

SMALL MOBILE INTERPRETED-LANGUAGE ENGINE (S.M.I.L.E) PLUG-IN

Build Custom Solutions to Manage your Unique Fleet Requirements

Enhance operations, boost safety and achieve greater efficiency with bespoke AI enhanced solutions.

INTRODUCING

Crystal by Ctrack

Crystal represents the pinnacle of Ctrack's innovation – a singular platform where the precision of Telematics converges with the foresight of Artificial Intelligence to harness the full power of Data Intelligence. This platform stands as a beacon of modern Fleet Asset Management, offering a live pulse on operations through its real-time monitoring capabilities and comprehensive analytics.

Designed to serve an array of industries, Crystal transcends the conventional, delivering bespoke operational optimisation, bolstering safety and equipping businesses with astute decision-making tools. Its versatility shines through its modular architecture, which invites companies to sculpt Crystal to their unique contours, ensuring it grows in tandem with their evolving needs.

With Crystal insights become foresight to plan ahead and control what is important to you.

We go beyond merely tracking your trucks, cars and assets.

This approach fosters safer environments, boosts performance, and lowers overall costs.



Optimise fleet productivity and efficiency



Reduce risk and minimise safety hazards



Improve asset management and tracking



Automate and Streamline Compliance



Manage and improve driver behaviour



UNLOCK THE FULL POTENTIAL OF YOUR FLEET

Crystal Small Mobile Interpreted-Language Engine (S.M.I.L.E) Plug-In

In today's dynamic fleet management landscape, a one-size-fits-all approach simply doesn't cut it. Crystal by Ctrack offers the S.M.I.L.E Plug-In, a revolutionary tool designed to empower businesses with real-time, intelligent automation for fleet operations.

What is S.M.I.L.E?

S.M.I.L.E stands for Small Mobile Interpreted-Language Engine, reflecting its ability to process data locally on each vehicle, execute custom AI-driven actions, and enhance operational decision-making without reliance on a central server.

This Plug-In seamlessly integrates with various devices and sensors, enabling real-time data processing and immediate action, ensuring that your fleet is always responsive and optimised.

Whether you operate in mining, agriculture, logistics, or any other industry, S.M.I.L.E provides the flexibility to develop tailored solutions that enhance efficiency, improve safety, and streamline fleet management.

By leveraging the power of Edge Computing, S.M.I.L.E ensures computation happens at the source, enabling faster decision-making, reduced latency, and a more responsive fleet.

The Benefits of Operating on the Edge



Local Data Processing

Allow data from various sensors and devices on the vehicle to be processed locally, right on the vehicle itself.



Immediate Actions

Actions such as sending alerts, activating immobilisers, or updating asset status can be triggered immediately based on the processed data, without needing to send everything to a central server first.



Custom Solutions

By creating custom scripts and actions that run directly on the vehicle, the Plug-In leverages the principles of edge computing, where computation happens close to the data source.

DEFINING

Edge Computing

*Maximising Efficiency at the Source:
The Power of Edge Computing in Fleet Management*

Edge computing brings computation and data storage closer to the location where it is needed, improving response times and saving bandwidth. In the context of fleet management, it allows for real-time data processing on the vehicle itself, enabling faster decision-making and actions.



Real-Time Data Processing

Analyse data on the vehicle for immediate insights and actions.



Reduced Latency

Minimise delays in data transmission, allowing for quicker responses to critical events.



Improved Efficiency

Offload data processing from central servers to the edge, freeing up bandwidth and reducing costs.



Enhanced Security

Keep sensitive data on the vehicle, reducing the risk of interception during transmission.



Scalability

Easily add new devices and capabilities without overloading central systems.

Feature Highlights

Enhance Your Fleet Asset Management with Custom Solutions.

In the ever-evolving world of telematics and AI, one size does not fit all. Ctrack understands this, which is why we offer the Crystal S.M.I.L.E Plug-In. A powerful tool that allows you to tailor the Crystal platform to meet your unique business needs. Whether you're in mining, agriculture, logistics, or any other industry, this plug-in provides the flexibility to create custom solutions that standard tools can't deliver.



Custom Notifications

Receive alerts for specific conditions, like speeding in a particular zone or vehicle tampering.



Advanced Data Processing

Process data from various sources to gain actionable insights and control over your fleet.



Third-Party Integration

Integrate with devices like driver card readers, temperature sensors and more for comprehensive monitoring



Bespoke Actions

Create custom scripts for specific actions, such as sending real-time alerts, updating asset status and immobilising vehicles.



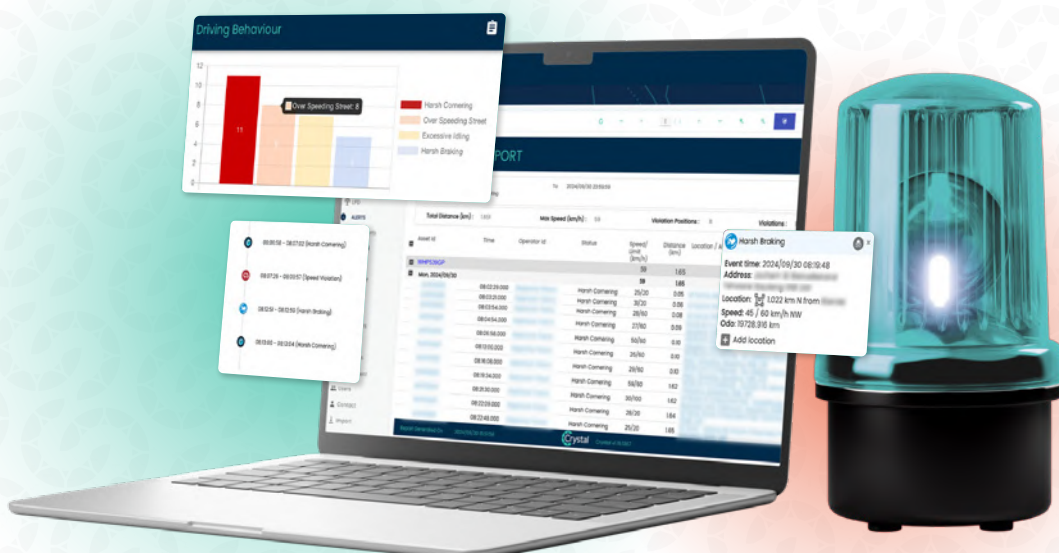
Remote Management

Upload and manage your custom AI plug-ins remotely, ensuring smooth and efficient fleet operations.



Industry-Specific Solutions

Tailor the plug-in to address unique challenges in sectors like mining, agriculture, logistics and more.



UNDERSTANDING

The Mechanics

The Crystal S.M.I.L.E Plug-In is designed to seamlessly integrate with your fleet's existing systems, providing real-time data processing and immediate actionable insights. Here's a step-by-step overview of how it transforms your fleet management:

01 Identify Specific Needs

Determine the specific problems or requirements that standard solutions can't address.

02 Develop Custom Solutions

Crack will work with you to develop a custom AI Plug-In tailored to your needs.

03 Integration

Crystal links with various devices in your vehicles, such as sensors, trackers and immobilisers, providing essential data, like location, speed and fuel usage.

04 Process Data

The Plug-In processes this data, allowing you to read information (like location) and control features (like sending alerts or activating immobilisers).

05 Create Custom Actions

Develop scripts for specific actions, such as: Sending real-time alerts, updating asset status, immobilising a vehicle if tampering is detected.

The Crystal S.M.I.L.E Plug-In provides you with a bespoke, flexible solution that ensures your fleet operates at its best, tailored specifically to your business needs. Incorporating Edge Computing, further enhances your fleet's efficiency, safety and responsiveness.

The Plug-In utilises a modular approach to connect and manage various devices within your fleet. Here's a simplified breakdown of the components and their interactions:



External Devices

Connect various devices like 1-Wire, CAN, immobilisers, serial and digital devices to the Crystal platform to provide essential data.



Data Processing

The Crystal platform processes data from these devices, enabling detailed monitoring and control.



External Communication

The processed data and alerts are sent to the Crystal platform for real-time decision-making and management, ensuring efficient and secure fleet operations.



Actions And Controls

Based on the processed data, Crystal can perform specific actions, including reading data such as location, speed and fuel levels, as well as performing writing actions such as sending alerts, activating immobilisers and sending messages.

EXAMPLE Use Cases



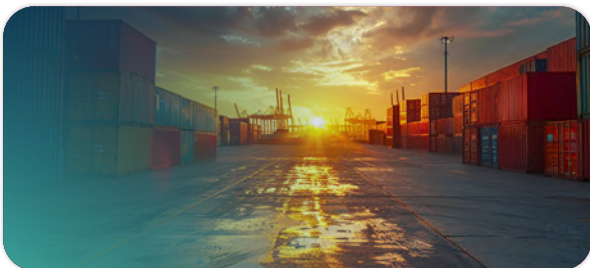
Mining Safety

Receive alerts when vehicles exceed speed limits in specific areas (Geo-Fences).



Fleet Asset Management

Generate outputs and immobilise vehicles if jamming or tampering is detected.



Logistics

Switch auxiliary equipment on and off based on location and device input, such as battery voltage.



Agriculture

Receive notifications if crop spraying stops for a specific time in defined areas.

These examples illustrate the versatility of the Crystal S.M.I.L.E Plug-In, but the possibilities are endless. Whether you need specific alerts, tailored controls, or unique data processing, the Plug-In can be customised to meet virtually any Fleet Asset Management requirement.





Ctrack has been at the forefront of telematics and Fleet Asset Management for 40 years, delivering cutting-edge solutions that drive efficiency, enhance safety, and optimise operations. As we celebrate this milestone, we remain committed to innovation, continuously evolving our technology to meet the changing demands of businesses across industries. Our legacy is built on reliability, adaptability, and a deep understanding of Fleet Asset Management. With Crystal, our next-generation modular platform, we empower businesses with real-time data, predictive insights, and AI-driven analytics—ensuring smarter decision-making and operational excellence.



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