

DeviceLink - CODESYS (v3.5.10 or later) Quicksheet

Purpose

The purpose of this document is to provide clear, step-by-step instructions for setting up a CODESYS v3 controller within Copia's DeviceLink platform. This guide focuses on controllers programmed using CODESYS v3.5.10 or later software.

Device Configuration/Setup

CODESYS Software Requirements

Before configuring DeviceLink, ensure the following requirements are met:

Step 1: Verify CODESYS Installation

1. Ensure you have a licensed copy of **CODESYS v3 (v3.5.10 or later)** installed on the PC running the Copia Agent.
 2. Install any additional vendor software required for project backup from the devices (Add-ons, target-specific packages, etc.).
 3. Test the **CODESYS** software installation by opening and backing up a project without error.
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Step 2: Locate CODESYS Installation Path

4. Find the **CODESYS.exe** file path on your system (typically located in **C:\Program Files\CODESYS\CODESYS\Common\CODESYS.exe**).
 5. Note this path as it will be required during DeviceLink configuration.
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CODESYS Project Preparation

Step 3: Prepare Your CODESYS Project

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1. Ensure your **CODESYS** project (**.project** file) is accessible on the Agent machine.
 2. Verify the project opens successfully in **CODESYS** without errors.
 3. Note the exact device name(s) as they appear in the **CODESYS project tree**.
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Step 4: Device Authentication (if applicable)

1. If your PLC requires **authentication**, gather the **username** and **password** credentials.
2. Ensure the Agent machine has network connectivity to the target device(s).

Setup the Project and Device in DeviceLink

Follow the steps below to set up the project and device in DeviceLink:

1. **Initiate Project Configuration:**
 - In the Copia interface, navigate to the **Projects** tab.
 - Click on **“Add a Project”** to open the project configuration dialog.
2. **Project Setup:**
 - **Select Project Type:** Choose **"CODESYS"** from the list.
 - **Assign an Agent:** Select an existing Agent or assign one later if not already created.
 - **Set Project Path:** Specify the repository and branch where the project (**.project** file) is stored.
 - **Project Details:** Enter the **Project Name** and optional **Description**.
 - **CODESYS Version:** Select the version of **CODESYS** used for the project.
 - **CODESYS.exe File Path:** Enter the full path to the **CODESYS** executable (**e.g., C:\Program Files\CODESYS\CODESYS\Common\CODESYS.exe**). It is recommended to install and use the default
 - Click **“Save and Continue”**.
3. **Device Setup:**
 - In the Device Setup section, click **“Add a Device”**.
 - **Device Name:** Enter a unique name for the device (**e.g., "ProjectName_DeviceName"**).
 - **Device Name in Project:** Enter the exact name of the PLC as it appears in the **CODESYS project tree**.
 - **Device Description:** Enter an optional description for the device.
 - **Username/Password:** Enter authentication credentials if required by the PLC.
 - After the configuration is complete, click **“Save Device”**.

4. **Job Setup:**

- In the **Job Setup** section, click “**Add a Job**”:
 - **Job Name:** Enter a descriptive name for the job.
 - **Timeout Duration:** Set the maximum time the job is allowed to run.
 - **Schedule:** Set the frequency and timing for backups.
 - **Auto-Commit:** Select if you want auto-commit enabled and which branch to commit to if enabled.
 - Click “**Save Job**”.

5. **Submit the Configuration:**

- After completing the project, device, and job setups, click “**Submit Project Setup**” to finalize the configuration.

Important Notes

- **Repository Requirement:** You must already have a repository created with the **CODESYS** .project file before configuring the project in DeviceLink.
- **Device Names:** Ensure the “**Device Name in Project**” field exactly matches the device name shown in your **CODESYS project tree**.
- **Testing:** It's recommended to test the Agent with the installed CODESYS software to ensure successful project backup before running scheduled jobs.
- **Notifications:** Don't forget to enable/disable the Watch button based on your preferences for project notifications.

By completing these steps, your CODESYS PLC will be set up in DeviceLink for automated backups and change detection.