HISTORY APP (SOFTWARE RT-WIN 4)

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History App of Pneumatic Tube Software RT-Win 4

The History App is one of the four apps included in the basic package of the RT-Win 4 pneumatic tube software. Whoever purchases a RT-Win 4 license will automatically receive the History App, the Programmer App, the Device State App and the Graphics App.

The History App displays information (history area) and statistics (statistics area) on all transports – whether currently ongoing, or completed.

History Area: Clear up Irregularities & Keep an Overview

In the history area, all current and past transports are tracked. The information is displayed in real-time and partially color-coded. Built-in filter functions enable particularly fast work and selection of specific transports.

The information supports the user in clarifying any irregularities that occur. For example, missing carriers and their contents can be traced again with the help of the data. In the case of ambiguities in individual journeys, these can be analyzed in more detail. Data about the operating time of the most energy-intensive component of a system – the blower – helps to identify possible energy consumption optimizations.

- **Detect anomalies**
- **Clear up irregularities**
- **Enhance processes**
- **Optimize system design**

The following information is included:

- Job and transaction number
- Number of transports
- Zone
- ID of sender/receiver
- Name, zone and device number of start and destination station
- Carrier ID, carrier type and content of the carrier (in combination with the Scan App)
- Request time (User inserted carrier into the station)
- Start time (System started to handle the job)
- Possible detour of the carrier or error
- End time of the job
- Selected and actual destination

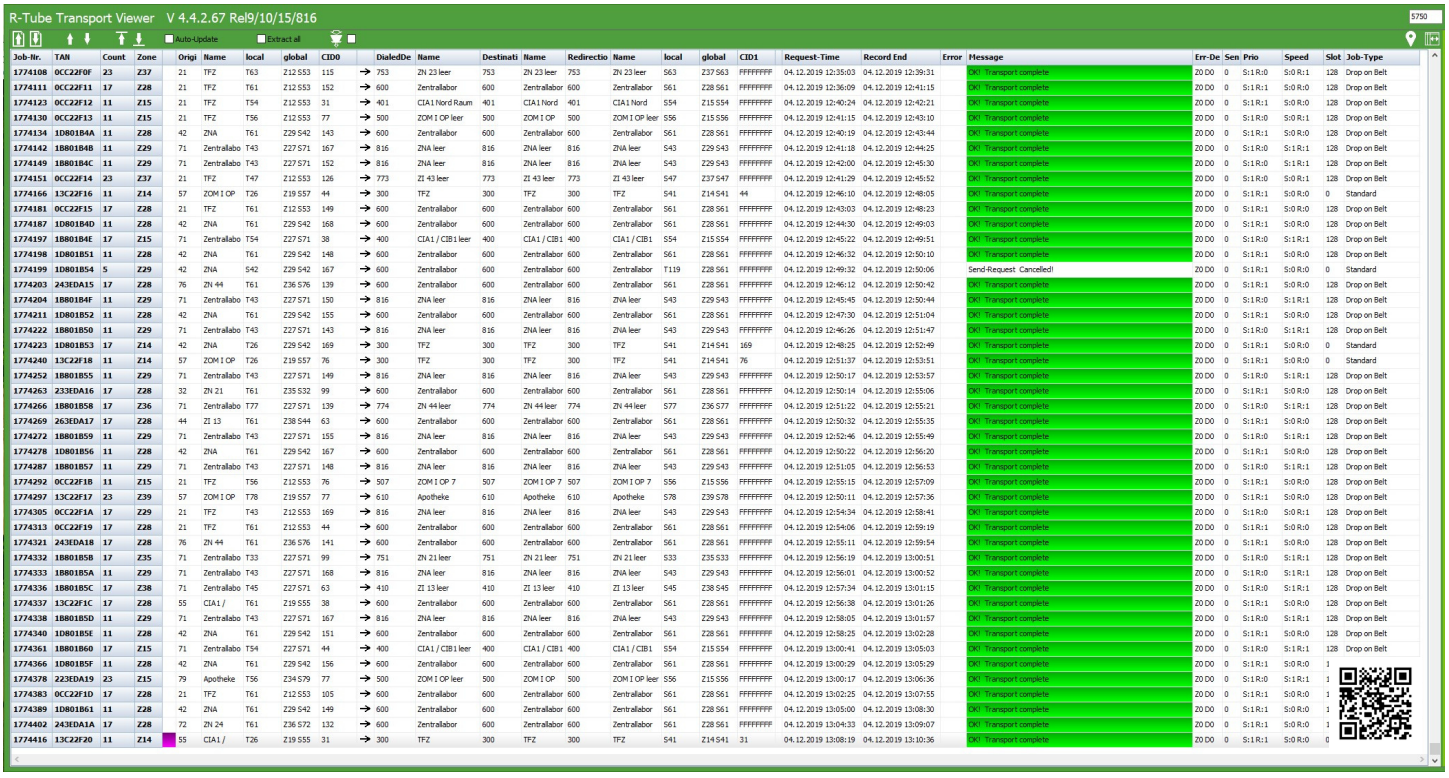
The app user sees the following color-coded messages about ongoing and completed transports:

- User started a sending request
- User cancelled a sending request
- Error in the transport
- Carrier waits for the transfer between two zones
- Job was successful
- Carrier was taken out of the station
- Content was removed from the carrier (in combination with the Scan Out App or the Arrive Screen App)

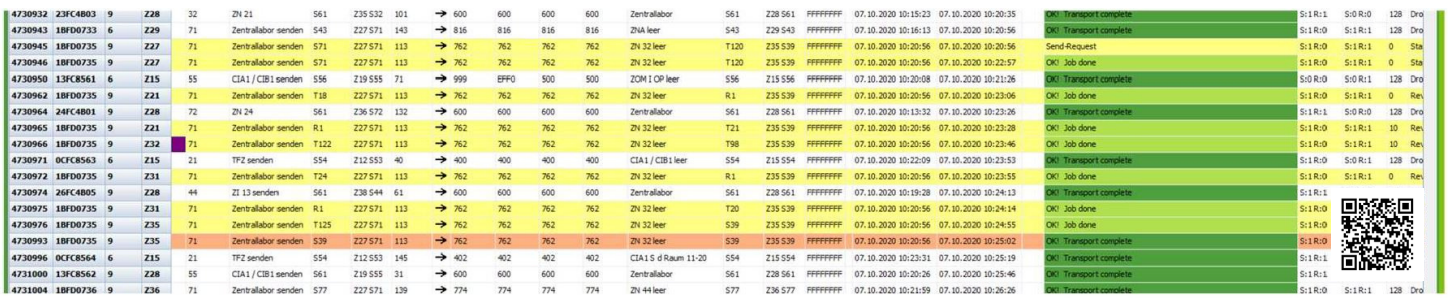
The following filter options are provided:

- Zones
- Destinations
- Devices
- Time
- Error
- Priority
- User ID
- Transaction number
- Carrier ID

Filter function: Filters can be combined as necessary



History area: Overview over all current and past events



Extraction of single transports

Statistics Area: Evaluate the System Design and Performance

The statistics area prepares data from the system in such a way that the user can easily draw conclusions from it.

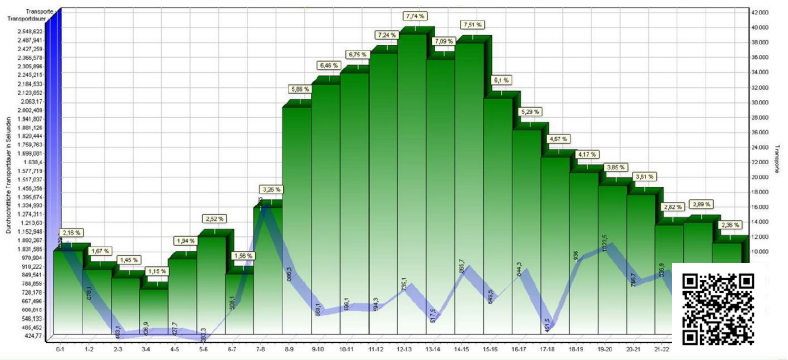
Time statistics: evaluate the system utilization and detect transport anomalies

In the time statistics, a bar chart shows the number of transports and the average transport duration in a given period (24h, weekday, week, month, year).

→**System utilization:** How busy is the system in general? Should the system be expanded?

→**Anomalies:** Are there any irregularities in the transport duration that indicate problems in the system?

→**Process planning:** Use of the average transport duration for the planning of internal process flows



Time statistics

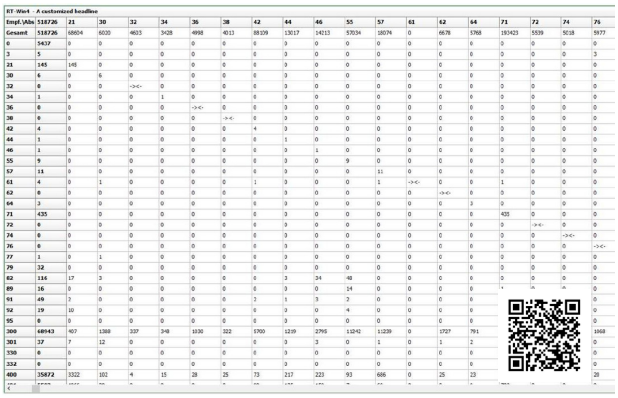
Cross table: utilization of individual routes

The cross table shows the number of transports from each station to each destination.

→**Route utilization:** How busy are individual routes? Can the system design be optimized (e.g., through additional stations on particularly busy routes)?

→**Service planning:** Planning of an increased maintenance effort for particularly frequently used routes

→**Process optimization:** Identifying sub-optimal internal processes (e.g., a department does not use pneumatic tube, even though it could operate more efficiently by doing so)



Cross table

Performance statistics: performance of each zone

The performance statistics provide performance data for each zone of the pneumatic tube system.

→**Zone utilization:** How busy are the individual zones? Can the system be optimized (e.g. by splitting a particularly busy zone into two zones)?

→**Delayed send requests:** Where is the average waiting time until the carriers leave the station particularly high?

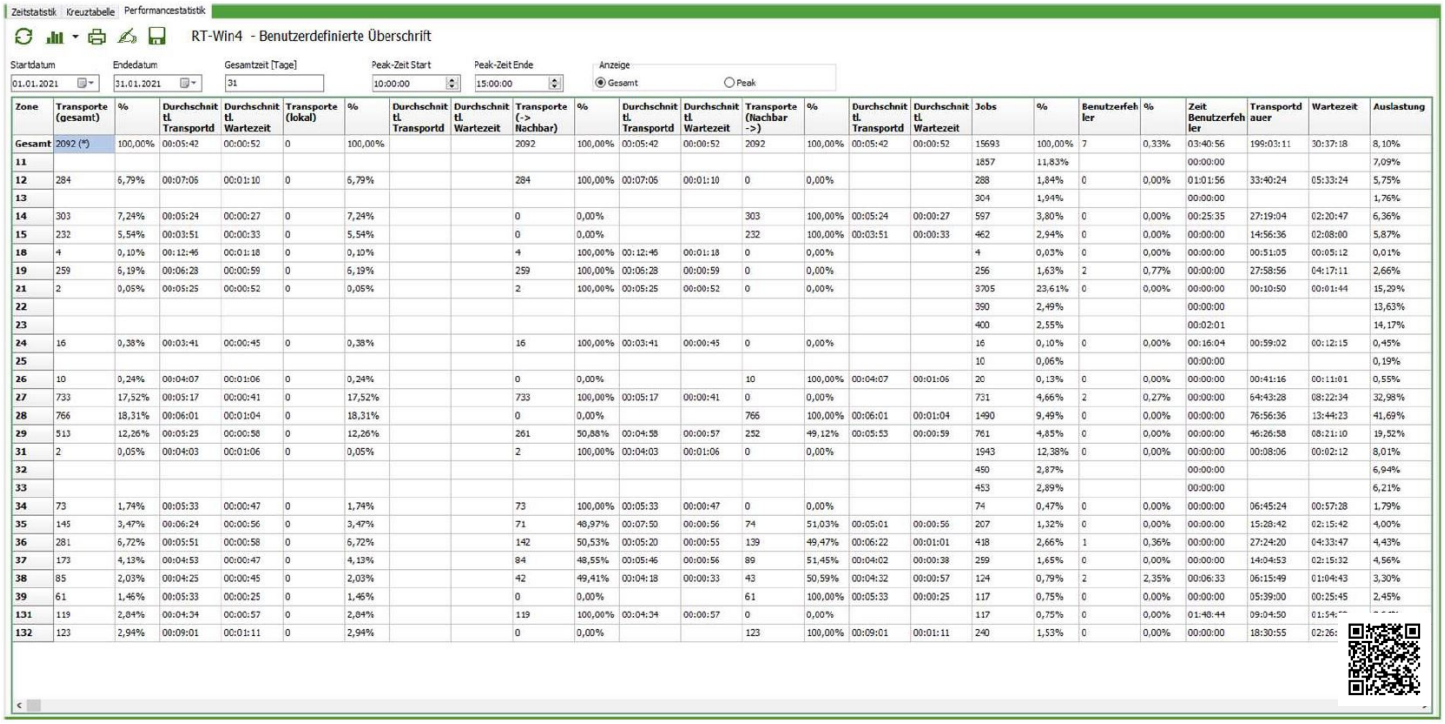
→**User errors:** Which zones do have particularly many user errors? Do the users of this zone need to be better trained?

→**Reliability:** How reliable is the system (Mean-Time-Between Failure)? What are the optimal service/maintenance intervals?

→**Economic efficiency:** Comparison of the system with alternatives such as pick-up and delivery services

→**Monitoring of external service providers:** How long does it take service providers to get the system working again after malfunctions?

→**Peak periods:** Are there times with particularly high system utilization? Could you prevent this by restructuring work processes?



Zone	Transporte (gesamt)	%	Durchschnittl. Transportd	Durchschnittl. Wartezeit	Transporte (lokal)	%	Durchschnittl. Transportd	Durchschnittl. Wartezeit	Transporte (-> Nachbar)	%	Durchschnittl. Transportd	Durchschnittl. Wartezeit	Transporte (Nachbar ->)	%	Durchschnittl. Transportd	Durchschnittl. Wartezeit	Jobs	%	Benutzerfehler	%	Zeit Benutzerfehler	Transportdauer	Wartezeit	Auslastung
Gesamt	2092 (*)	100,00%	00:05:42	00:00:52	0	100,00%			2092	100,00%	00:05:42	00:00:52	2092	100,00%	00:05:42	00:00:52	15693	100,00%	7	0,33%	03:40:56	199:03:11	30:37:18	8,10%
11																	1857	11,83%			00:00:00			7,09%
12	284	6,79%	00:07:06	00:01:10	0	6,79%			284	100,00%	00:07:06	00:01:10	0	0,00%			288	1,84%	0	0,00%	01:01:56	33:40:24	05:33:24	5,75%
13																	304	1,94%			00:00:00			1,76%
14	303	7,24%	00:05:24	00:00:27	0	7,24%			0	0,00%			303	100,00%	00:05:24	00:00:27	597	3,80%	0	0,00%	00:25:35	27:19:04	02:20:47	6,36%
15	232	5,54%	00:03:51	00:00:33	0	5,54%			0	0,00%			232	100,00%	00:03:51	00:00:33	462	2,94%	0	0,00%	00:00:00	14:56:36	02:08:00	5,87%
18	4	0,10%	00:12:46	00:01:18	0	0,10%			4	100,00%	00:12:46	00:01:18	0	0,00%			4	0,03%	0	0,00%	00:00:00	00:51:05	00:05:12	0,01%
19	259	6,19%	00:06:28	00:00:59	0	6,19%			259	100,00%	00:06:28	00:00:59	0	0,00%			256	1,63%	2	0,77%	00:00:00	27:58:56	04:17:11	2,66%
21	2	0,05%	00:05:25	00:00:52	0	0,05%			2	100,00%	00:05:25	00:00:52	0	0,00%			3705	23,61%	0	0,00%	00:00:00	00:10:50	00:01:44	15,29%
22																	390	2,49%			00:00:00			13,63%
23																	400	2,55%			00:02:01			14,17%
24	16	0,38%	00:03:41	00:00:45	0	0,38%			16	100,00%	00:03:41	00:00:45	0	0,00%			16	0,10%	0	0,00%	00:16:04	00:59:02	00:12:15	0,45%
25																	10	0,06%			00:00:00			0,19%
26	10	0,24%	00:04:07	00:01:06	0	0,24%			0	0,00%			10	100,00%	00:04:07	00:01:06	20	0,13%	0	0,00%	00:00:00	00:41:16	00:11:01	0,55%
27	733	17,52%	00:05:17	00:00:41	0	17,52%			733	100,00%	00:05:17	00:00:41	0	0,00%			731	4,66%	2	0,27%	00:00:00	64:43:28	08:22:34	32,98%
28	766	18,31%	00:06:01	00:01:04	0	18,31%			0	0,00%			766	100,00%	00:06:01	00:01:04	1490	9,49%	0	0,00%	00:00:00	76:56:36	13:44:23	41,69%
29	513	12,26%	00:05:25	00:00:58	0	12,26%			261	50,88%	00:04:58	00:00:57	252	49,12%	00:05:53	00:00:59	761	4,85%	0	0,00%	00:00:00	46:26:58	08:21:10	19,52%
31	2	0,05%	00:04:03	00:01:06	0	0,05%			2	100,00%	00:04:03	00:01:06	0	0,00%			1943	12,38%	0	0,00%	00:00:00	00:08:06	00:02:12	8,01%
32																	450	2,87%			00:00:00			6,94%
33																	453	2,89%			00:00:00			6,21%
34	73	1,74%	00:05:33	00:00:47	0	1,74%			73	100,00%	00:05:33	00:00:47	0	0,00%			74	0,47%	0	0,00%	00:00:00	06:45:24	00:57:28	1,79%
35	145	3,47%	00:06:24	00:00:56	0	3,47%			71	48,97%	00:07:50	00:00:56	74	51,03%	00:05:01	00:00:56	207	1,32%	0	0,00%	00:00:00	15:28:42	02:15:42	4,00%
36	281	6,72%	00:05:51	00:00:58	0	6,72%			142	50,53%	00:05:20	00:00:55	139	49,47%	00:06:22	00:01:01	418	2,66%	1	0,36%	00:00:00	27:24:20	04:33:47	4,43%
37	173	4,13%	00:04:53	00:00:47	0	4,13%			84	48,55%	00:05:46	00:00:56	89	51,45%	00:04:02	00:00:38	259	1,65%	0	0,00%	00:00:00	14:04:53	02:15:32	4,56%
38	85	2,03%	00:04:25	00:00:45	0	2,03%			42	49,41%	00:04:18	00:00:33	43	50,59%	00:04:32	00:00:57	124	0,79%	2	2,35%	00:06:33	06:15:49	01:04:43	3,30%
39	61	1,46%	00:05:33	00:00:25	0	1,46%			0	0,00%			61	100,00%	00:05:33	00:00:25	117	0,75%	0	0,00%	00:00:00	05:39:00	00:25:45	2,45%
131	119	2,84%	00:04:34	00:00:57	0	2,84%			119	100,00%	00:04:34	00:00:57	0	0,00%			117	0,75%	0	0,00%	01:48:44	09:04:50	01:54:[illegible]	
132	123	2,94%	00:09:01	00:01:11	0	2,94%			0	0,00%			123	100,00%	00:09:01	00:01:11	240	1,53%	0	0,00%	00:00:00	18:30:55	02:26:[illegible]	

Performance statistics

Your benefits from the History App:

- Enables continuous optimization of the pneumatic tube system and its design
- Monitoring of the system
- Irregularities in the system can be immediately followed up
- Provides the data basis for identifying internal processes that can be improved

Who do we recommend to use the app?

Technical staff,
who wish to clarify ambiguities and irregularities in the pneumatic tube system

Logistics managers,
who pursue the goal of continuously optimizing their internal logistics.

P.S.

Our RT-Win 4 pneumatic tube software becomes especially valuable with a combination of the basic modules and our optional apps. For more information, visit www.bit.ly/30xLysw.