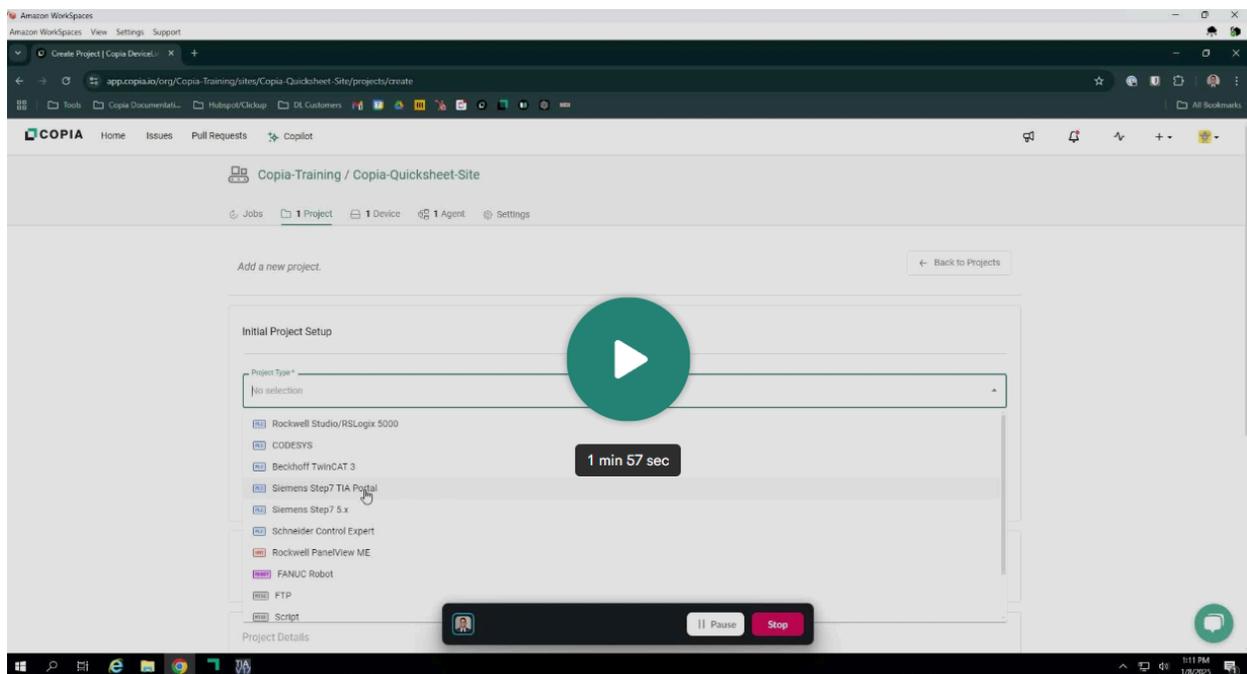# DeviceLink – Siemens Step7 TIA Portal Quicksheet

Purpose

The purpose of this document is to provide clear, step-by-step instructions for setting up a Siemens Step7 TIA Portal controller within Copia's DeviceLink platform.

[Video Tutorial](#)

Device Configuration/Setup

Agent Requirements

See below for Agent requirements:

1. The Copia Agent must be run as an administrator.
2. The Windows user logged into the Agent must be added to the TIA Openness user group in Windows – [Copia Documentation: TIA Openness User](#)
3. On the Agent, Siemens Step7 TIA Portal must be configured to open using "Project View"
   - Options ▯ Settings ▯ General ▯ Start View ▯ Select "Project View"
4. If using a Safety controller, you must check the setting "Enable consistent upload from the F_CPU"
   - Select Controller in Project Tree and expand the menu ▯ Safety Administration ▯ Settings ▯ Advanced Settings ▯ Check the box for "Enable consistent upload from the F_CPU"
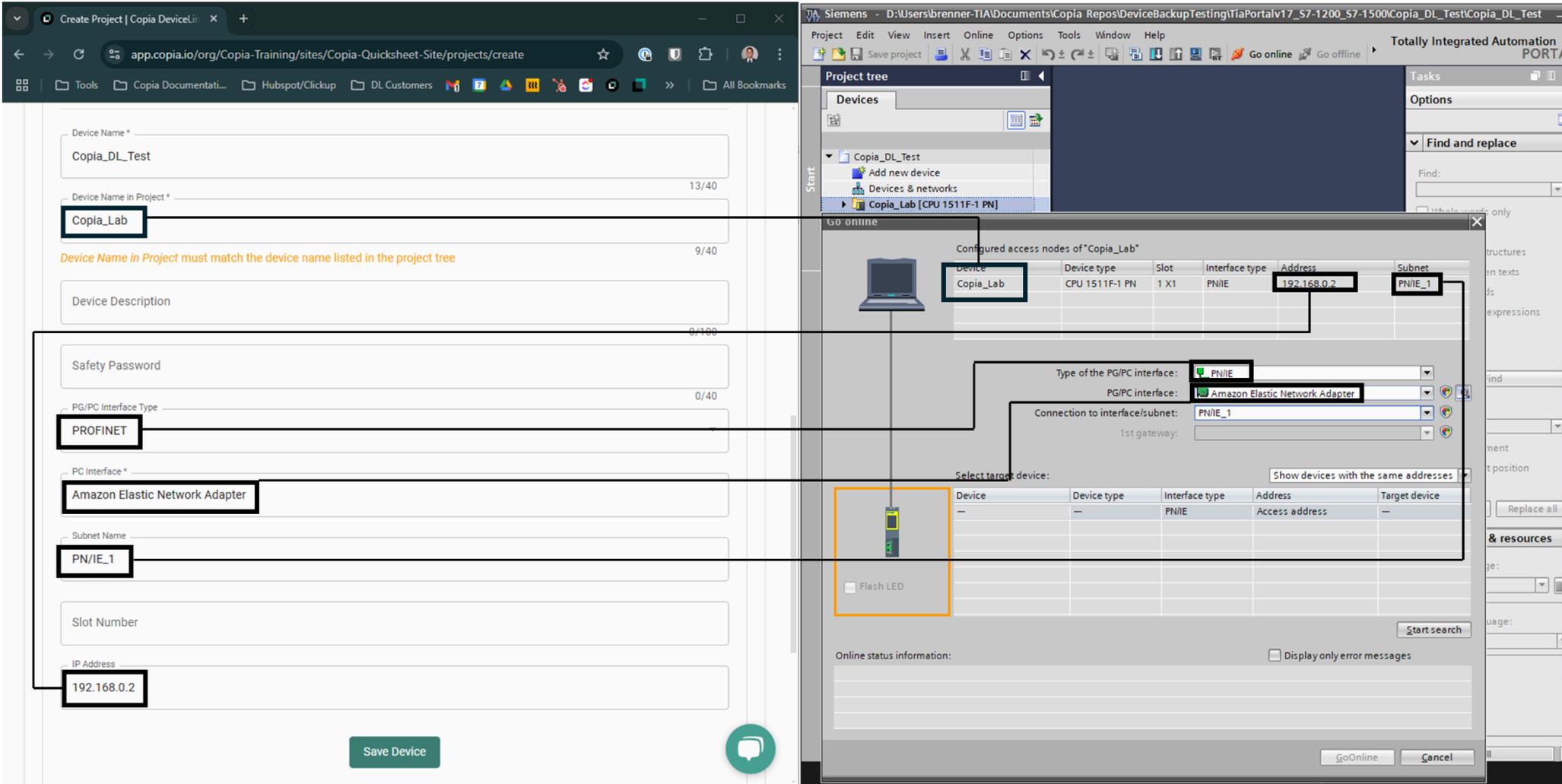
Configure the Project and Device in DeviceLink

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 **"Siemens Step7 TIA Portal"** 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 (.zap## file) is stored.
   - **Project Details**: Enter the **Project Name** and optional **Description**.
   - Click **"Save and Continue"**.
3. **Device(s) Setup ([See Image on Page 4](#))**:
   - In the Device Setup section, click "**Add a Device**" and add device information:
     - **Partial Backups**: Copia supports backing up multi-controller projects. Enable this setting to successfully backup a subset of PLCs in a project.
     - **Device Name**: Enter a unique name for the device
     - **Device Name in Project**: Input the exact name as it appears in the TIA Portal project tree.
     - **Description**: Enter an optional description.

- o **Safety Password**: If configuring a Safety PLC, enter the required password.
- o **PG/PC Interface Type**: Select the communication type (Profinet or Profibus).
- o **PC Interface**: Specify the Agent's network interface that is used to communicate with the PLC(s).
- o **Subnet Name**: Enter the subnet name as shown in TIA Portal.
- o **Slot Number:** Enter the slot number as shown in TIA Portal.
  - ▪ **Note:** if you are using a subnet & IP address, a slot number is not required.
- o **IP Address**: Enter the device's IP address as shown in TIA Portal.
- ● Click "**Save Device**". Repeat for additional devices if necessary.

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

5. **Submit the Configuration**:
- ● After completing the project, device, and job setups, click "**Submit Project Setup**" to finalize the configuration.

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

Device Setup using TIA Portal