Serpa Packaging Elevates Code Management and Team Collaboration with Copia Automation



Overview

Located in Visalia, California, <u>Serpa Packaging</u> designs and manufactures equipment capable of meeting complex packaging demands, from robotic line tracking to full line management solutions. Serpa is driven by a mission to become the end-of-line packaging solutions company of choice. Backed by advanced technology, rapid changeover innovation, and a commitment to 5-Star Service, Serpa has built a reputation for delivering customized, highspeed automation solutions tailored to customer needs. They also proudly stand behind a best-in-class 98% uptime guarantee.

As their engineering team expanded and projects became more intricate, Serpa sought a solution that would provide scalable code management, improve documentation, and foster cross-team collaboration. By partnering with Copia Automation, Serpa embraced an Industrial DevOps approach that brought greater visibility, accountability, and trust to their code management processes, helping them deliver exceptional results to their customers.

Accelerating Innovation with Copia Automation

Before partnering with Copia, Christian Diaz, Senior Controls Engineer, and the Serpa team had been searching for a solution that could bring modern source control practices into their PLC development environment. Diaz had experimented with Git on his own, particularly for ABB robotics projects where text-based code was compatible. However, for Rockwell-based projects, the lack of purpose-built tooling made it difficult to apply those same practices effectively. That changed when Copia entered the market, offering a solution designed specifically for PLC code management. "We had been waiting for something like Copia to exist," Diaz shared. "The moment we saw what it could do, we knew it would help us scale, collaborate, and trust our code."

Serpa's partnership with Copia has enabled the company to evolve its engineering workflows and support scalable growth across its customer base. Together, they introduced advanced tools to enhance code management, standardization, and team-wide knowledge sharing.

1. Streamlined Code Management

With highly customized machines and a wide variety of unique customer requirements, Serpa needed a centralized solution for managing their industrial code. Copia's Git-based platform allowed the team to track project histories, visualize changes, and build trust in the code being deployed.

"It's like having an insurance policy for our PLC code," said Christian Diaz, Senior Controls Engineer. "We can go to a central location, see the full history, and have confidence in what we're deploying."

2. Standardizing Best Practices

Serpa leveraged Copia's platform to manage their base standards, including machine logic and safety response programs that apply across all machine types. This standardization allows engineers to build more quickly while maintaining consistency.

"We've built modular code that every machine can rely on," Diaz explained. "Using Copia, we ensure those standards stay current and accessible to the entire team."

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3. Fostering a Collaborative Culture

Serpa's engineering culture values openness and learning from mistakes. Copia's platform helps support that by making development paths visible and encouraging knowledge sharing. The team uses commit histories and pull requests to document work, making it easier for junior engineers and interns to contribute.

"The ability to see change histories and diff reports builds trust," Diaz noted. "It empowers junior engineers to contribute without fear, knowing we can trace and review everything easily."

4. Improving Service and Support

Copia's features also enhance Serpa's ability to service machines postdeployment. By using commit comparisons, engineers can quickly identify changes made in the field and troubleshoot issues without guesswork.

"When we receive a service call, the first thing I do is pull the most recent version and compare it to the as-shipped version," Diaz shared. "It reduces downtime and helps us get to the root cause faster."

Copia's Industrial DevOps Solution in Action

Serpa chose Copia because they needed a purpose-built solution to manage industrial code in a scalable, collaborative, and transparent way. Using Copia as a journaling tool for code status tracking, standards management, and fostering team alignment has proven invaluable. The platform helps them maintain visibility into their evolving projects, simplify complex code management, and support a culture of openness and continuous improvement.

"Copia helps us keep everyone aligned and on the same page, which is crucial when dealing with highly customized machines," Diaz noted" "Copia helps us keep everyone aligned and on the same page, which is crucial when dealing with highly customized machines."

Key Features Implemented

Source Control

- · Git-based workflows customized for industrial code environments
- Visual diffs and commit histories for real-time transparency

Collaboration Tools

- Pull requests and inline commenting for code reviews
- Issue tracking to document known bugs and fixes.

"The visual diff reports are especially powerful," Diaz added. "They demystify changes for everyone, from engineers to project managers."

Impact of Copia's Platform

Serpa Packaging has seen measurable impact from its adoption of Copia, transforming the way its team collaborates, documents, and troubleshoots code. Copia has brought clarity and trust to development processes, allowing engineers to focus on innovation and faster project delivery. Diaz highlighted that the ability to track changes visually and maintain a central knowledge bank has empowered both senior and junior engineers, enabling them to work with greater confidence.

1. Improved Transparency and Trust

- Full visibility into code changes fosters collaboration and accountability
- Reduced fear of mistakes, enabling faster learning and innovation

2. Scalable Best Practices

- Modular code management allows for faster machine builds and consistent quality
- Centralized repositories make onboarding new engineers more efficient

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CASE STUDY

3. Faster Troubleshooting and Recovery

- Quick comparisons between commits and current machine states
 reduce downtime
- Empowered service teams to react rapidly to field issues

4. Enhanced Knowledge Sharing

- Movement away from institutional knowledge toward centralized documentation
- Culture shift toward open communication and shared ownership of code

"We used to rely on individual knowledge. Now, we're building a shared knowledge bank that anyone can access," Diaz said.

Conclusion

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By partnering with Copia Automation, Serpa has transformed how its engineering team manages and collaborates on code. The result is a scalable, efficient development process that supports rapid growth and customer satisfaction.

This transformation was driven by their desire to break down silos, promote open communication, and empower all engineers — from interns to senior team members — to contribute and learn. Copia has helped create that environment.

"Copia has become part of our workflow," Diaz concluded. "It builds trust, improves transparency, and allows us to focus on building great machines for our customers. It's an essential tool for modern industrial automation."

As Serpa continues to push the boundaries of packaging automation, Copia remains a critical partner in supporting their mission of innovation, efficiency, and reliability.

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Key Takeaways

Challenges:

- Managing complex, customized PLC codebases across multiple projects
- Lack of centralized documentation and knowledge sharing
- Scaling engineering processes to support growth and innovation

Solutions:

- Adoption of Copia's Industrial DevOps Platform with Git-based version control
- Standardization of core machine modules for consistency and speed
- Use of visual diffs, commit tracking, and automated backups for transparency and trust

Benefits:

- Enhanced collaboration and team-wide visibility
- Faster troubleshooting and service response
- Scalable development processes for consistent customer delivery
- Empowerment of junior engineers and interns to contribute confidently

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>.

To learn more about Serpa Packaging or to request their services, please visit <u>serpapackaging.com</u> or reach out to <u>serpa.info@promachbuilt.com</u>.

