Deep Code Analysis

You'll never have to worry
about your app health status again

Learn how Deep Code Analysis helps you build success

Stay one step ahead of the life cycle of your business applications!

As a software developer or architect

- Keep **control of the costs** of your developments.
- Make sure that the entire code history of your application follows current **good development practices**.
- Ensure a source code that is easier and faster to **maintain**.

As CIO or team leader

- Support the **robustness and the durability** of your strategic applications in the medium and long term.
- Boost the **security** of sensitive data and settings optimization.

As an end-user

- Improve the **stability** of your application.
- Increase the **speed and the performance** of your business application.

Benefit from the support of a 4D expert

With the help of a 4D expert, your applications get the right support to **sustain a competitive quality advantage**. The 4D expert will study and analyze your business application, its source code, and configuration within a defined time frame. You'll have a summary of recommendations in form of a **detailed report** the recommendations for priority actions to be taken.

The expert report will be submitted during a **videoconference or face-to-face session**, facilitated by the 4D expert.

Get the right expertise

The involvement of the various stakeholders in the process is imperative in order to obtain the best from this analysis. The 4D expert will always be there to guide you through the various steps.
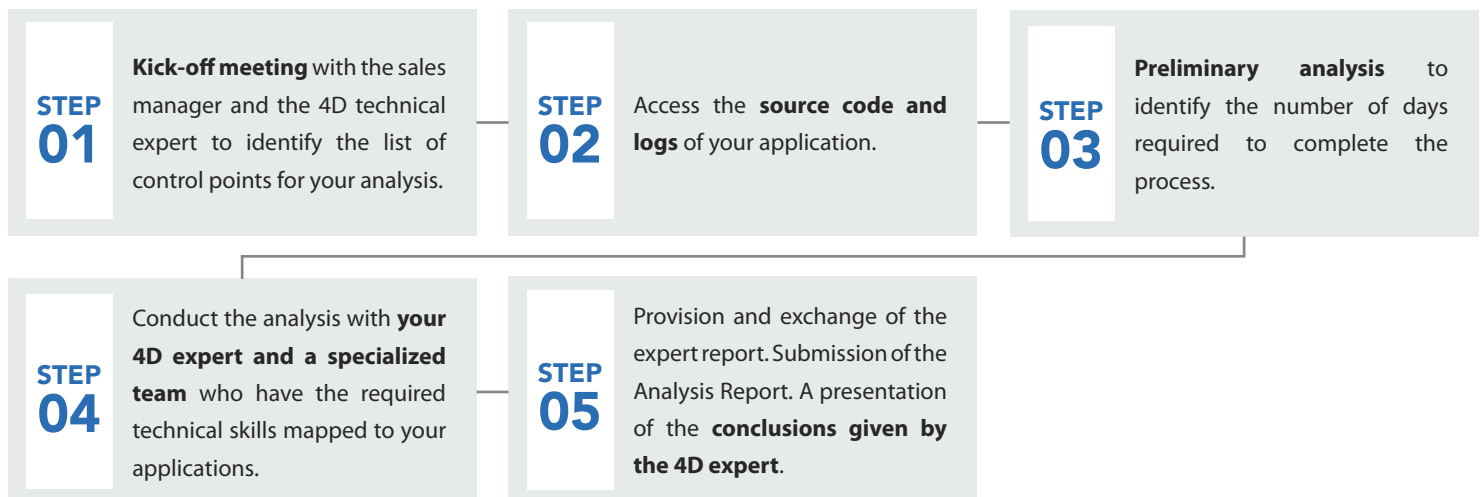
Possible Control Points:
1. Reviewing application setup, deployment settings and backup strategy.
2. Studying database structure (data model, indexes, relations, etc.) and consistency.
3. Assessment of reliability and stability of the application.
4. Evaluation of the effectiveness and performance of the application.
5. Assessment of code quality.
6. Definition of work needed to migrate the application to the latest targeted version of 4D.
7. Analysis of the security level of the application and database.

Here's what you'll receive

1. Recommendations for the **optimal configuration of the database**.

2. Advice on ways to **optimize database structure** following the business rules.

3. Identification of **possible problems relating to the code** (memory leaks, logic errors, etc.) Recommending improvements and/or corrections.

4. **Performance report:** Review of live network logs and application's code to create **measurable performance increases**.

5. **Advice for developers**, based on code analysis and examples from the application, on ways to adhere to **current best practices**.

6. Proposals for a **Defensive Programming approach**.

7. Recommendations on how to easily **remove obsolete features**.

8. Recommendations as to how to **modernize** the source code by implementing the **latest technologies developed by 4D** (ORDA, pre-emptive multi-threading, etc.).

9. List of potential vulnerabilities related to the **security of the application** and a proposal of solutions to address them.

Deep Code Analysis: This is how we do it

This service can be useful for pre-production or production applications. It is even recommended to conduct regular analysis.

STEP 01 — **Kick-off meeting** with the sales manager and the 4D technical expert to identify the list of control points for your analysis.

STEP 02 — Access the **source code and logs** of your application.

STEP 03 — **Preliminary analysis** to identify the number of days required to complete the process.

STEP 04 — Conduct the analysis with **your 4D expert and a specialized team** who have the required technical skills mapped to your applications.

STEP 05 — Provision and exchange of the expert report. Submission of the Analysis Report. A presentation of the **conclusions given by the 4D expert**.