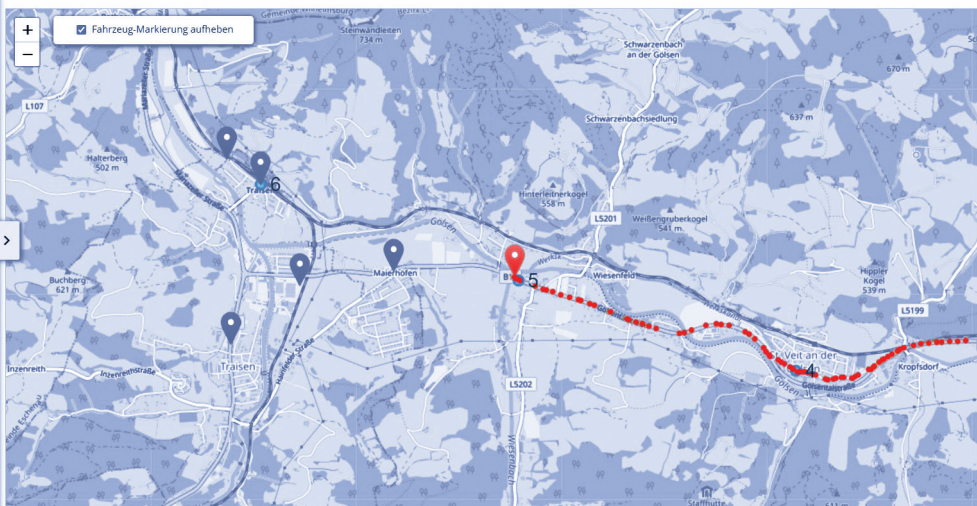


Zündung	ON	Kraftstoff-Stand	56.0 %	Tür	Offen	Bremsverschleiß	
Drehzahl	550	AdBlue Stand	92.0 %	Fahrerkarte	Gesteckt	VO LI	100 %
Geschwindigkeit	0 km/h	Spannung	28.4 volt	Fahrt Strecke	25.66 KM	VO RE	100 %
Motortemperatur	83 °C	Öldruck	2.8 bar	Fahrt Verbrauch	6.96 L	AA LI	100 %
KM-Stand	4535 km	Ölstand	-	Ø Verbrauch	27.13 L/100km	AA RE	100 %



Active Trip 144 on 789

Line	Trip Seq.	Stop name	Plan	Dist
789	123	8	11:03	2494
789	140	1	11:56	0
789	140	2	12:00	2492
789	140	3	12:04	2508
789	140	4	12:08	3317
789	140	5	12:11	2422
789	140	6	12:16	3069
789	144	1	12:56	0
789	144	2	13:00	2492
789	144	3	13:04	2508
789	144	4	13:08	3317
789	144	5	13:11	2422
789	144	6	13:20	3069
789	144	7	13:30	6783
789	144	8	13:33	1154
789	139	1	13:59	0
789	139	2	14:02	1093
789	139	3	14:13	6795
789	139	4	14:19	3669
789	139	5	14:24	2591
789	138	6	14:29	1761

History BD16611

NO Fahrzeug Fehlermeldungen

U1 bus

NO IT Probleme

Überwachung der Verbindungen

Latenz U1->Alert:	11 sec	
Gps:	-1 sec	9
Internet:	-1 sec	22
Tablet:	-	
D2K:	-1 sec	Ping OK
APC 1:	-27 sec	-
APC 2:	-27 sec	-
APC 3:	-	-

INFO

Status

Tablet App Gateway Status:	-
Zählsensor 1 Status:	-
Zählsensor 2 Status:	-
Zählsensor 3 Status:	-

Software Version

PostbusApp Version:	0.6.1.24
Tablet App Gateway Version:	2023.02-r0
Tablet App Gateway Version:	-
Busnode Software Version:	1.2.38
Passenger Interface1 Configuration:	at_vor-1920x1080
Passenger Interface1 Data:	paracetamol-data
Passenger Interface1 Data Version:	2023.02-r3
Passenger Interface1 Software:	paracetamol
Bordrechner Typ:	2023.02-r0
	U1

IP Adressen

Fahrgastzählanlage Tür 1 IP:	10.42.102.231
Fahrgastzählanlage Tür 2 IP:	10.42.102.232
Fahrgastzählanlage Tür 3 IP:	10.42.102.232
Driver Interface 1 IP:	-

THOREB ALERT

... know the condition of your fleet at any time

THOREB Alert is a remote vehicle diagnostic software that shows you the health status of your vehicle, its planned trips, values, warnings and messages in real-time. It is available 24 hours a day, wherever you are, easily to access via pc, laptop or tablet. Furthermore you can receive warnings and messages via e-mail and SMS.

The diagnostic interface provides over 5,000 pieces of information about the current status of the vehicle. In addition to the operating variables, the diagnosis also shows the status of the individual electronic systems and their sensors and actuators. The diagnostic data can be actively accessed at any time. Since the information is sorted, based on its severity, the customer can take immediate actions when needed.



Upcoming errors can be identified earlier than with usual systems and preventive actions taken when appropriate. Therefore all CAN operating data can be made available. Furthermore, upcoming trips for the day are shown and the stops of the current trip are marked on the map. Thoreb Alert thereby helps to reduce maintenance costs as well as inconvenience for passengers and drivers due to broken vehicles.

The THOREB onboard cluster computer acts like a firewall, so there is no risk of product liability and no risks to network stability. It communicates all signals to the central application THOREB Alert which alerts important issues and present them as categories „notice“ „caution“, „warning“ „danger“ „to do“.

THOREB Alert also functions as a “super watchdog” as this application has the responsibility to watch over all IT systems installed in the vehicles. Whatever hardware is connected to the THOREB Cluster computer will be surveilled each second if it is active or not, if it still operates or not, what current software and firmware version it has and always keeps a record of operation activity.

The application can also define the power management policy for specific units, by the power management function you may configure the policy manager to put connected units into certain power states. This can be used to activate for instance third party devices when executing tasks in background or to simply prevent the system from going to a specific state by activate or deactivate specific power state.

Further more information on the three individual areas of the Thoreb Alert:

THOREB BACK-OFFICE

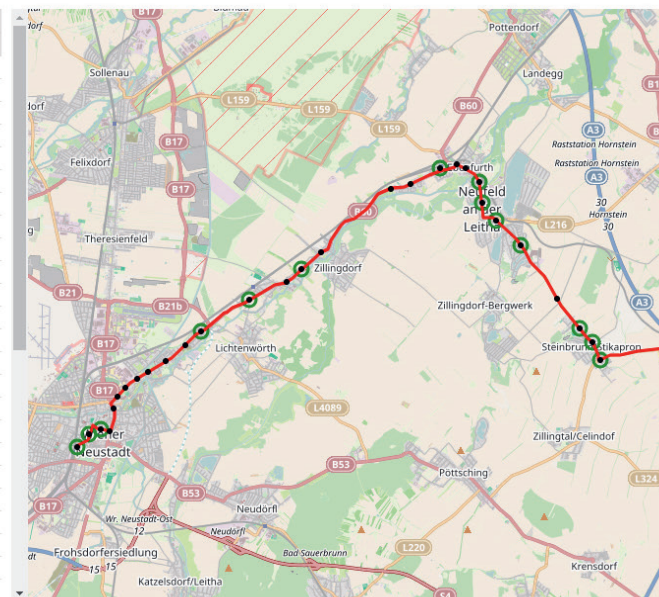
- Search field to select a specific vehicle
- Integrated search field to manually configure and choose which values should be shown, e.g. motor cooling liquid temperature
- Detailed information about connected units and names, e.g. U1 Version, C2o version, firmware version and other status info, status ping to units, surveillance of software versions, etc.
- Time when the vehicle board computer, e.g. C2o/U1, was online/in traffic the Last time
- Hardware-Peripheries with additional information on every installed component and their status e.g. connected/not connected, failures, responding/not responding, OK
- Vehicle specificationlist, stoplist, dutylist,
- Integrated planning/scheduling system.

Region All regions Area All operators Bus BD15890 (U1T)

14:00 **15:24** 16:35 15:24 (902, 0) Line: 902 Dest. code: 0 Trip no.: 125 Fuel used/trip: 10.40 L Fuel economy: 32.61 L/100km (3.07 km/L)

Stop Name	Stop No	Planned Departure	Deviation seconds	Pass Stop	Passenger			Distance
					In	Out	Onboard	
Eisenstadt Domplatz, Bus...	1	15:24	+0:05	26:17	28	0	28	275
Eisenstadt Ruster Straße/...	2	15:26	+1:19	P	0	0	28	1280
Eisenstadt Schloss Esterh...	3	15:27	+0:57	0:10	2	0	30	215
Eisenstadt Oberberg, Mast 2	4	15:29	+1:26	0:42	6	1	35	620
Eisenstadt Landesgericht...	5	15:30	+1:13	P	0	0	35	435
Kleinhöflein im Bgld Wien...	6	15:31	+1:14	0:11	1	1	35	550
Großhöflein Eisenstädter ...	7	15:33	+1:05	0:11	0	2	33	1285
Großhöflein Wiener Straß...	8	15:34	+0:59	0:14	2	1	34	350
Großhöflein Steinbruchwe...	9	15:36	+0:37	P	0	0	34	1255
Müllendorf Hauptstraße, M...	10	15:37	+0:11	P	0	0	34	175
Müllendorf Bahnhof (Bahn...	11	15:38	+0:21	0:09	1	1	34	535
Müllendorf Fabrikstraße, ...	12	15:39	+0:08	0:08	1	0	35	350
Müllendorf Industriegebiet...	13	15:41	+1:25	P	0	0	35	1945
Steinbrunn im Bgld Süd (...	14	15:44	+1:34	0:19	1	3	33	2395
Steinbrunn im Bgld Unter...	15	15:45	+1:58	0:17	1	2	32	530
Steinbrunn im Bgld Obere...	16	15:46	+2:00	0:09	0	2	30	505
Steinbrunn im Bgld Stein...	17	15:49	+0:10	P	0	0	30	980
Steinbrunn im Bgld Betha...	18	15:50	+1:14	0:12	0	3	27	1680
Neufeld/Leitha Steinbrunn...	19	15:52	+1:02	0:16	0	10	17	890
Neufeld/Leitha Hauptplatz,...	20	15:54	+1:17	0:14	0	6	11	760
Ebenfurth Rennbahnstraß...	21	15:55	+2:08	0:08	0	1	10	550
Ebenfurth Ortsmitte, Mast 2	22	15:56	+2:02	P	0	0	10	515
Ebenfurth Schulen, Mast 1	23	15:57	+2:38	P	0	0	10	270
Ebenfurth Bahnhof (Vorpl...	24	15:59	+2:14	0:20	2	1	11	505

P - Vehicle passed the stop



○ Previous trip end point ○ Current trip start point

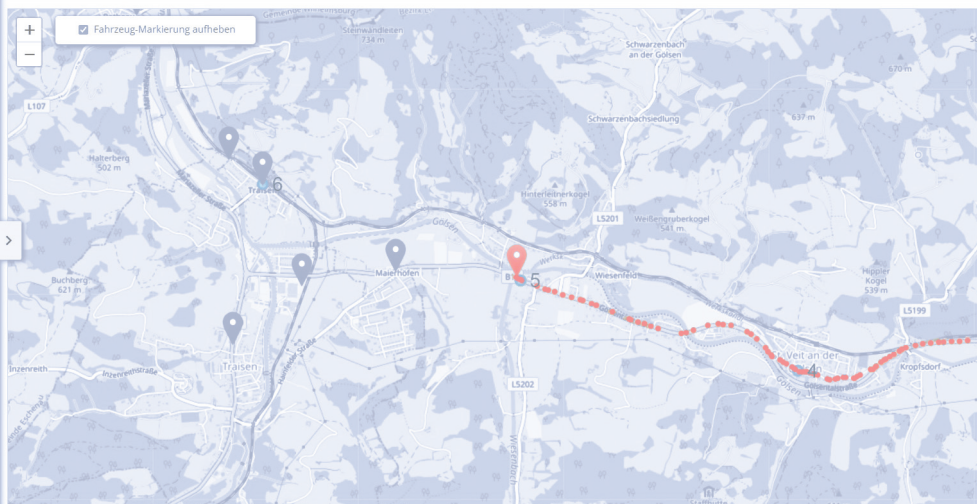
THOREB History

- Historical Playback view and simulation rewind function of the logged data from the vehicles in order to play up the history to reproduce and study the complete activity of a vehicle at a specific day.
- Track when and where an error occurred, or if a device lost connection.
- Study all events second by second in the vehicle, e.g. before an accident or specific event.
- In Historical Mode you can use a slider to go back in time and the components will update with the appropriate values based on the selected timestamp. The playback feature allows you to review the values at various speeds.
- Analysis of historical data and review of their evolution over time. Alternatively, you can also include e.g. the throttling percentage in the event of an accident.
- Export button (.pdf) for vehicle errors.
- Download function for the historical data including individually chosen parameters/values as Excel or CSV file. Values are e.g. acceleration data, G-Forces, position of the gas pedal, etc.

THOREB History Traffic Study

- Study the traffic in a historic mode: Where did the vehicle stop or pass, how long did it stop, etc.
- Study if the bus was running an empty trip: how long and where did it drive. A mapview is also available on empty trips
- Deviation from the timetable: Was the vehicle early or late according to the schedule, incl. mapview on the duty
- Distance driven between the stops
- Amount of passengers embarking and disembarking on stops
- Occupation level of the vehicle

Zündung EIN Kraftstoff-Stand 56.0 % Tür Offen Bremsverschleiß
 Drehzahl 550 AdBlue Stand 92.0 % Fahrerkarte Gesteckt VO LI 100 %
 Geschwindigkeit 0 km/h Spannung 28.4 volt Fahrt Strecke 25.66 KM AA LI 100 %
 Motortemperatur 83 °C Öldruck 2.8 bar Fahrt Verbrauch 6.96 L AA RE 100 %
 KM-Stand 4535 km Ölstand - Ø Verbrauch 27.13 L/100km



Active Trip 144 on 789

Line	Trip	Seq.	Stop name	Plan	Dist
789	123	8	Hainfeld NO Bahnhof (Bahnstraße), Mast 1	11:03	2494
789	140	1	Hainfeld NO Bahnhof (Bahnstraße), Mast 1	11:56	0
789	140	2	Rohrbach/Gölsen Wehrstraße, Mast 1	12:00	2492
789	140	3	Rainfeld/Gölsen Ortsmitte, Mast 2	12:04	2508
789	140	4	St.Veit/Gölsen Kirchenplatz, Mast 2	12:08	3317
789	140	5	Wiesenfeld/Gölsen Wiesenbachbrücke, Mast 2	12:11	2422
789	140	6	Traisen Bahnhof (Vorplatz), Mast 2	12:16	3069
789	144	1	Hainfeld NO Bahnhof (Bahnstraße), Mast 1	12:56	0
789	144	2	Rohrbach/Gölsen Wehrstraße, Mast 1	13:00	2492
789	144	3	Rainfeld/Gölsen Ortsmitte, Mast 2	13:04	2508
789	144	4	St.Veit/Gölsen Kirchenplatz, Mast 2	13:08	3317
789	144	5	Wiesenfeld/Gölsen Wiesenbachbrücke, Mast 2	13:11	2422
789	144	6	Traisen Bahnhof (Vorplatz), Mast 2	13:20	3069
789	144	7	Wilhelmsburg/Traisen Abzw Kreisbach, Mast 2	13:30	6783
789	144	8	Wilhelmsburg/Traisen Bahnhof (Vorplatz), Mast 2	13:33	1154
789	139	1	Wilhelmsburg/Traisen Bahnhof (Vorplatz), Mast 1	13:59	0
789	139	2	Wilhelmsburg/Traisen Abzw Kreisbach, Mast 1	14:02	1093
789	139	3	Traisen Bahnhof (Vorplatz), Mast 1	14:13	6795
789	139	4	Traisen Markt Bahnst (Mittelschule), Mast 1	14:19	3669
789	139	5	Markt/Traisen Ort, Mast 1	14:24	2591
789	139	6	Lilienfeld Bahnhof (Kreuzstraße), Mast 2	14:29	1761

History BD16611

NO Fahrzeug Fehlermeldungen

U1 bus

NO IT Probleme

Überwachung der Verbindungen

Latenz U1->Alert: 11 sec
 Gps: -1 sec 9
 Internet: -1 sec 22
 Tablet: -
 D2X: -1 sec Ping OK
 APC 1: -27 sec - -
 APC 2: -27 sec - -
 APC 3: - - -

INFO

Status

Tablet App Gateway Status: -
 Zählsensor 1 Status: -
 Zählsensor 2 Status: -
 Zählsensor 3 Status: -

Software Version

PostbusApp Version: 0.6.1.24
 Passenger Interface SW Version: 2023.02.r0
 Tablet App Gateway Version: -
 Busnode Software Version: 1.2.38
 Passenger Interface1 Configuration: at_vor-1920x1080
 Passenger Interface1 Data: paracetamol-data
 Passenger Interface1 Data Version: 2023.02.r3
 Passenger Interface1 Software Version: paracetamol
 Bordrechner Typ: 2023.02.r0
 U1

IP Adressen

Fahrgastzählanlage Tür 1 IP: 10.42.102.231
 Fahrgastzählanlage Tür 2 IP: 10.42.102.232
 Fahrgastzählanlage Tür 3 IP: -
 Driver Interface 1 IP: -

THOREB ALERT

... know the condition of your fleet at any time

Advantages

- ✓ Information and vehicle location shown in real-time on an interactive map
- ✓ Overview the entire fleet or specific areas
- ✓ Vehicle values e.g. line, number, vehicle type, current speed, driver card information, etc.
- ✓ CAN Diagnostic Messages sorted by severity
- ✓ Information about the next trip, name of the stops and planned departure, GPS positions on the map for all stops of the active trip
- ✓ History with long-term access of CAN messages e.g. after deleting the vehicle memory
- ✓ Trip History with long-term access to information e.g. time, distance, stop names, etc.
- ✓ Overview about installed Thoreb devices e.g. software version, IP's, ping status etc.



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