

# NDS.LIVE DEMONSTRATORS

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# NDS.LIVE DEMONSTRATIONS

## 1. NDS.Live size reduction

### NDS.LIVE SIZE REDUCTION: 38% (SMART LAYER TILE)

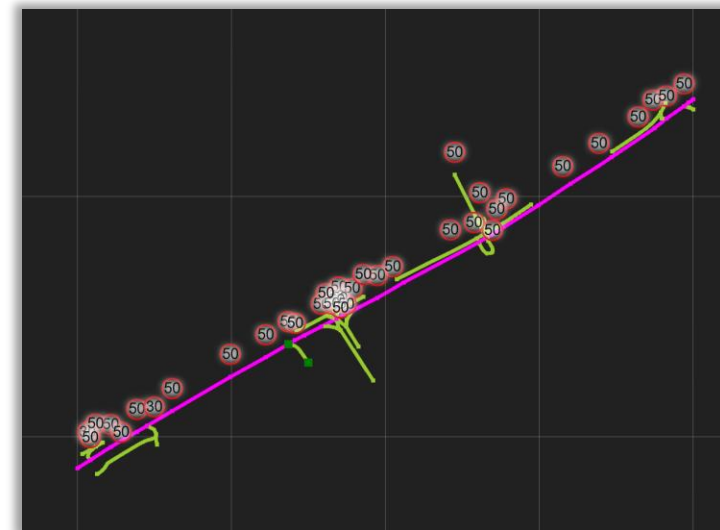
NDS.Live module version:  
2021.06



NDS.Live module version:  
2021.07

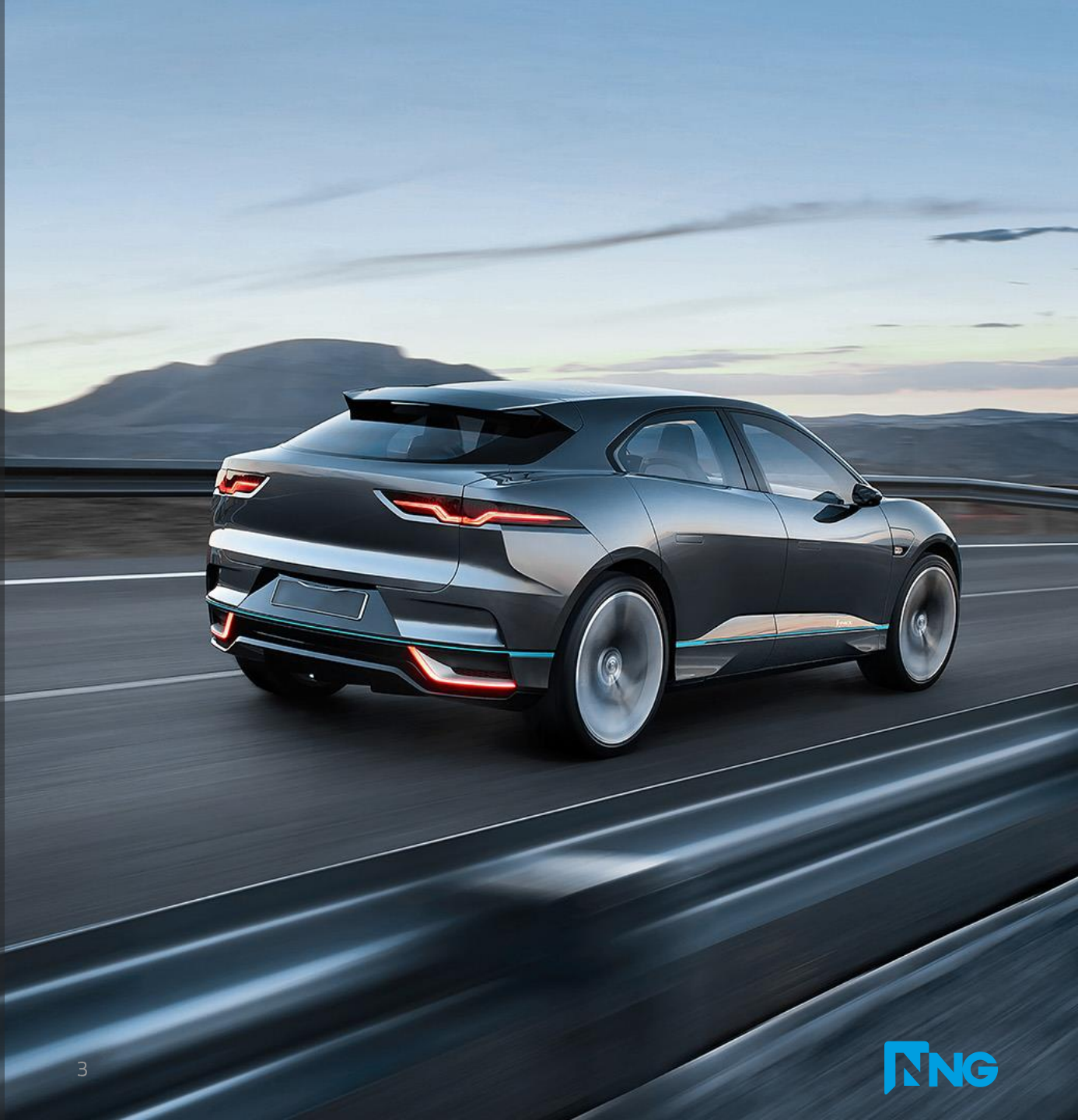


## 2. LiveLab implementation of path service



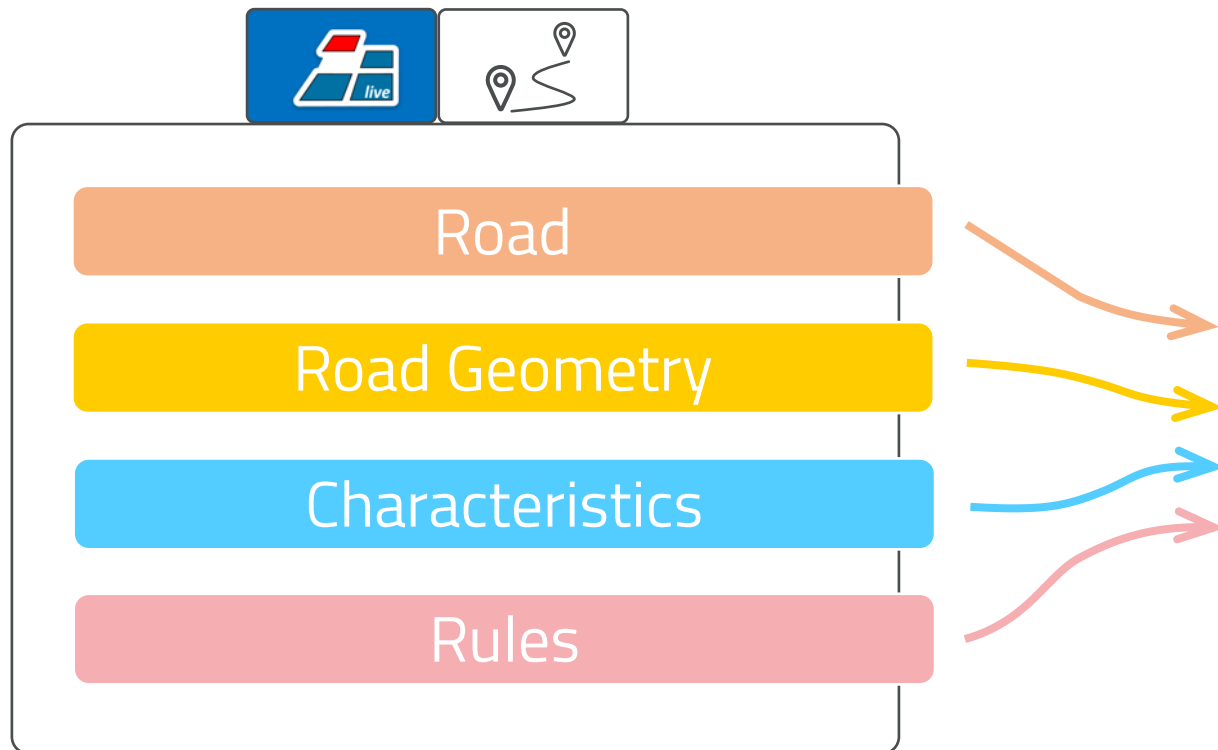
# 1

## NDS.LIVE SIZE REDUCTION

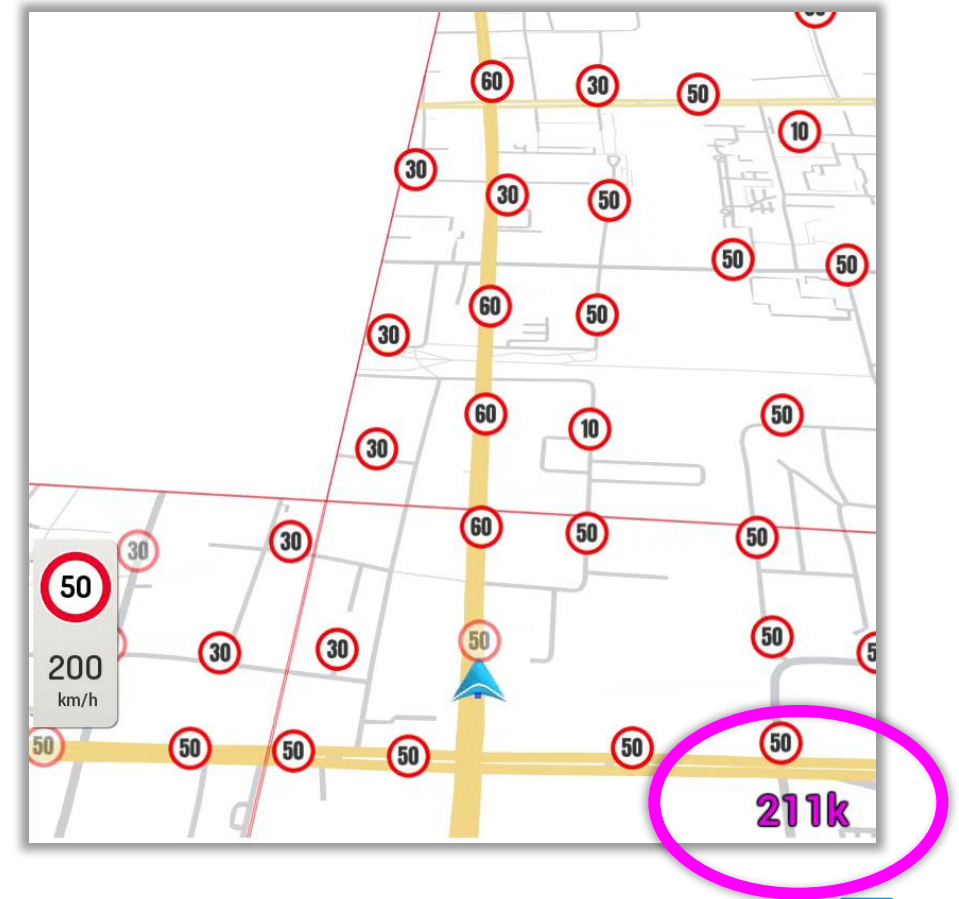


# NDS.LIVE SIZE REDUCTION

Smart Layer **Tile** Service for ISA

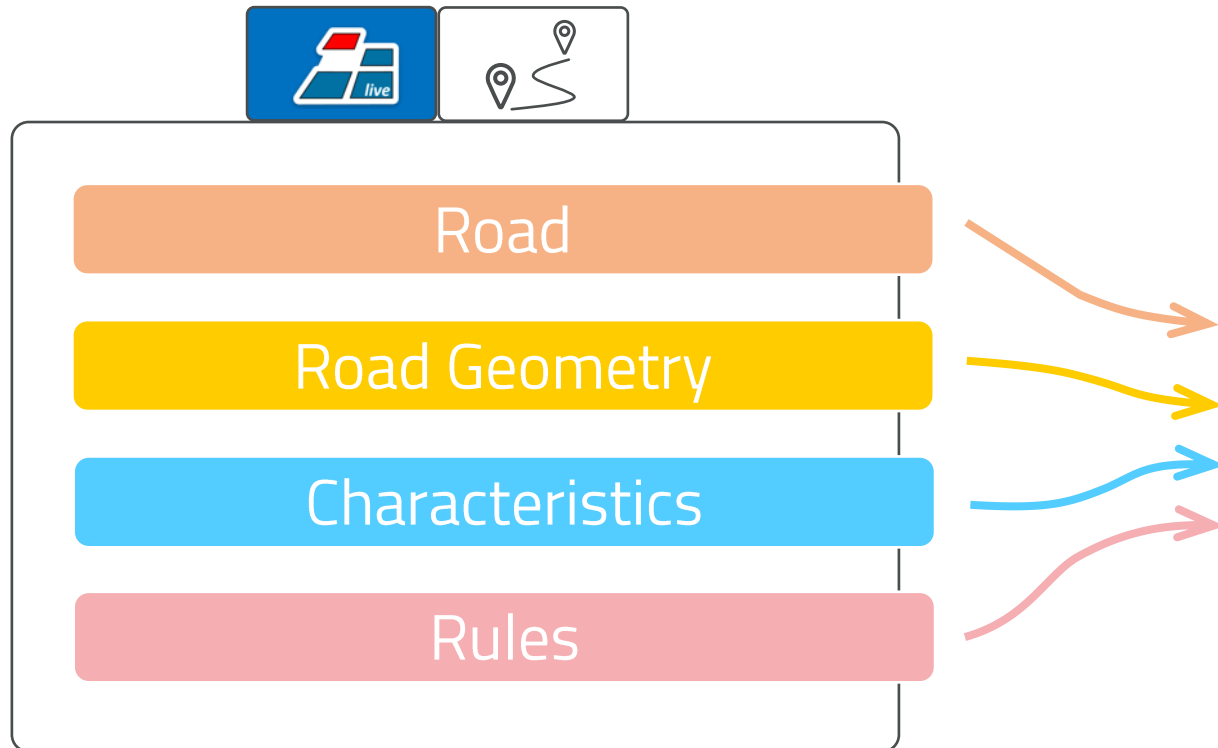


NDS.Live module version:  
**2021.06**

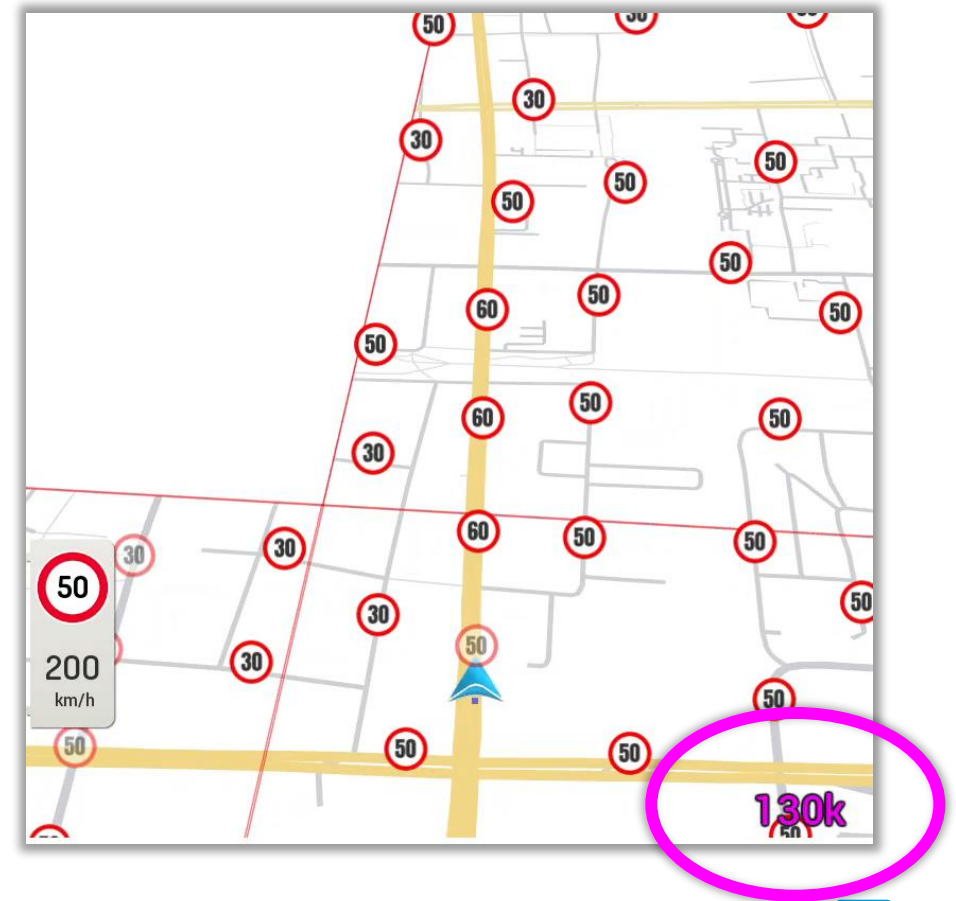


# NDS.LIVE SIZE REDUCTION

Smart Layer **Tile** Service for ISA

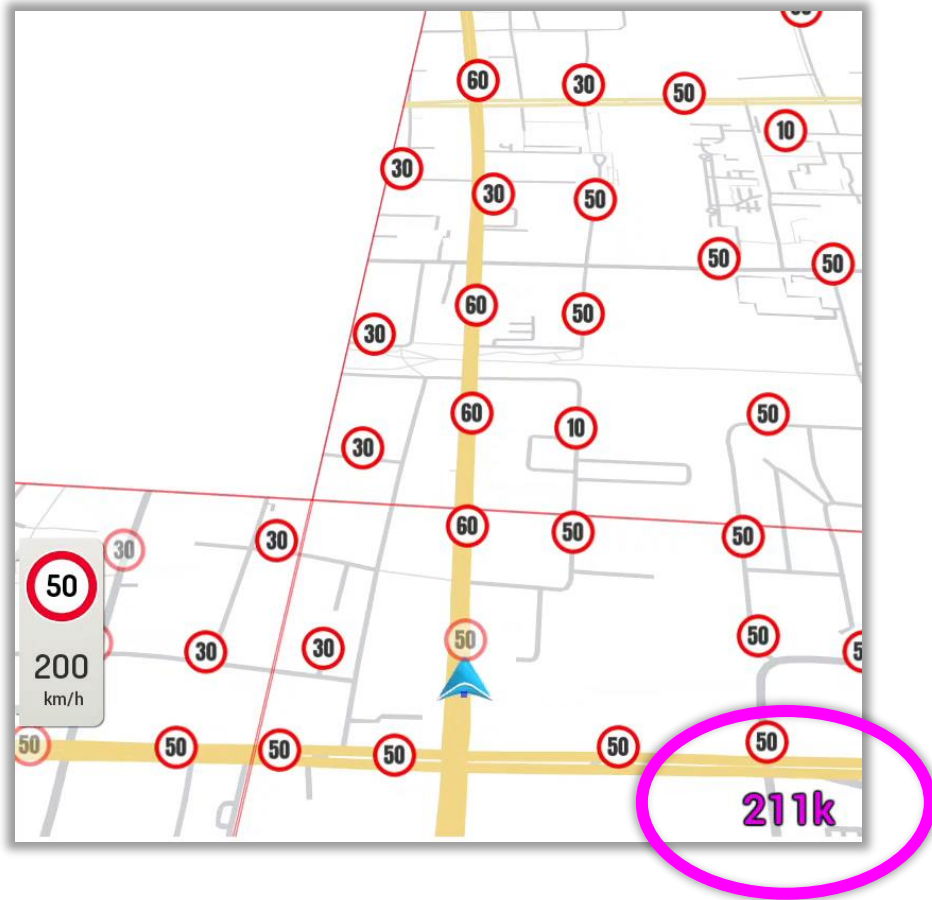


NDS.Live module version:  
**2021.07**

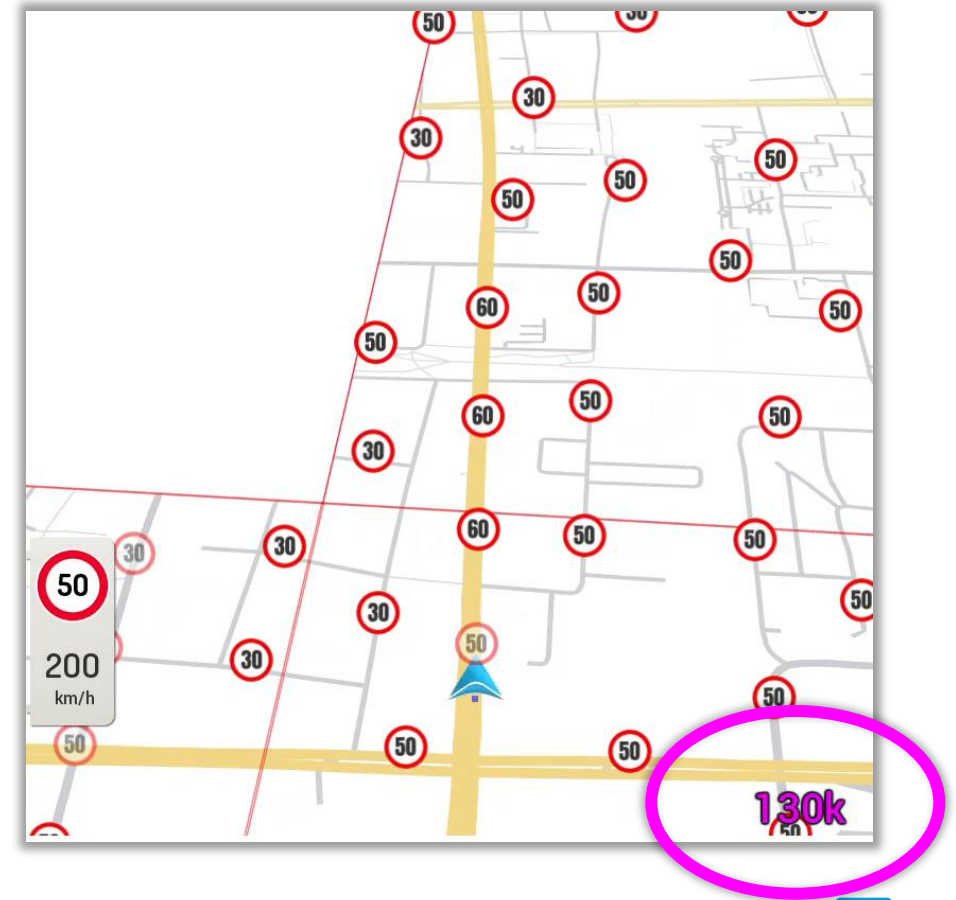


# NDS.LIVE SIZE REDUCTION: 38% (SMART LAYER TILE)

NDS.Live module version:  
**2021.06**



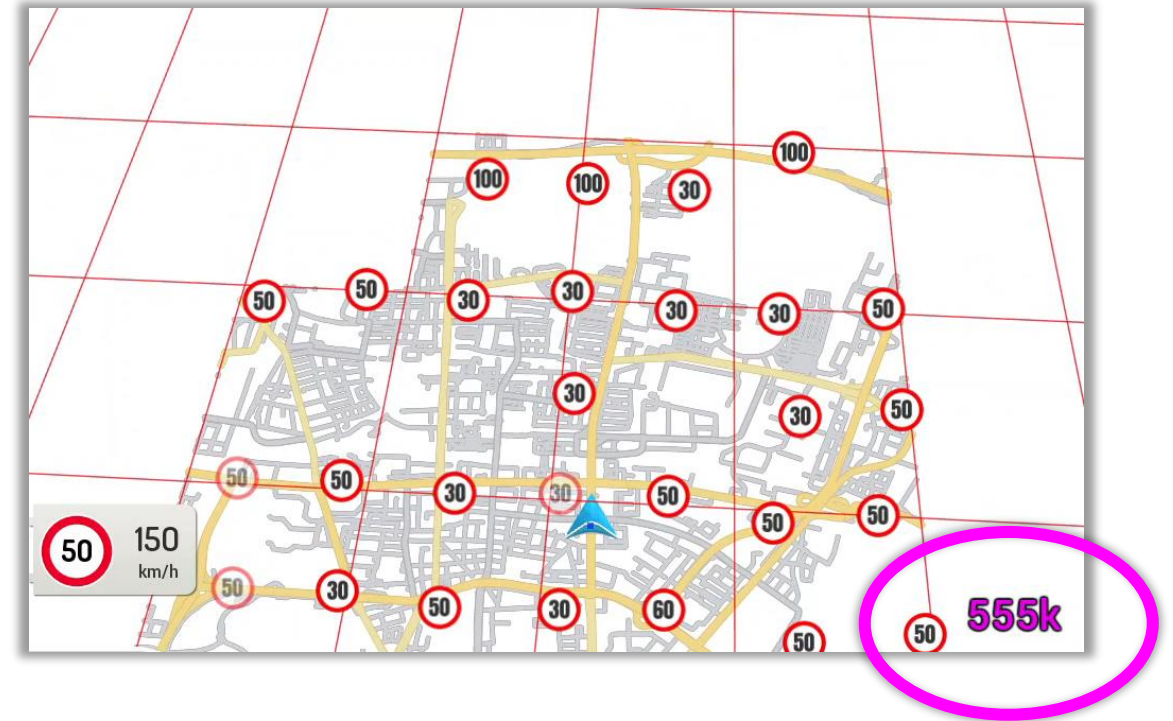
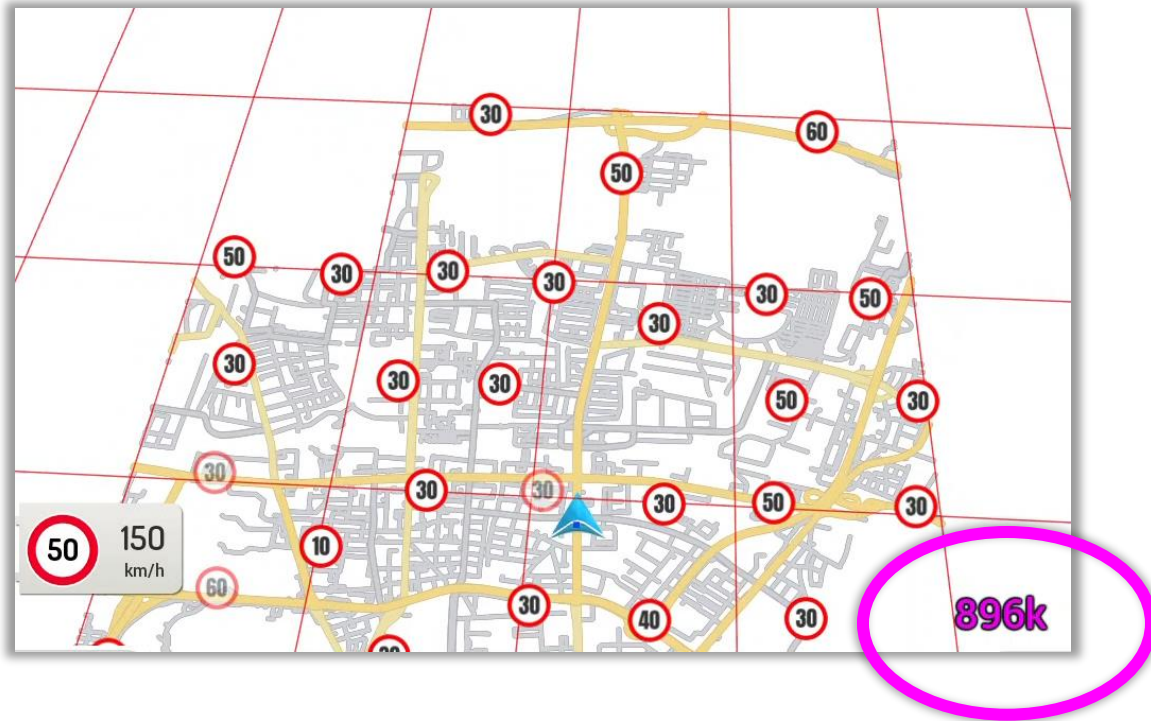
NDS.Live module version:  
**2021.07**



# NDS.LIVE SIZE REDUCTION: 38% (CORRIDOR TILES)

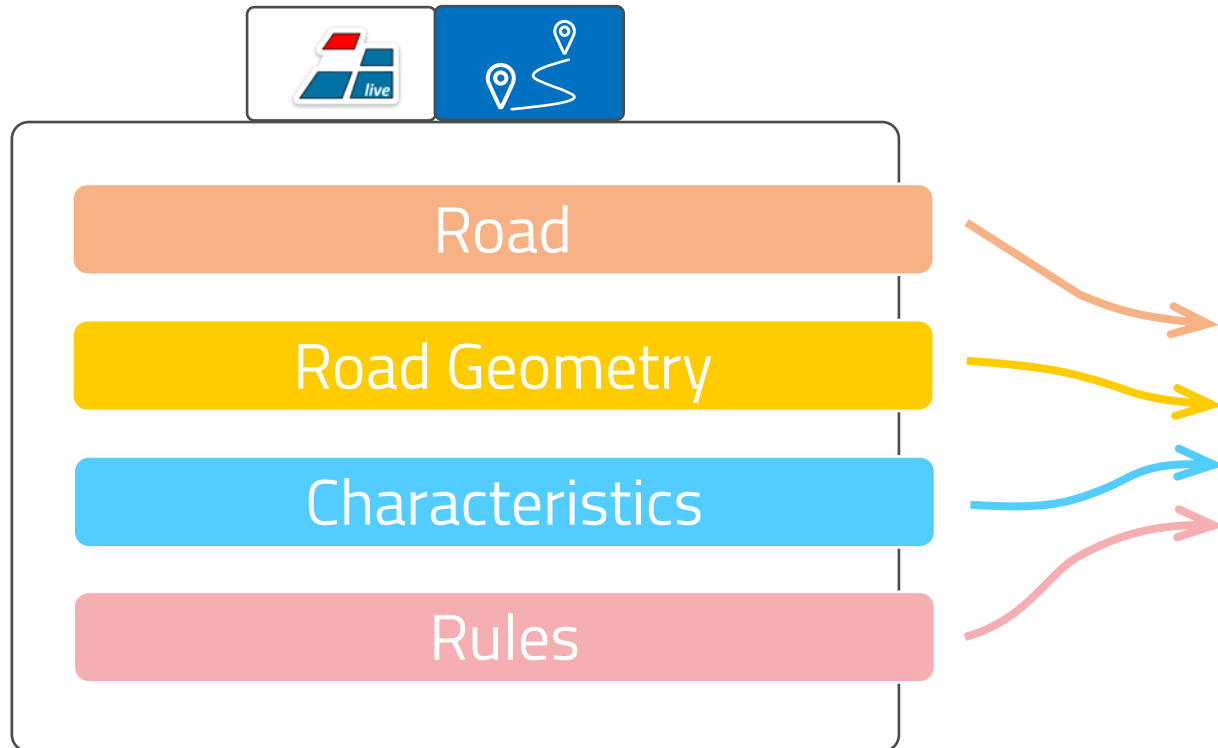
NDS.Live module version:  
2021.06

NDS.Live module version:  
2021.07

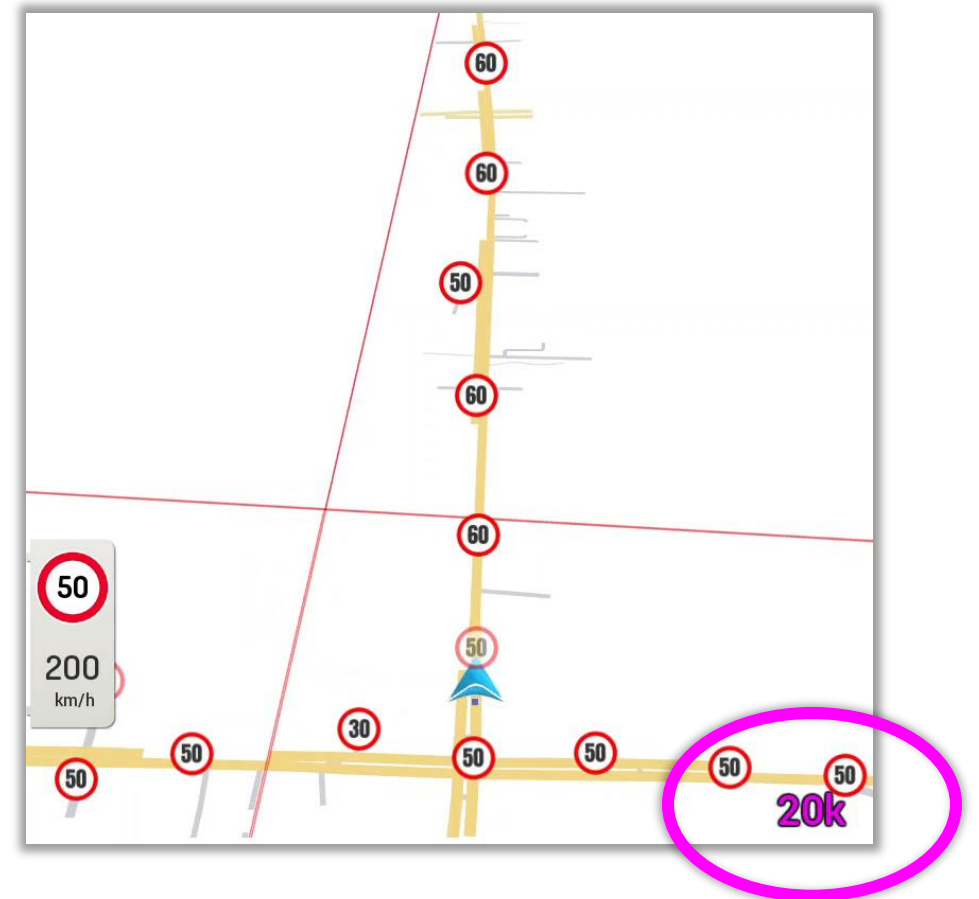


# NDS.LIVE SIZE REDUCTION

Smart Layer **Path** Service for ISA



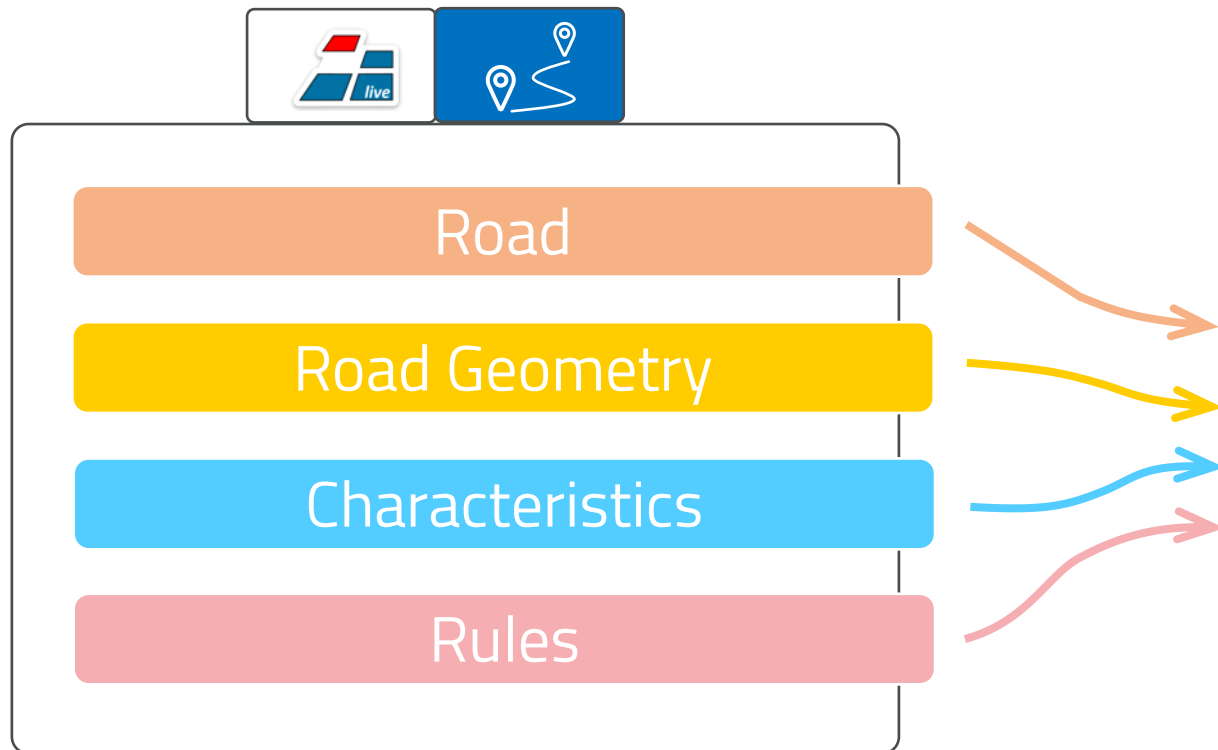
NDS.Live module version:  
**2021.06**



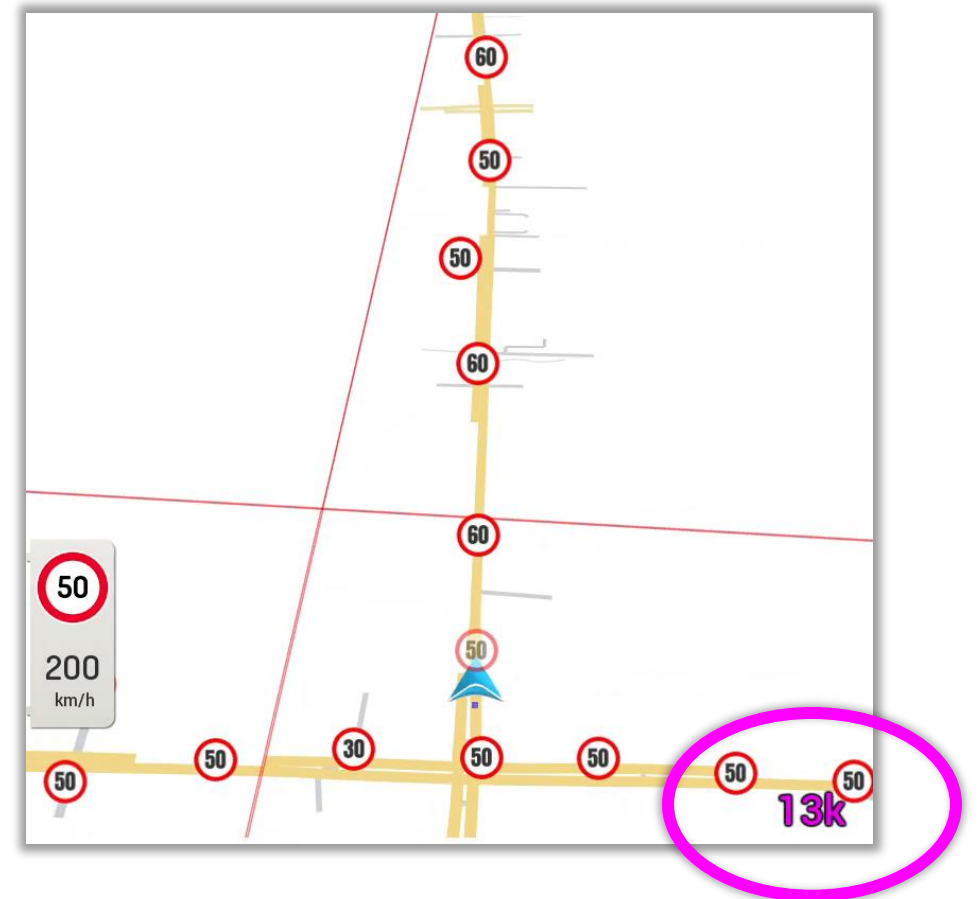


# NDS.LIVE SIZE REDUCTION

Smart Layer Path Service for ISA

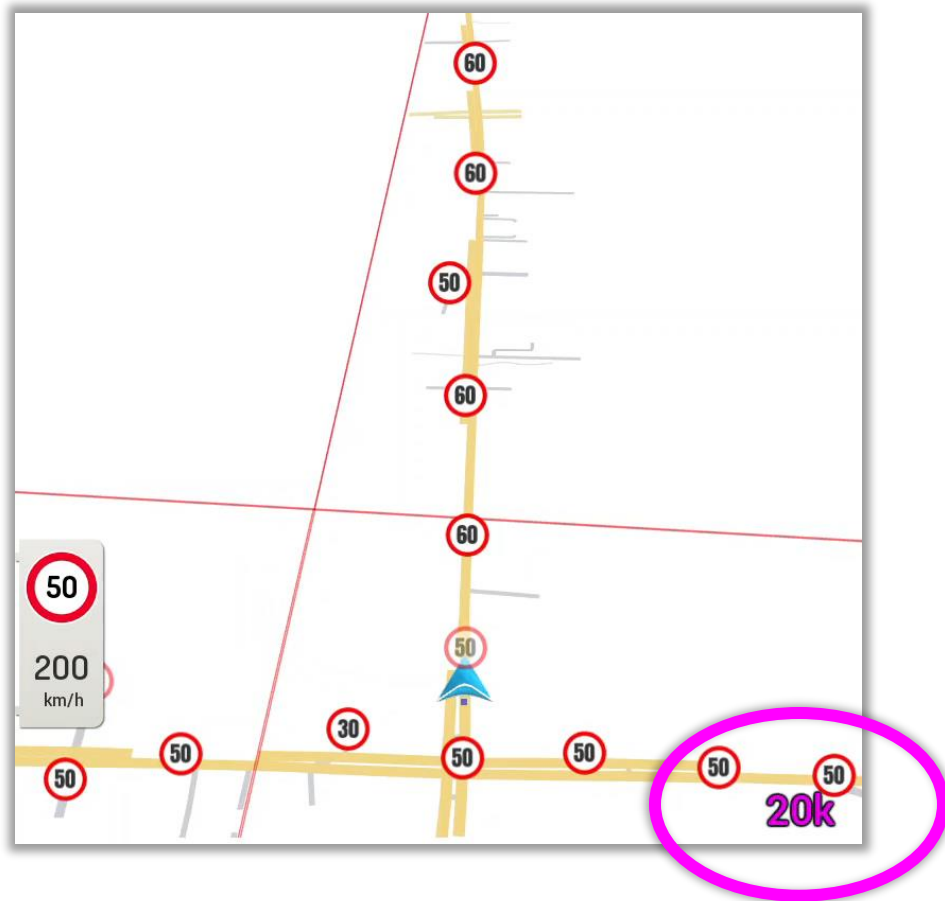


NDS.Live module version:  
**2021.07**

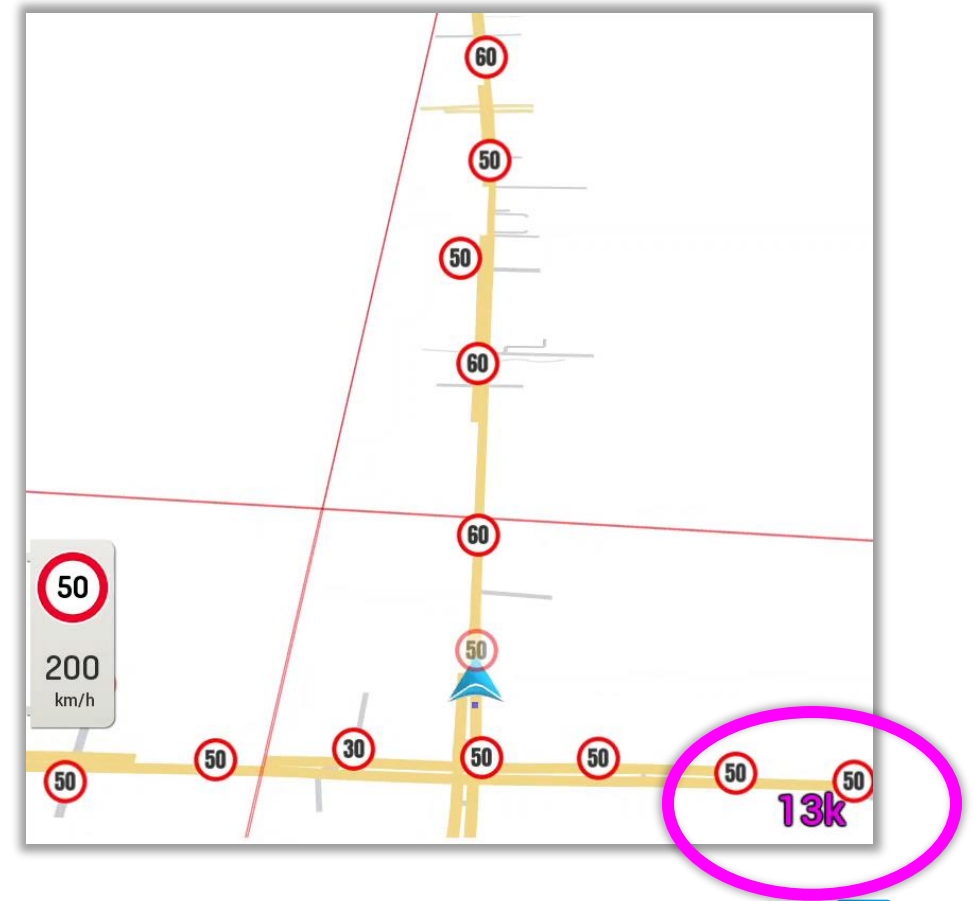


# NDS.LIVE SIZE REDUCTION: 35% (SMART LAYER PATH)

NDS.Live module version:  
2021.06


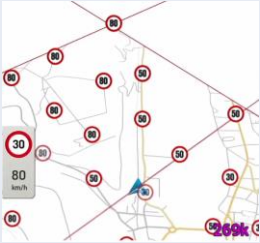
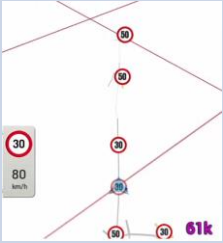


NDS.Live module version:  
2021.07





# NDS.LIVE SIZE REDUCTION: 31% (ISA ROUTE)

		Data consumption - NDS.Live module version: 2021.06	Data consumption - NDS.Live module version: 2021.07	Size Reduction
3x3 tiles around the car		4.511 kB	2.978 KB	33%
1 tile around the car		2.177 kB	1.469 kB	33%
Path only		448 kB	317 kB	29%

# 2

## LIVELAB IMPLEMENTATION OF PATH SERVICE



# LIVELAB IMPLEMENTATION OF PATH SERVICE

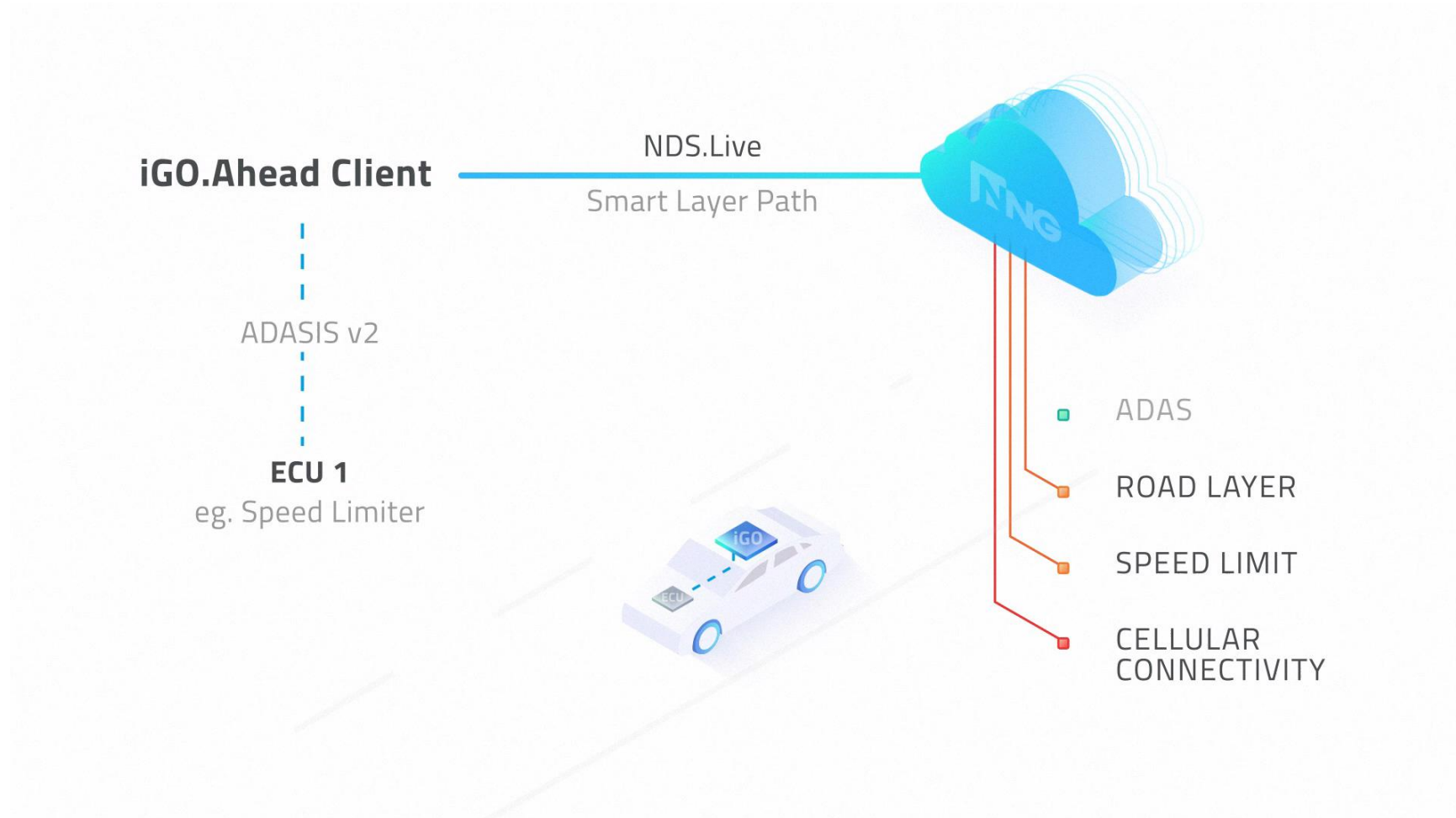
*NNG iGO.Ahead utilizing data delivery from NDS.Live Smart Layer Path service*

- **Map matching** in the cloud:  
NDS.Live Vehicle Pose
- **Horizon calculation** in the cloud:  
NDS.Live Vehicle Horizon Service
- Fetching **horizon map path**:  
NDS.Live Smart Layer Path Service
- Adding **Stubs** based on topological selection
- **Caching** Path persistently for later re-use



# LIVELAB IMPLEMENTATION OF PATH SERVICE

*NNG iGO.Ahead utilizing data delivery from NDS.Live Smart Layer Path service*



Webinar: [Making-intelligent-speed-assistance-easy](#)

# LIVELAB IMPLEMENTATION OF PATH SERVICE

*LiveLab offers easy entry to Python and NDS.Live*

<https://nds-association.org/livlab-entry-ndslive/>



NEWS

## LiveLab offers easy entry to Python and NDS.Live

3. May 2022

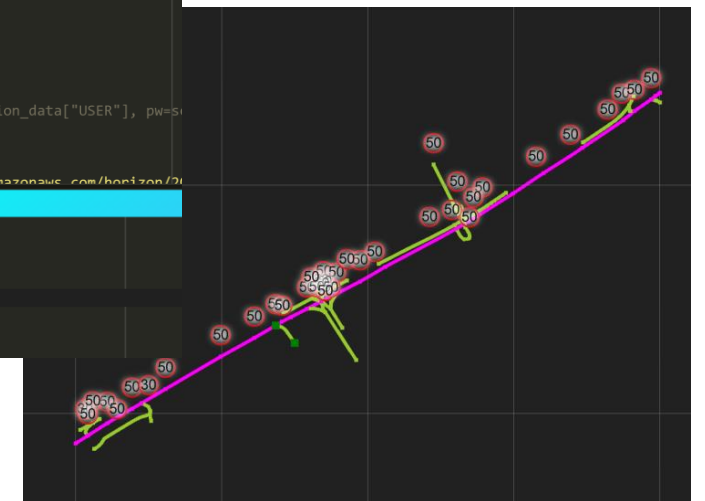
LiveLab allows easy entry to Python and NDS.Live.

[Show article →](#)

```
LiveLab 2022.4
MapViewer Tools Network Sources Help

Scripts Edit New visualize_horizon_path.py
1 import base64
2 from pathlib import Path
3 from traceback import format_exc
4
5 import livelab
6 import mapviewer
7 import ndslive.core.v2022_02.api as core
8 from afw.wgs84 import Position
9 from afw import Color
10 # from dotenv import dotenv_values
11 from ndslive.smart.v2022_02.tile.api import SmartLayerTile
12 from ndslive.smart.v2022_02.services.api import SmartLayerPathHorizonService
13 from ndsutil.parse.smart import parse_smart_layer
14 from ndsutil.visualize.common import *
15 from pyzswagcl import HTTPError
16 from zserio.serialization import deserialize_bytes
17 from zserio import ServiceData
18 from zswag import OAClient, HTTPConfig
19
20 from horizon_path_vis.road import visualize_road_layer
21
22 ONLY_ONE_HORIZON_PATH = False
23
24 # service_authentication_data = dotenv_values(".env")
25
26 # config = HTTPConfig().basic_auth(user=service_authentication_data["USER"], pw=
27 config = HTTPConfig()
28
29 client = SmartLayerPathHorizonService.Client(
30     OAClient("https://taphi3vtd.execute-api.eu-central-1.amazonaws.com/horizon/2

Run #2 of "visualize_horiz...
Drawing offline tiles...
Finished drawing offline tiles.
Horizon path visualized
Horizon path visualized
```









**THANK YOU FOR YOUR  
ATTENTION!**

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