



HTZ Automate

Network planning automation for the mining industry

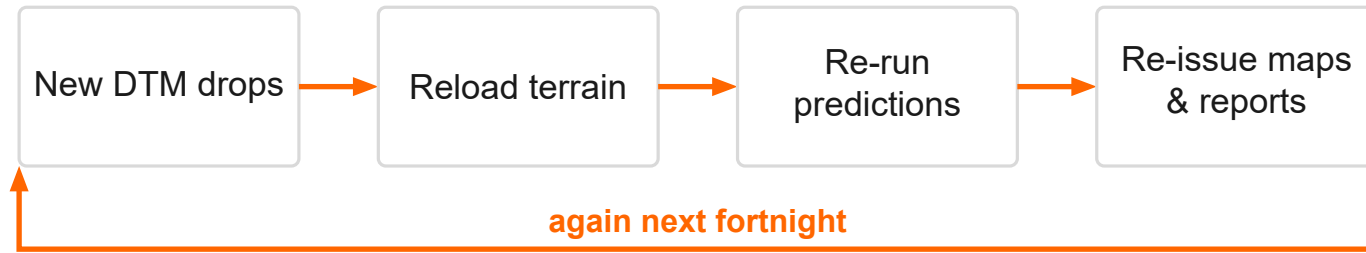
The problem

Coverage assurance for wireless networks in mining

Network coverage — and hence **network reliability** — changes constantly:

- Continuously changing terrain — every bench, dump and cutback
- Trailer and repeater relocation
- New pits, new phases, decommissioned sites

Coverage work is never “done”



THE LOOP

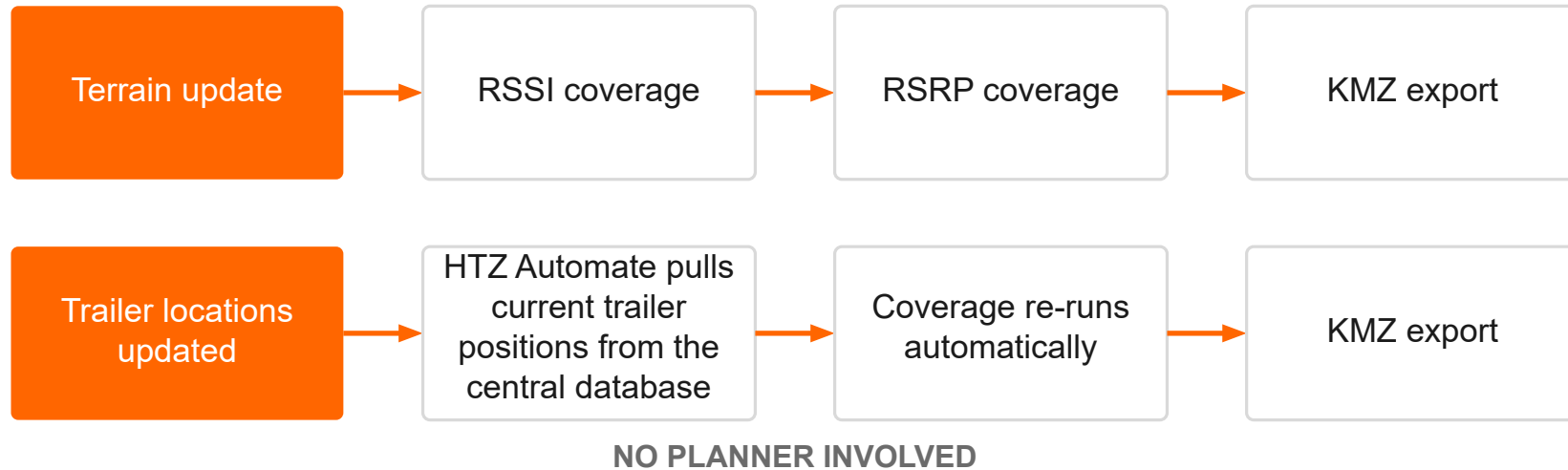
Identical work. Per site. Per network. Forever.

What it costs

- **Planner hours** spent repeating, not engineering
- **Inconsistent output** — depends on who ran it
- **Doesn't scale** — more sites means more headcount
- **The lag** — between the pit changing and the map catching up, the network runs against a map that is no longer true
- Every client site multiplies the same cycle. The design isn't the hard part. The re-design, forever, is.

Automating the entire planning cycle

- simple and elegant GUI that just works..
- set your workflow once and forget about it
- coverage predictions will run on scheduled basis, using the latest terrain updates
- workflows as simple or as nuanced as they need to be:



Simple Web GUI to build any RF workflow

The screenshot displays the HTZ Automate web interface. The top navigation bar includes links for QUEUE, SCHEDULE, RECIPES, JOBS, REFERENCES, HTZ, and ADMINISTRATOR. The user is logged in as 'System' and is viewing the 'JOBS' section. A search bar is present above a table of jobs.

Name ▲	No. tasks
Best server (RSRP)	4
Best server (RSSI)	4
Best server + Overlap (RSRP)	4
Best server + Overlap (RSSI)	4
BS path budget	4
C/N+I map	4
Composite coverage in dBm (RSRP)	4
Composite coverage in dBm (RSSI)	4
Composite coverage in dBu (RSSI)	4
Copy file from source to destination	1
Coverage calculation (Active)	4
Coverage calculation (All)	4
Coverage calculation (Callsign)	4

At the bottom of the table, there is a 'Load more' button and a status bar showing 'Showing 20 of 41 items'.

The right-hand panel shows a workflow editor with four tasks:

1. Load a project (11 input(s))
2. Sql database connector (1 input(s))
3. Import station from Sql database (5 input(s))
4. Export best server coverage map (RSRP) (1 input(s))

Buttons for '+ Add Task', '+ Add New Task', 'Save', 'Cancel', and 'Delete' are visible at the bottom of the workflow editor.

Set the schedule (recurrence)

The screenshot displays the HTZ Automate web interface. The top navigation bar includes links for QUEUE, SCHEDULE (active), RECIPES, JOBS, REFERENCES, HTZ, and ADMINISTRATOR. The user is logged in as 'System'. The main content area shows a table of schedules with columns: Schedule, Recipe, Trigger, Owner, Start Time, Next Run, Last Run, Run Count, Priority, and Enable. One schedule is listed: 'Pit-A-Terrain-Upd-RSSI-TETRA' with a 'Time' trigger, 'System' owner, and a priority of 3. The right sidebar shows the configuration for this task. The 'General' tab is active, showing the task name, recipe, priority (3), and execution mode (On Time). The 'Start' section shows the task is set to run 'Now'.

Schedule	Recipe	Trigger	Owner	Start Time	Next Run	Last Run	Run Count	Priority	Enable
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Time	System	13/08/2026 03:11 PM	13/08/2026 03:11 PM	-	0	3	✓

Configuration for Pit-A-Terrain-Upd-RSSI-TETRA:

- Name: Pit-A-Terrain-Upd-RSSI-TETRA
- Recipe: Recipe-Terrain-Upd-RSSI
- Priority: 3
- Execution Mode: On Time
- Start: Now
- Owner: System

Quick coverage visuals

HTZ Automate

localhost:8082/queue/schedules

QUEUE

SCHEDULES

STAGES

SCHEDULE

RECIPES

JOB

REFERENCES

HTZ

ADMINISTRATOR

Hello, System

logout

Columns

Filters

☐	Schedule Name	Status	Priority	Created At	Start Time
☐	Pit-A-Terrain-Upd-RSSI-TETRA	Done	3	13/08/2026, 03:11 PM	13/08/2026, 03:11 PM

Load: 10 20 50 All Custom

Auto 15:14:58 Showing 1 of 1 items

General

Jobs

Logs

>

Composite coverage in dBm (RSSI)

Order: 6 4 Tasks

Tasks:

>

Load a project

Order: 1 3 inputs

>

Sql database connector

Order: 2 1 input

>

Import station from Sql database

Order: 3 1 input

>

Export composite coverage map in dBm

Order: 4 1 input

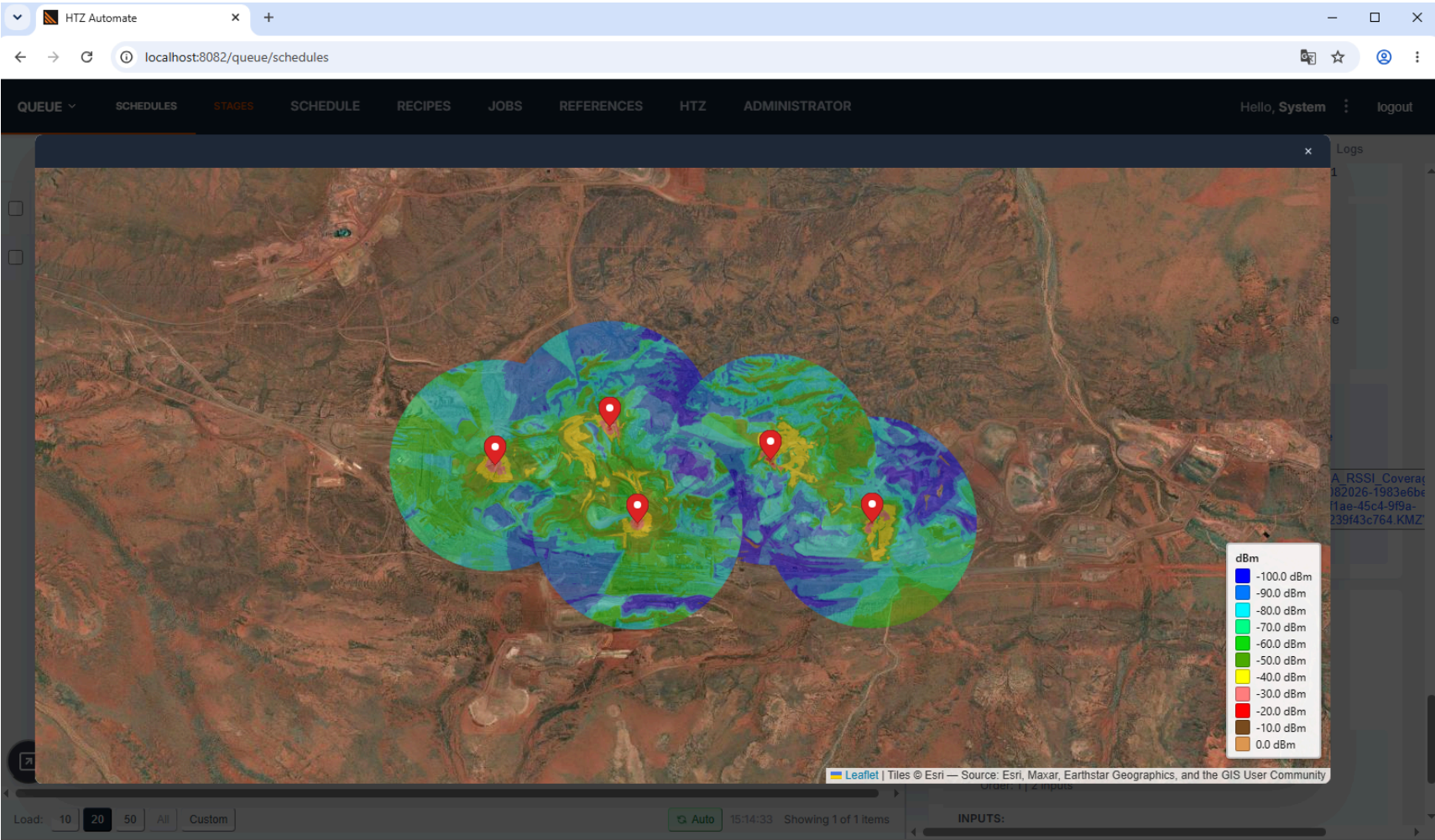
INPUTS:

Input	Reference	Alias	Value
Output	Coverage Format	KMZ	5

Outputs:

Task	Output	Reference	Alias	Value
Export composite coverage map in dBm	Composite coverage map in dBm output	Coverage Output	Pit_A_RSSI_Coverage	"Pit_A_RSSI_Coverage-13082026-1983e6bef1ae-45c4-9f9a-10239f43c764.KMZ"

Quick coverage visuals



Status of each scheduled run

HTZ Automate

localhost:8082/queue/stages

QUEUE

SCHEDULES

STAGES

SCHEDULE

RECIPES

JOBS

REFERENCES

HTZ

ADMINISTRATOR

Hello, System

logout

Schedule	Recipe	Job Name	HTZ Queue	Status	Start Time
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Coverage calculation (All)	QueueA	Processing	13/08/2026, 03
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Delete all files in directory	QueueA	Done	13/08/2026, 03
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Update DTM from TIF	QueueA	Done	13/08/2026, 03
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Move file from source to destination	QueueA	Done	13/08/2026, 03
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Reference file update by latest file in directory	QueueA	Done	13/08/2026, 03
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Move file from source to destination	-	Waiting	-
Pit-A-Terrain-Upd-RSSI-TETRA	Recipe-Terrain-Upd-RSSI	Composite coverage in dBm (RSSI)	-	Waiting	-

Columns

Filters

General

Jobs

Stage ID

30122938-42c3-4f33-9e45-116078114f0c

Queue ID

fb2dd7e4-8eb5-43d0-ab88-d1369458638d

Schedule Name

Pit-A-Terrain-Upd-RSSI-TETRA

Recipe Name

Recipe-Terrain-Upd-RSSI

Job Name

Coverage calculation (All)

HTZ Queue

QueueA

Status

Done

Start Time

13/08/2026, 15:13

Finish Time

13/08/2026, 15:14

Load: 25 50 100 200 All Custom

Auto

Showing 7 of 7 items