



USE CASE

# Coordinating technicians, parts, and schedules in HVAC

How Fieldcode supports daily operations

# A practical look at how HVAC teams use Zero-Touch automation to manage scheduling, technicians, and field execution

HVAC teams manage a constant flow of installation, repair, and maintenance work across residential, commercial, and industrial sites. **Seasonal spikes, urgent breakdowns, complex equipment histories, and subcontractor involvement** make coordination difficult. Technicians need the right certifications, the right parts, and accurate information before arrival. Dispatchers need a way to **prioritize urgent calls without losing track of ongoing maintenance contracts and planned work.**

Fieldcode's Zero-Touch FSM approach helps HVAC providers move from **reactive fire-fighting to predictable service delivery** by automating ticket creation, technician assignment, scheduling, and field execution. This applies to HVAC service providers managing commercial buildings, multi-site facilities, industrial systems, and mixed residential portfolios — especially teams coordinating in-house technicians and subcontractors across preventive and reactive work.



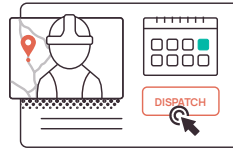


# The key operational challenges



## High volume of emergency calls during seasonal peaks

Broken AC in summer or heating in winter triggers immediate customer calls. Dispatchers must confirm the issue, locate the customer, prioritize the job, and check availability — all manually.



## Scheduling skilled technicians for the right job

HVAC tasks often require specific certifications (EPA, refrigerants, electrical handling). Assigning the wrong technician increases repeat visits and delays resolution.



## Limited visibility into parts and equipment history

Jobs stall when technicians arrive without required parts or accurate service history. Inventory often sits in separate systems, and equipment documentation is scattered.



## Manual coordination with subcontractors

Many HVAC providers rely on external partners during peak months or for specialized systems. Work orders, access details, SLAs, and proof-of-work tracking are inconsistent.



## Compliance, documentation, and contract obligations

Maintenance contracts, warranty rules, safety checks, and environmental compliance demand structured reporting. Paper or spreadsheet tracking creates gaps and audit risks.



# How Fieldcode supports HVAC operations



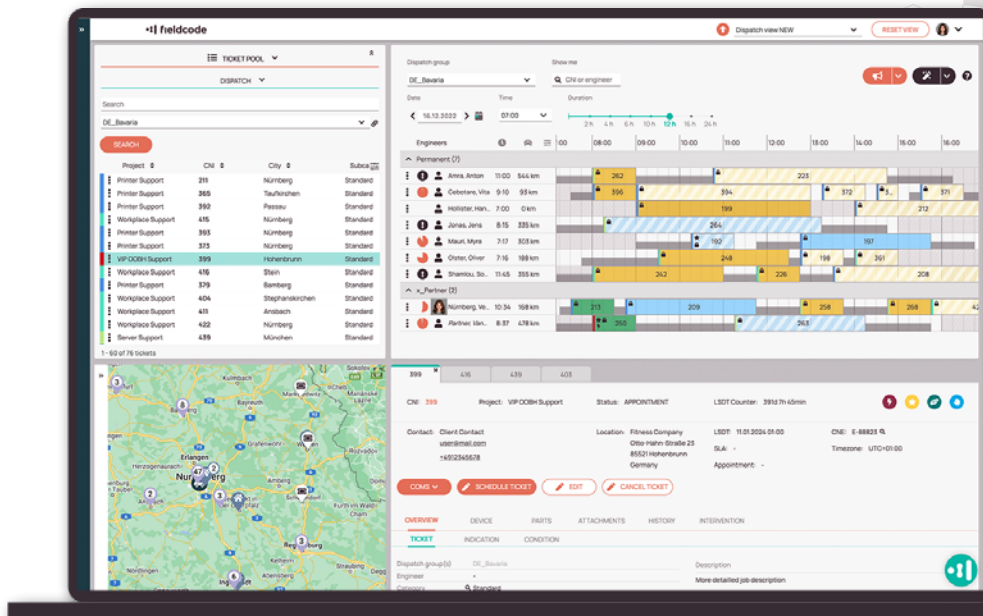
## Reduce call handling time with Voice AI agents

Voice AI agents capture customer issues instantly – no waiting, no manual logging. They identify the site, understand the problem, ask a few clarifying questions, and create a structured ticket automatically.

→ Support teams **focus on exceptions**, not every incoming call.

## Zero-Touch scheduling assigns the right technician automatically

Once the ticket is created, Zero-Touch applies skills, certifications, availability, proximity, SLAs, and workload rules to assign the correct technician or subcontractor. Recurring maintenance, reactive jobs, and contract obligations are merged into one scheduling flow.



→ Operators **reduce repeat visits** and maintain **predictable service delivery**.

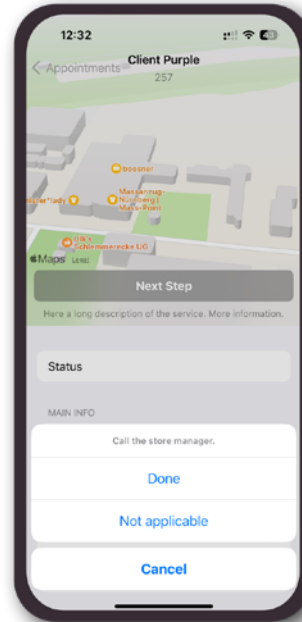


## Technicians receive everything they need in the mobile app

The Fieldcode Mobile App provides:

- equipment history and service logs
- manuals, wiring diagrams, refrigerant details
- job steps and checklists required parts and notes
- customer communication history

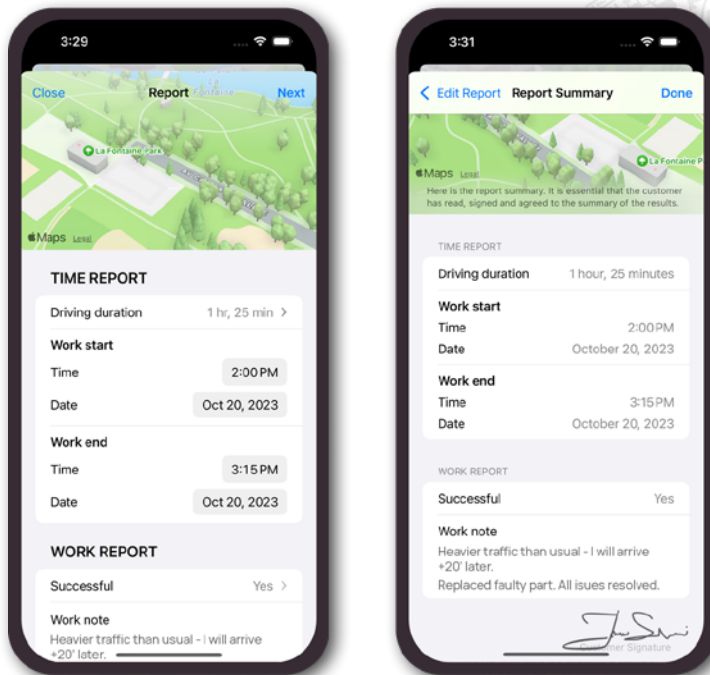
Technicians can work online or offline, upload photos, complete checklists, and record time and parts usage.



→ Jobs are completed **faster** and documented **consistently**.

## Unified workflows for internal teams and subcontractors

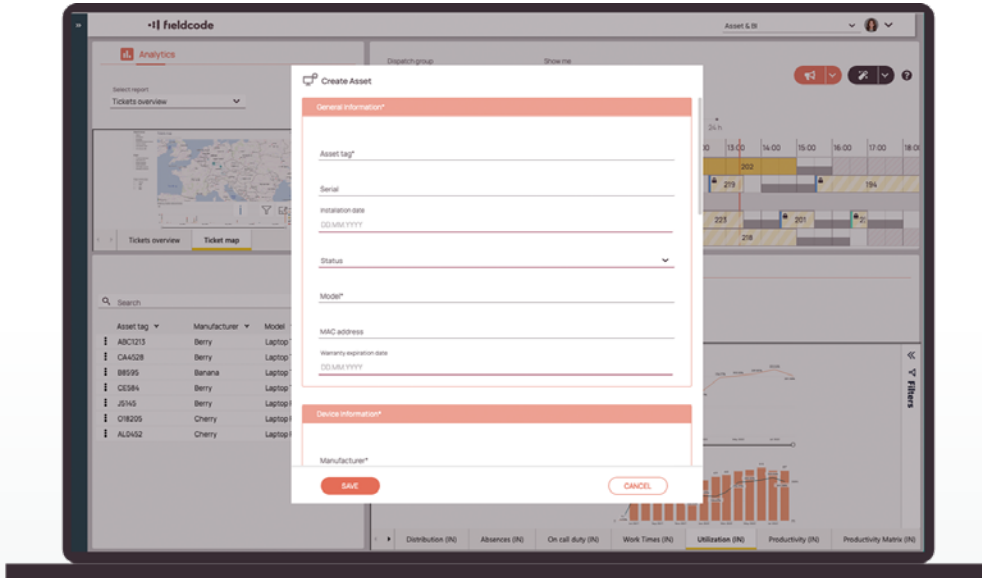
All providers – internal or external – follow the same structured work order. SLA tracking, proof of work, photos, and documentation update automatically when the job is completed.



→ Operators maintain **visibility** and **quality** across mixed service networks.

## Real-time updates, alerts, and maintenance planning

Alerts from connected BMS (Building Management Systems), asset sensors, or monitoring tools can automatically create tickets in Fieldcode. Preventive maintenance cycles for chillers, boilers, heat pumps, rooftop units, and ventilation systems are planned in advance and merged with ongoing work. Analytics dashboards provide insight into failure patterns, seasonal demand, parts usage, and technician performance.



→ Providers move toward **proactive service** instead of reacting to breakdowns.

” Thanks to the Fieldcode mobile application our engineers’ duties are simplified and their efficiency is enhanced.

Becky Carr, Account Manager – Climate by Design



# How the Voice AI agent handles a common HVAC issue:

## Air handling unit failure impacting multiple zones

- **Trigger**

A facility manager calls reporting that multiple floors are experiencing poor airflow and rising temperatures.

- **Ticket creation**

The Voice AI agent identifies the site and affected zones, confirms symptoms (airflow, temperature alarms, BMS alerts), and creates a structured ticket with asset and location context.

- **Assignment**

Zero-Touch scheduling assigns the job to a technician certified for large HVAC systems, factoring in SLA priority, availability, and site access rules.

- **Execution**

The technician receives the job in the mobile app with:

- AHU service history
- previous fault patterns
- schematics and manuals customer communication history
- site-specific safety procedures
- on-site checklist (filters, motors, belts, sensors, dampers, controls)

Work is documented with photos, parts used, and compliance steps. Maintenance records update automatically.

- **Result**

Service is restored quickly, SLA impact is minimized, and documentation is ready for audits and future maintenance planning.



# Business value for HVAC service providers

## Fewer emergency interventions

Zero-Touch merges preventive tasks, alerts, and reactive calls into a single automated schedule — reducing urgent breakdown visits, last-minute dispatching, and peak-season overload.

## Lower operational overhead

Voice AI agents capture customer calls and categorize them instantly. Zero-Touch rules route each case to the right provider without manual triage, letting dispatchers focus only on exceptions.

## Better uptime of HVAC equipment

Consistent maintenance planning, real-time alerts, and accurate equipment history reduce unplanned downtime and extend the service life of heating, cooling, and ventilation assets.

**-15%**

maintenance cost

→ **Higher  
equipment  
uptime**

**Elimination**

of repeated on-site visits

→ **Faster on-site  
resolution**

**+30%**

workforce productivity

→ **More efficient  
workforce  
coordination**

## Consistent management of internal teams and subcontractors

Every Unified workflows, SLA tracking, and digital documentation ensure consistent service quality and reduce compliance risks across all providers.

## Predictable maintenance cycles

Equipment history, alerts, and schedules are managed in one place — supported by analytics dashboards for forecasting, planning, and contract fulfillment.

## Full visibility across all customer sites

Operators gain a real-time overview of workloads, technician status, parts usage, and service performance across regions.





# Start improving your HVAC operations with Zero-Touch automation

See how Fieldcode supports HVAC teams with automated scheduling, guided mobile workflows, and consistent coordination across technicians and subcontractors.

**Request your personalized demo.**

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