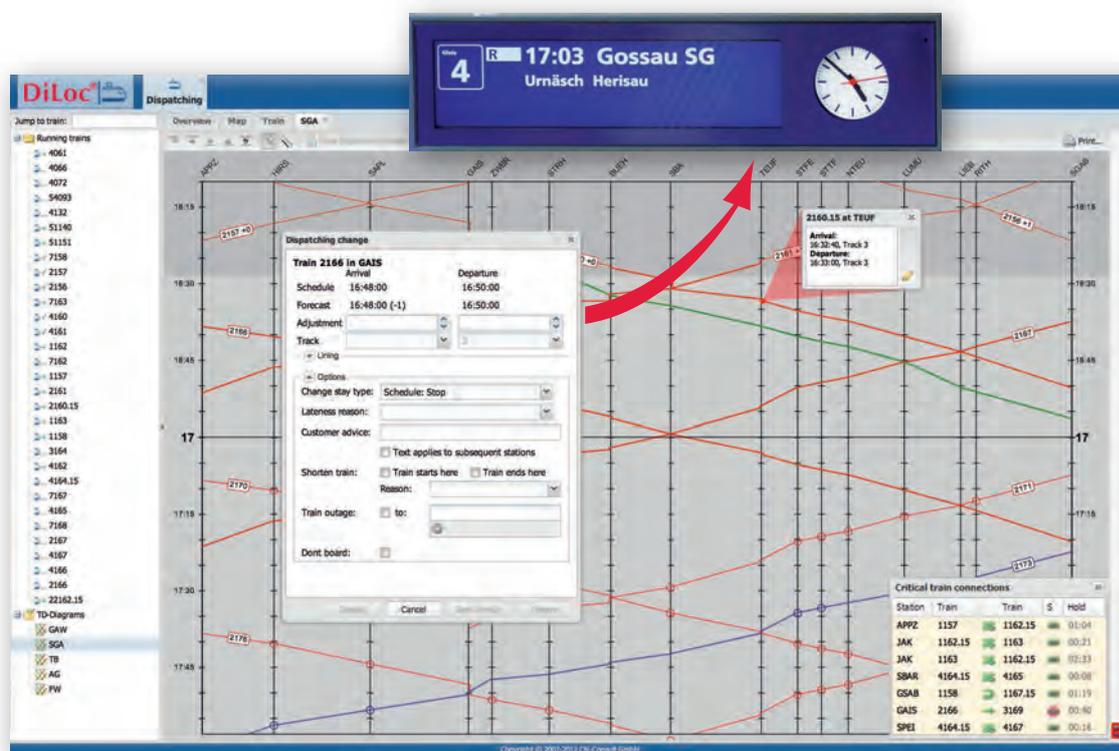


Dispatching

- ▲ Time-distance line diagrams
- ▲ Tables
- ▲ Maps

The dispatcher gets a full overview of all trains which are currently in use or planned for the current day with the "dispatching module". To relieve dispatchers from routine work, all interfaces to external systems (VDV, mobile applications, customer information systems, etc.) are automatically updated with the operating situation.

The operating situation can be displayed in various ways:



Time-distance line diagram

Time-distance line diagrams are **easy to configure** for the user in terms of the stations displayed, the time windows and the background colours. The time window can also be altered at any time during operation. Train numbers of delayed trains are displayed in red. Train types can be displayed in different colours, so increasing clarity. The dispatcher can intervene using the mouse and a context menu, allowing him to enter delays, cancellations and manual passenger information can be entered.

DiLoc indicates **connections at risk** in a special window. There, the user has the opportunity to decide whether connections are to be broken or maintained. All this can first be displayed as a preview, so the effects on other trains can be assessed. The adjustment then becomes active only once it is approved by the user.

Possible effects for travellers are automatically displayed and announced at the stations, as well as being communicated in the trains involved.

Tables

The operating situation can also be displayed in table format as a timetable for a specific train with the current train movement notifications and delays.

The screenshot shows the DiLoc Dispatching software interface. On the left, there is a 'Jump to train:' list with various train numbers. The main window displays 'Train 1163 (Gossau SG - Appenzel)' with a 'Live schedule' table. The table has columns for Name, Station, Stay type, Time, L-code, Info-Text, Arrival (A Time), and Departure (L-code, Info-Text, A). The schedule is as follows:

Name	Station	Stay type	Time	L-code	Info-Text	Arrival	Departure
GSAB - Gossau SG		-				16:16:58	
HEAB - Herisau		H	16:23:07	-		16:24:02	
WILE - Wilen		B	16:26:37	-		16:26:57	
WSTA - Waldstatt		H	16:30:10	-		16:30:30	
SÜB - Saldun		D	16:33:30			16:33:30	
ZUEH - Zürcherhütte		B	16:35:30			16:35:30	
LIR - Limmach		H	16:38:10			16:38:30	
JAK - Jakobbad		B	16:44:30 (+1)			16:44:30 (+1)	
GONT - Gonten		H	16:46:40			16:47:00	
GONB - Gontenbad		B	16:46:00			16:49:00	
APPE - Appenzel		-	16:54:00 (-2)				

Maps

The map display is particularly well-suited to being shown on company websites used by customers for example. Trains are displayed there with their current operating status. Further information is available by clicking on the trains.

DiLoc is the only software which offers the **Schweers + Wall railway maps** for Germany online, so that dispatchers can also take advantage of the railway-specific information contained in the maps, such as electrification, number of tracks, etc.



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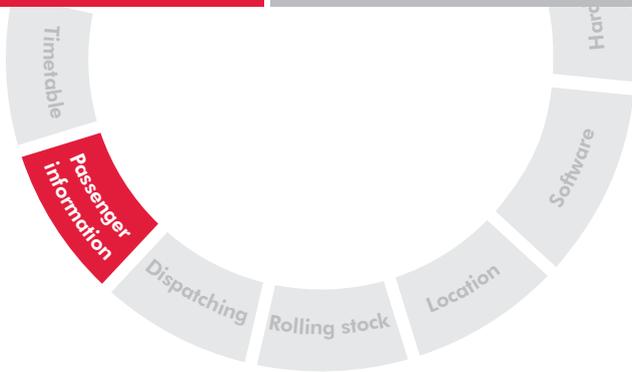
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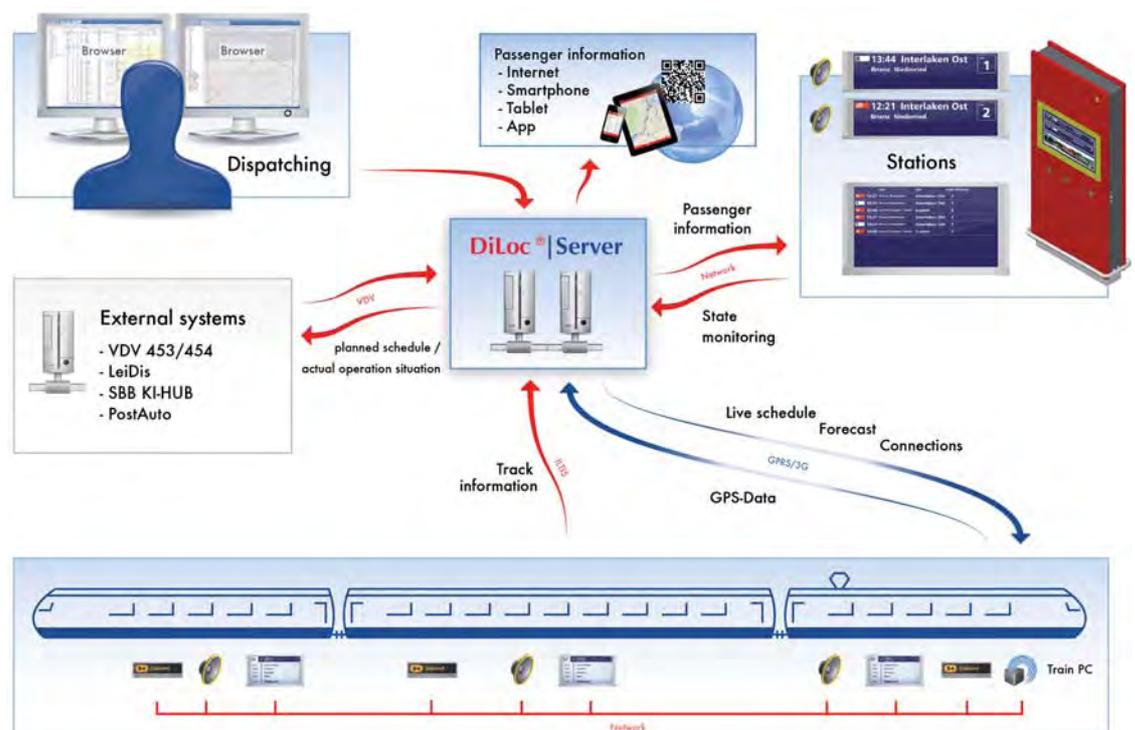
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- ▲ Direct control of displays and announcements
- ▲ Technical monitoring
- ▲ Infotainment

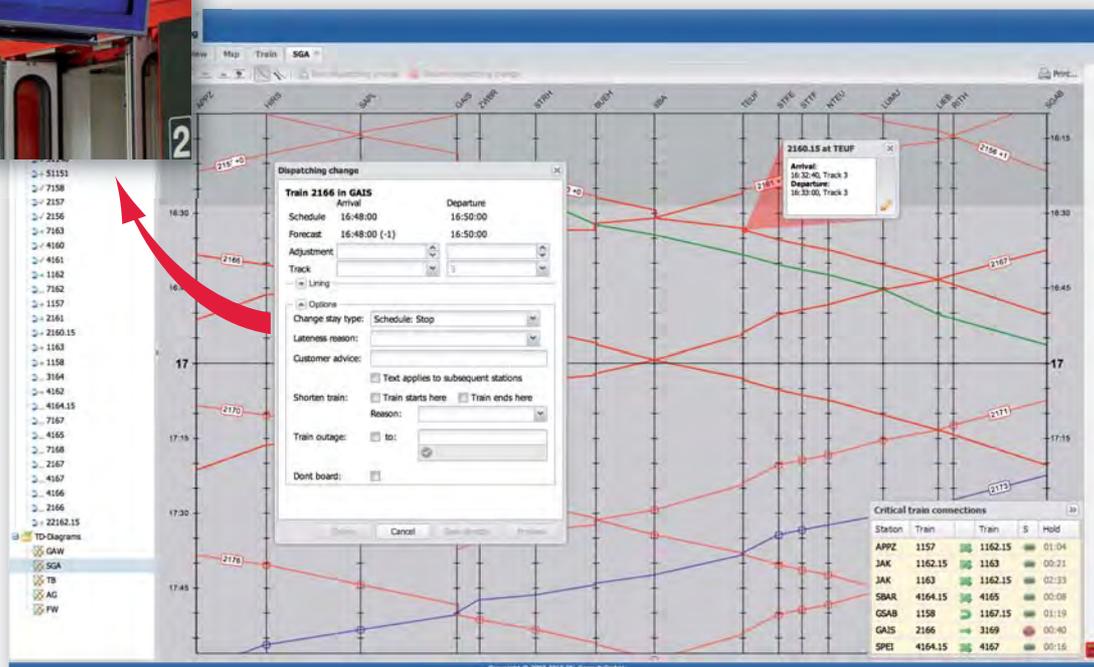
Passenger Information

Acceptance of the public transport by passengers increases in proportion to punctuality or at least the extent to which passengers feel they are kept well informed of any faults or delays that occur. So correct and timely information available to passengers via as many channels as possible is an important success factor for rail operators. This is why DiLoc links dispatching directly to passenger information. All dispatching decisions that have a direct impact on passengers are communicated immediately: At stations this is done via overhead displays, departure displays or monitors, or acoustically via loudspeakers at the relevant platforms. In rail carriages it is done by means of monitors and announcements. Internet access is via Web pages or apps for smartphones and tablets. Connections to other information systems via VDV (Association of German Transport Providers) also support the provision of continuous current information to passengers.





Direct control of all displays and announcements by DiLoc relieves dispatchers from routine work, especially when there are also problems. This involves displaying delays, information on train cancellations or service interruptions on particular sections, along with platform changes or missed connections.



Passenger information at stations

The activation of monitors and overhead displays is performed in real time using the latest browser-based technology. Therefore even future developments can be catered for with little effort. Text-to-speech announcements are also generated live by DiLoc | Rail. All information is communicated in real time, both at stations and in carriages.

The architecture used eliminates the need for additional servers at stations. This reduces procurement costs and operating costs, and reduces the incidence of failures. Each output device operates independently of all other output devices.

Passenger information on board trains

Modern systems keep the passenger informed about the scheduled stops by scrolling dot matrix displays and announcements. But DiLoc | Rail goes one step further: Each carriage is linked by a radio interface (GSM) to the DiLoc server and receives in addition information about delays to connecting trains,

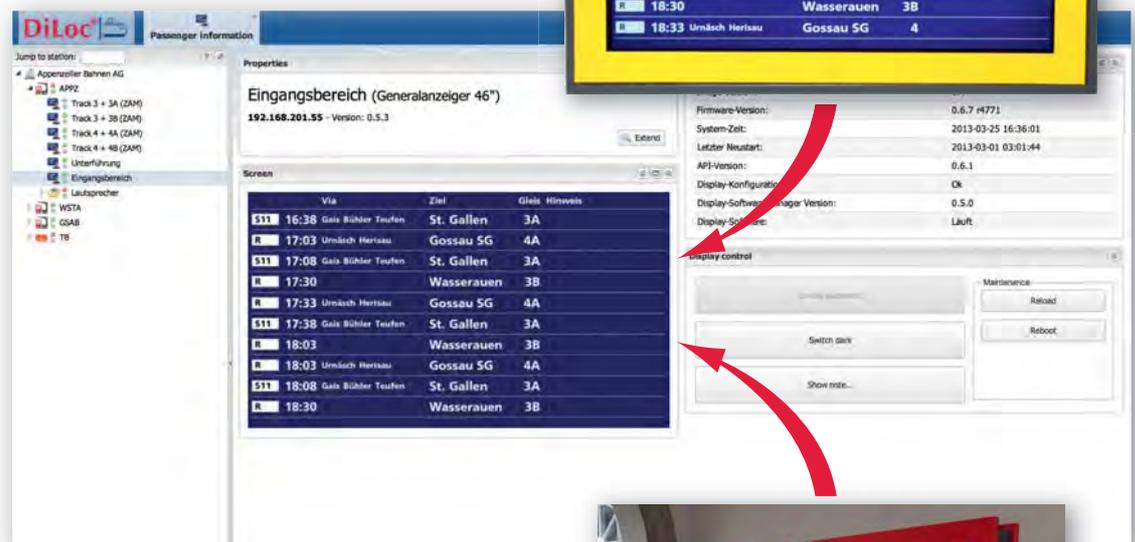
and any connections that will be missed. Of course brief breaks in communications can occur with the GSM network, but these are tolerated by the system and do not affect its operation.

Within the carriages, not only the front and side (external) displays are actuated, but also the interior monitors and announcements. The displays are managed by the train driver using a modern style touch panel, arranged for highly intuitive interaction.

Individual passenger information

Information to passengers via the Internet, apps for smartphones or tablet computers is becoming increasingly important. Since DiLoc | Rail is a Web application it goes without saying that it also supports these modern media. Here again the passenger benefits from the modern architecture employed by DiLoc: Live information from the DiLoc server can also be incorporated into Web pages or existing apps offered by train operating companies.

- ▲ Information to passengers at stations
- ▲ Information to passengers on the move
- ▲ Information to passengers on the Internet
- ▲ Information to passengers via apps for smartphones
- ▲ Connections to other passengers information systems via VDV



The **display overview** also incorporates **technical monitoring** of the display units themselves. Dispatchers are warned about faults or technical problems, so they can quickly initiate a trouble-shooting process. The **material actually displayed** on the monitors or overhead displays can be retrieved at any time by the dispatchers. They can view a pixel-accurate representation of the actual display.

Dispatchers can also compose special texts for instance in circumstances where there is major disruption and output them at individual displays or groups of displays; they can also

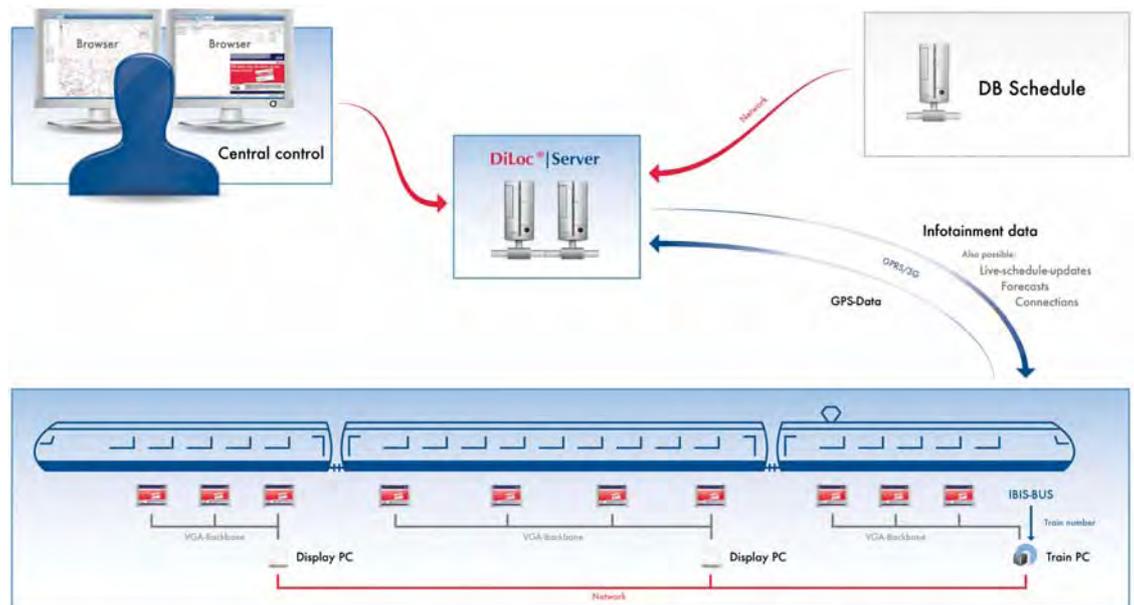
deactivate displays. Texts which are input manually override the automatically generated material.

The same applies to announcements. You can use **text-to-speech** to make an announcement on one group of loudspeakers, at a station or on all the company's loudspeakers, or you can also mute the system.

The requirement for activation of displays or announcement systems is simply a network connection.

Software and passenger information technology from a single source!

Infotainment



Commercial content, images, animations or films can also be shown, in addition to passenger information – an important precondition for infotainment.

The system consists of the central DiLoc|Infotainment administration module and the infotainment PCs (IT-PCs) installed in the trains. These PCs can play the infotainment material on the monitor screens.

The material to be displayed can easily be determined from the administration module, using the Web browser:

- What should be displayed (images, video clips).

- When it should be displayed (start date to end date, start time to end time, daily or continuously).
- Where (in which geographical region) it should be displayed.

The user interface layout is highly intuitive, therefore very little training is required to operate it from any workstation using internet access via a browser.

The material to be displayed is communicated via a GPRS/3G module installed in the IT-PC.



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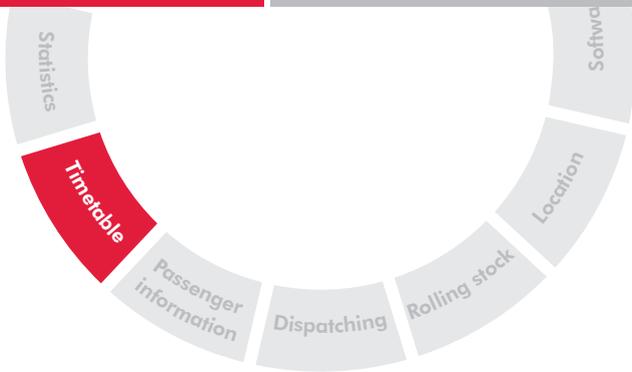
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Timetable

- ▲ Annual timetables
- ▲ Weekly/daily exceptions
- ▲ Connection information
- ▲ Predictions

Since the earliest days of rail travel, timetables have been one of the most important components for smooth operation.

On the one hand, they are absolutely essential for passengers to identify the connection they want. On the other hand, the timetable is the basis of dispatching and operational control for the rail transport company.

Station	Stay type	Arrival	Track	Departure	TT-Departure	Track	Head	Center	Rear	DB
HERSAU	S	05:53:40	-	05:54:00	05:54	11	-	-	-	-
WILEN	C	05:56:00	-	05:57:00	05:56	-	-	-	-	-
WASTA	S	05:59:40	-	06:00:00	06:00	-	-	-	-	-
SÄLB	P	06:03:00	-	-	-	-	-	-	-	-
ZUEHN	C	06:05:00	-	06:05:00	06:05	-	-	-	-	-
URMÄSCH	S	06:07:40	-	06:08:00	06:08	-	-	-	-	-
JAK	C	06:14:00	-	06:14:00	06:14	-	-	-	-	-
GONT	S	06:16:40	-	06:17:00	06:17	-	-	-	-	-
GONB	C	06:19:00	-	06:19:00	06:19	-	-	-	-	-
APPZ	S	06:24:00	-	06:30:00	06:30	4	-	-	-	-
STER	C	06:32:00	-	06:32:00	06:32	-	-	-	-	-
WEIS	S	06:34:40	-	06:35:00	06:35	-	-	-	-	-
SCDE	C	06:37:00	-	06:37:00	06:37	-	-	-	-	-

By differentiating between technical journey times and railway timetable times, the DiLoc prediction engine can take **recovery times** into consideration and thus establish **very accurate predictions**.

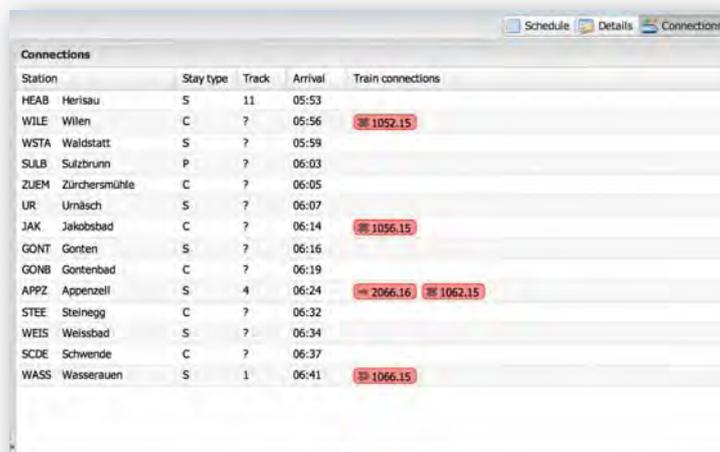
However, compiling the timetable is only the first step. Any **timetable periods** can be input and managed in DiLoc. The validity of a timetable period is determined by the user. This allows you to set up your own timetable periods, irrespective of the normal timetable revisions.

First of all, an **annual timetable** is created in DiLoc, for which exceptions can then be

defined for every **calendar week** and also every individual **day** (major incidents, track work, public holidays, etc.).

Trains which for instance operate on an hourly basis can be copied once the first train has been input, which means that all the stop times are automatically adjusted. This makes train input considerably easier.

The use of **lines** is another aid. When a train is set up to operate on a defined line, the stations on this line are automatically assigned as intermediate stations. All you have to do is add the times.



Station	Stay type	Track	Arrival	Train connections
HEAB Herisau	S	11	05:53	
WILE Wilen	C	?	05:56	☞ 1052.15
WSTA Waldstatt	S	?	05:59	
SULB Sulzbrunn	P	?	06:03	
ZUEM Zürchersmühle	C	?	06:05	
UR Urnäsch	S	?	06:07	
JAK Jakobsbad	C	?	06:14	☞ 1056.15
GONT Gonten	S	?	06:16	
GONB Gontenbad	C	?	06:19	
APPZ Appenzell	S	4	06:24	☞ 2066.16 ☞ 1062.15
STEE Steinegg	C	?	06:32	
WEIS Weissbad	S	?	06:34	
SCDE Schwende	C	?	06:37	
WASS Wasserrauen	S	1	06:41	☞ 1066.15

It is also very easy to input **connections** in DiLoc. At each station the system automatically suggests which crossing trains can be considered as connections. The user simply has to choose the right trains.

There are three types of connections:

- Crossovers: on single-track sections
- Changeover: the consist carries on to the destination station with another train number
- Connection: connection for passengers

The "timetable" is a user-friendly working tool and is a prerequisite for comparing the target situation with the actual one.



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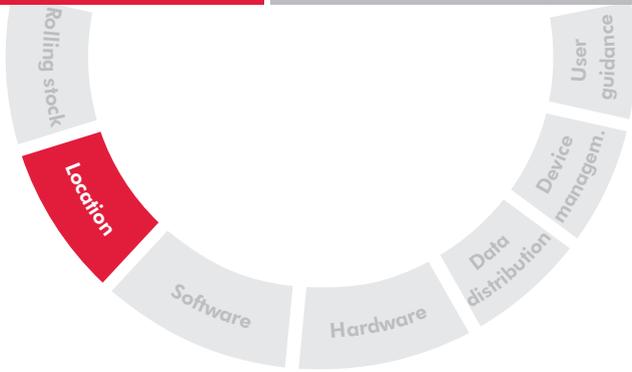
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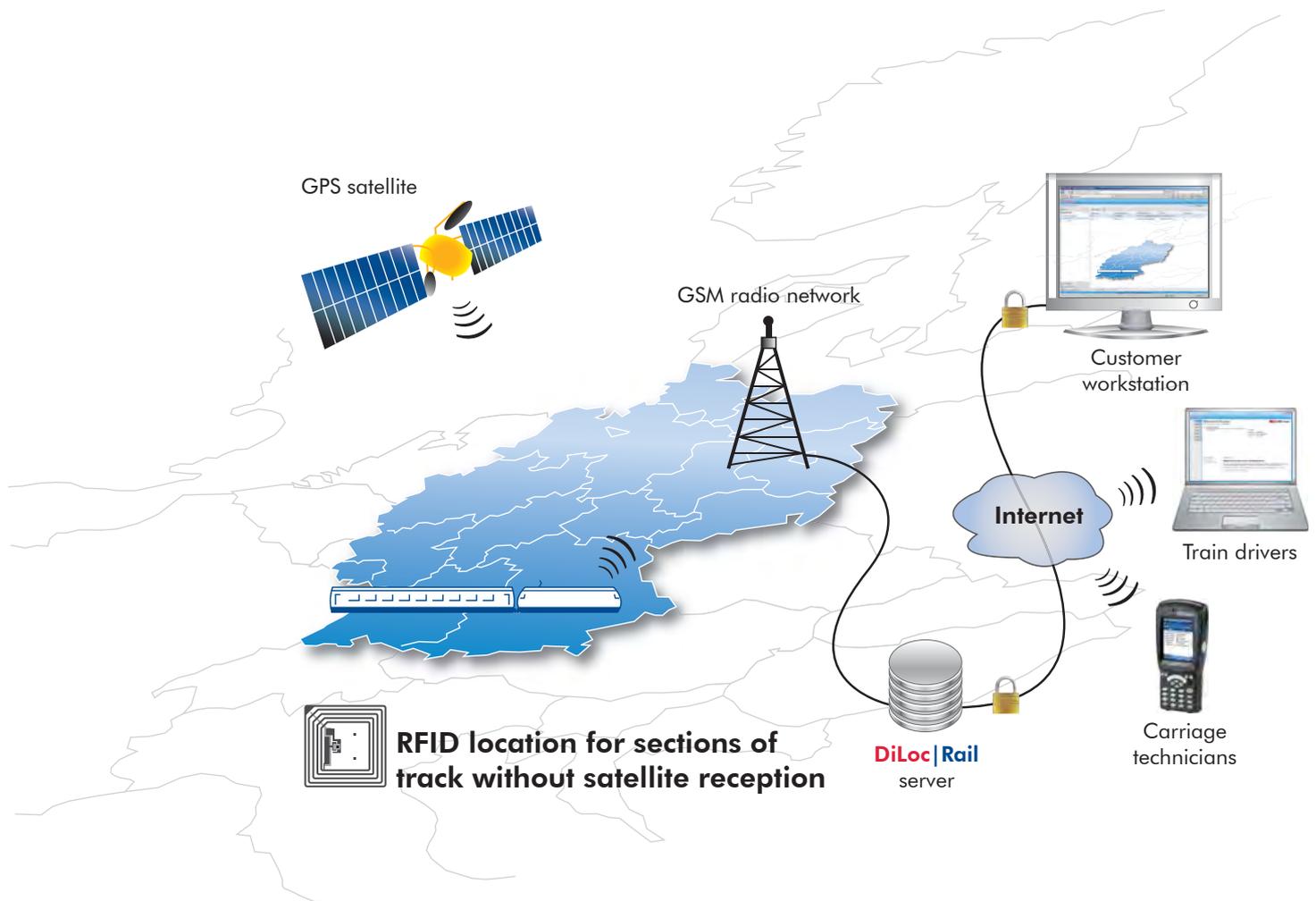


Location

- ▲ GPS
- ▲ External distributor (LeiDis)
- ▲ ILTIS (Siemens)
- ▲ RFID
- ▲ Individual interfaces

No dispatching without location

The basis of any dispatching is precise knowledge of the actual operational situation and of the timetable (see also "Timetable"). Accurate and flexible location of vehicles is a key component of the due time/actual time comparison here. This means that delays and predictions can be communicated or connection information updated.



The architecture of the DiLoc data hub allows up-to-date location information to be uploaded promptly from a large number of different sources, processed, then distributed to a wide variety of recipients.

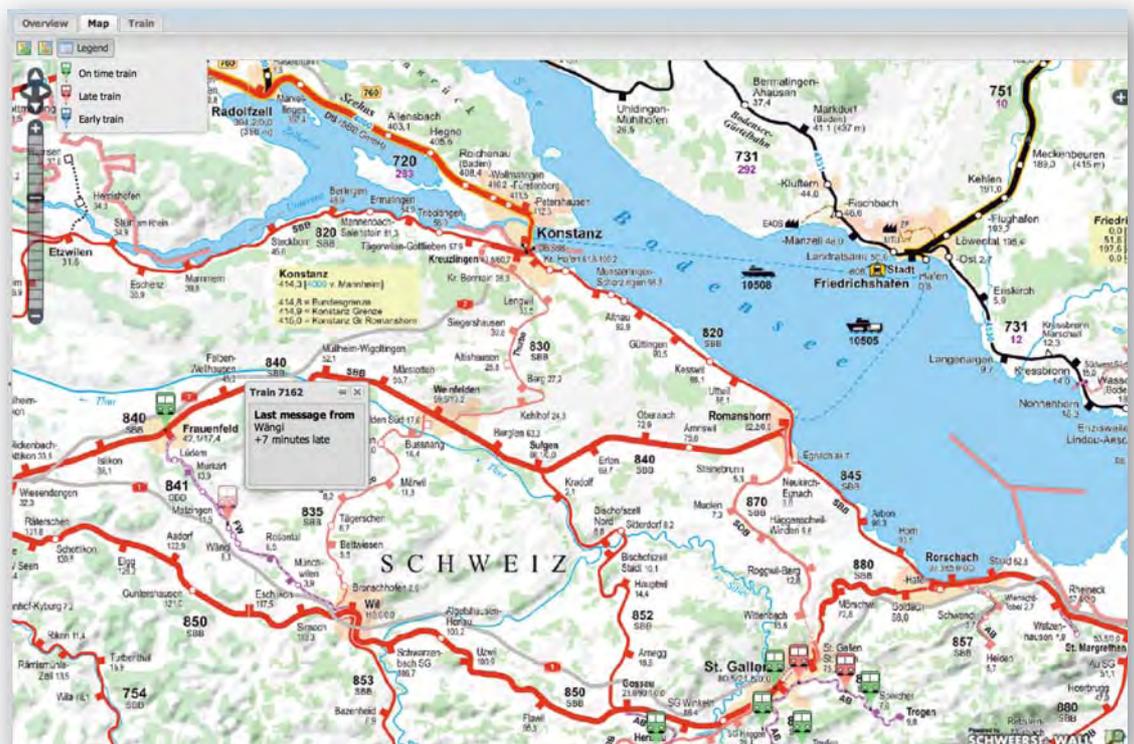
Possible data sources for location information are:

- **GPS:** location via on-board GPS devices in vehicles. Accessible GPS data from GPS devices already installed can also be uploaded.
- German Railways' external distributor (**LeiDis**)
- **ILTIS:** uploading of messages from the Siemens operations control system
- **RFID:** e.g. in tunnel sections where no GPS location is possible

- Interfaces to additional supply systems that can be developed **individually**

Location data can of course also come from different sources, either simultaneously or successively (e.g. via ILTIS and an available GPS module). DiLoc always automatically selects the more accurate information as the basis for its predictions.

For receiving systems, irrespective of whether they are passenger information systems, mobile applications or statistical analyses, it does not matter what the source of the location data is. It is always ensured that the current data are available – and in real time!



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05/2013



Rolling Stock

- ▲ GPS
- ▲ Railway atlas

The “rolling stock module” allows vehicles which are fitted with GPS modules to be tracked. These vehicles (generally locomotives) are shown as symbols on a map.

Vehicle position

Time	Station	Type	Speed
20.09.2012 08:05:43	SGAR - Schützengarten	Pass through	32
20.09.2012 08:04:07	VOEG - Vögelinsegg	Pass through	23
20.09.2012 08:02:07	RANK - Rank	Pass through	55
20.09.2012 08:01:13	SBAR - Schwarzer Bären	Pass through	31
20.09.2012 07:54:37	NOGG - Notkersegg	Pass through	43
20.09.2012 07:52:52	SGBI - Birnbäumen	Pass through	38

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The Schweers + Wall railway atlas is stored in the system for Germany. You can zoom or move the section as required, in the way that you are accustomed to doing with web-based maps.

Alternatively you can display trains in a table. You can generate train movement notifications for trains that are in service, when they arrive at or pass locations (stations, marshalling yards, sidings, etc.) which are of interest. There is a backup of which vehicle reached which point at which time. This means you can reproduce the entire train movement with exact time data in the “statistics module” at a later stage.

The rail transport company can itself determine which points are of interest here, so that only relevant events are documented. This makes subsequent data analysis easier. Customer queries, for example about the arrival time at a siding, can be answered comprehensively with just a few clicks of the mouse.

It is also possible to assign locomotives to a train which has been entered in the “timetable manager”. In this way, its train movement notifications can be compared to the timetable. An analysis of the discrepancies with the timetable provides punctuality documentation with no gaps.

The screenshot shows the DiLoc Rolling Stock software interface. The main window displays a table with columns: T, Type, Number, UIC classificati, Name, Current train number, Year of c, and Initial Operation. Below this, there is a detailed table of train movements with columns: Time, Location, Type, and Speed. An 'Export' menu is open, showing options: Table to Excel, Table to CSV, and Table to XML.

T	Type	Number	UIC classificati	Name	Current train number	Year of c	Initial Operation
	Be 4/8	33		Peter		2008	16.10.2012
	Be 4/8	15				1980	

Time	Location	Type	Speed
07.09.2012	amen	Pass through	40
07.09.2012	rsegg	Pass through	29
07.09.2012	rzer Bären	Pass through	33
07.09.2012 15:31:18	RANK - Rank	Pass through	52
07.09.2012 15:33:09	VOEG - Vögelinsegg	Pass through	0
07.09.2012 15:35:09	SGAR - Schützengarten	Pass through	27
10.09.2012 07:14:06	SPEI - Speicher	Pass through	0
11.09.2012 05:26:48	SPEI - Speicher	Pass through	15
11.09.2012 06:10:18	BUEH - Bühler	Pass through	29
11.09.2012 06:17:30	TRD - Trogen	Pass through	20
11.09.2012 06:20:48	BUEH - Bühler	Pass through	18
11.09.2012 06:23:18	SPEI - Speicher	Pass through	21
11.09.2012 06:24:57	SGAR - Schützengarten	Pass through	29
11.09.2012 06:26:39	VOEG - Vögelinsegg	Pass through	13
11.09.2012 06:28:03	RANK - Rank	Pass through	60
11.09.2012 06:30:45	SBAR - Schwarzer Bären	Pass through	40
11.09.2012 06:33:33	NOGG - Nötkersegg	Pass through	37
11.09.2012 06:35:00	SGBI - Birnbäumen	Pass through	39
11.09.2012 06:36:24	SHS - Schülerhaus	Pass through	31
11.09.2012 06:37:48	SPIS - Spisertor	Pass through	8
11.09.2012 06:39:36	SGMP - Marktplatz	Pass through	22
11.09.2012 06:41:33	SGAB - St. Gallen	Pass through	25
11.09.2012 06:50:00	SGMP - Marktplatz	Pass through	10
11.09.2012 06:51:57	SPIS - Spisertor	Pass through	23
11.09.2012 06:53:54	SHS - Schülerhaus	Pass through	24
11.09.2012 06:54:39	SGBI - Birnbäumen	Pass through	37
11.09.2012 06:56:42	NOGG - Nötkersegg	Pass through	37
11.09.2012 07:01:12	SBAR - Schwarzer Bären	Pass through	38

All train movement notifications can be sorted, filtered and exported in various data formats.

Automatic brake test

In addition, the results of the automatic brake test can also be analysed using the “rolling stock module”.

Further information can be found in the “DiLoc|Brake” brochure.



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05/2013



Statistics

- ▲ Delay analyses
- ▲ Documentation
- ▲ Export of evaluations

The statistical analysis of the train movement information contained in DiLoc offers a wide range of possibilities. Full delay analyses can be generated, which are used to document punctuality for commissioning authorities or to enable the company to react to any build up in delays.

Evaluations can be prepared for instance showing which stations experience the greatest delays or which reasons for delays are increasing. You can also analyse which platforms are most used at which stations. These are just a few examples of the huge number of possible applications of the "statistics module".

		SPEI			APFZ			GAIS						
		0-3:59 min	0-7:59 min	>8 min	0-3:59 min	0-7:59 min	>8 min	0-3:59 min	0-7:59 min	>8 min				
Tag	Züge/Tag	Züge	%	Züge	%	Züge	%	Züge/Tag	Züge	%	Züge	%	Züge	%
1	72	72	100	72	100	0	0	63	63	100	0	0	0	0
2	101	101	100	101	100	0	0	87	87	100	0	0	0	0
3	99	99	100	99	100	0	0	87	85	97,7	87	100	0	0
4	101	100	99,01	101	100	0	0	90	88	97,78	90	100	0	0
5	101	100	99,01	100	99,01	1	0,99	87	95	97,7	87	100	0	0
6	101	99	98,02	101	100	0	0	88	86	97,73	88	100	0	0
7	74	74	100	74	100	0	0	75	75	100	0	0	0	0
8	72	72	100	72	100	0	0	72	72	100	72	100	0	0
9	101	101	100	101	100	0	0	86	83	96,51	86	100	0	0
10	101	98	98,02	100	99,01	1	0,99	90	89	98,89	90	100	0	0
11	101	101	100	101	100	0	0	87	87	100	87	100	0	0
12	101	99	98,02	101	100	0	0	86	86	98,89	85	98,84	1	1,16
13	101	99	98,02	100	99,01	1	0,99	86	86	100	86	100	0	0
14	72	70	97,22	70	97,22	2	2,78	75	74	98,67	75	100	0	0
15	71	69	97,18	70	98,59	1	1,41	73	71	97,26	73	100	0	0
16	49	49	100	49	100	0	0	87	87	100	87	100	0	0
17	48	48	100	48	100	0	0	88	85	96,59	88	100	0	0
18	48	48	100	48	100	0	0	89	87	97,75	88	98,89	1	1,12
19	49	47	95,92	48	100	0	0	87	83	95,4	87	100	0	0
20	101	101	100	101	100	0	0	88	86	97,73	87	98,86	1	1,14
21	76	76	100	76	100	0	0	76	74	97,37	74	97,37	2	2,63
22	72	72	100	72	100	0	0	72	72	100	72	100	0	0
23	101	101	100	101	100	0	0	88	86	97,73	87	98,86	1	1,14
24	100	100	100	100	100	0	0	88	88	100	88	100	0	0
25	98	98	100	98	100	0	0	89	87	97,75	88	98,88	1	1,12
26	101	99	98,02	99	98,02	2	1,98	87	86	98,89	86	98,85	1	1,15
27	101	101	100	101	100	0	0	87	83	95,4	87	100	0	0
28	76	75	98,68	76	100	0	0	76	72	94,74	76	100	0	0
29	72	72	100	72	100	0	0	72	72	100	72	100	0	0
30	100	100	100	100	100	0	0	87	83	95,4	85	97,7	2	2,3
31	102	101	99,02	102	100	0	0	77	83	95,4	87	100	0	0
D/M	2663	2643	99,25	2655	99,7	8	0,3	2589	2534	97,88	2579	99,61	10	0,39

The train movement data can be filtered and sorted according to different criteria. All these evaluations can be carried out simply at the push of a button and can be exported in

various file formats. Tedious and often patchy manual input of punctuality data is now a thing of the past.

Train number	Train origin	Time	Station	Track	Type	Lateness	Lateness-code	Info text
4050	Speicher	01.02.2013 05:23:30	BENO - Bendlehn	2	Arrival	-	-	
4051	Trogen	01.02.2013 05:23:51	SPIS - Spisertor	-	Arrival	-13	-	
4050	Speicher	01.02.2013 05:24:00	BENO - Bendlehn	2	Departure	-	-	
92050	Gais	01.02.2013 05:24:21	TEUF - Teufen	-	Arrival	+2	15	
2050.16	Appenzell	01.02.2013 05:24:36	ZWBR - Zwisbrüden	-	Departure	-1	-	
4050	Speicher	01.02.2013 05:24:41	SPIS - Speicher	-	Start depar...	+2	-	
92050	Gais	01.02.2013 05:24:41	TEUF - Teufen	-	Departure	+2	34	
7052	Frauenfeld	01.02.2013 05:25:00	MURK - Murkart	1	Arrival	-	-	
7052	Frauenfeld	01.02.2013 05:25:01	MURK - Murkart	1	Departure	-	-	
4051	Trogen	01.02.2013 05:25:04	SPIS - Spisertor	-	Departure	+8	-	
7053	Wil	01.02.2013 05:25:28	PFL - Pflegeheim	2	Arrival	-17	-	
7053	Wil	01.02.2013 05:25:29	PFL - Pflegeheim	2	Departure	-7	-	
2050.16	Appenzell	01.02.2013 05:25:49	STRH - Strahlholz	-	Arrival	+2	-	
92050	Gais	01.02.2013 05:25:54	STFE - Stofel	-	Arrival	+2	-	
4051	Trogen	01.02.2013 05:26:17	SGHP - Marktplatz	-	Arrival	-8	-	
1048.15	Appenzell	01.02.2013 05:26:40	WSTA - Waldstatt	-	Arrival	-	-	
1048.15	Appenzell	01.02.2013 05:27:00	WSTA - Waldstatt	-	Departure	-	-	
7052	Frauenfeld	01.02.2013 05:27:00	WEIM - Weiberei Matzingen	1	Arrival	-	-	
7052	Frauenfeld	01.02.2013 05:27:01	WEIM - Weiberei Matzingen	1	Departure	-	-	
2050.16	Appenzell	01.02.2013 05:27:02	STRH - Strahlholz	-	Departure	+8	-	
92050	Gais	01.02.2013 05:27:07	STFE - Stofel	-	Departure	-14	-	
4051	Trogen	01.02.2013 05:27:30	SGHP - Marktplatz	-	Departure	+13	-	
7053	Wil	01.02.2013 05:27:34	RTAL - Rosental	2	Arrival	+6	15	
7053	Wil	01.02.2013 05:27:35	RTAL - Rosental	2	Departure	+6	-	
2050.16	Appenzell	01.02.2013 05:28:15	BUEN - Bühler	-	Arrival	+2	-	
92050	Gais	01.02.2013 05:28:20	STTP - Sternen bei Teufen	-	Arrival	+4	16	
7053	Wil	01.02.2013 05:28:28	WGR - Wängli GB	-	Pass through	+6	-	
4051	Trogen	01.02.2013 05:28:43	SGRA - Rathaus	-	Pass through	-1	-	
2050.16	Appenzell	01.02.2013 05:29:28	BUEN - Bühler	-	Departure	-3	-	
92050	Gais	01.02.2013 05:29:33	STTP - Sternen bei Teufen	-	Departure	+5	-	
7053	Wil	01.02.2013 05:29:41	WAEN - Wängli	-1	Arrival	+3	31	
4051	Trogen	01.02.2013 05:29:56	SGAB - St. Gallen	12	Destination...	+2	-	
1048.15	Appenzell	01.02.2013 05:30:00	WILE - Willen	-	Arrival	-	-	
1052.15	Appenzell	01.02.2013 05:30:00	APPZ - Appenzell	-	Start depar...	-	-	
1048.15	Appenzell	01.02.2013 05:30:01	WILE - Willen	-	Departure	-	-	

The data can be sorted in ascending or descending order and filtered according to different criteria.

The creation of individual customized evaluations and statistics with graphs and diagrams is also supported. Please discuss this with us!



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05/2013

What Customers Think

SBB CFF FFS Cargo

Manfred Peter

Schweizerische Bundesbahnen SBB Cargo AG

"ODI* is a perfect interface for enabling equipment to be operated easily and efficiently by staff."

Die Zentralbahn.

Peter Furrer, Leiter Betriebsführung

zb Zentralbahn AG

"Competence and efficient collaboration meant we could put our ideas into practice quickly and professionally."



Daniel Fust, senior train driver

Thurbo AG

"Broadly speaking, what is impressive about ODI* is its clarity, functionality and reliability."

SBB Cargo International

Matthias Birnbaum, Managing Director

SBB Cargo Germany

"DiLoc|Sync was taken on board very positively by staff and also impressed them with its reliability and user-friendliness."



Thomas Knechtel, Managing Director

KombiRail Europe B.V.

"With 40 trains per week at the moment we have a relatively manageable portfolio, but nevertheless we wouldn't want to be without the benefits of DiLoc|Sync now."

Awards



1. Prize for DiLoc|Rail

at the INNOVATIONSPREIS-IT 2010 IT innovation awards. Winner for the state of Hesse.

Nomination in the "Sector Software" category, that is DiLoc|Rail is one of the best three products of all the applications submitted. In this, the winners come out on top against around 2,000 competitors.

In 2008, DiLoc|Rail was nominated for the Hesse innovation award.

The products and processes presented were assessed according to the criteria of degree of innovation, marketability, market potential and environmental impact.



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08/2013



CN-Consult bietet Softwarelösungen für Disposition, Fahrgastinformation und Lokalisierung sowie schlüsselfertige Komplettsysteme inklusive herstellerunabhängiger Hardware für die Fahrgastinformation.

Gern beraten wir Sie auch bei der Durchführung Ihrer IT-Projekte und unterstützen Sie mit IT-Spezialisten für zeitlich begrenzte Einsätze oder für Festanstellungen.

Unsere Stärke sind kundenindividuelle, ganzheitliche Lösungen insbesondere für die Transport- und Logistik-Branche. Aufgrund dieser Spezialisierung sind wir in der Lage, einen ausgewählten Markt mit tiefgehendem Know-how und detailliertem betrieblichem Hintergrundwissen mit stets hochaktueller Informationstechnologie zu bedienen.

CN-Consult offers software solutions for dispatching, passenger information and positioning, as well as complete turnkey systems including multivendor hardware for passenger information.

We will be pleased to advise you regarding the implementation of your IT projects and to support you with IT professionals both for temporary project work and permanent assignments.

Our strengths are comprehensive solutions for individual customers, in particular in the transport and logistics sectors. Because we are specialists in these fields, we are in a position to offer deep know-how and detailed operating background knowledge, allowing us to serve our chosen market with thoroughly up-to-date information technology at all times.

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