



FENIX GROUP, INC.
CREATIVE INTELLIGENCE. APPLIED.

SOOTHSAYER™

MODEL THE FUTURE

TAK ready

Standards based operator's interface for ATAK, WinTAK and secure management via customer's TAK server.

No plugin required.

Secure

Developed to the CIS L1 Linux security standard with disk encryption, role based accounts, transport encryption. The server supports mutual PKI authentication with a customer's TAK server.

Scalable

Use the service's intuitive 4D web interface from any web browser on your network or run it directly from our interactive Google Earth™ layer.

Powerful

With a proven REST API and GPU acceleration, you can efficiently model large scale networks offline or integrate the API into existing geoviewers or dashboards.

Accurate

Add LiDAR data and/or soft clutter to enhance accuracy.

The service can model obstacles at 1 metre resolution with user defined clutter profiles for environments covering 18 classes of landcover and building materials.

Draw or import your own obstacles as KML or GeoJSON

SOOTHSAYER™ is a scalable radio planning server for private networks.

This unique edge capability empowers radio planners and radio operators alike to make **better decisions, faster** with a **minimal training burden** and interfaces **designed by operators**.



Radio signals are attenuated significantly by obstacles, yet a radio vendor's map can only show you the problem after the event. With SOOTHSAYER you can establish the workable and *unworkable* locations **before you deploy**.

Built upon 10 years of operational use as **CloudRF.com**, the mature API has been proven with almost every technology, domain and environment.

The scope for user error with SOOTHSAYER is mitigated with easy to use **templates, inline help tips** and clutter profiles.



Interfaces

- TAK chatbot
- Cross-platform 3D web interface
- Google Earth™ interface
- OpenAPI specification REST API
- 4D Satellite tool

APIs

- Point-to-multipoint (GPU)
- Point-to-Point
- Interference
- Best Server
- **Best Site Analysis (GPU)**
- Route analysis
- Multipoint analysis

Settings

- Frequency: 2MHz to 100GHz
- RF power: 1mW to 1MW
- Feeder loss variables
- Co-ordinates: DD,DMS,MGRS
- Height ceiling: 120,000 ft
- Antenna templates
- Antenna azimuth, tilt, gain
- Custom antenna patterns
- Tx & Rx gains in dBi
- Terrain and climate contexts

Outputs

- dB, SNR, dBm, RSRP, dBμV
- Bit Error Rate & Modulation
- Receiver threshold
- Min resolution: 1m/3ft
- Custom colour schemas
- Max range: 400km / 248Mi
- Profile & Fresnel zone
- Area efficiency & %

Models

General purpose

- ITM / Longley Rice
- ITU-R P.525
- ITU-R P.529
- Line-of-sight
- Plane Earth Loss
- Okumura-Hata
- COST231-Hata
- Egli VHF/UHF
- Stanford Interim (SUI)

LiDAR & Clutter

- Import 1m LiDAR as GeoTIFF. Interface clutter drawing tools supporting bulk KML & GeoJSON
- 10m Global Landcover, 9 DIY clutter classes with custom environmental profiles

Security

- AES-256 disk encryption, Role based accounts, TLS 1.2 transport encryption, Mutual auth certificates for customer TAK server, E-purge.

Standards

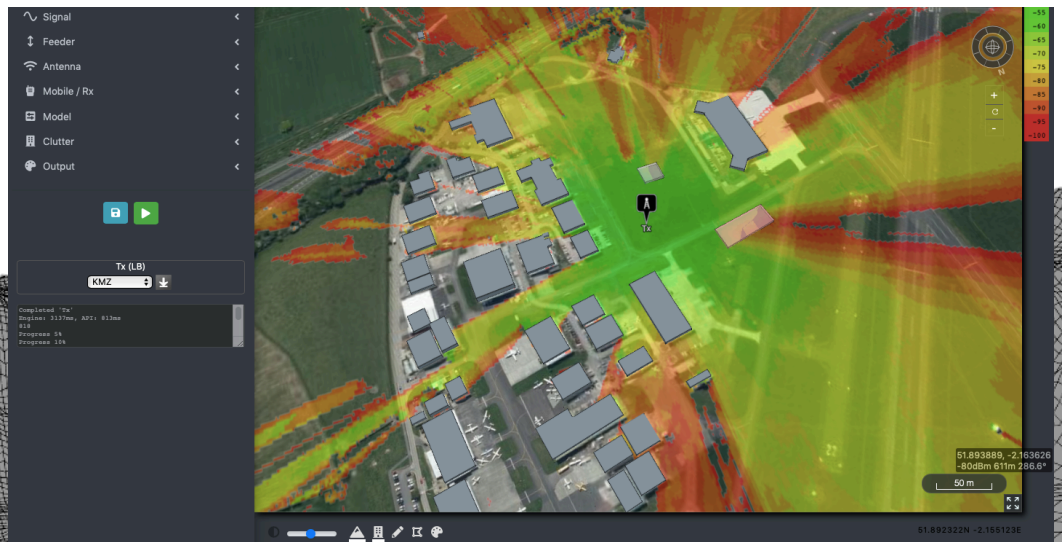
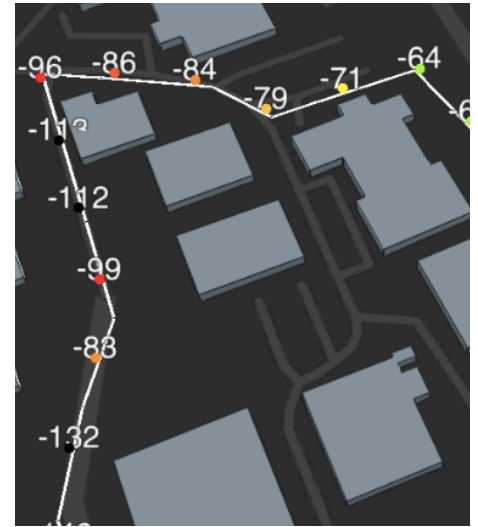
- HTML5, KML, KMZ, CoT, JSON, GeoJSON, GeoTIFF, SHP, PNG, HTTP, WMS, ISO-8601, EPSG 4326, EPSG 3857, CoT, OAS3

Host requirements

- VMware / ESXi, Azure or Proxmox (KVM)
- 4 x 2GHz CPU, 4GB Memory, 10GB disk space, SMB data share
- Nvidia GPU (optional). Maxwell to Ampere architectures supported.

Options

- Global LiDAR & 3D buildings
- Self hosted or hosted server
- Turnkey hardware solution
- Radio templates



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