



Technology for a safer world

EIT Health IPCEI Matchmaking session | Sep 5th

© 2024

Agenda



About us

Service areas X5

- Software Development
- Systems Integration
- Cybersecurity
- Innovation
- IT infrastructure

Contact



TRC is a **technology integration** company with **35 years** of experience

World class ✓ software ✓ development, ✓ systems integration, ✓ cybersecurity, ✓ innovation and ✓ IT infrastructure to **meet evolving challenges** alongside our clients in **Spain** and **beyond**

#cibersecurity #cloud #infrastructure
#networking #innovación #software #Digital
transformation #datacenter #IT systems

Extensive presence and diversification

Markets

Healthcare

Manufacturing and Transportation

Financial

Enterprise

Defense and Security

Public Administration



UNE-EN ISO 9001
Quality Management
System



UNE-EN ISO 14001
Environmental
Management System



ISO/IEC 33001
System Integration &
Software Development



ISO/IEC 15504
System Integration &
Software Development



ISO/IEC 20000
IT Service
Management System



UNE-ISO/IEC 27001
Information Security
Management in the
Organization



UNE-EN ISO 45001
Occupational health and
safety system



HUELLA DE CARBONO
Greenhouse gas reduction



CHAMBER TRUST
Guarantee of business
on the internet at an
international level



Innovative company
accredited by the Ministry
of Economy and
Competitiveness



TRC INFORMÁTICA
Managed security service for
incident detection and
response.



GRUPALIA INTERNET
Greenhouse gas
reduction commitment



**Government contractors with high-
level clearance**
Certified Telecommunications
Installer



**Comunidad
de Madrid**

Thermal installation and maintenance services
Low voltage electrical installation



CNMC Authorized Operator

ICT



Defense and security



Transportation

Oil & Gas

Infrastructure

Consumer Staples

Luxury



Government



Healthcare



Financial and Insurance



01

Develop

Software Development: Development of applications and specialized software focused on Hospital Information Systems, Financial and Management Platforms.

02

Integrate

Systems Integration: Deployment and configuration of your entire network and IT resources: networking, virtualization, hyperconvergence, secure mobility, cloud environments...

03

Cyber-Defend

Cybersecurity: Services and solutions to enhance your organization's level of security.

04

Innovate

Innovation: Research and developments based on Artificial Intelligence, Artificial Vision and Radio Frequency, through machine learning and deep learning.

05

Build

IT Infrastructure: Cabling networks, Data Centers, security networks, special installations, electricity and air conditioning of technical rooms.

trc

01. Development

Software Factory

Work system

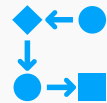


Analysis

Assess the current situation

Define needs scope, reports

Develop a migration strategy



Design

Prototype delivery

Migration test

Design

Development and test plan



Development

Data loading

Collaboration environments

Training

Staff development



Implementation

Deployment

Support

Maintenance

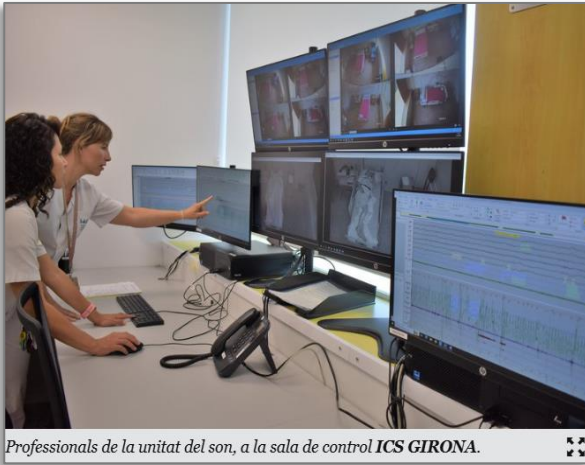
Incident resolution

Specialists in JAVA, .net, MIRTH integrations, SQL Server DB developments, system integration, data migrations, data analysis

Applications

Innobics-SAHS

Obstructive Sleep Apnea Syndrome is a disorder characterized by repeated interruptions in breathing during sleep



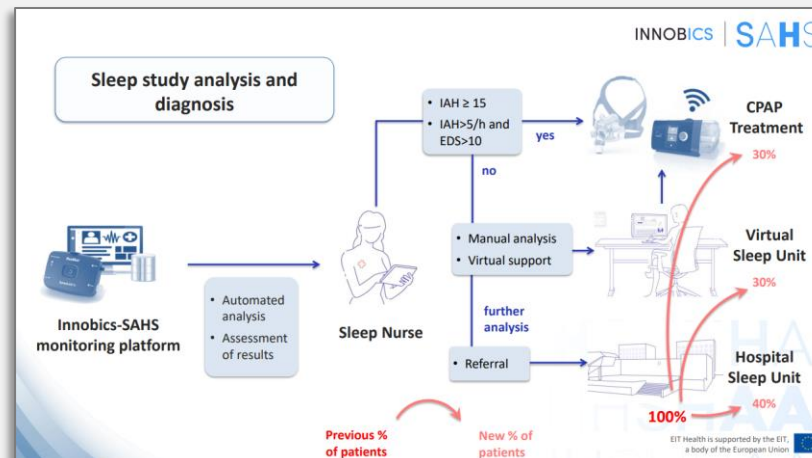
Problem:

- 90% underdiagnosis
- 6 to 12 months delays

Solution:

- A digital platform that provides an innovative, scalable solution for diagnosing and treating sleep apnea in hospitals and sleep units
- It efficiently manages data, devices, patients, institutions, and healthcare professionals

<https://innobics-sahs.eu/news/the-role-of-grupo-trc-in-the-innobics-sahs-project/>



INNObICS
SAHS



Applications

RetinaReadRisk

Diabetic retinopathy (DR) is a microvascular complication affecting the small blood vessels in the retina, leading to total vision loss



Problem:

Waiting time in public healthcare systems, and lack of **early** detection in working adults

Solution:

- RRR orchestrates AI models 5G technology, and smartphones equipped to capture retinal images in local medical offices via a single ICT platform
- Deep learning models automatically analyze them to predict the risk of developing DR



Software



Doctoris

Hospital **Management Software** where all systems converge on a single web platform, facilitating the **comprehensive** Health Center workflow orchestration

- **Doctoris HIS.** Hospital Information System
- **Doctoris HCE.** Electronic Medical Record
- **Patient Portal**
- **Patient portal. APP**
- **+Signature.** Informed consent
- **e-Oncology.** Oncology Pharmacy
- **Private electronic prescription**
- **GDM.** Digital medication management
- **Specialized module in ICU**
- **Queue.** Waiting room management

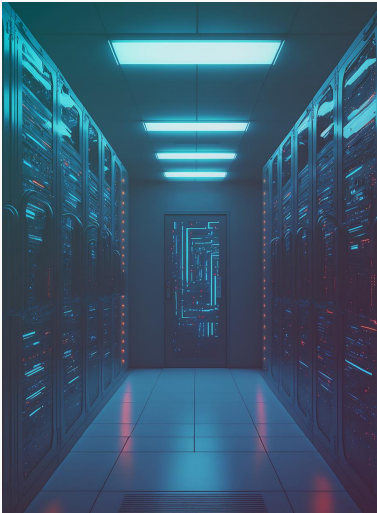


02. Integration

Systems Integration

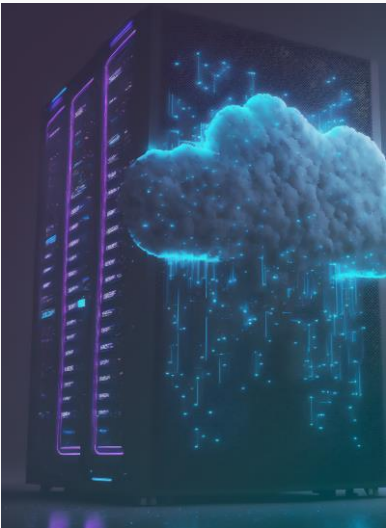
Boost productivity and streamline business processes

At TRC, we strive to be your technological ally, guiding your **digital transformation** and enhancing your capabilities with top solutions



Cloud, Storage

Deploy **hosting** and cloud solutions to create **reliable, scalable**, and readily available data environments



Maintenance, operation and monitoring 8x5 or 24x7 models
Customizable SLAs according to needs

Work areas



Bare Metal Servers

Install high-performance servers to optimize data management



IT Support

Issue resolution, technical support, and technology installation and configuration



Unified Communications

Custom professional solutions: IP telephony, call centers, and video conferencing integration



Mail / DNS

Integrate mail and DNS applications for efficient, intuitive experiences

Integration of physical, equipment and software applications
Scalable architecture



Virtualization

Virtualize services, machines, and work environments with full workstation features



Storage Systems

Integrate and install high-performance storage systems



Backup Solutions

Install and manage backup solutions for data recovery



Hyperconverged Structures

Deploy platforms and migrate data and machines in hyperconverged environments to simplify resource management



VDI (Virtual Desktop Infrastructure)

Customize virtual desktops with centralized management flexibility



Authentication Applications

Integrate authentication, identity, and document protection applications

Networking, Wi-Fi and Perimeter Security

Deploy network resources
for all needs

From mobile platforms to
high-criticality
environments

Configure and secure LAN
and WAN networks to
protect your assets



Site Acceptance Testing **SAT** Service



Manage, support, and
maintain IT systems to
handle daily incidents
and requirements

Our highly qualified
teams monitor your
systems and respond
quickly to incidents,
ensuring process
continuity

Work Areas



Switching. Routing

Access networks, data centers, WAN connectivity,
and network auditing and consulting services



WIFI

Deploy WiFi networks, integrate with wired
networks, and conduct coverage studies



Load Balancing

LAN and WAN load balancing solutions



Firewall

Implement, operate, and migrate firewalls



NAC (Network Access Control)

Implement network access control systems



SD-WAN Networks

Integrate software defined wide area network SD-
WAN technologies, consulting, and solution
analysis



SASE (Secure Access Service Edge)

Cloud Access Security Broker (CASB), FWaaS, and
Zero Trust, ensuring secure access to platforms



Support

Handle incidents and requests via email,
phone, and SGCOL, with escalation to
higher technical levels



24x7 Service

24/7 incident management carried out by
experts



Remote Hands Service

Manage Data Center equipment: server
reboots, cable changes, and basic
installations



Remote Operations

Execute procedures remotely to reduce
escalations and response times for failures



Monitoring

24x7 monitoring services for organizations
with their own technical teams

03. Cyber Defense

Cybersecurity

Cyberlab

TECHNOLOGY TESTING LABORATORY



Technology Assessment

World-class cybersecurity technology benchmarking for thoughtful integration: hardware, software, best practices



Integration of previously-weighted solutions

Pre-tested solutions in our cyberlab to devise specialized cyber defense pathways



Identification of disruptive technologies

- Deep knowledge of client technologies for **objective evaluation**
- Strong collaboration with manufacturers
- Selecting the best solutions
- Fostering trust between integrator and client



SERVICES AND SOLUTIONS

Endpoint/extended detection and response

EDR/XDR systems

Effective defense against sophisticated behavior-based and Zero Day attacks

Implement technology to **differentiate** legitimate from advanced **malicious** behaviors

Comprehensive monitoring and defense for all systems and users



Vulnerability Identification and Management

Ongoing identification, categorization, prioritization, and resolution of IT infrastructure vulnerabilities



Immediate alerts and system status

Comprehensive evaluation of all system telemetry, behaviors, and misconfigurations

- Reporting on the **platform health** and performance



Here's how our **Managed Monitoring Service** enhances healthcare

- Threat **Detection**: Continuous monitoring to keep systems secure and compliant
- Platform **Maintenance**: Optimize and update security platforms for peak performance
- Threat **Analysis**: Analyze threats in containers and virtual systems
- Firewall **Integration**: Seamless integration with local firewalls
- Device **Control**: Manage devices and align with your security policies, maintaining your sensitive healthcare data safe



Identification

- Information system **asset inventory** for potential vulnerabilities



Categorization and prioritization

- Classify vulnerabilities based on detected **Common Vulnerabilities and Exposures** (CVEs)
- Prioritize **criticality** through AI-based models



Analysis and notification

- Analyze vulnerabilities
- Contextualize AI-generated priorities
- Document notifications with asset details and mitigation measures



Verification and registration

- Make sure the vulnerability is no longer detected

SERVICES AND SOLUTIONS

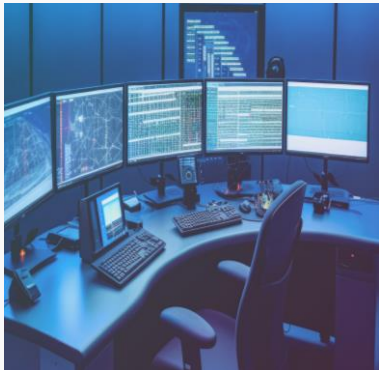
In-depth Identity Defense

Problem: Identity-based attacks are a major challenge in corporate cybersecurity

Solution: Technology that differentiates between legitimate users and cybercriminals with stolen credentials



Automated Security Operations Center SOC



Deployment and Implementation Service

Evaluate the client's ecosystem, identify vulnerabilities, deploy agents, and configure the platform



Regulatory Compliance

Compliance with National Cybersecurity Scheme, ISO 27001, and NIST standards



Active Directory Risk Analysis

- Analyze all AD entities and the risk framework
- Identification of potential attack vectors
- Continuously **monitor** AD security
- **Define** access policies based on activity, behavior, and risk
- Configure response actions and **automate** playbooks
- **Threat Hunting** and **Proactive search**



Our services are **API-FIRST**

We use next-gen cybersecurity technologies with an 'open' design for **easier interoperability** and reduced complexity

Advantages

- Faster threat response
- **Reduced** manual errors
- Lower operational costs



Virtual Analyst Role

- Use AI and machine learning for 24/7 monitoring
- **Accurate** threat detection with reduced false positives



Risk Analysis

Conducting risk analysis with the **MAGERIT** methodology using Pilar/micro-Pilar tools as needed

04. Innovation

R&D



Biometric recognition

Facial and Body BR: BR Image Processing

- Secure Identification: Biometric recognition ensures accurate **patient ID**, reducing errors, preventing identity theft, and streamlining check-ins
- Personalized **Care**: Facial and body recognition tracks interactions, monitors treatment compliance, and customizes care plans
- Access Control: Biometric systems **secure** access to sensitive areas and data, enhancing protection and regulatory **compliance**

Frequency spectrum analysis

Hyperspectral image processing

Processing radio interface signals

- Improved Network **Security** and Compliance
- Optimized Wireless **Medical Device** Performance
- Efficient Spectrum Management for IoT Devices

IoT Device Data Analytics

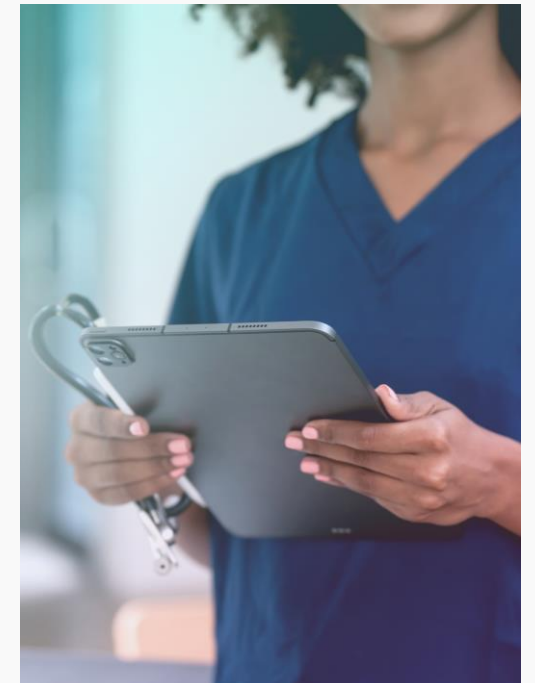
- Enhanced **Patient Monitoring** and **Predictive** Care: IoT devices collect real-time patient data, enabling remote vital sign monitoring
- Operational **Efficiency** and Cost **Reduction**: IoT analytics streamline operations, optimize equipment use, and reduce **wait times**

Computer vision

GBR-thermal image processing

BR by voice: voice file processing

- Early **Detection**: Thermal imaging detects abnormal temperature patterns for early, non-invasive diagnosis and timely intervention
- Patient **Safety**: Computer vision monitors movements and analyzes speech to detect distress or neurological issues, enhancing safety
- Workflow Efficiency: Automated analysis of images and voice files reduces workloads, speeding up **diagnosis** and improving care focus





Natural Language Processing (NLP)

Language interpretation and processing

- Automated Documentation: Convert physician notes into **structured records**, reducing admin work and improving **accuracy**
- Patient Interaction: **Enable** chatbots to handle patient queries 24/7, enhancing engagement and reducing staff workload
- Predictive Insights: Provide insights on **disease** patterns, **treatment** outcomes, and risks for better decisions.
- Health Trend Monitoring: Identify headwinds and opportunities from your data, enabling proactive care **adjustments**

Machine Learning

Data correlation, pattern finding, and prediction models

- **Predictive** Diagnostics: Predict health issues early, enabling preventive care
- **Personalized** Care: Identify patterns in patient data and treatment outcomes for Bespoke treatments
- Resource **Optimization**: Improve resource allocation by forecasting admissions, equipment use, and staffing
- Faster **Drug Discovery**: Accelerate drug discovery by finding molecular data correlations and predicting drug **efficacy**
- **Decision** Support: Data-based recommendations to enhance diagnostic accuracy and reduce error

05. Build

IT Infrastructure

IT Infrastructures

Maximum security and efficiency in the deployment and management of **telecommunications networks**

Properly **designing** and **planning** these infrastructures means being prepared for the constant **evolution/scaling** demanded by digital transformation, implementing new technologies and applications not anticipated in the initial design

Telecommunications networks

Structured Cabling

Data Center

Security Networks

IT Facilities

Audiovisual

Perimeter Security

IT Infrastructures



Audit

Analysis and knowledge of the real state of your Data Center



Commissioning

Review, adjustment and assurance of all processes and systems



Engineering

Multidisciplinary design of all infrastructures. Documentation



Installation

All stages and figures of construction in a unified turnkey project



Monitoring

Constant monitoring to ensure the operation of the systems



Critical transfer

Planning, analysis and documentation in the movement of infrastructure



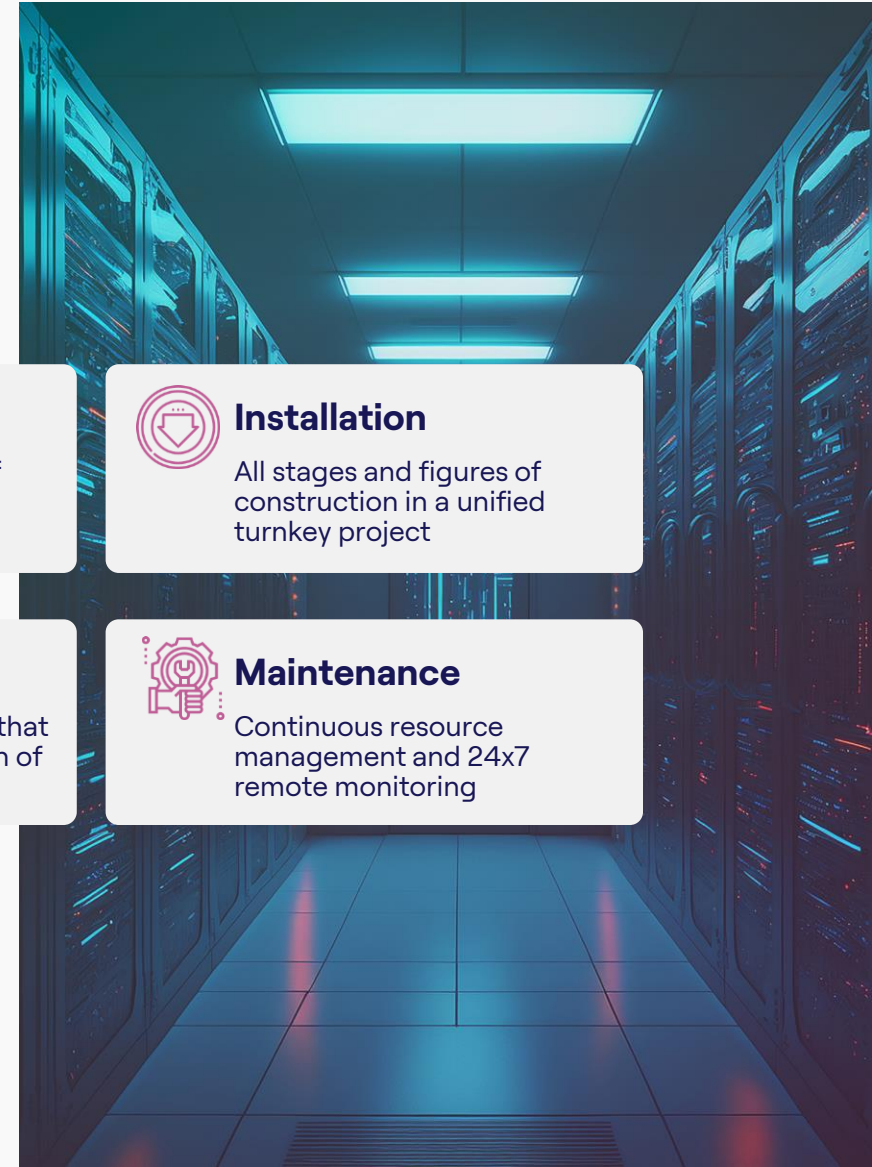
Technical cleaning

Specialized maintenance that ensures the optimal health of your DC



Maintenance

Continuous resource management and 24x7 remote monitoring



Special facilities



Patient-Nurse Communication System

VoIP-based solution compatible with both IP and analog systems. A button triggers a real-time alarm, instantly alerting the control station where staff manage the emergency response



Access control and work presence identification

Access control terminals enable quick, easy management of workers' entry and exit times through customizable modules



Building Management Systems **BMSs**

Verify proper operation, regulate heating, air conditioning, ventilation, and utilities, and monitor alarms or incidents in real-time. It also integrates with third-party solutions



Parking guidance and Control Systems

Including information panels, guidance lights, and parking detectors



IP Television Systems

Manage TV channels or advertising signals through a versatile, fast, and simple cabling infrastructure



Security of Systems Integration (PSIM)

Unified integration of access control, CCTV, intrusion detection, intercom, public address, and telephony





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Thanks!