Touch4IT

Space
Defence
Aerospace

Business Solutions. Insight-Driven. Partnership-Focused.

esa

EUMETSAT

needronix

dhv technology

GROUNDCOM

Space scAvengers

3IPK

ALTER

AsTrOS solutions

aicia

DESY.

European XFEL

CTRL … bringing space closer

SAMCO Aircraft Maintenance

Touch4IT

Your Solution for Mission Critical Systems

Next-Gen technology adoption enabler for mid size+ companies

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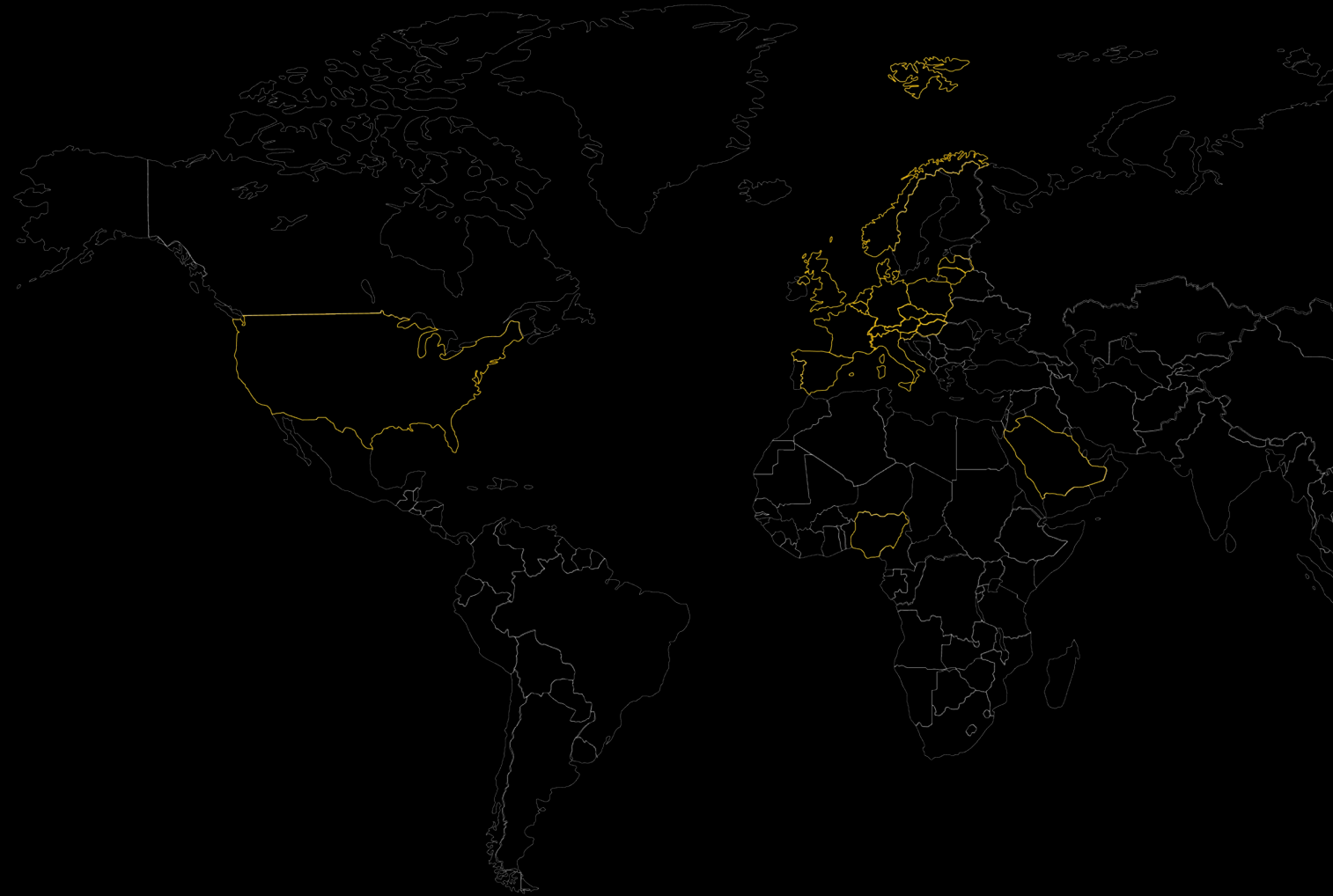
Why Companies Trust Us

68% of new projects come from **client referrals**

70% of our revenue comes from **6+ year client** partnerships

90% of our projects are **business-critical systems**

50% faster delivery of new software product prototypes

90% of projects are covered by our **Run & Maintenance operations** (private or public cloud)

99.98% actual long-term **SLA uptime**

Touch4IT as a boutique Accenture: Strategic mindset, custom delivery, and execution excellence, without the bureaucracy.

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Key advantages

- **Next-Gen technology adoption enabler for mid size+ companies**
- EU based company with US branch
- Deep tech SW engineering & Modern visual design
- Building enterprise grade solutions
- ISO certified (quality, environment, security)
- Long-term partnerships
- Domain knowledge (Space, Defence, Aerospace)
- Own products & solutions that can be reused or adapted (pre-built sw modules, private cloud infrastructure, proven event-driven microservice architecture...)

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Space industry

Ground Segment SW

- SW for ground segment infrastructure management, signal transmission, signal receiving, processing and data processing, antenna control

- In cooperation with 15 entities/part of STEPHANIK project

Mission Control SW

- Management of missions, receive/display/analysis telemetry from satellites, plan and analyze planned operations, order approval processing and execution

- In cooperation with Groundcom, Technical University in Kosice and more

Satellite Security

- Hardening of satellite SW/OS, security of network/communication layer/link

- In cooperation

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Defence industry

Command and Control (C2) System

- Addressing missing European Command and Control capabilities which were identified as one of the most [crucial gaps](#)

- System of systems architecture

- Planning, simulation and training

- Data gathering

- Integrations

  - HW

  - Other SW

- Advanced Graphical User Interface

  - XR interface

  - Enhanced visualization and training

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Aerospace industry

MRO Digitalization

- We help MRO companies digitalize their activities and thus improve operation efficiency

- Resource Planning and Allocation

- Task Planning and Results Reporting

- Data integrity - Airworthiness / Trustworthiness – 3IPK blockchain integration

- ERP System integration

T4 Products & Solutions

Reuse as is or Adaption to your Business Case

Thematic Short List

- **Satellite Geometry Analysis Tool**
  - Can analyse constellation orbits and ground station location to achieve the required performance (visibility windows, pass occurrence and length)

- **Colocation Mixed Reality Training platform**
  - Multi-person team can train for difficult situations with changing using AI characters

- **AI RAG System for a highly regulated environments**
  - Access to large volumes of information/data, integrable with various systems.

- **Private Cloud – Container-based (K8S) Infrastructure**
  - Modern and private infrastructure for the secure operation of various solutions. EU-based. It can be used as-is or deployed in your preferred data centre.

- **T4 SW Platform**
  - A modular platform that enables rapid development thanks to pre-built modules, secure operation, auditability, and scalability of digital solutions.

SGAT - Satellite Geometry Analysis Tool

- Model-Based System Engineering

- Modelling, simulation and analysis

- Orbit propagation, ionosphere, line of sights, viewing angles, ionosphere signal impact

- Available for MacOS, Win, Linux

- User-Oriented, Research-Based Design System

- Significantly Increases Efficiency and Reduces Working Time

- Cuts down Setup time from 14 days to 4 hours

- Combined 5 tools to 1

Working on new features - v2.0

- Orbit modification simulations

- Support for LEO, space debris

- Satellite instrument parameters, inter-satellite links

- HW integration testing

- Cloud deploy - SaaS availability

In cooperation with:

Space scAvengers   needronix   GROUNDCOM

SGAT   esa

An SBAS Geometry Analysis Tool

We developed a Satellite-based Augmentation System (SBAS) Geometry Analysis tool with European Space Agency. It is a comprehensive toolset that **enables SBAS engineers, researchers and operators to carry out analyses of orbit and ionospheric geometries** between SBAS ground stations and constellation of satellites.

Our platform merges multiple tools into one and **cuts down setup time from days to hours**.

Colocation Mixed Reality Training

- The Problem: Traditional training in challenging industries is costly, lacks immersion, and prevents real-world teamwork. The

- Solution: Our colocation mixed reality (XR) platform allows teams to train together in the same physical space, interacting with AI-driven virtual characters and digital objects in real time.

- How It Works:

  - Multi-user colocation keeps training synchronized across shared environments

  - AI-driven characters adapt dynamically to users' actions

  - Modular framework enables rapid scenario development & customization

AI RAG System for a highly regulated environments

- The Problem: AI systems often hallucinate, lack auditability, and pose security/compliance risks in regulated industries

- Solution: Our AI RAG System for a highly regulated environment retrieves internal, compliant data and uses it to generate grounded, verifiable answers. With multi-levelled controlled data access, solution can cover tasks from general/publicly available data up to confidential/restricted access data.

- How It Works:

  - Data Retrieval (Grounded Responses) - The system retrieves relevant documents from a controlled internal knowledge base, relevant to the required access level.

  - Generation - The retrieved context is then passed to an LLM (possibly on-premise or fine-tuned) to generate an answer grounded in real, known documents.

  - Traceability - Answers include references or links to the original documents, enabling auditability and compliance.

Private Cloud – Container-based (K8S) Infrastructure

- The Problem: Companies often struggle with inconsistent environments across development, testing, and production, leading to deployment errors and delays.. In addition, sensitive data cannot leave dedicated premises.

- Solution: Our container-based infrastructure offers an effective and reliable way to manage computation resources through multiple environments. Private Cloud setup with multiple locations offers high availability and resilience to a wide range of risks.

- Options:

  - Using purely open sourced technologies, mitigates vendor locks

  - Multiple locations utilize TIER III and/or IV data center colocation services offers 99,9 up to 99.999 availability

  - Infrastructure including sensitive data can be located on client premises only

T4 SW Platform

- The Problem: Custom software development is costly and time-consuming. leading to deployment errors and delays.

- Solution: Our pre-built modules for faster bootstrapping new solutions, developed and improved over the last 7 years and actively maintained. Although every customer and project is unique, common aspects and elements can be identified and by reuse, we can save time and resources.

Key benefits:
- Accelerates time-to-market
- Enables increased budget allocation for custom development
- Flexible for customisation
- Provides cost-efficient maintenance
- Ensures ironclad security and data privacy

- High-load ready with effective scaling
- Seamless integration with existing systems and workflows
- Streamlined efficiency with Automated Testing and CI/CD
- Deployable to any Environment: Cloud, On-premise, Serverless

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Tailored Solutions

Building solutions tailored to your Business Case

Common Use cases

- Greenfield projects
- Integration projects
- Rescue projects
- Rework existing solutions

Touch4IT | **Tailored Solutions**

UC: HW Integration + Rework

CHALLENGE: CBRN detection device designed for remote sensing needed a complete hardware and software generational upgrade. Our task was to **design** and **deliver new generation of the software control system** to ensure it would be secure, fast, and sustainable for long-term operation, given that the previous generation had been on the market for 15 years with an originial sw solution.

Falcon 4G is active laser-based distant detector for chemicals (airborne chemical and biological agents)

- Operation range up to 6km

- Stand-off or mobile installation

- Motorized stand platform

- Integrated camera and joystick

Touch4IT | Tailored Solutions
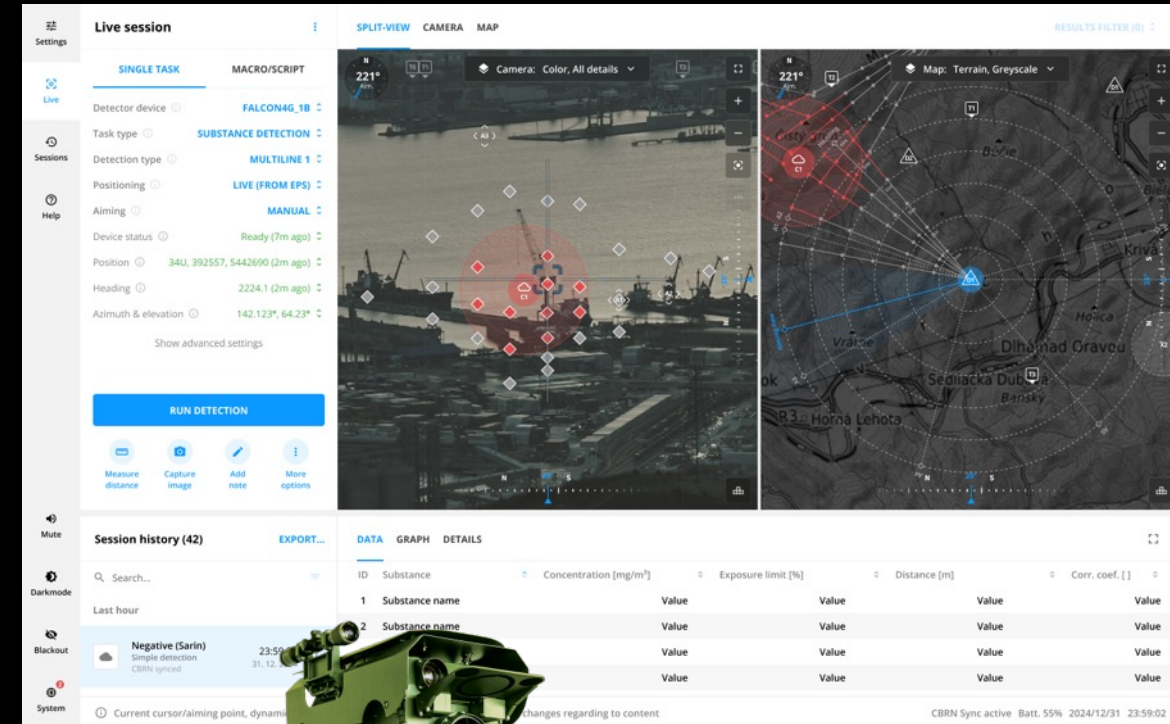
UC: HW Integration + Greenfield

CHALLENGE: Dental chair manufacturer defeloped new top tier dental chair set.
Our task was to **design** and **deliver new generation of the software control system** to ensure it would be secure, fast, and sustainable for long-term operation.

Diplomat Dental – Model Pro, the first smat dental chair

- Wireless controlled, SW integrated control of the chair movements

- dental tools configuration and control

- Telemetry data gathering - monitoring

- Remote diagnostics, maintenance and support

- Firmware update over-the-air (OTA)

- Remote support and maintenance

reddot winner 2021

if DESIGN AWARD 2022

BIGSEE PRODUCTDESIGN AWARD 2021 WINNER
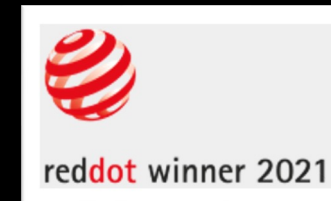
UC: Rescue project

CHALLENGE: Rescue client from situation, where he spent most of the budget and time with exotic developers, but received nothing but promises from vibe coding practices. We had to act fast, so the customer might generate revenue soon.

We did the following :
- Evaluate the overall quality of the existing codebase.
- Deploy the frontend application to assess its current functionality and stability
- Analyse the architecture and code structure
- Provide detailed recommendations and next steps based on our findings.
- We had to design, build and deploy MVP in 3 months

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Interested?

Get in Touch!

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CERTIFIED MANAGEMENT SYSTEM
SKQS
ISO 9001
ISO 14001
ISO 27001

ISO Certified

Clutch

5.0 ★★★★★

Highly Rated by
Customers

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Thank You!

More case studies:

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