

PTV GROUP

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PTV Optima 2025

What's new

01

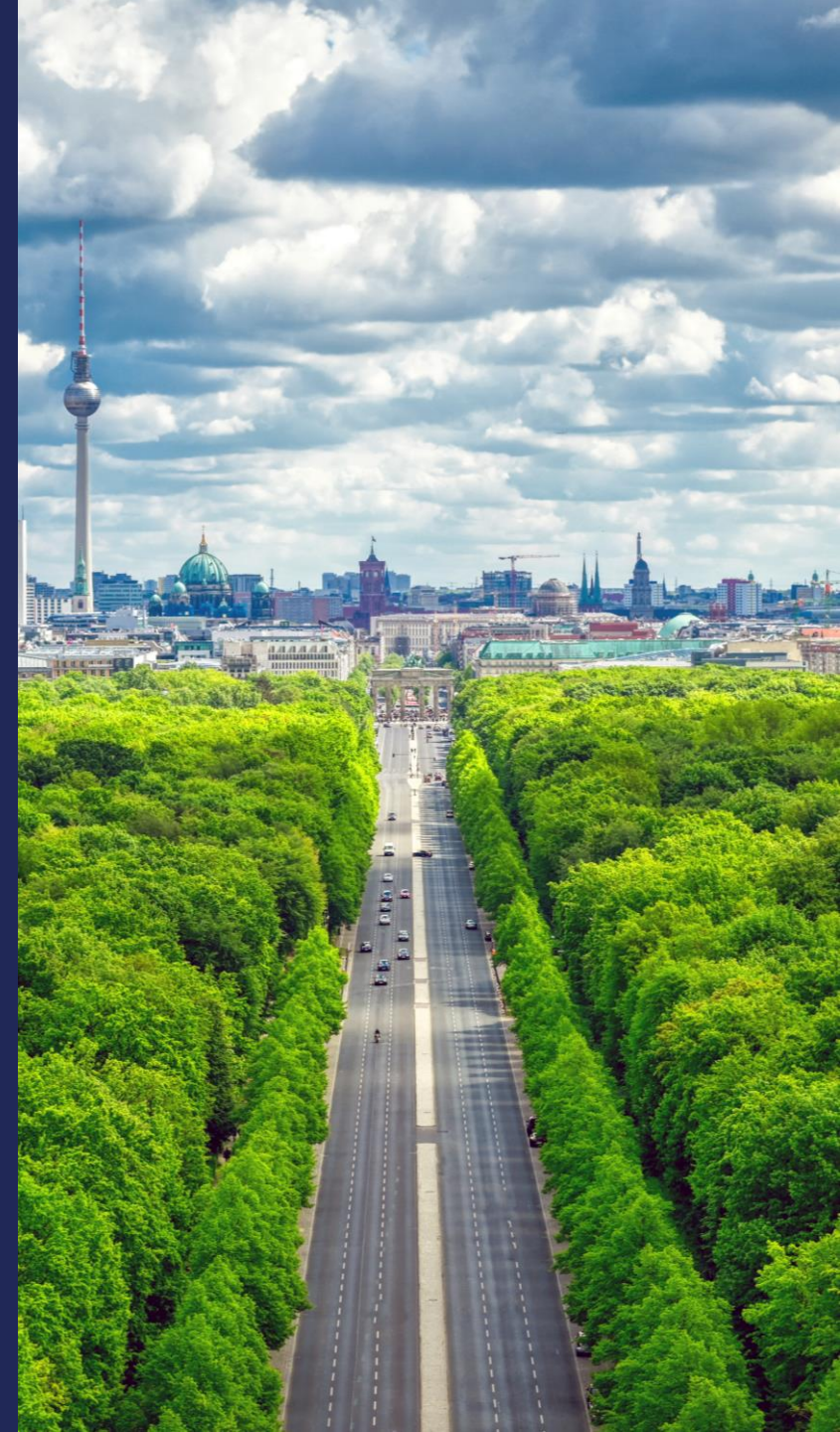
Multimodal Network Management

02

Environment-Sensitive Traffic Management

03

TomTom Dynamic Sectioning

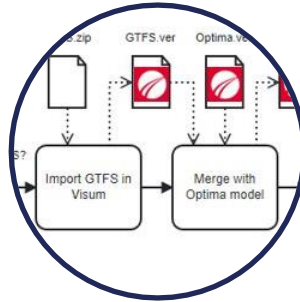


Multimodal Network Management



PuT ETA in TS

- › Visualization of incoming vehicles at one stop
- › Visualization of ETA at remaining stops of a vehicle



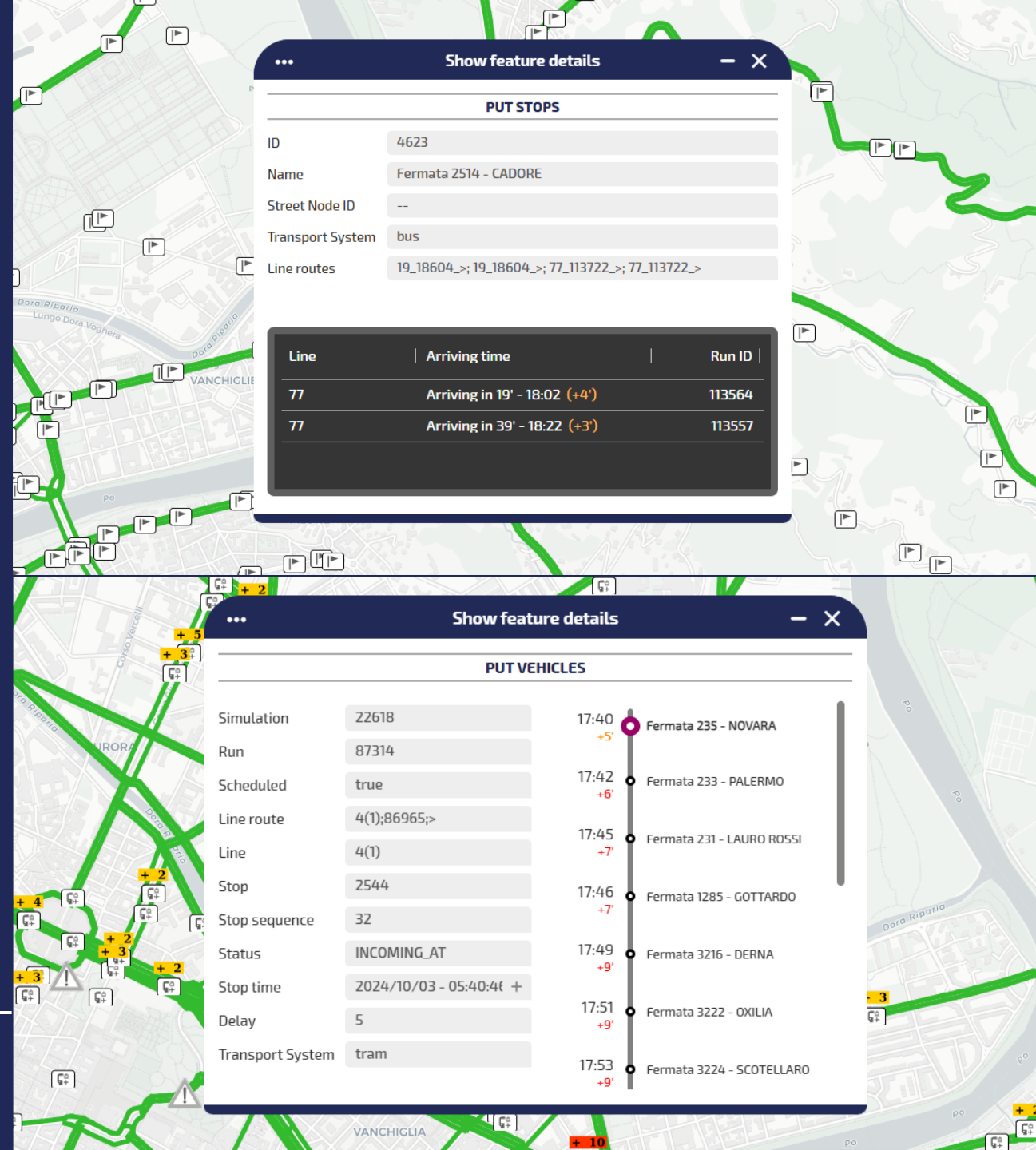
Automatic PuT Updater

- › Automated modeler work when generating new Visum supply model from GTFS
- › Listening when a new GTFS is published, and automatic start
- › Import quality indicators, stopping in case of errors

PuT ETA in Traffic Supervisor

PuT ETA is a backend engine which computes ETA forecast. Until PTV Optima 2025 its results could be extracted only via API.

- Now in Traffic Supervisor the operator can click on a stop and see incoming vehicles
 - Line, current waiting time, timestamp, delay, run ID
- Now in Traffic Supervisor the operator can click a vehicle and see for remaining stops
 - ETA for all the remaining stops, current and forecasted delay



- ### ACTIVE LAYERS
- PuT Stops
 - KPIs
 - PuT Vehicles
 - Web Cams
 - Controllers
 - Count Locations
 - VMS
 - Events
 - Estimated Traffic
 - Machine Learning Fore...
 - Scenarios
 - Scenario Results

Show feature details

PUT STOPS

ID: 1247

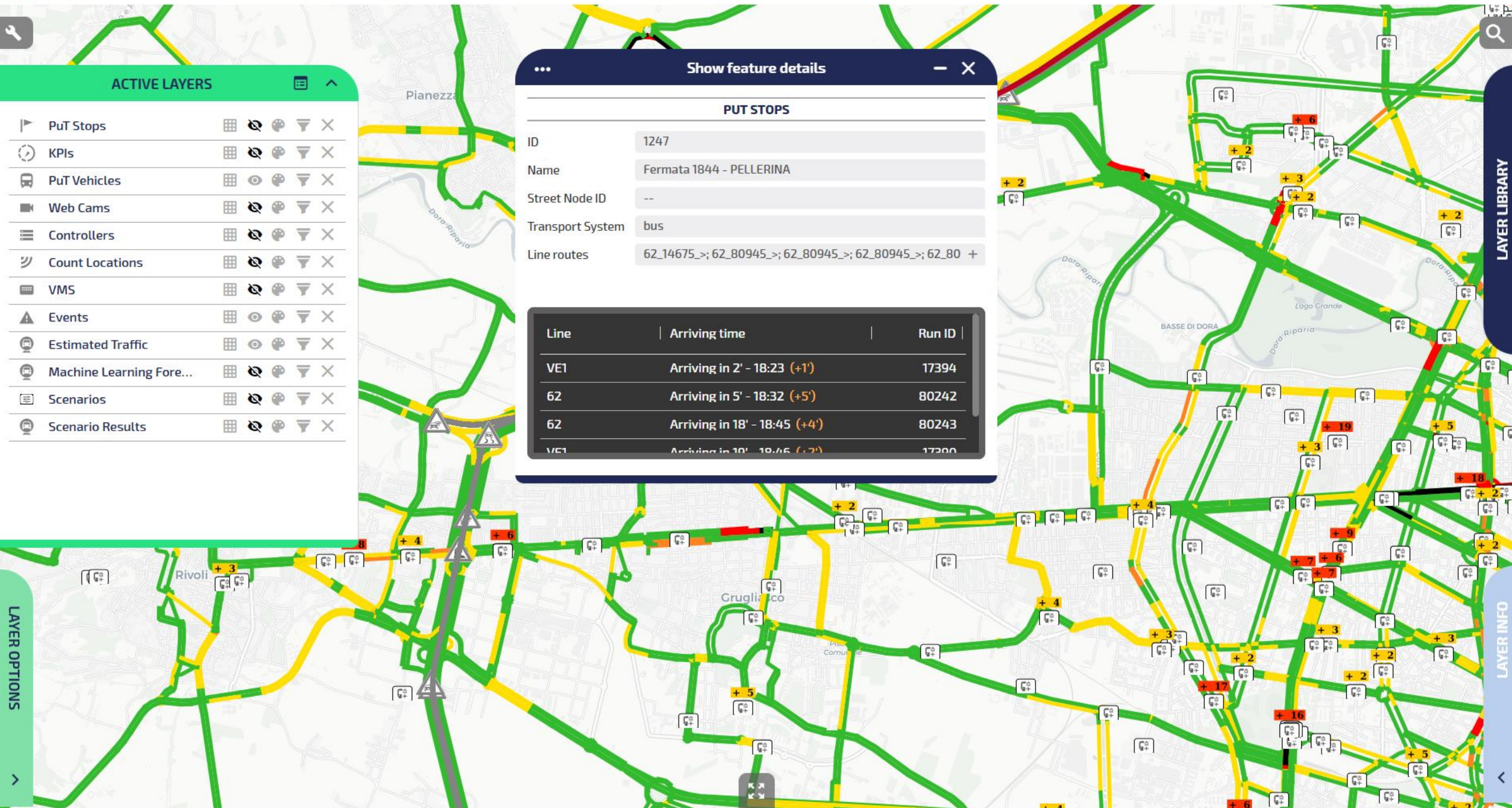
Name: Fermata 1844 - PELLERINA

Street Node ID: --

Transport System: bus

Line routes: 62_14675_>; 62_80945_>; 62_80945_>; 62_80945_>; 62_80 +

Line	Arriving time	Run ID
VE1	Arriving in 2' - 18:23 (+1')	17394
62	Arriving in 5' - 18:32 (+5')	80242
62	Arriving in 18' - 18:45 (+4')	80243
VE1	Arriving in 10' - 18:46 (+2')	17390



LAYER OPTIONS

LAYER LIBRARY

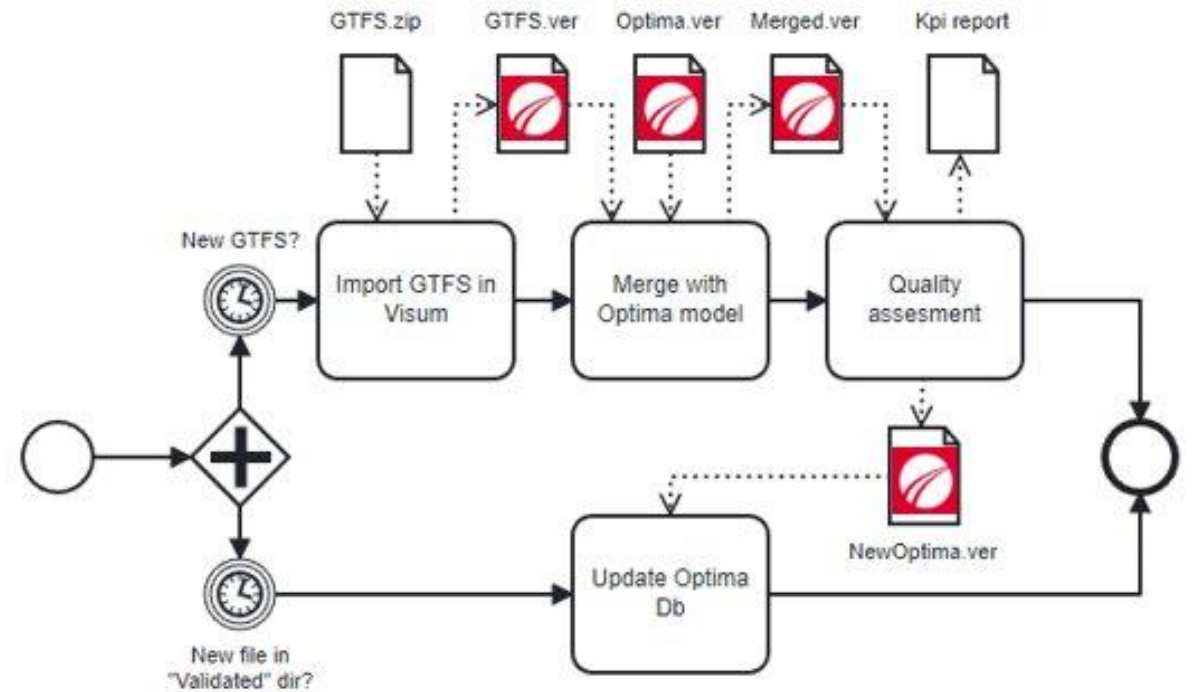
LAYER INFO

Automatic PuT Updater

PuT Updater was a process to update the PuT supply in Optima used by PuT ETA model, from a new Optima model in Visum, containing the updated PuT supply.

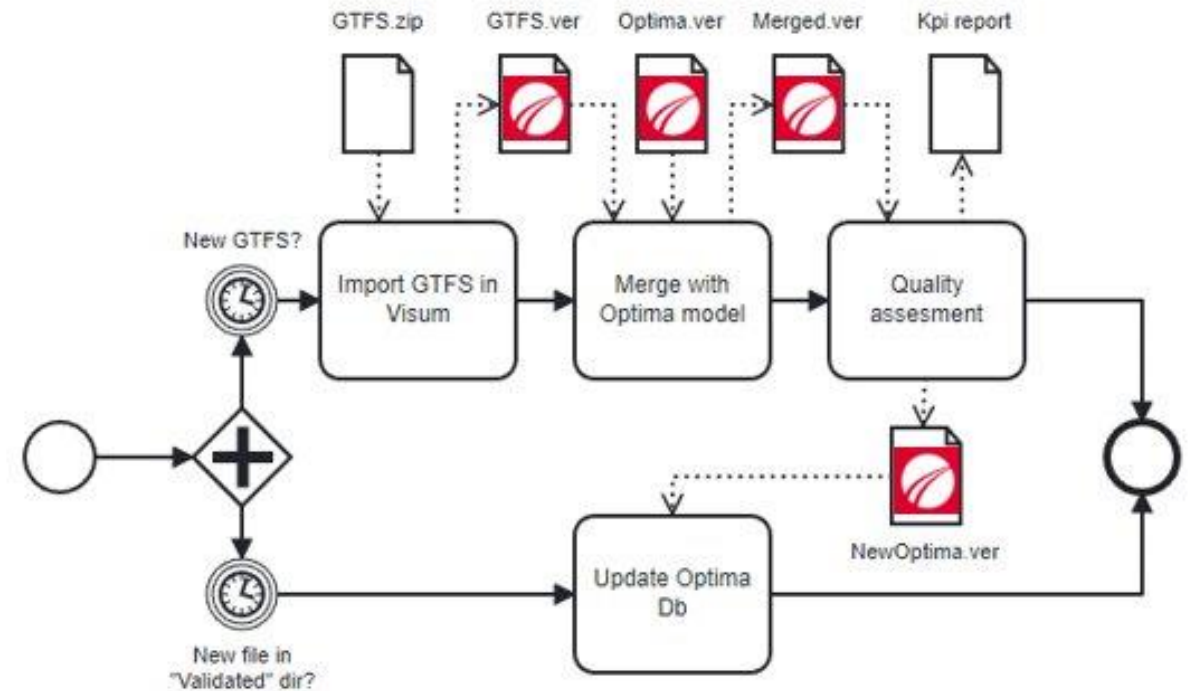
But, the modeler had to generate the new Visum supply model to be provided to the PuT Updater. Usually, this happened as manual modelling work, importing in Visum PT schedule (e.g., from GTFS), and validating manually.

Now, PTV Optima 2025 has automated the latter process.



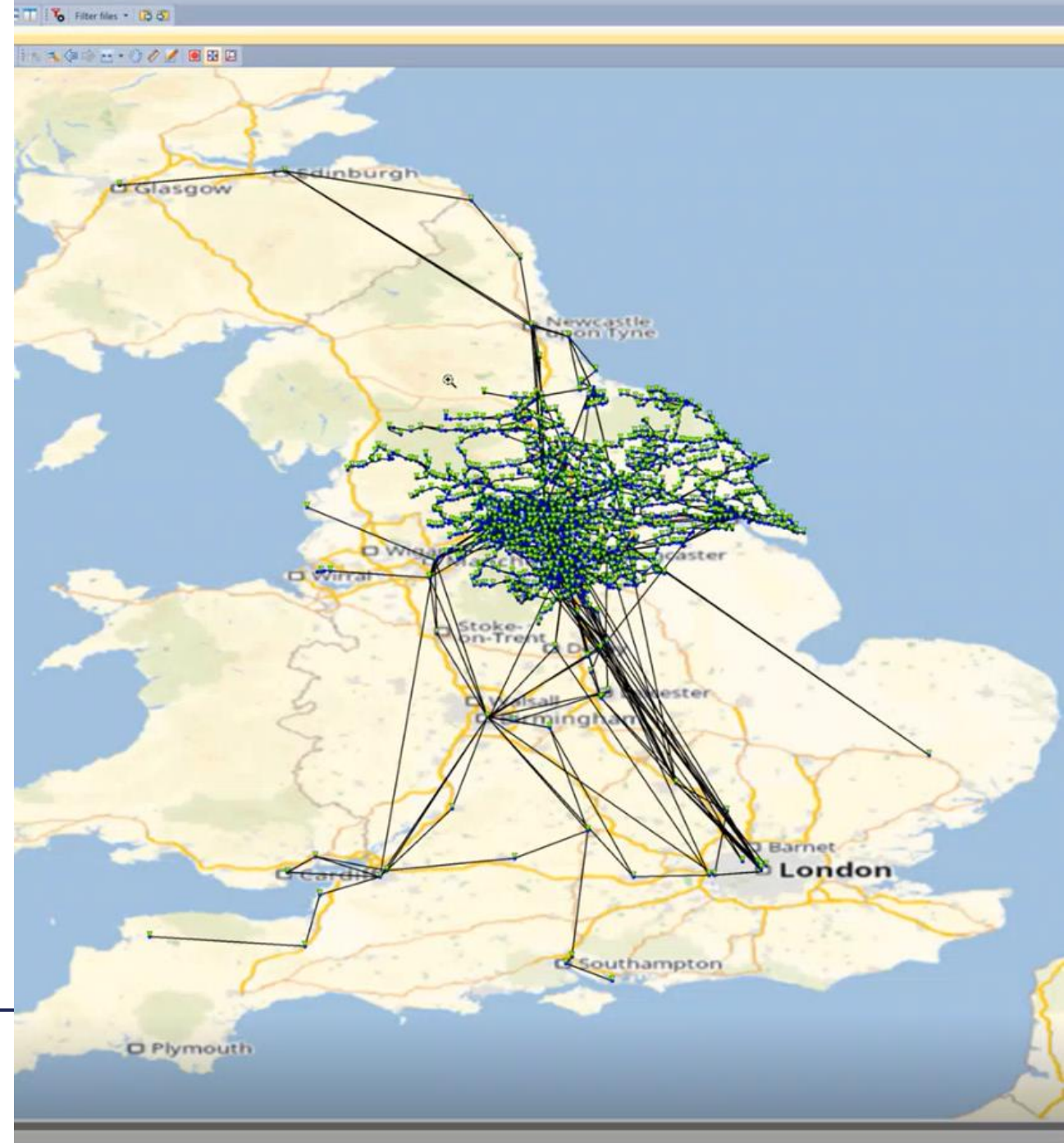
Automatic PuT Updater

- On a dedicated Optima server we add a PTV Visum instance. We automated the process of importing a GTFS, and PuT Supply import onto the former Optima model.
- PTV Optima listens when a new GTFS is published and triggers the process above, generating the corresponding Visum version input file.
- Import quality is automatically evaluated via indicators, and checked against configurable thresholds. In case of insufficient quality, the automatic update is prevented, and manual fix in the model is required, and guided.



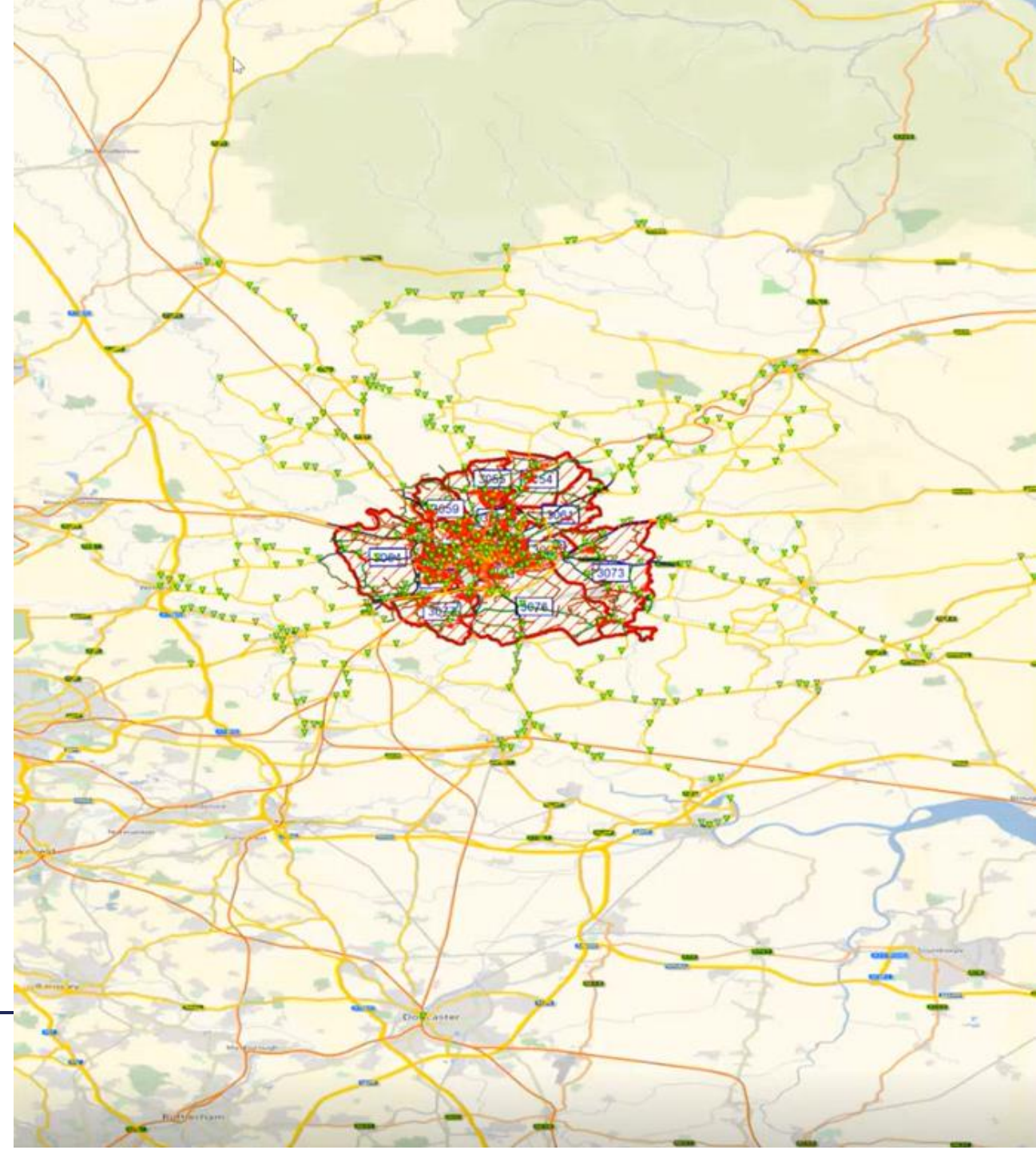
Automatic PuT Updater

PTV Optima listens when a new GTFS is published. When this happens, it downloads the latest GTFS version, and imports it in a dedicated Visum instance, on an Optima server.



Automatic PuT Updater

The new PuT Supply from GTFS, is imported onto the former PTV Optima model (PuT Supply Import), so that the stops and line routes netmatch the existing (validated, updated, officially used) PrT network used by the already running PTV Optima.



Automatic PuT Updater

Import quality is automatically evaluated via indicators, and checked against configurable thresholds.

If all the checks pass against the configured thresholds, the process automatically restarts only the PuT ETA service of PTV Optima, this way guaranteeing a smooth update of data, and minimizing downtimes.

In case of insufficient quality, the automatic update is prevented, and manual fix in the model is required, and guided.

```
QualityAssessmentSummary.txt
1 Put Updater Quality Check
2 2024-01-18T16:53:18.5213748+01:00
3
4
5 Files:
6 BasePrivateModelFileName: \\fs-dev.ptvag.ptv.de\products\Optima\PuTUpdaterDemo\Base
7 GTFSFilePath: \\fs-dev.ptvag.ptv.de\products\Optima\PuTUpdaterDemo\GTFS\itm_yorkshir
8 PuTSupplyData: \\fs-dev.ptvag.ptv.de\products\Optima\PuTUpdaterDemo\PuTSupplyData\Pu
9 ToBeValidatedModel: \\fs-dev.ptvag.ptv.de\products\Optima\PuTUpdaterDemo\ToBeValidat
10
11 Summary of kpis evaluation
12
13 *****
14
15 Stop point distance test passed!
16 False negative stops for lineroute test NOT passed for 214 line routes
17 (threshold=0):
18 Id : NumberOfFalseNegative
19 19_72,19_72_2,> : 2
20 19_46,19_46_2,> : 1
21 19_46,19_46_1,> : 1
22 19_46,19_46,> : 1
23 81_39,81_39_9,> : 25
24 6_58,6_58,> : 1
25 82_39,82_39_5,> : 25
26 X99,X99,> : 7
27 19A_46,19A_46,> : 3
28 19_72,19_72_1,> : 1
29 20_72,20_72,> : 3
30 20_72,20_72_3,> : 3
31 6_58,6_58_3,> : 1
32 20_72,20_72_4,> : 3
33 6_58,6_58_2,> : 1
34 19_72,19_72,> : 1
35 105_36,105_36_3,> : 4
36 20_72,20_72_1,> : 2
37 5_58,5_58_2,> : 1
38 6_58,6_58_1,> : 2
39 Golden_Tours_Hop_On_Hop_Off,Golden_Tours_Hop_On_Hop_Off,> : 2
40 25_72,25_72_1,> : 2
41 19_46,19_46_3,> : 1
42 1_58,1_58_1,> : 1
43 20_72,20_72_5,> : 2
44 11_58,11_58,> : 3
45 20_72,20_72_2,> : 2
46 A43,A43,> : 4
47 105_36,105_36_4,> : 14
48 CAS,CAS_5,> : 4
49 A43,A43_1,> : 2
50 CAS,CAS_6,> : 4
51 Y12,Y12_1,> : 3
```

Automatic PuT Updater

Import quality is automatically evaluated via indicators, for different PT objects: stop points, line routes, line route items.

These help the modeller in the manual validation to spot the issues.

For example, for stop points, the distance in meters from the original point in GTFS data is reported. By sorting in decreasing order of distance, the largest outliers can be processed, helping to identify error reasons: errors in original data, missing network infrastructure, errors in network attributes.

Also, duplicated stop points are reported as errors.

List (Stop points)

Number: 1.710	No	StopAreaNo	Code	Name	TypeNo	Directed	NodeNo	FromNodeNo	LinkNo	NumLines	Position Distance	Duplicate
1	37821	60332	22001535	Lockington Car Cross	0			3221516	2000454696	1	303.20	
2	40172	62583	32097082	Hunters Lodge Farm	0			3179676	2000451224	1	263.80	
3	37568	60079	22000993	Watton A164	0			3221516	2000454696	1	253.43	
4	40173	62584	32097083	Hunters Lodge Farm	0			3172582	2000451224	1	253.28	
5	8659	33787	32004686	St Katharines	0			3183231	2000451712	0	219.86	
6	36938	59449	22000235	Woodmansey Hull Road	0			3229160	2000455954	1	199.52	X
7	66786	59449	22000235	Woodmansey Hull Road	0			3229160	2000455954	1	190.85	X
8	38104	60615	22011916	Hulton Cranswick Beverley Rr	0			3221516	2000454696	1	186.61	
9	37564	60075	22000988	Scorborough Driffield Road	0			3221516	2000454696	1	186.51	
10	37874	60385	22001630	Woodmansey Hull Road	0			3229160	2000455954	1	181.83	
11	40056	62567	32096931	Thompsons Arms	0			3196219	2000452772	1	181.08	
12	40057	62568	32096932	Thompsons Arms	0			3193483	2000452772	1	180.96	
13	37898	60409	22001660	Beswick A164	0			3221516	2000454696	1	179.53	
14	67941	90452	45024172	Bus Station stand A (Stand A	0			29731	2000445682	0	178.88	
15	36937	59448	22000234	Dunswell Beverley Road	0			3229160	2000455954	1	178.45	
16	8658	33788	32004684	Bond Lane	0			3183231	2000451712	0	175.30	
17	40184	62695	32097107	Thirkley Park	0			3178606	2000451236	1	172.92	
18	40192	62703	32097115	Thirkley Park	0			3167094	2000451236	1	171.14	
19	42338	64849	32091006	Bagby Lane End	0			3178606	2000451236	1	158.05	
20	37570	60081	22000995	Hulton Cranswick Beverley Rr	0			3221516	2000454696	1	157.83	
21	42337	64848	32091005	Bagby Lane End	0			3167094	2000451236	1	155.33	
22	37169	59680	22000506	Hulton Beverley Road	0			3221516	2000454696	1	155.30	
23	36942	59453	22000239	Woodmansey Hull Road	0			3229160	2000455954	1	151.65	
24	37770	60281	22001464	Cottingham Hull Road	0			3230826	2000455955	1	145.33	
25	37923	60434	22001688	Cottingham Thwaite Street	0			3230826	2000455955	1	142.91	
26	37166	59677	22000503	Leconfield Main Street	0			3221516	2000454696	1	141.17	
27	68785	59455	22000242	Woodmansey Hull Road	0			3229160	2000455954	1	132.80	
28	37993	60504	22011713	Kilwick Crossroads	0			3221516	2000454696	1	132.52	
29	36934	59445	22000231	Dunswell Beverley Road	0			3229160	2000455954	1	132.08	
30	66787	59445	22000231	Dunswell Beverley Road	0			3229160	2000455954	1	125.85	X
31	36892	59403	22000188	Cottingham Thwaite Street	0			3230826	2000455955	1	125.14	X
32	36940	59451	22000237	Woodmansey Hull Road	0			3229160	2000455954	1	123.96	
33	37772	60283	22001466	Cottingham Hull Road	0			3230826	2000455955	1	94.01	
34	36890	59401	22000186	Cottingham Thwaite Street	0			3230826	2000455955	1	92.32	
35	38202	60713	22001398	Cottingham High School	0			3230826	2000455955	1	90.97	
36	40221	62732	32000019	Shops	0			3189688	2000452414	1	88.26	
37	36626	59137	22011971	Hoime on Spalding Moor	0			3206782	2000453891	1	84.76	
38	36636	59147	22011981	Haisthorpe Main Road	0			3243653	2000456671	2	82.39	
39	37778	60289	22001472	Cottingham Harland Way	0			3230826	2000455955	1	81.72	
40	37164	59675	22000501	Leconfield Main Street	0			3221516	2000454696	1	75.67	
41	6533	5453	32001494	Windmill Farm	0			3177398	2000451530	0	74.29	
42	36614	59125	22011949	Low Farm	0			3203282	2000453464	1	72.35	
43	38620	61131	22900205	Kelvin Hall School	0			3230826	2000455387	3	6.83	
44	9274	28362	32900023	Holgate Methodist Church	0			2428741	925386564	3	7.43	
45	9275	28363	32900024	West Bank	0			2607142	1225712899	3	7.00	
46	9276	28432	32900025	West Bank	0			2607142	1225712898	3	7.04	
47	9277	28431	32900026	The Regent	0			2687413	26981268	3	6.55	
48	9278	28394	32900027	The Regent	0			2360397	26981292	3	6.07	
49	9279	28365	32900028	Acomb Shops	0			2629501	26981519	1	34.70	X
50	9280	26675	32900029	Acomb Shops	0			2279822	26981407	1	7.91	
51	9281	19626	32900030	Acomb Church Hall	0			3022810	756501193	1	7.21	X
52	9282	19628	32900031	Acomb Library	0			3022810	756501192	4	10.75	
53	9283	19625	32900032	Acomb Methodist Church	0			2310691	78747715	4	5.85	
54	9284	19629	32900033	Acomb Methodist Church	0			2310691	78747717	3	6.78	
55	9285	46047	32903685	Church Cottage	0			3191477	1234087335	1	12.83	
56	9286	46048	32903686	Church Cottage	0			3191411	1234087335	1	5.04	
57	9287	46049	32903687	Manor School Grounds	0			2132704	1123756227	2	46.67	
58	9288	46050	32903688	Scoreby Lodge	0			3198678	1234082410	1	6.42	
59	9289	33216	32900037	Askham Lane	0			2924345	1165011480	1	3.97	
60	9290	33210	32900038	Askham Lane	0			3024413	1165011480	2	4.80	
61	9291	5363	32900039	Ainess Drive	0			2649589	26983546	4	4.49	
62	9292	5364	32900040	Acomb Park	0			2860381	763879370	4	7.28	
63	9293	5319	32900041	Acomb Park	0			2934181	763879370	4	7.60	
64	9294	5365	32900042	Eden Close	0			2744847	968961812	4	4.62	
65	9295	5366	32900043	Moorcroft Road	0			2268983	26983509	4	3.13	
66	9296	20186	32900044	Moor Lane Car Park	0			3016988		4	6.27	

Automatic PuT Updater

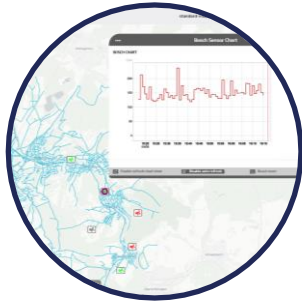
Import quality is automatically evaluated via indicators, for different PT objects: stop points, line routes, line route items.

These help the modeller in the manual validation to spot the issues.

For example, for line routes the ratio between the route length in the original data, and in the reconstructed route, are compared. Also, the correctness of the sequence of stops served is verified, and errors reported.

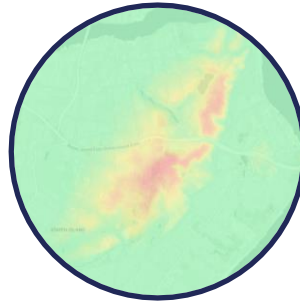
Number	TBusCode	LineName	Name	DirectionCode	StopsServed	Length	LinkRunTime	LenRatio	NumFalseNegDI	ListFalseNegSP	NumFalsePosSI	ListFalsePosSP
1	Bus	105_36	105_36_3	>	10	3.778km	3min 49s	1.00	4	2200YEA01242	0	0
2	Bus	105_36	105_36_4	>	12	4.288km	4min 22s	1.00	14	2200YEA01480	11	2896,2895,2853
3	Bus	10A	10A	>	57	25.902km	1h 13min 59s	1.00	0	0	0	0
4	Bus	10A	10A_1	>	32	17.379km	28min 20s	1.00	0	0	0	0
5	Bus	10_58	10_58	>	23	7.642km	29min 21s	1.00	0	0	0	0
6	Bus	10_58	10_58_1	>	48	22.529km	57min 54s	1.00	12	2200YEA00532	16	2305,2304,3462
7	Bus	10_58	10_58_2	>	55	24.309km	1h 12min 1s	1.00	0	0	0	0
8	Bus	11_58	11_58	>	35	10.929km	40min 45s	1.00	3	3290YEA00456	3	34450,3290YEA
9	Bus	11_58	11_58_1	>	23	7.415km	29min 3s	1.00	1	3290YEA00112	1	3290YEA00101
10	Bus	11_58	11_58_2	>	33	10.278km	37min 35s	1.00	2	3290YEA00718	2	3290YEA00800
11	Bus	11_58	11_58_3	>	30	9.983km	37min 6s	1.00	3	3290YEA00456	3	34450,3290YEA
12	Bus	11_58	11_58_4	>	39	12.375km	44min 33s	1.00	2	3290YEA00718	2	3290YEA00901
13	Bus	121	121_12	>	74	55.224km	52min 3s	1.00	18	2200YEA01636	33	2991,2210,2211
14	Bus	121	121_3	>	52	35.719km	35min 42s	1.00	7	2200YEA00031	9	1869,1867,2184
15	Bus	121	121_5	>	38	20.991km	19min 12s	1.00	11	2200YEA00607	11	2200YEA00244
16	Bus	121	121_7	>	74	54.137km	52min 3s	1.00	18	2200YEA01636	33	2991,2210,2211
17	Bus	121	121_8	>	57	39.253km	38min 45s	1.00	10	2200YEA00515	15	2290,2719,2288
18	Bus	13_44	13_44	>	22	8.089km	31min 56s	1.00	1	3290YEA00586	1	3290YEA00726
19	Bus	13_44	13_44_1	>	46	14.918km	52min 13s	1.00	2	3290YEA00779	2	3290YEA00571
20	Bus	13_44	13_44_10	>	6	3.049km	7min 27s	1.00	1	3290YEA00586	1	3290YEA00726
21	Bus	13_44	13_44_11	>	56	18.787km	1h 3min 51s	1.00	2	3290YEA00779	2	3290YEA00571
22	Bus	13_44	13_44_12	>	55	19.333km	1h 6min 21s	1.00	3	3290YEA00586	3	3290YEA00723
23	Bus	13_44	13_44_13	>	34	13.297km	48min 31s	1.00	1	3290YEA00109	1	3290YEA00112
24	Bus	13_44	13_44_14	>	12	4.192km	12min 6s	1.00	3	3290YEA00586	3	3290YEA00723
25	Bus	13_44	13_44_15	>	45	17.493km	1h 38s	1.00	3	3290YEA00586	3	3290YEA00723
26	Bus	13_44	13_44_16	>	51	17.071km	56min 40s	1.00	2	3290YEA00779	2	3290YEA00571
27	Bus	13_44	13_44_17	>	52s	1.00	3290YEA00586	52s	1.00	3290YEA00723	2	3290YEA00571
28	Bus	13_44	13_44_18	>	21s	1.00	3290YEA00779	21s	1.00	2	3290YEA00571	
29	Bus	13_44	13_44_19	>	54s	1.00	3290YEA00586	54s	1.00	2	3290YEA00723	
30	Bus	13_44	13_44_20	>	58s	1.00	3290YEA00586	58s	1.00	3	3290YEA00723	
31	Bus	13_44	13_44_21	>	31s	1.00	3290YEA00109	31s	1.00	1	3290YEA00112	
32	Bus	13_44	13_44_22	>	58s	1.00	3290YEA00586	58s	1.00	3	3290YEA00723	
33	Bus	13_44	13_44_23	>	32s	1.00	3290YEA00779	32s	1.00	2	3290YEA00571	
34	Bus	13_44	13_44_24	>	27s	1.00	3290YEA00586	27s	1.00	3	3290YEA00723	
35	Bus	13_44	13_44_25	>	37s	1.00	12 2200YEA00029	37s	1.00	11 1867,2184,2185		
36	Bus	13_44	13_44_26	>	12s	1.00	17 2200YEA00039	12s	1.00	33 1877,2693,2282		
37	Bus	13_44	13_44_27	>	42s	1.00	10 2200YEA00029	42s	1.00	9 1867,2184,2185		
38	Bus	13_44	13_44_28	>	53s	1.00	1 3290YEA01068	53s	1.00	1 3290YEA00824		
39	Bus	13_44	13_44_29	>	50s	1.00	0	50s	1.00	0	0	
40	Bus	13_44	13_44_30	>	14s	1.00	2 3290YEA00779	14s	1.00	2 3290YEA00571		
41	Bus	13_44	13_44_31	>	10s	1.00	1 3290YEA00530	10s	1.00	1 3290YEA00783		
42	Bus	13_44	13_44_32	>	25s	1.00	2 3290YEA00779	25s	1.00	2 3290YEA00571		
43	Bus	13_44	13_44_33	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
44	Bus	18_44	18_44_1	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
45	Bus	18_44	18_44_2	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
46	Bus	184_5	184_5	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
47	Bus	184_5	184_5_1	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
48	Bus	184_5	184_5_2	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
49	Bus	185_5	185_5	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
50	Bus	18_36	18_36	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
51	Bus	18_36	18_36_1	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
52	Bus	18_36	18_36_2	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
53	Bus	18_36	18_36_3	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
54	Bus	18_36	18_36_4	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
55	Bus	18_36	18_36_5	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
56	Bus	18_36	18_36_6	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
57	Bus	18_36	18_36_7	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
58	Bus	196	196	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
59	Bus	196	196_1	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
60	Bus	19A_46	19A_46	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
61	Bus	19A_46	19A_46_1	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
62	Bus	19M	19M	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
63	Bus	19M	19M_1	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
64	Bus	19M	19M_2	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
65	Bus	19X	19X	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
66	Bus	19_46	19_46	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
67	Bus	19_46	19_46_1	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
68	Bus	19_46	19_46_2	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623
69	Bus	19_46	19_46_3	>	11	3.576km	23min 38s	1.00	1	3290YEA00670	1	3290YEA03623

Environmental-Sensitive Traffic Management



AQ sensor data

- › AQ sensor layer in traffic operator UI
- › Visualization of live indicators
- › Visualization of recent data series



Evaluation of traffic pollution

- › Visualization of traffic emissions from HD data
- › Estimation of traffic emissions from custom emission model
- › Visualization of pollutant dispersion data



Decision support

- › Evaluation and comparison of traffic intervention scenarios
- › Emission simulation from traffic microsimulation

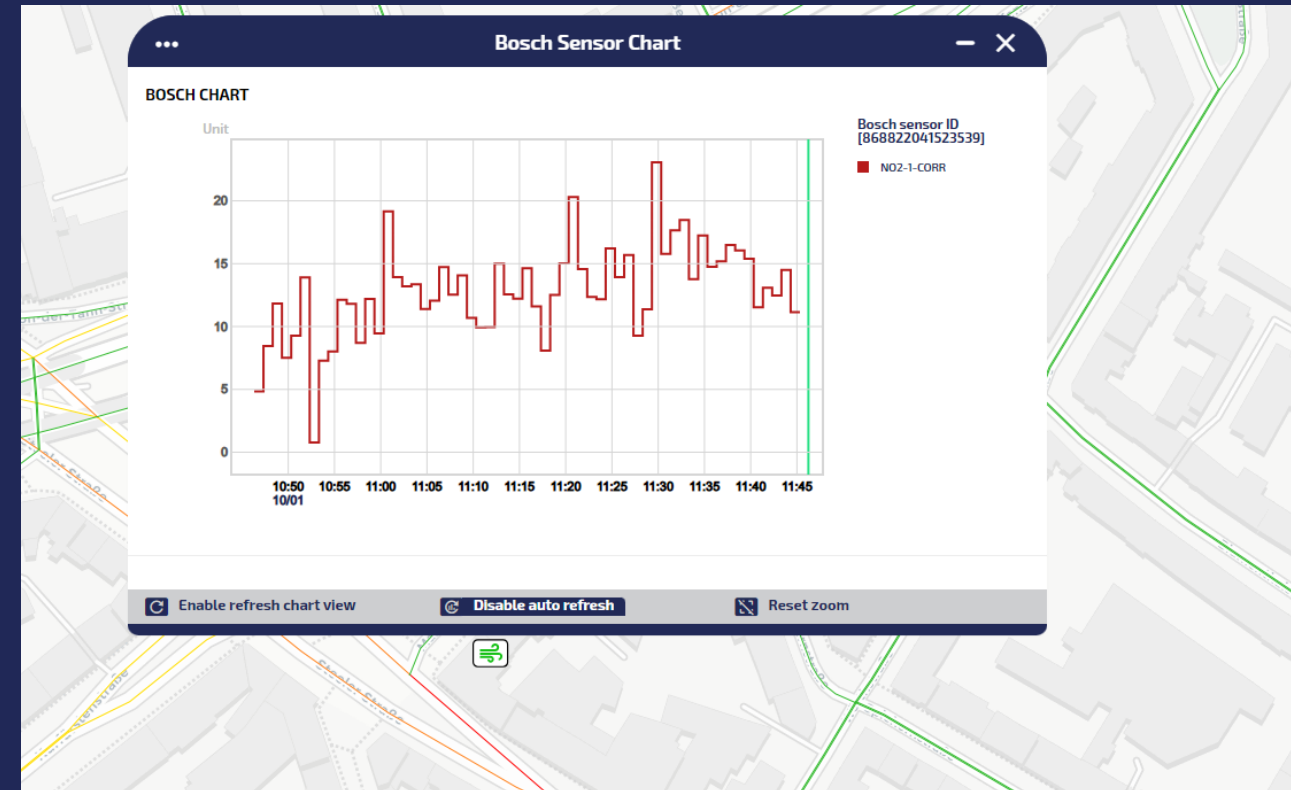
* PTV Optima 2025

AQ sensor data

PTV Optima acts as a data hub, collecting streaming data from the different sources of the Mobility Control Center, and in this case also Air Quality Sensors.

PTV Optima allows to connect to an existing instance of Bosch AQ sensors (AQ Monitoring Boxes), from Bosch Cloud.

Operators can see the sensor position, the latest reading (with customizable threshold number, values and corresponding colors, for each of the supported pollutants). It is also possible to access to the latest 24 hours of readings.

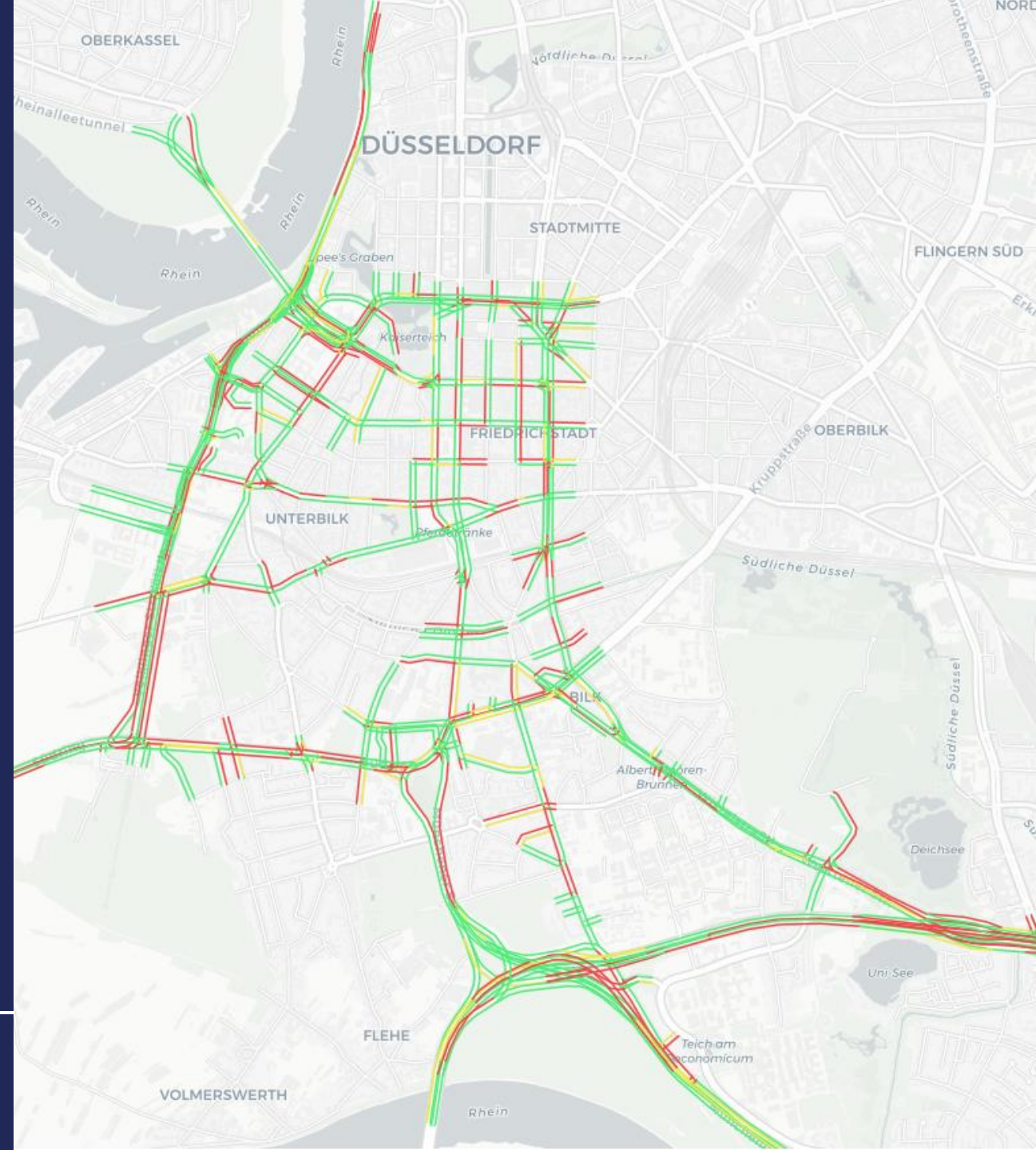


Road traffic emissions data ingestion

PTV Optima 2025 allows from a third-party data source to provide road emission measurements (or estimates), at any desired density. This way it is possible for the operators to display on the Optima network the measured (or estimated) sources of traffic emissions, for example identifying most polluting traffic conditions.

On top of these data, PTV Optima also computes aggregated custom indicators, per selected pollutant, area or corridor, or whole network.

Note: these are not emission estimates by PTV Optima, but rather these are comparable to traffic measurements, i.e., are data provided by external sources.



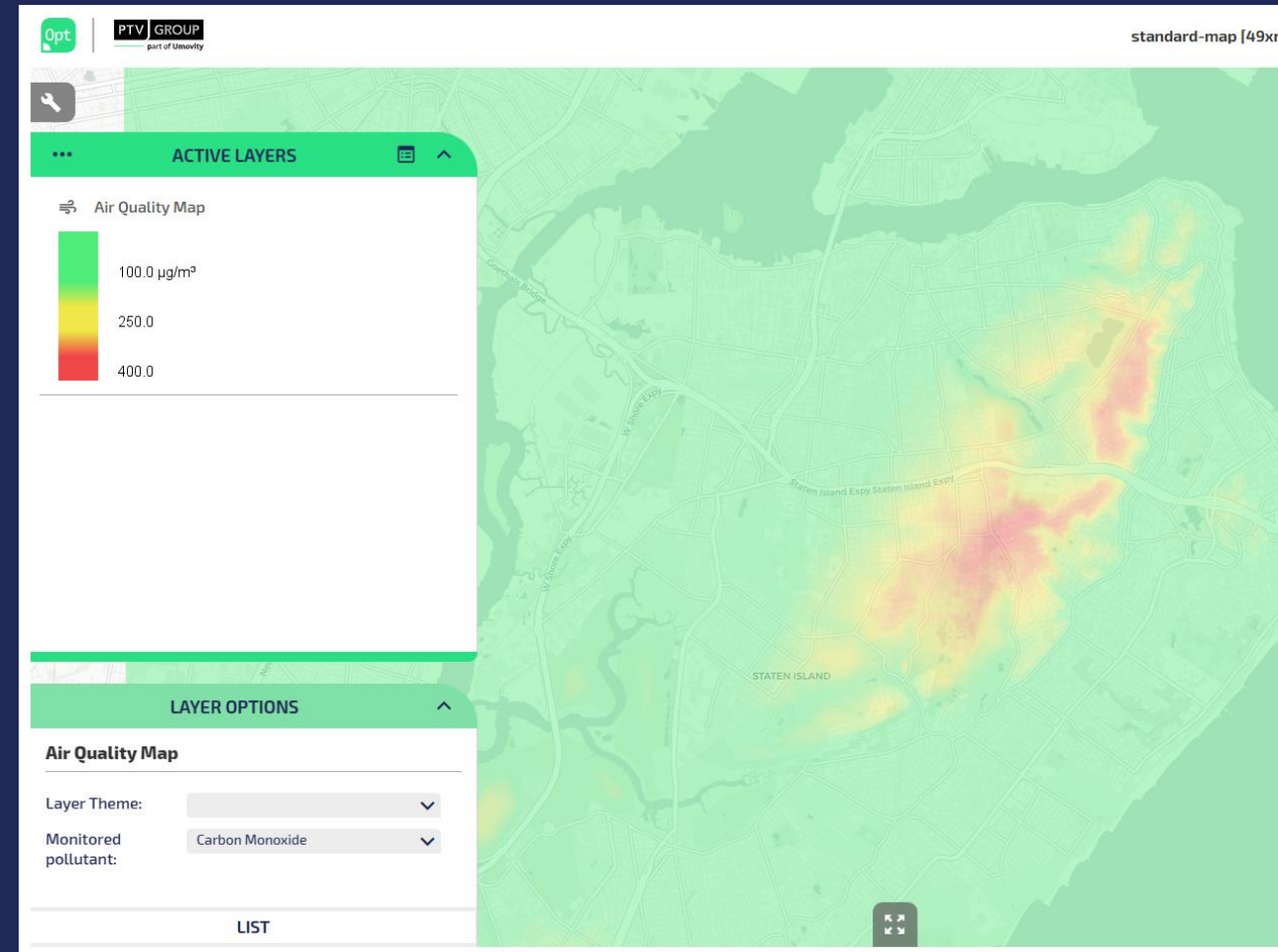
Road traffic dispersion data ingestion

PTV Optima 2025 allows from a third-party data source to provide emission concentration measurements (or estimates). This way it is possible for the operators to display not only on the network but also on the surrounding territory the measured (or estimated) concentrations of pollutants, for example identifying most affected areas.

Also in this case, thresholds are configurable (values).

No KPIs are supported, on this data.

Note: these are not dispersion estimates by PTV Optima, but rather these are comparable to the traffic measurements (or rather model estimates) over a plane, i.e., are data provided by external sources.



Road traffic emission estimate (macroscopic)

PTV Optima 2025 macroscopic model (TRE) supports custom emission estimation, based on the simulated traffic volumes and conditions.

These can be used to compare alternative scenarios, how these impact road traffic emissions.



Road traffic emission estimate (macroscopic)

PTV Optima supports estimation of a set of emissions (CO, CO₂, NO_x, HC, PM, Fuel consumption), from a custom emission factor model. I.e., a kilometeric emission volume for each emission type, as a function of the average speed, for a given set of emission vehicle types (transport system, engine size, fuel type). The numerosity of the vehicle classes in the transport system fleet can be customized, and are proportioned per the simulated tsys volume.

A default COPERT 4 dataset can be requested if available, for supported countries. This can be further customized at need, as a product configuration.

The feature is for now released for the module Operational Planning, and available via API only.

Road traffic emission estimate (microscopic)

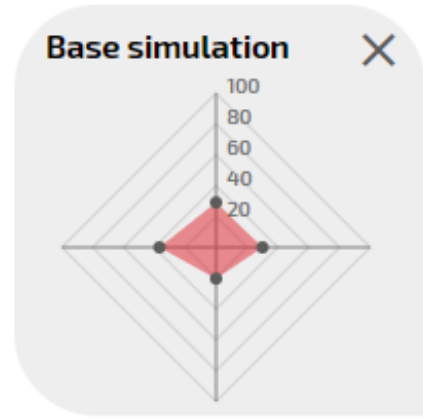
PTV Optima 2025 microscopic model (Optima Micro - Vissim) supports custom emission estimation, based on the simulated traffic volumes and conditions.

These can be used to compare alternative scenarios, how these impact road traffic emissions.

Simulation group name

Bridge closed

- + Base simulation ▾
- + Simulation 1 ▲
- Skeldergate Bridge Maintenance (26)
- + Simulation 2 ▾
- + Simulation 3 ▾

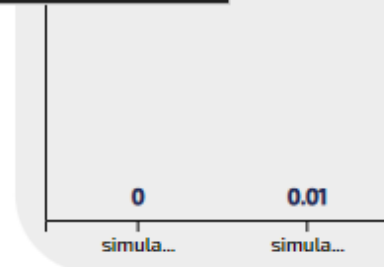
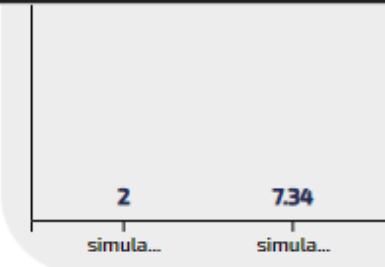
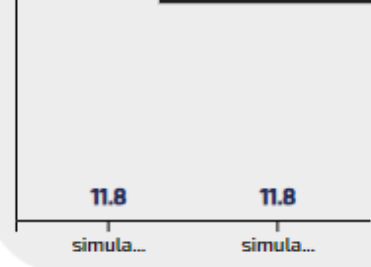


Measurement of ... ✕

Tot Delay [s] (avg ... ✕

Avg Delay [s] (min... ✕

Measurement of Nitrogen Oxides emission per subnetwork, time interval [g] (NO_x)



Road traffic emission estimate (microscopic)

To perform the evaluation, Optima Micro Vissim model is configured to launch Bosch ESTM.sim service, already available in PTV Vissim since version 2024.

Improved accuracy of TomTom Live Traffic



Dynamic Sectioning

- › TomTom connector for live traffic supports TomTom feed specifications with Dynamic Sectioning
- › More accurate locationing of congestions and speed information

Support of TomTom *Dynamic Sectioning*

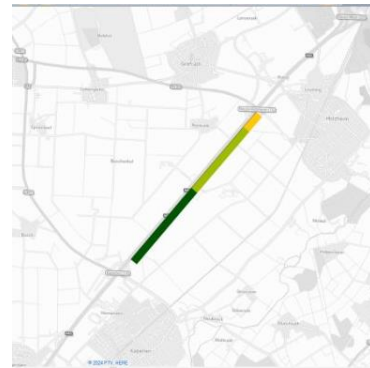
PTV Optima 2025 connector to TomTom Live Traffic has been upgraded to support TomTom congestion data locationing referred as «Dynamic Sectioning». This allows a more accurate positioning of the congestions over the network, and a more fine grained granularity of the live speed information.



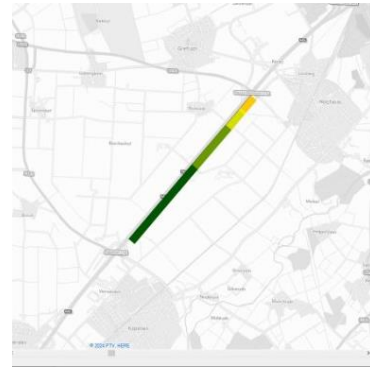
Support of TomTom Dynamic Sectioning

Dynamic Sectioning for TomTom data is already used in PTV Flows too.

Before



After



Thank you



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