ThingPark Network Coverage (TNC) webinar

January 2025

Agenda

- Quick overview

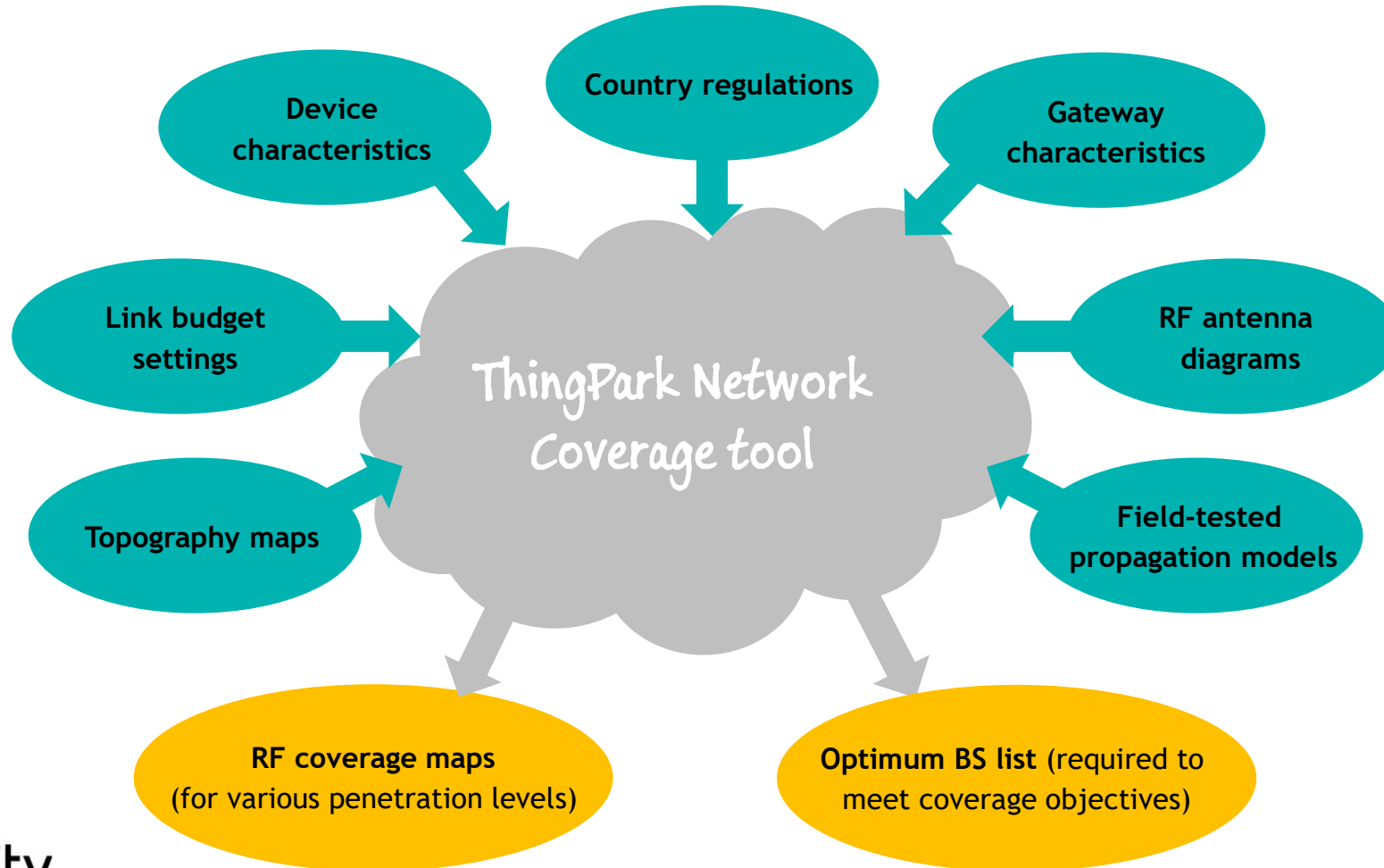- TNC demo

- Try it out

- Q&A

Overview

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What is ThingPark's Network Coverage tool?

- In-house RF coverage prediction tool to support radio network planning for **outdoor macro gateways** on rooftops or tower-mount
  - **WARNING** The tool is not suitable for coverage prediction of indoor gateways.

- Seamlessly integrated with ThingPark SaaS

- **Main use cases**
  - Predict RF coverage for greenfield deployments and determine the optimum antenna placement
  - Generate coverage heatmaps for already-deployed gateways, detect potential coverage holes and choose where to add new gateways to cover white spots
  - Automatically select the best gateway locations from a list of candidate high points **New**
  - Inspect the RF coverage status of your device fleet and compare the predicted coverage with the real device KPIs **New**

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Inputs & outputs

Inputs

Outputs

Device characteristics

Country regulations

Gateway characteristics

Link budget settings

ThingPark Network Coverage tool

RF antenna diagrams

Topography maps

Field-tested propagation models

RF coverage maps (for various penetration levels)

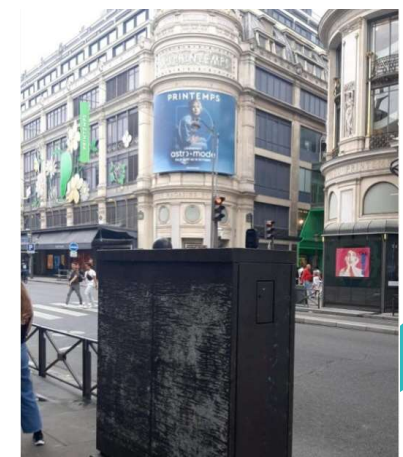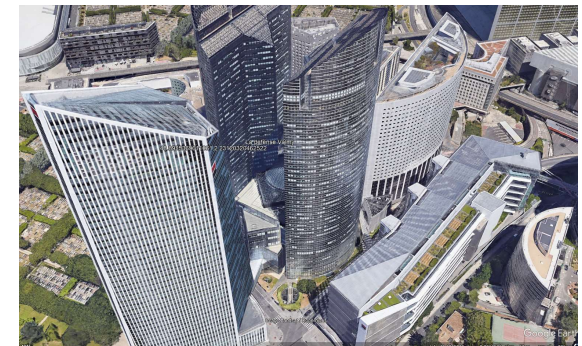Optimum BS list (required to meet coverage objectives)

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Comparison with field tests

- 2 propagation models compared with field tests, for 4 different propagation environments (Dense Urban, Urban, Suburban and Rural)

  - Hata Okumura, with tuned correction factors, provides safe predictions for all environments
  - An alternative propagation model is proposed by the tool, providing realistic results in urban environment and slightly optimistic results for other environments.

	# points	Average delta (safe model)	Average delta (optimistic model)
Dense Urban	94	-0.33 dB	1.75 dB
Urban	133	-0.63 dB	0.87 dB
Suburban	88	-0.64 dB	2.11 dB
Rural	60	0.02 dB	1.86 dB

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TNC Demo

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Try it out

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Try it out now

- Sign-up for a free access to ThingPark Community
  https://community.thingpark.org/index.php/sign-up-tpcp/ or scan this QR code:

- Buy credit on ThingPark Market
  https://market.thingpark.com/actility-thingpark-s-network-coverage-credits.html or scan this QR code:

- Checkout the tool's user guide:
  https://docs.thingpark.com/thingpark-enterprise/latest/docs/user-guide/network-tools/network-coverage/ or scan this QR code:

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Q&A

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Thank you