Leading Systems
Integrator Accelerates
Code Reviews and
Onboarding with Copia
Automation

Overview

Over the last 30 years, this engineering consulting firm has consistently delivered custom automation software and control systems to hundreds of clients across a wide range of industries, from automotive and food production to defense applications. With engineering offices in more than a dozen U.S. cities, the company is known for delivering high-quality automation solutions tailored to each customer's unique manufacturing environment.

To meet growing demand and support continued expansion, the firm needed a way to onboard new engineers more quickly and better leverage senior staff. The team turned to Copia Automation to modernize code collaboration, streamline reviews, and create a more scalable engineering process.



Why They Chose Copia

The company had long recognized the need for a more efficient solution for managing PLC code. Project leads had previously experimented with Git for version control—especially on projects using ABB robots—but traditional Git lacked support for visual, ladder logic-based programming. When Copia introduced Git-based version control tailored for PLC environments, the team was ready.

"We had been waiting for something like Copia to exist," said a Project Director. "The moment we saw what it could do, we knew it would help us scale, collaborate, and trust our code."

With Copia, the team now has purpose-built tools that allow them to work concurrently, reduce manual review effort, and accelerate onboarding without sacrificing quality.

Empowering Teams to Work Smarter

Streamlining Code Reviews:

Senior engineers are frequently involved in design reviews—especially during the summer when new hires and interns join in greater numbers. Copia's Git-based platform with visual diffing has significantly reduced the time needed to conduct reviews.

"Our senior engineers are saving up to a day a week," said the Project Director. "We review more frequently, catch mistakes earlier, and avoid unnecessary rework."

Accelerating Onboarding

Junior engineers now contribute more quickly, thanks to Copia's visual interface that allows for intuitive understanding of PLC code changes without opening the original IDE. This supports both faster learning and safer deployments.

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Improving Collaboration and Reducing Errors

With a shared central repository and detailed commit histories, the entire team gains visibility into each project's lifecycle. Engineers no longer worry about overwriting work or manually comparing code across platforms.

"A 45-minute process now takes 15 minutes," the Director noted. "And because we always see visualized code before merging, we're making fewer mistakes."

Long-Term Support

Maintaining support for machines years after deployment is a common challenge in industrial automation. With Copia's detailed version history, engineers can retrieve and understand legacy projects even if the original developers have moved on.

"I recently heard from a customer we last worked with seven years ago. The original team was gone, but thanks to Copia, we could retrieve the old code and redeploy to new hardware."

This centralized source of truth also supports effective collaboration with manufacturing clients during high-pressure support situations.

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Conclusion

Copia Automation has transformed how this leading systems integrator manages and reviews PLC code. By improving visibility, reducing errors, and empowering junior engineers to contribute with confidence, Copia enables the company to scale while maintaining high standards of quality and customer service.

"I can't imagine going back to the old way of doing things. Copia is easy to adopt and makes a huge difference in productivity and quality," the Project Director concluded.



Key Takeaways

Challenges:

- Difficulty onboarding new engineers quickly
- Time-consuming code reviews for senior engineers
- Managing code changes without ladder logic visibility
- · Long-term code access for legacy system support

Solutions:

- Git-based version control tailored to PLC environments
- · Visual diffing and inline comments for faster reviews
- Centralized repository for team collaboration
- Detailed project histories for long-term support

Benefits:

- Up to 8 hours/week saved per senior engineer
- Fewer errors due to more frequent and efficient reviews
- · Faster onboarding and higher junior engineer productivity
- Reliable long-term access to project code and context

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Meet with the Copia team

Visit <u>copia.io</u> to learn how you can implement the Copia Industrial DevOps Platform in your business, or reach out for more information today at <u>contact@copia.io</u>.

