

Service ID S00244

Location Remote



Tracking of AI development lifecycle

Provider service

GRADIANT

Link to content

<https://agrifoodtef.eu/services/tracking-ai-development-lifecycle>

Type of Sector

Arable farming, Food processing, Greenhouse, Horticulture, Livestock farming, Tree Crops, Viticulture

Accepted type of products

Software or AI model

Type of service

AI model training

Description

This service helps you keep track of everything that happens while training and testing AI systems. Think of it like a detailed diary that automatically records all the important information about your AI models. Every time you make changes to your model, train it with new data, or test its performance, our system saves this information in an organised way. You get access to a user-friendly website where you can see all your models, compare how well different versions are performing, and understand what changes led to better results. For example, if you're training an AI model to count fruits on trees, you can easily compare how accurate different versions of your model are, see which training data worked best, and track how each change improved the counting accuracy. The system stores all the technical details, test results, and performance measurements in one place, making it simple to find information when you need it and share results with your team. This takes away the headache of manually documenting everything and helps you make better decisions about which version of your AI model to use.

How can the service help you

Before using this service, organisations training and testing AI models often struggle with scattered information about this process. They typically maintain spreadsheets, notes, and code in different places, making it difficult to understand why one model version performs better than another or what changes led to improvements. Teams waste valuable time trying to recreate previous experiments or figure out which dataset was used for successful results. After implementing our traceability service, you gain a clear view of your entire AI development process in one place. When you make changes to your model or try new approaches, the system automatically records everything—from the code changes to the training data used and the resulting performance metrics. For instance, if you're training an AI model to detect plant diseases, you can easily see that version A achieved 85% accuracy using dataset X, while version B reached 92% accuracy after adjusting specific parameters and using enhanced training data.

This comprehensive tracking helps you make informed decisions, saves time in documentation, and ensures you can always return to previous successful versions if needed. The service transforms a typically chaotic training and testing process into an organised, easy-to-follow journey where every decision and its impact are clearly visible and understood by the entire team.

How the service will be delivered

The traceability service can be tailored to match your specific AI training needs. We can customise metric definitions according to your model's objectives—whether you're measuring accuracy, inference speed, resource usage, or domain-specific metrics. During the integration phase, we will work with you to define custom tracking points in your code that capture the specific data you need. The comparison visualisations can be configured to focus on the metrics that matter most to your use case.

Service customisation

The service delivery begins with an initial setup phase that takes approximately one week. During this phase, our team will work closely with your developers to adapt your existing AI model code to integrate with our tracking system. We handle the technical integration, requiring minimal changes to your current development workflow, and ensure all your experiments and results are properly tracked.

The implementation follows a structured process: First, our team helps modify your code to include the necessary tracking capabilities. Then, we configure the traceability platform and provide access credentials to your designated team members. We conduct a 2-hour remote training session to show your team how to use the platform effectively and how to add tracking to new code.

The platform becomes immediately available after the training, and your team can start tracking AI model development right away. As outputs, you receive continuous access to the web interface where all tracked information is displayed. The platform stores and organises all your model artefacts, metrics, and comparison results, which you can interact with through the web user interface or through a web API. To use the service, customers need to provide access to their AI model code and training pipeline, specify their preferred metrics for tracking, and ensure a stable internet connection. The service runs continuously and can be accessed 24/7. Throughout the service period, we provide ongoing support to help integrate tracking for new models or experiments.