

INTERVIEW QUESTIONS

The following questions were used to guide the semi-structured interview with the industry partner.

1. Efficiency and Time Savings

This block aims at identifying whether the implemented refactoring operations can reduce the development time.

- Does the semi-automated refactoring approach for IEC 61499 Function Blocks in Eclipse 4diac reduce the time required for maintaining and updating applications?
- Have you noticed any reduction in manual adjustments that are required?
- What do you see as the main advantage of automated refactoring features and error visualization?

2. Errors and Inconsistencies

The questions aim at analyzing whether the refactoring operations can support avoiding errors during the development.

- When refactoring IEC 61499 models in Eclipse 4diac, have you observed any decrease in errors or inconsistencies, such as type mismatches or broken connections, compared to manual refactoring?
- Could you share any specific examples how refactoring affects the number of errors?

3. Scalability

This question aims at identifying how scalable the refactoring tools are in large-scale industrial models.

- How well does the refactoring approach handle large-scale IEC 61499 applications in 4diac, particularly in managing multiple function block instances and maintaining consistency across interconnected components?

4. Practical Adoption: Usability

These questions aim to identify how

From your experience using Eclipse 4diac for IEC 61499 development,...

- How intuitive and effective is our refactoring solution in real-world projects?
- Are there any specific challenges or improvements you would suggest?