

Welcome to COPIA



Built for industrial automation professionals, Copia's Copilot empowers you to understand, develop, and maintain your automation code with intelligent assistance.

Initial Steps

The following is a "self-guided" product tour of Copia Copilot, allowing you to walk through the essential workflows for using the product. In each step, links to documentation and/or training videos are provided, so you can learn more about each topic!

Getting Started:

- [Access Copilot Features](#)
 - Access the Platform:** Navigate to your existing Copia repository and look for the [Copilot](#) Chat interface
 - Verify Setup:** Ensure your repository has the necessary permissions and integrations enabled
 - [Understanding Limitations](#):** Review token limits (140K), supported file types, and vendor compatibility

 - [Navigate Copilot Chat Interface](#)
 - Chat Interface** - Where you interact with Copilot
 - Repository Picker** - Select files, routines, or PLC logic to add to your chat context
 - Context Display** - View selected items below the prompt textbox
 - Chat History** - Review previous conversations and responses
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Developer Workflow:

The developer workflow is designed for customers who develop code on a daily basis, typically System Integrators (SIs) and Original Equipment Manufacturers (OEMs).

Using Copilot Chat

- Add Context** - ([video](#)) Select files, routines, or PLC logic using the repository picker
- View Context** - Selected items appear below the prompt textbox for confirmation
- Submit Prompts** - Type your question or request and submit to Copilot
- Review Responses** - Analyze Copilot's answers and suggested code changes

Best Practices for Developers

Be Specific in Your Prompts

- The more specific you are with your questions, the better Copilot can assist you
-  Bad Example: "What's wrong with this code?"
-  Good Example: "My code is experiencing unexpected behavior X, Y, Z. Please find what part of the code is causing this behavior and suggest a fix."

Give Focused Code Snippets

- Instead of giving Copilot an entire program to reference, provide smaller chunks of code when possible
- Example: If asking Copilot to convert an AOI from Ladder Logic to Structured Text, only attach the existing AOI export
- Attaching the entire project file might result in Copilot over-indexing on other unrelated project items

Real-World Developer Use Cases

Use Case 1: Document and Explain Logic - ([demo](#))

- Select a routine from your repository using the repository picker
- Prompt Example: "Document and explain the logic in the [routine name]"
- Copilot will provide a detailed explanation of what the logic does
- Use this to understand unfamiliar code or create documentation

Use Case 2: Fix Bugs and Troubleshoot - *(demo)*

- Add the problematic routine or logic to your chat context
- Provide specific details about the issue
- Prompt Example: "The VFD is having trouble starting as the start and stop bits are on at the same time. Can you find the error in the start/stop logic in this routine and correct it for me? Please provide any modified rungs in ladder logic."
- Copilot will identify the issue and suggest corrections
 - **Note:** If hitting token limits, unselect controller or other large context items

Use Case 3: Code Conversion and Generation - *(demo)*

- Select the code you want to convert (e.g., AOI in Ladder Logic)
- Prompt Example: "Convert this AOI from Ladder Logic to Structured Text"
- Copilot will generate the converted code
- Review and test before implementation

Understanding Developer Limitations

Token Limit: 140K

- Large files may exceed the token limit
- Solution: Provide focused code snippets or unselect unnecessary context items
- Prioritize the specific logic you need help with

Supported Languages

- Ladder Logic and Structured Text only
- Currently supports Rockwell Studio 5000 code
- Siemens TIA Portal support coming soon

File Upload Requirements

- Files must be < 5 MB
 - Supported file types: .L5X, .EDS, .XML, .HTML, .PDF, .TXT, .CSV, .MD, and .JSON
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Sustainment Workflow:

The sustainment workflow is designed for enterprise customers who primarily use DeviceLink for automated backups and disaster recovery. Copilot provides auto-generated commit messages that describe what has changed in the code with modified jobs.

Enable Copilot-Generated Commit Messages

For Sitewide Jobs (Recommended)

- [Navigate](#) to the Sitewide Job settings menu
- Enable "Copilot-Generated Commit Messages"
- This setting applies to all devices in your site
- Only needs to be enabled once

For Standard Jobs

- [Navigate](#) to the Standard Job settings menu
- Enable "Copilot-Generated Commit Messages" for individual jobs
- Useful for selective deployment

Viewing Copilot-Generated Commit Messages

[In the Web Application](#)

- Open the Job History table
- Find modified jobs in the list
- Expand the dropdown next to the modified job
- View the Copilot-generated summary of changes
- Review what logic was modified, added, or removed

Setting Up Notifications

Email Notifications

- **Step 1:** [Enable](#) DeviceLink notifications in your User Settings
- **Step 2:** Set notification preference to "Notify Immediately on Modified Job Runs"
- **Step 3:** Ensure you are watching the relevant projects

[Watching Projects](#)

- **Option 1:** Selectively watch projects by clicking the "eyeball" icon on the top right of any project
- **Option 2:** Watch all projects at once in the Site Settings menu

Understanding Your Notifications

- Receive email alerts when jobs detect changes
- Email includes Copilot-generated summary of modifications
- Review changes without logging into the platform
- Quickly identify critical updates requiring attention

Webhook Notifications

- Not currently supported
- Feature request submitted to Engineering for Copilot-generated commit messages in webhooks

Sustainment Best Practices

Review Change Summaries Regularly

- Check Copilot-generated commit messages for unexpected changes
- Use summaries to track who made changes and when
- Identify patterns in code modifications over time

Configure Appropriate Notification Settings

- Balance between staying informed and avoiding alert fatigue
- Use "Notify Immediately" for critical systems
- Consider watching only high-priority projects

Use DeviceLink Integration

- Ensure DeviceLink is properly configured for automated backups
 - Copilot analyzes changes between backup versions
 - Automatically generates meaningful commit messages
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Troubleshooting:

Developer Workflow Issues

Token Limit Exceeded

- Unselect large context items like controllers
- Focus on specific routines or logic blocks
- Break complex requests into smaller parts

Unexpected Responses

- Provide more specific context in your prompt
- Include details about PLC platform and version
- Describe expected vs. actual behavior clearly

File Upload Failures

- Verify file is < 5 MB
- Check that file type is supported
- Ensure file format is valid (.L5X, .EDS, etc.)

Sustainment Workflow Issues

Not Receiving Notifications

- Verify notifications are enabled in User Settings
- Confirm you are watching the project
- Check email spam/junk folders
- Ensure "Notify Immediately on Modified Job Runs" is selected

Missing Commit Messages

- Verify Copilot is enabled for the job (sitewide or standard)
- Check that the job completed successfully
- Confirm changes were detected in the backup

DeviceLink Connection Issues

- Verify DeviceLink integration is active

- Check device connectivity and backup schedule
 - Review job history for error messages
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Congratulations!

You have completed the initial product tour of Copia Copilot. There is more to learn and experience, and our dedicated Customer Success team is here to help. As you continue to explore feel free to reach out for additional assistance via your Customer Success Manager, our Contact Form or support@copia.io