## **Explainer**

## entopy

## Entopy's Al Agent.

Large Language Models (LLMs) have caught the attention of most since the launch of OpenAls GPT4 model in 2023. They have created excited, provoked inspiration and really given a glimpse of what the Artificial Intelligence (AI) revolution will do. For most, these tools are used to generate content – write emails, create social media content, create images. Some more advanced models are being used for general search over traditional search engines, delivering brilliant results.

Now, in 2025, we are seeing a new wave of 'next generation LLMs' which are capable of reasoning. These models don't just respond intelligently, but they think. They are capable of going through multi-step task reasoning at each step. It is these models that have given rise to what is now being referred to as AI Agents.

## **Entopy's Al Agent**

Entopy has combined it's powerful AI-enabled Digital Twin with LLMs, creating both a chatbot capability and an AI Agent tool. By combining the spatial and temporal awareness of the Digital Twin with advanced AI reasoning, Entopy's AI Agent becomes an intelligent co-pilot for your operations. Whether you're asking complex questions, running investigative workflows, or monitoring key metrics behind the scenes, the AI Agent delivers fast, contextual, and actionable intelligence.

- Chatbot: offers a natural language question/answer interface as well as the production of graphs/charts to support analysis.
- **Deep analysis:** provides an analysis and scenario testing capability powered by ReAct for multi-step reasoning.
- **Background monitoring:** enables users to set monitoring tasks for the Al Agent to watch and flag anomalies and insights in real time.

The first step that we took was to create an intuitive interface for users to interact with the Digital Twin. Some of our deployments are very large with many data points and dashboard screens. Being able to ask a tool in natural language what was going on somewhere within the Digital Twin was considered a logical and powerful first step. Users can ask questions, create charts, run analysis and so on, accessing the full Digital Twin.

Following on from this, we start to move into deep research – a capability that allows users to run scenarios through the Al Agent, leveraging the next gen reasoning models. Highly complex and intricate scenarios can be tested using the Digital Twin as a base for reality (both historically, real time and future predictions from Al micromodels), delivering powerful results.

The Al Agent can also run task autonomously such as monitoring and alerting on certain activity. This is a powerful capability allowing users to watch very specific aspects of the operation within certain contexts and be emailed as to its status and if there are changes.

