

Plannr.

From service contract to paid invoice — one platform, no handoffs.

Plannr turns recurring service agreements into an optimised technician schedule, turns completed visits into signed reports, and turns those reports into electronic invoices that get paid. Constraint-based planning, self-hosted route optimisation, an offline field app and Peppol e-invoicing across 35 country profiles — in a single deployment you control.

Recurring contracts

Route optimisation

Offline field PWA

Peppol e-invoicing

Stripe payments

510

REST ENDPOINTS

35

PEPPOL COUNTRY PROFILES

0

MAP API KEYS NEEDED

1

COMMAND TO INSTALL

THE PROBLEM

Recurring service is a scheduling problem that becomes a billing problem.

A company with four hundred maintenance contracts and eight technicians is running a constraint-satisfaction problem in a spreadsheet. Visits slip. Routes zigzag. The paperwork comes back three days later, half of it illegible. And the invoice — the only part the business actually lives on — is raised weeks after the work was done, if the extras get billed at all.

Unplanned drive time

A day sequenced by hand costs an hour of driving that a solver would not have spent.

Missed cadence

Quarterly contracts that quietly become five-monthly. Nobody notices until the customer does.

Paper reports

No signature, no photos, no proof — and no defence when the work is disputed.

Leaked revenue

Extra parts and extra hours performed on site that never reach an invoice line.

THE SOLUTION

One chain, end to end, with nothing re-keyed.

- 1 Contract**
Define the customer, the services and the cadence — weekly through annual, with seasonal months, anchor dates and tolerance windows.
- 2 Schedule**
The engine generates draft visits that respect skills, working hours, absences, customer preferences and closed periods, then sequences each day to minimise real driving time.
- 3 Execute**
The technician works from an installable, offline-capable field app: route, access instructions, checklists, photos, materials, customer signature.
- 4 Bill**
Completed visits and their extras flow into invoice lines. The invoice goes out as PDF, as Peppol UBL, or as a Stripe payment link — and chases itself if unpaid.

Draft, review, publish

The optimiser is not a black box that assigns work behind your back. It produces a **draft schedule** as a tracked job. Your planner reviews it on the calendar, drags what needs dragging, and publishes. Four objectives are selectable: minimise time, minimise distance, balance workload, or minimise the number of drivers.

NO THIRD-PARTY GEO BILL

Routing runs inside your own server.

Plannr embeds a full routing engine in-process, downloads its own OpenStreetMap extracts, and proxies and caches its own map tiles. No Google Maps contract, no Mapbox key, no per-request geocoding bill — and it works in an air-gapped network.

PLAN & EXECUTE

The scheduling engine and the field app.

1 Recurrence & contracts

- Weekly, biweekly, monthly, bimonthly, quarterly, semi-annual, annual and custom N-day cadences
- Anchor dates, seasonal active months, month-end and leap-year handling, tolerance windows
- Contract lifecycle: prepared, active, paused, expired, cancelled — with accept and refuse recorded against an actor and a timestamp
- Termination with immediate or notice-period modes; contract replacement chains
- Reusable clause library, contract templates and section styles; PDF generation and e-mail dispatch
- Per-line preferred technician, priority and duration override

2 Optimisation & calendar

- Hard constraints: availability, skills, maximum daily hours, break rules
- Soft constraints: preferred day and window, preferred employee, workload balance, territory
- Four objectives — minimise time, minimise distance, balanced, minimise drivers
- Asynchronous generation with tracked jobs; draft, publish or cancel
- Day, week and month calendar with technician colour coding, drag-and-drop reschedule, unassigned panel and conflict detection
- Absence modelling: day off, vacation, sick, training, custom — full or partial day
- Customer closed periods with recorded reason
- Meetings and calendar blockers live in the same grid as service visits
- Printable day-route sheets; iCal export and e-mail subscription per organisation, team or employee

3 The field application

- Separate installable app — **Plannr Field** — with its own icon and its own service worker
- **Offline capable:** app shell and technician code precached, offline login screen
- Numeric PIN login, location-scoped
- Day list, appointment detail with access instructions and contacts, one-tap native navigation
- Status flow: planned, confirmed, in progress, completed, cancelled, no-show, rescheduled
- Reports prefilled with planned services, durations and per-service checklists
- Actual arrival, departure and on-site times captured
- Additional work and materials added on site — and carried straight into billing
- Photographs, remarks, follow-up flag, **customer signature capture**, GPS coordinates at submission

4 Customers & catalogue

- Separate site and billing addresses with coordinates; access instructions and gate codes
- Preferred visit days and time windows honoured by the optimiser
- Tags, custom fields and full-text search; CSV import with bulk geocoding
- Service catalogue with default duration, required skills, checklist items, pricing, colour and default periodicity
- Materials master data with units, unit price and VAT rate

Why it holds together. The extras a technician records on site are the same objects the invoice reads. There is no export, no nightly sync and no re-keying between the operations half and the finance half of this product, because there are not two halves.

BILL & GET PAID

The commercial half.

5 Quotes & invoices

- Estimates with validity dates, decline reasons, and conversion into either an invoice or a contract
- Invoices with line and document discounts, VAT breakdown, credit notes, and frozen customer and company snapshots at issue
- Line types for service, material, labour, travel, discount and free text
- Recurring invoicing on weekly through yearly cycles
- Completed appointments and their on-site extras pulled directly into invoice lines
- Open-invoice, ageing and period-revenue reports as PDF

7 Document designers

- Three WYSIWYG designers — invoice, work order and contract
- Field, WYSIWYG and block layout modes; preset catalogue with generated thumbnails
- Logo upload per organisation; pixel-accurate PDF rendered through headless Chromium

6 Getting paid

- **Peppol / UBL electronic invoicing** with 35 country profiles, directory lookup, participant eligibility checks and access-point delivery
- Stripe card payments: stored payment methods, off-session charging, a hosted public payment page and signed webhooks — with separate test and live credentials per tenant
- **SEPA QR codes** printed on the invoice for scan-to-pay bank transfer
- Automated dunning with three reminder stages and **eight ready-made letter designs**
- Bank transfer, cash, card, cheque, SEPA direct debit and Bancontact recorded as payment methods

8 Customer-facing & intake

- Token pages with no login required: confirm or reschedule an appointment, read the service report, complete a survey, accept a contract, pay an invoice — all branded per organisation
- Inbound service requests with fuzzy customer matching, threaded messages, internal notes, and one-click conversion into customer, contract and estimate
- **Embeddable offering widget** — a drop-in snippet that puts a bookable service on your own website
- Satisfaction surveys with rating, yes/no, text and multiple-choice questions, and issue tracking through to resolution
- Notification engine with **23 event types** across appointments, invoices, contracts, requests and subscriptions

Open by design

510 documented REST endpoints with OpenAPI and a browsable console.
Scoped API keys with per-key rate limits.
13 HMAC-signed webhook events with retry, delivery log and replay.

Mail that fits

Four e-mail backends — SMTP, Outboundly, Gmail API and Microsoft 365 Graph — resolved per organisation, per tenant or platform-wide, with OAuth mailbox authorisation and encrypted token storage.

Speaks your language

Around 4 200 interface strings, English and Dutch shipped, further languages addable at runtime from the admin console with machine translation built in — no rebuild.

WHO BUYS IT

Any business that visits the same customers on a cadence.

HVAC & climate

Annual inspections, filter replacements, seasonal service. Skill tags for certified gas work are built into the model.

Plumbing & heating

Boiler servicing under contract, statutory checks, emergency work folded into a planned day.

Electrical contracting

Periodic installation inspection, certification visits, multi-site portfolios under one customer.

Fire & safety inspection

Extinguisher, alarm and emergency-lighting checks where the cadence is a legal obligation and the report is the evidence.

Lift & equipment servicing

Contracted maintenance rounds with parts consumption captured on site and billed the same week.

Commercial cleaning

High-frequency recurring visits across many sites, with closed periods and seasonal months respected.

Pest control & hygiene

Treatment cycles, photographic evidence, customer-signed reports and survey follow-up.

Landscaping & grounds

Seasonal cadences that stop in winter and resume in spring — modelled natively as active months.

Pool, water & treatment

Chemical service rounds with materials, readings and checklists per service type.

Security & alarm maintenance

Contracted checks with access instructions, gate codes and site-specific handling.

Medical & lab equipment

Calibration and maintenance intervals with a signed, timestamped, photographed record per visit.

Facility management

Multi-trade coordination across bases and teams, with territory and workload balancing.

WHO USES IT

Platform operator

Reseller / tenant admin

Owner / administrator

Planner / dispatcher

Field technician

End customer

API integrator

Five roles are enforced in code, assigned **per location** so a technician or planner can carry different rights at different branches. Technicians are explicitly barred from financial screens. Customers act through signed tokens and never need an account.

GEOGRAPHY & COMPLIANCE

Plannr was built for the European market and shows it: euro and 21% VAT defaults, Bancontact and SEPA direct debit, SEPA QR payment codes, Dutch and English interfaces — and Peppol e-invoicing covering every EU member state plus the United Kingdom, Norway, Switzerland, Japan, Singapore and Australia/New Zealand.

As EU member states phase in B2B e-invoicing mandates, the Peppol path is not a future project. It is a setting.

TECHNICAL SPECIFICATION

One command to install. Yours to run.

Runtime	Java 25 on Spring Boot 4, native-image ready
Database	PostgreSQL with PostGIS, 93 versioned migrations
Front end	Server-rendered with vanilla ES6 — no framework, no build step, no CDN
Routing	GraphHopper embedded in-process, OpenStreetMap extract downloader, self-hosted tile cache
Documents	Headless Chromium rendering, template engine, QR generation
Realtime	WebSocket push to planner and technician clients
Install	docker compose up — database credentials, signing secret and encryption key generated on first run
Topology	All-in-one, or split into front end, back end and scheduler tiers
Clients	Two installable progressive web apps from one deployment; the field app works offline
Scale	~155 000 lines of application code, 61 entities, 220 test classes

SECURITY & GOVERNANCE

- Five roles assigned per location; method-level authorisation
- Tenant, organisation and location isolation on every query
- **TOTP multi-factor** and **single sign-on** via Azure AD or Google — configured in the database and changeable without a restart
- **AES encryption at rest** for single-sign-on secrets, mail credentials, payment keys and webhook secrets
- Passwords and PINs hashed with bcrypt; session and API tokens stored hashed only
- Login rate limiting, account lockout after repeated failures
- Content Security Policy with per-request nonces, HSTS, strict referrer policy, CSRF protection
- Full audit log with actor, action, before/after state, IP and timestamp
- Configurable retention with automated purge; scheduled database backups
- Dependency vulnerability scanning gated at CVSS 7 in the build

COMMERCIAL

Licensed per deployment. Not per technician.

Field service software is normally priced per technician, so every hire raises the software bill before it raises revenue. Plannr is licensed for the deployment: put every planner, dispatcher, technician and seasonal hire in it.

REVENUE	PER YEAR	REVENUE	PER YEAR
Up to €500k	€900	€100M	€13,000
€1M	€1,500	€500M	€37,000
€5M	€2,500	€1B	€52,000
€25M	€5,500		

Annual licence on your own turnover, ex VAT. The schedule is marginal like income tax — each slice of turnover is charged at its own rate, so there are no cliffs — with a €900 minimum and any yearly increase capped at 25%. Every tranche carries unlimited users, projects and organisations inside one tenant, self-hosting and support that rises with the tranche. Hosting and hardware are yours, and consultancy, setup, migration and training are quoted separately. Illustrative: a per-technician subscription at €35 a month bills a hundred and twenty engineers €50,400 a year; at €5M turnover this is €2,500.

NEXT STEP

Bring us one week of your schedule.

Give us a real customer list and a real contract set. We will run the optimiser against it and show you the driving hours it removes.

Sales	tim@automatize.eu
Partners	luc@automatize.eu
Web	automatize.eu