info@robomain.ca • www.robomain.ca • 1-437-808-1668

RoboElinkKVM

Intelligent Remote Maintenance and Support Solution

How Your Support Team Benefit from Remotely-Troubleshooted Device

https://www.linkedin.com/company/robomain/

In a digital infrastructure landscape where system uptime is critical and IT resources are increasingly distributed, enterprises demand smarter ways to manage and maintain their systems. **RoboElinkKVM** is an **intelligent remote maintenance management solution** that empowers IT teams to **monitor, troubleshoot, and operate servers and industrial devices** remotely, at the BIOS level, with AI-enhanced diagnostics, secure KVM-over-IP control, and seamless integration into enterprise infrastructure

Background and Challenges

Modern IT and OT (**O**perational **T**echnology) environments face significant challenges:

- High costs and delays in on-site maintenance.
- Inability to access BIOS system or troubleshoot non-booting devices remotely.
- Fragmented tools for monitoring and controlling server health
- Security vulnerabilities in traditional remote access tools.

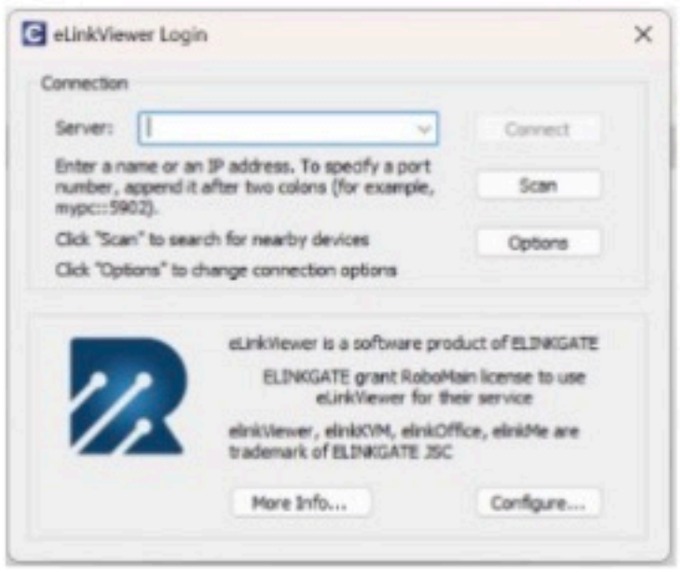
Key Problems Idenfitied

- Delayed response to outages or failures.
- Lack of visibility and predictive alerts for system health.
- Downtime costs due to manual interventions.

Solution Overview:

RoboElinkKVM is a Plug-and-Play hardware and software solution that provides:

- Full KVM-over-IP access to target devices, including during boot, BIOS, or OS crash states.
- AI-driven health monitoring and maintenance recommendations.
- Remote control of power and restart functions (via GPIO or relay modules).
- Integration APIs with CMMS platforms.



The Advantages of RoboElinkKVM

Remote KVM Control

- Full keyboard, video, and mouse control from any location via secure web portal.
- BIO-level access for OS recovery and configuration.

Smart Monitoring & Predictive Maintenance

- Real-time system data.
- Machine leaning models trained to detect anomalies and suggest preemptive actions.

Security-first Architecture

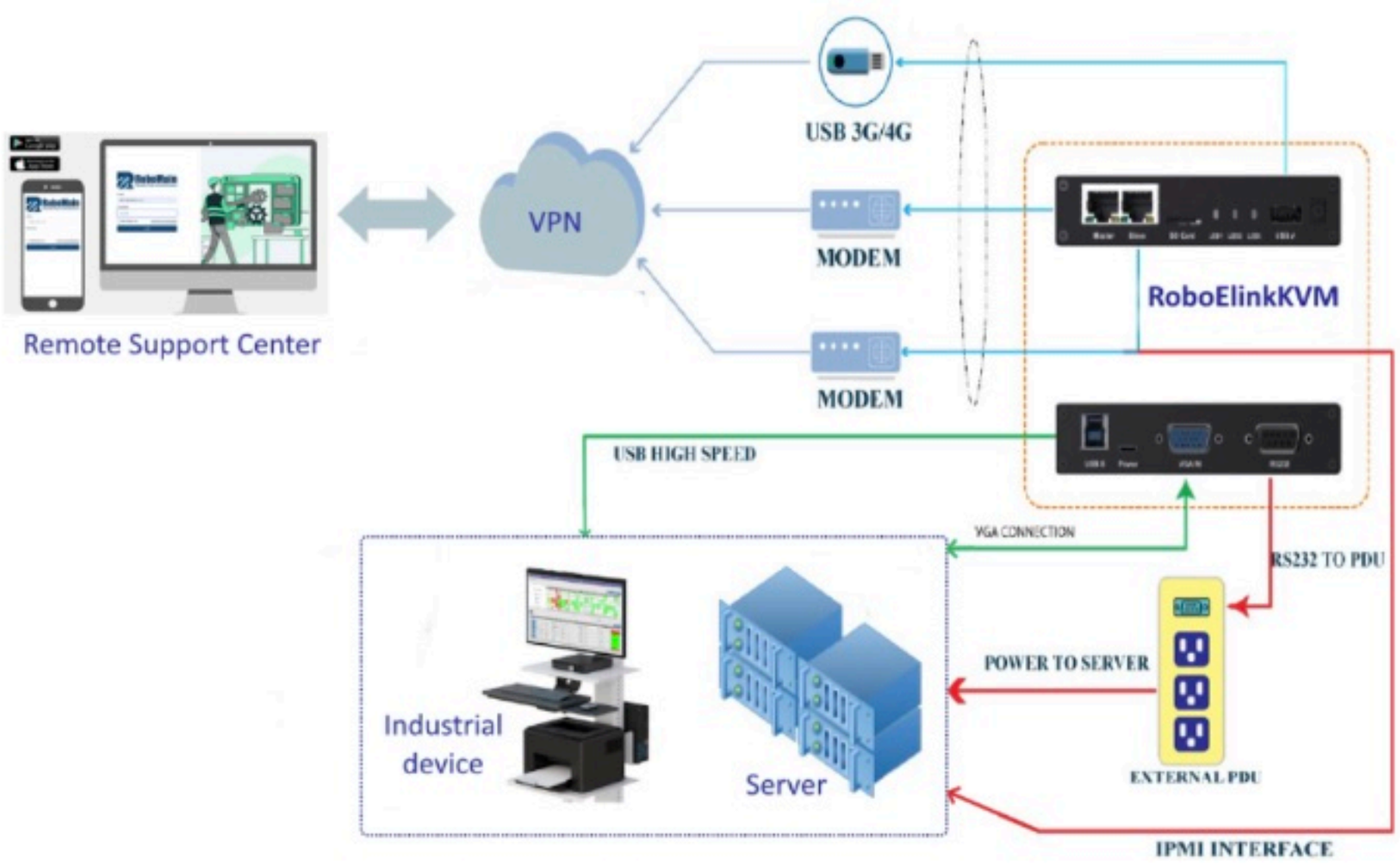
- AES-256 encrypted sessions.
- Multi-user role control with full audit trail and session logs.
- Configurable access zones and alerts.

Seamless Integration

- Can be embedded into existing CMMS.
- MQTT/Modbus extensions for Industrial IoT/OT scenarios.

System Architecture

- Works over LAN, VPN, or public internet (configurable).
- Supports DHCP/static IP, VLANs, and secure remote access.



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Use Cases

Data Centers

Remote BIOS setup, OS reinstallation, server monitoring

Industrial Plants

Control and monitor PLCs or embedded systems

Retail Chains

Manage POS and digital signage from HQ

Smart Buildings

Maintenance of access control and automation systems

Telecom & Edge

Manage remote base stations, reduce site visits

Competitive Comparison

Feature	RoboElinkKVM	Traditional KVM	Remote Desktop
BIOS-Level Access	✅	✅	❌
Remote Power Control	✅	❌	❌
AI Diagnostics	✅	❌	❌
Cloud Integration	✅	❌	✅

Benefits

- ⏱️ **Reduce maintenance response time by up to 70%**
- 💰 **Lower operational costs by minimizing travel and downtime**
- 🔒 **Strengthen infrastructure security and auditability**
- 🔁 **Increase uptime through predictive maintenance and real-time visibility**