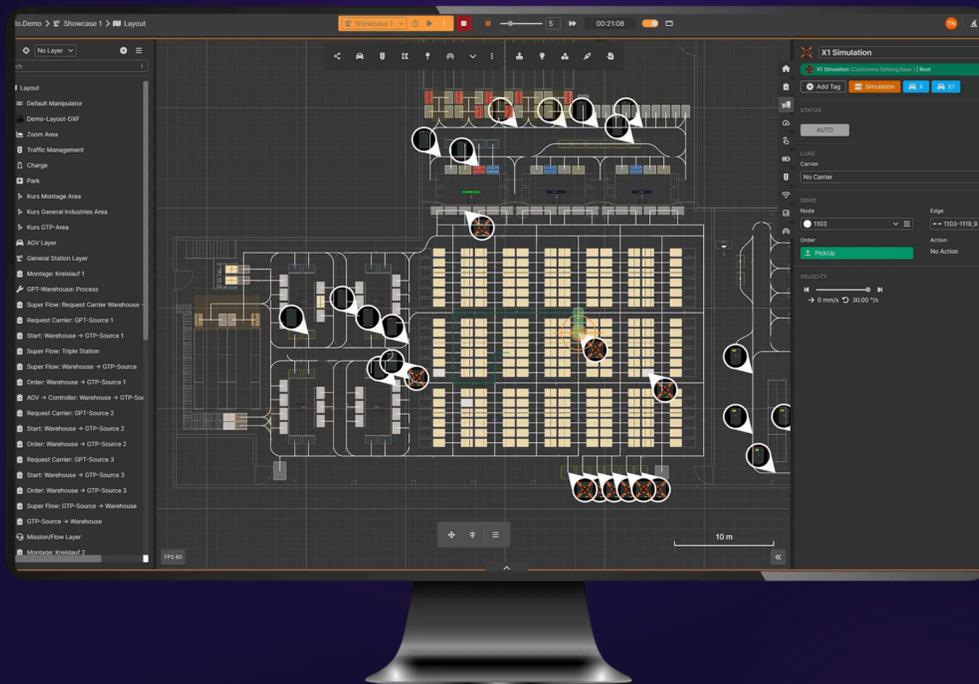# ScaliRo

FleetEngine

PLAN. SIMULATE. VISUALIZE.

Vendor-Independent Mobile Robotics Planning Platform

SCALIRO.DE

ScaliRo

The Hidden Cost of Fragmented Fleet Planning

Without FleetEngine

- 🔒 **Vendor lock-in** ties you to a single robot manufacturer
- ▦ **Fragmented tools** for planning, simulation, and visualization
- 🕐 **Long timelines** — custom integration from scratch every time
- ☒ **Black box solutions** with no visibility or configurability
- ☁ **Cloud-only tools** with no offline capability

With FleetEngine

- 🛡 **Vendor-independent** — choose any manufacturer freely
- ▦ **One unified platform** — Editor, Simulation & Visualization
- ⚡ **Fast integration** through standards-based interface (LIF)
- 👁 **Full transparency** — extensible via C#/.NET plugins
- 🖥 **Flexible deployment** — Self-Hosted, Cloud or On-Premise

**Avoid hidden costs by cutting rework by up to 50%
and right-sizing your fleet through simulation before purchase.**

What FleetEngine Is Not

- ✗ **Not a Fleet Management System** — we don't replace, we complement.
- ✗ **Not proprietary robot software** – we are neutral and independent
- ✗ **Not a black box** – we offer full transparency and configurability
- ✗ **Not "one-size-fits-all"** – we adapt to your specific requirements
- ✗ **No dependency on our cloud** – we enable offline operation too
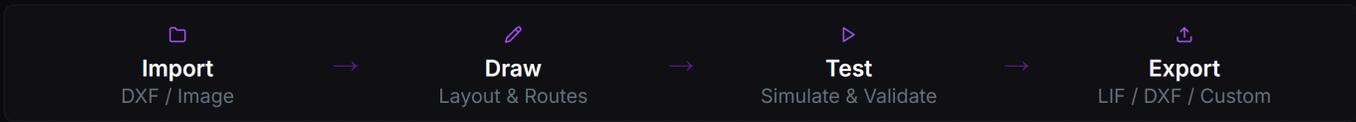
What FleetEngine Is

- ✓ **Vendor-independent** planning and simulation platform
- ✓ **Simulation & fleet sizing** — no coding required
- ✓ **Real-time fleet monitoring**
- ✓ **Proven best practices** from 250+ projects
- ✓ **Flexible deployment** (Self-Hosted, Cloud, On-Premise)

ScaliRo

Three Modules. One Platform.

FleetEngine unifies Editor, Simulation, and Visualization in one seamless solution.

Editor
Layout design & export

✓ DXF import for existing layouts
✓ Intuitive drawing tools
✓ Component library
✓ LIF-standardized export

Simulation
Fleet sizing & validation

✓ Low-code flow editor
✓ Fleet sizing
✓ Bottleneck analysis & statistics
✓ Real-time debug views

Visualization
Live monitoring & tracking

✓ Live fleet overview
✓ Job status tracking
✓ VDA 5050 monitoring
✓ State-of-charge tracking

Editor

Import		Draw		Test		Export
DXF / Image	→	Layout & Routes	→	Simulate & Validate	→	LIF / DXF / Custom

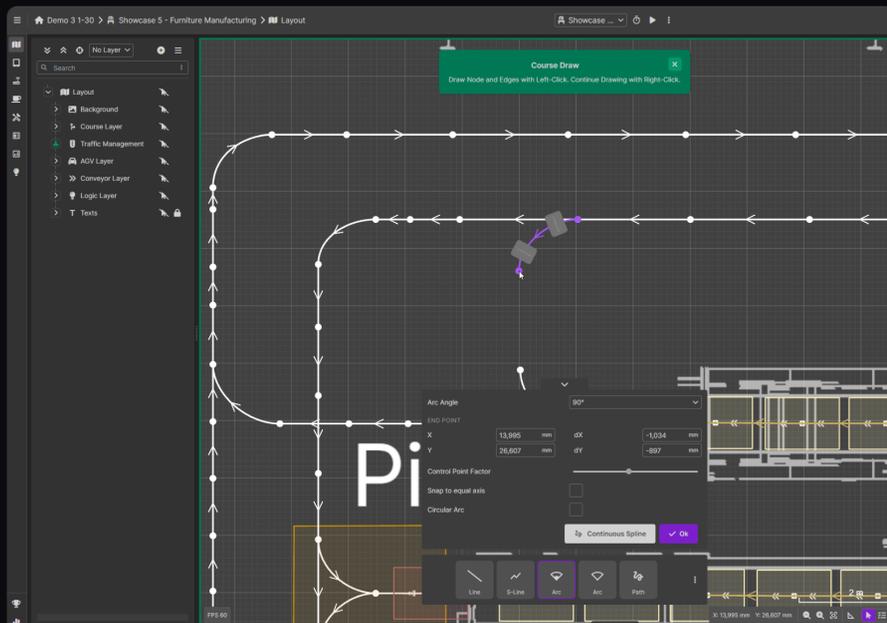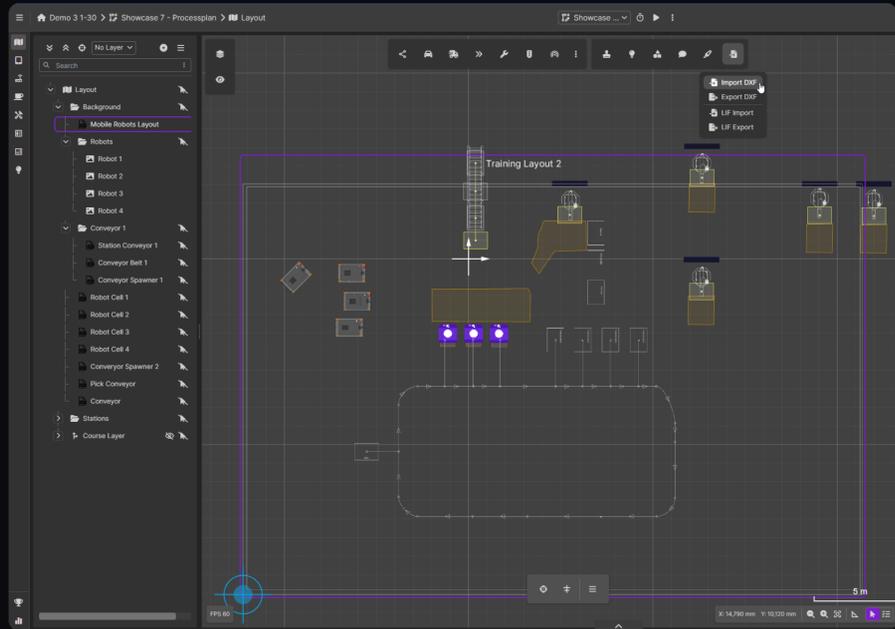### DXF & Background Import

Load existing facility layouts instantly and start designing from what you already have.

✓ DXF or image file import
✓ True-to-scale layout import
✓ Multiple floor support
✓ Measurement & annotation tools

Intuitive Drawing & Commenting

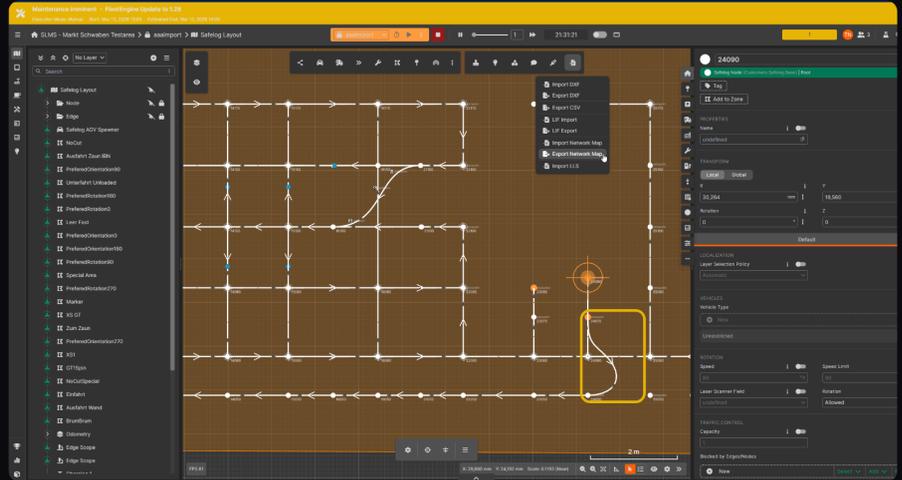Create paths, stations, and zones with drag-and-drop. Review collaboratively on the layout.

✓ Undo/redo support
✓ Snap-to-grid alignment
✓ Copy & paste
  layout elements
✓ Multi-select & group editing

ScaliRo

Flexible Export

One layout, any target system. Export to the format your fleet manager needs.

✓ LIF standard for cross-manufacturer compatibility

✓ DXF export for CAD workflows

✓ Custom formats for specific robot vendors

> **LIF Standard**
> Native support for cross-manufacturer layout exchange.

Additional Editor Features

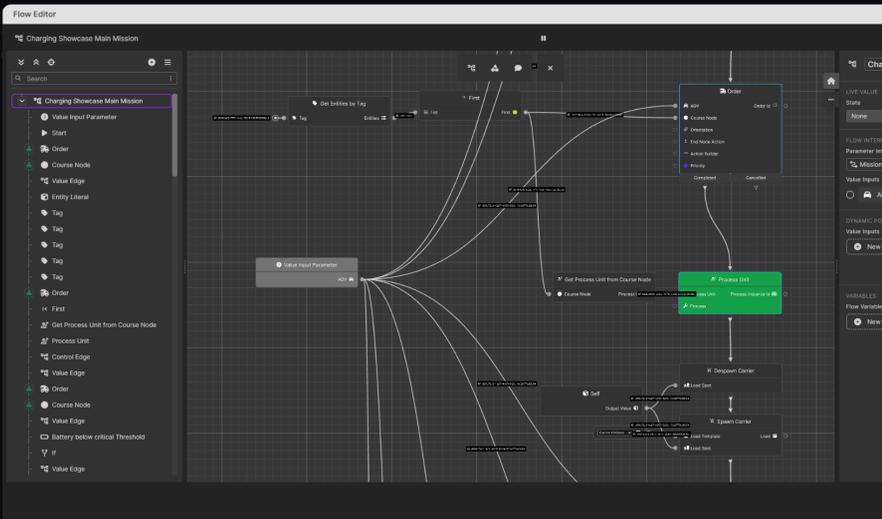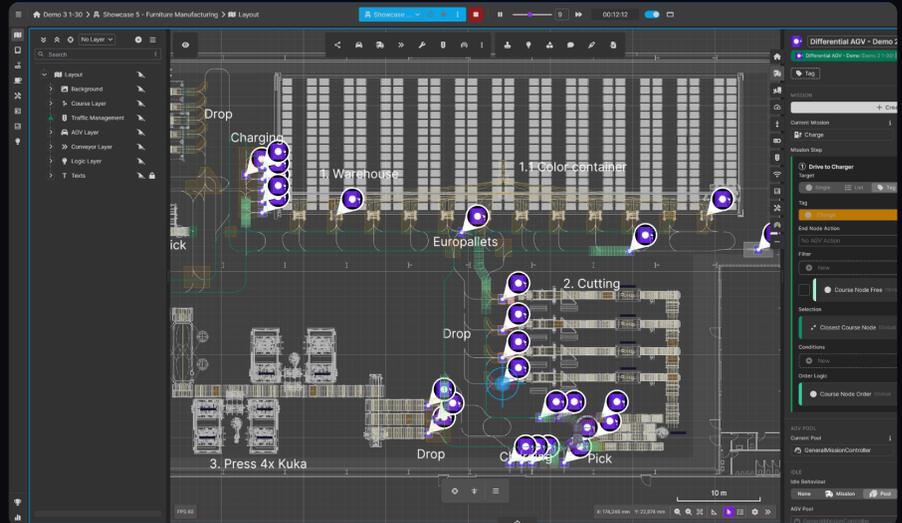|	
✓ Custom export plugins via C#/.NET	✓ Templates & packages for common configurations
✓ Mobile robot editor for parameter tuning	✓ Performant canvas for 100,000+ elements

Simulation

Validate your logistics concept before deployment. Size your fleet, test traffic scenarios, and detect bottlenecks with high-fidelity simulation — **no coding required**.

Simulation Engine

High-fidelity engine for fleet behavior and throughput analysis.

✓ Fleet sizing & dimensioning

✓ Real-time debug views

✓ Multi-scenario comparison

✓ Adjustable simulation speed

✓ Battery & charging simulation

Low-Code Flow Editor

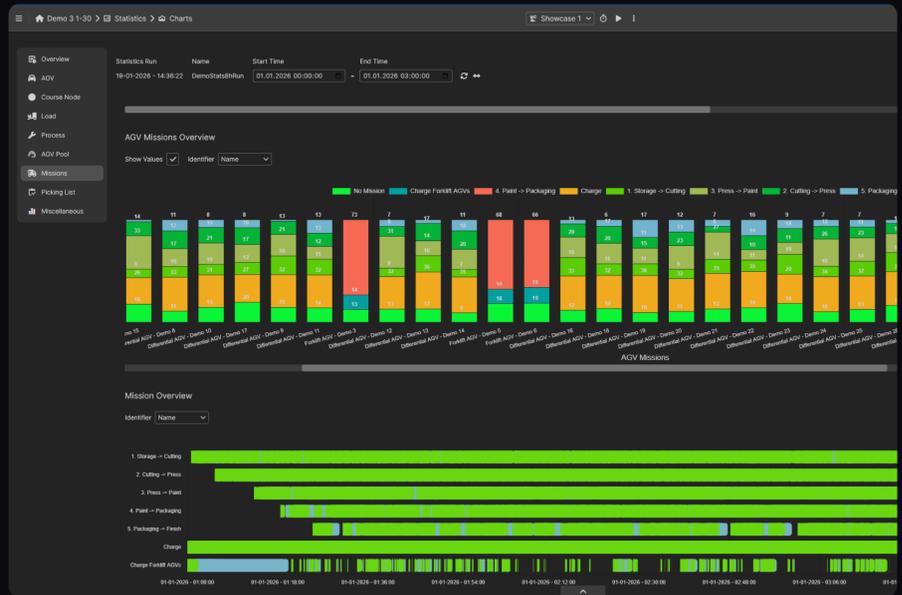Define transport processes visually.
No coding required.

✓ Drag-and-drop flow builder

✓ Nested flows for complex workflows

✓ Reusable process templates

ScaliRo

Statistics & Analysis

Comprehensive statistical reporting for data-driven planning decisions.

✓ Bottleneck identification & throughput analysis

✓ Robot utilization metrics & custom KPIs

✓ Exportable reports for stakeholders

Additional Simulation Features

✓ Emulation mode — hardware-in-the-loop testing	✓ Traffic management with collision avoidance
✓ Job scheduling and prioritization engine	✓ Multi-scenario comparison for A/B testing

Visualization

Monitor your fleet in real time. Track vehicle positions, job status, and battery levels on your factory layout — with full VDA 5050 protocol transparency.

VDA 5050
Full real-time monitoring of all VDA 5050 protocol messages.

Live Fleet & Infrastructure Overview

Complete operational picture at a glance — robots, infrastructure, and fleet health in one view.

✓ Real-time 2D visualization of all mobile robots

✓ Gates, sensors, and machine positions

✓ VDA 5050 warnings, errors & battery tracking

✓ Order status per robot

✓ Customizable dashboards & alert rules

✓ Historical replay for incident analysis

ScaliRo

Your Infrastructure, Your Rules

Deploy FleetEngine where it fits best. Available as Full Suite or individual modules.

FULL CONTROL

🖥️ Self-Hosted
Your infrastructure

- Docker container images
- Proprietary extensions
- White-label option
- Air-gapped capable

RECOMMENDED

BEST VALUE

☁️ Managed Cloud
Fully managed by ScaliRo

- Fully managed hosting
- Automatic updates
- Auto-scaling
- Enterprise SLA

DATA SOVEREIGNTY

🏠 On-Premise
Dedicated installation

- Full data sovereignty
- Full control over data location
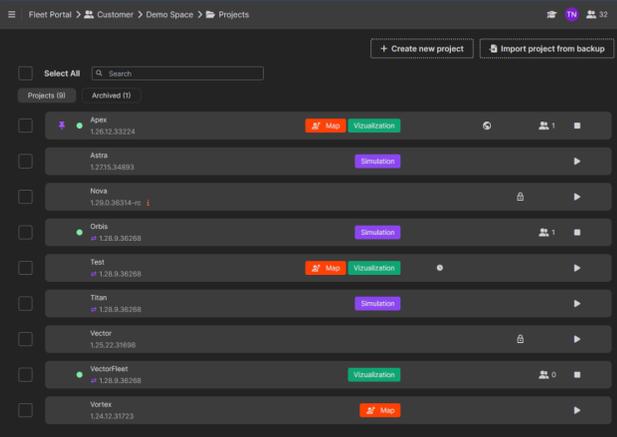- Isolated environment
- Custom configuration

Licensing

FOR ROTATING USERS

👥 Floating License
Shared team usage

- Up to 10 users per license
- One active user
- Unlimited number of projects
- Includes updates & chat support
- Volume discounts from 2 licenses
- 30-day free trial

MOST POPULAR

MOST POPULAR

👤 User License
Dedicated per user

- 2 simultaneous cloud instances per license
- Unlimited number of projects
- Includes updates & chat support
- Volume discounts from 2 licenses
- 30-day free trial

ENTERPRISE

🏢 Custom
Tailored offer

- Unlimited users
- On-premise deployment
- Dedicated contact person
- Custom adaptations
- SLA & premium support

FleetEngine Ecosystem

Our cloud and offline tools for your project management

▣ FleetPortal
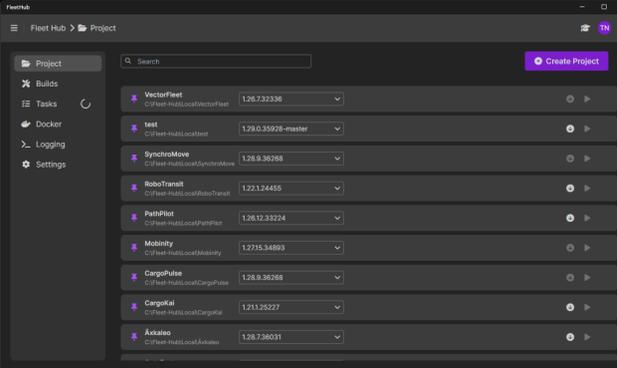
Cloud platform for FleetEngine projects. German DSGVO-compliant data centers with full data sovereignty.

▣ FleetHub

Offline project management with FleetPortal sync. Export as Docker container, Debian package, or Windows service.

ScaliRo

Your Partner for Successful Fleet Projects

ScaliRo's engineering team is your partner — from feasibility to long-term support.

OEMs	PRODUCT	Services
Integrators	**FleetEngine**	Training
Operators		Support

Consulting & Feasibility
Expert assessment of your robotics project — layout review, feasibility analysis, and actionable recommendations.

MOST POPULAR

Simulation-as-a-Service
We run the simulation for you — fleet sizing, bottleneck analysis, and validated results with KPI reports.

System Integration & Commissioning
End-to-end setup of FleetEngine in your environment — from installation and configuration to go-live support.

Custom Development
Tailored C#/.NET plugins, adapters, and extensions for your specific workflows. 20+ plugins deployed.

Training & Certification
Hands-on training programs and certification for your team and integrator partners.

Long-Term Support & Maintenance
Ongoing maintenance, dedicated account management, and SLA-backed premium support.

Talk to us directly

Tim Nowak
MANAGING DIRECTOR & CO-FOUNDER

"Planning errors cost companies millions. With **FleetEngine***, we give every robotics project the simulation and planning tools it deserves —* **vendor-independent and standards-based.** *"*

Florian Köster
MANAGING DIRECTOR & CO-FOUNDER

"From automotive AGV projects to the first truly **vendor-neutral planning platform** *— FleetEngine unites* **editor, simulation, and visualization** *in one solution."*

Patrick Burkart
MANAGING DIRECTOR & CO-FOUNDER

"900+ users and 250+ projects — more convinced than ever: **open standards like VDA 5050 and LIF** *are the future of mobile robotics — and FleetEngine supports them* **natively.** *"*

Product + Services = your complete solution for scaling robotics operations.
Backed by 250+ projects of proven best practices.

Learn More

ScaliRo

BMW | BOSCH | SICK Sensor Intelligence | JUNGHEINRICH | DÜRR

TGW | SAFELOG | SYNAOS | ARTI | carrybots

idealworks | arculus A JUNGHEINRICH COMPANY | STÄUBLI | BARRY CALLEBAUT | ACTEMIUM

BÄR | AUMOVIO Robotic Solutions | XSCALED | GDS-CS ev | HUBTEX.

ProLog Automation | MEGGLE

TRACK RECORD

| **900+** Users Worldwide | **250+** Projects | **20+** Custom Plugins | **LIF** Standards Compliant |

TESTIMONIALS

"ScaliRo's FleetEngine enables precise map creation and facility planning. With the modern graphical editor, creating maps and rule sets for our mobile transport robots requires no programming knowledge — it's simple and requires minimal training. Thanks to improved simulation analysis, we can identify bottlenecks early and replan."

M **Mathias Behounek**
CEO, SAFELOG   SAFELOG

"ScaliRo's FleetEngine gives us the flexibility and adaptability to address our customers' individual requirements. With the ability to simulate and optimize various process flows, we can develop tailored solutions."

S **Stefano Bell**
Product Manager, Dürr   DÜRR

"Thanks to ScaliRo's FleetEngine and our vehicle expertise, we were able to swiftly implement new industry standards like LIF & VDA5050 as market pioneers together with ScaliRo. Their ability to implement innovative ideas quickly and pragmatically was crucial for the success of several pilot projects."

K **Konstantin Mautner-Lassnig**
CEO, ARTI Robots   ARTI

"We use ScaliRo FleetEngine as a central test field in Waldkirch and Hamburg for applications and different vehicle types. The integration of the FleetEngine system solution was realized quickly and smoothly together. Together, we create the foundation for successful projects."

T **Thomas Mößner**
Head of Product Management Performance LiDAR & Radar   SICK Sensor Intelligence

Ready for the Next Step?

Follow us on LinkedIn

⊘ Enterprise Ready   ⚡ Quick Integration   ⚐ Dedicated Support

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