How to retrieve a project archive in TIA Portal

This guide shows you how to retrieve a project archive in TIA Portal. It covers the full workflow: downloading a shared project in ZAP format, archiving your own project, and retrieving or opening the archive in TIA Portal V15 and in V16 or higher. It also explains what happens when you open an archive from a lower version, and how to monitor variables during HMI simulation.

Prerequisites

- TIA Portal installed on your computer (V15, or V16 or higher).
- A TIA Portal project archive in ZAP format, or a project you want to archive.
- Access to the Facebook group where the project is shared, if you want to download the example project.

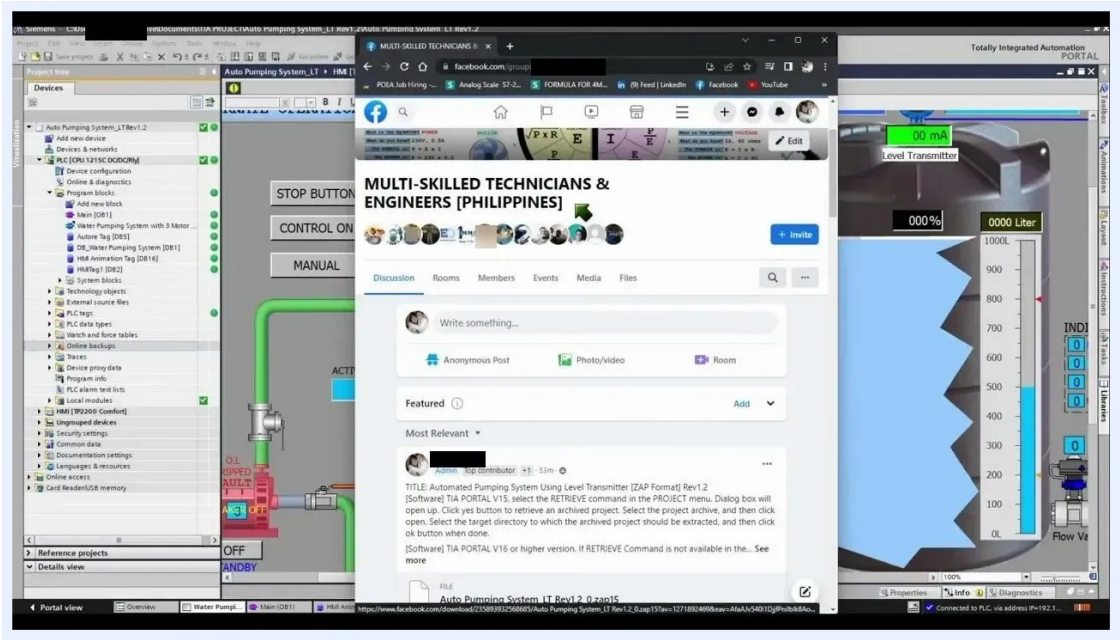
The ZAP format is a compressed archive, similar to ZIP, but made specifically for TIA Portal projects. TIA Portal projects can be large, so archiving them into ZAP files reduces their size and makes them easier to share.

Step 1: Download the shared project in ZAP format

1. Join the Facebook group where the TIA Portal project is shared. The group in this example is "MULTI-SKILLED TECHNICIANS & ENGINEERS [PHILIPPINES]". It is primarily for Filipinos, but you can join temporarily to download the file.
2. Go to the **Files** section, or find the post that contains the ZAP file attachment.
3. Find the TIA Portal project in ZAP format that you want to download.
4. Click the attached ZAP file to start the download.

Step 2: Locate the downloaded project

After the download finishes, find the ZAP file in your computer's **Downloads** folder or in the folder you chose.

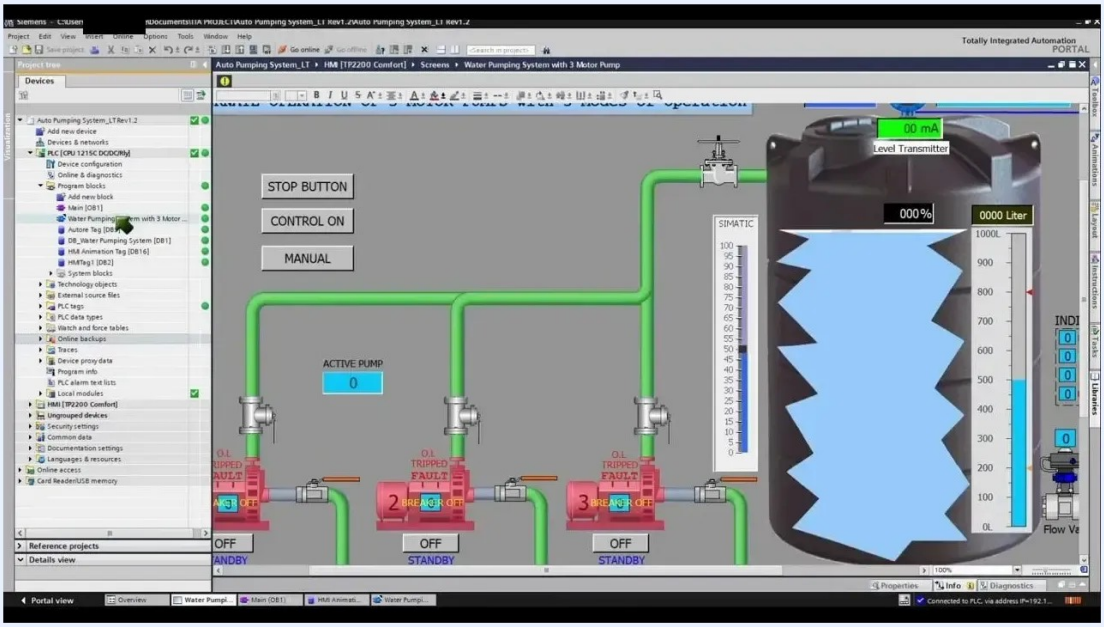


Windows File Explorer showing several folders, including TIA PROJECT, where ZAP files can be stored

Step 3: Archive your own TIA Portal project

You can also create a ZAP archive of your own project for sharing or backup.

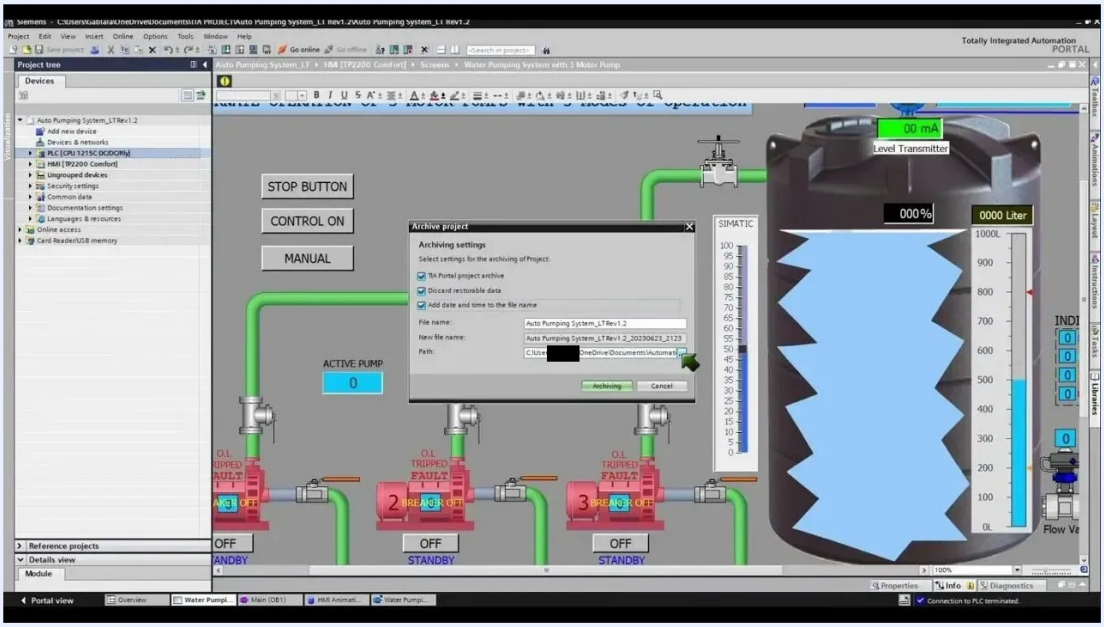
1. Launch TIA Portal and open the project you want to archive.



TIA Portal showing the project tree and an HMI screen for a water pumping system

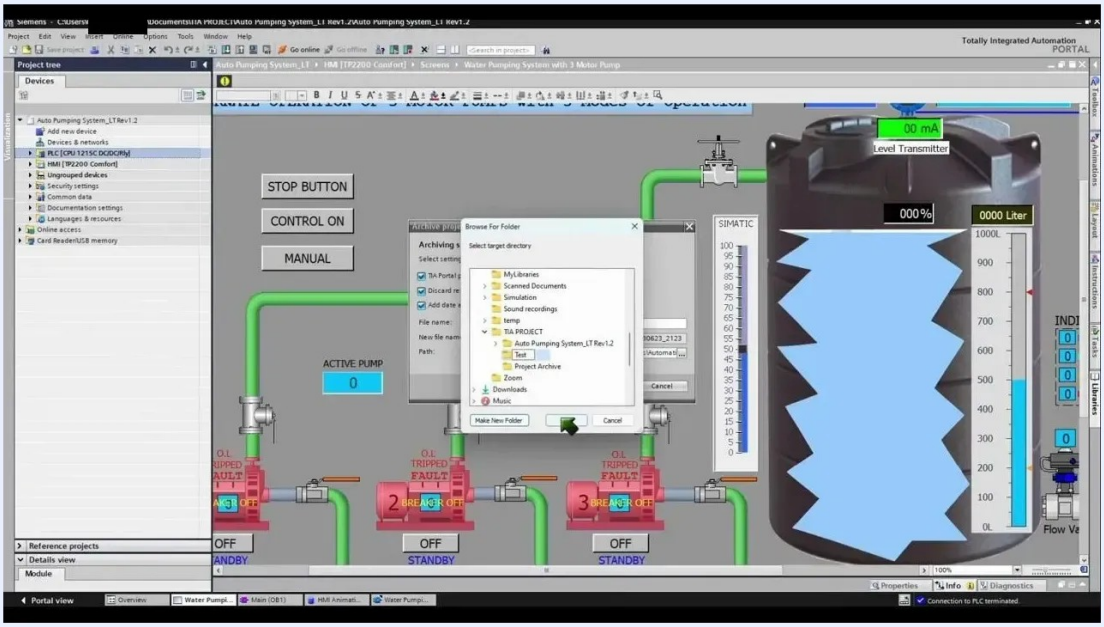
2. Go to the **Project** menu and select **Archive**.
3. In the **Archive project** dialog, make sure **TIA Portal project archive** is selected.
4. Optionally, select **Discard restorable data** to reduce the file size further.
5. Enter a file name. You can add the date and time to the name for version tracking, for example Auto Pumping System_LT_Rev1.2_20230623_2123.

6. Select the path where you want to save the archive, for example C:\Users\[YourName]\OneDrive\Documents\Automation\TIA PROJECT\Project Archive.



Archive project dialog in TIA Portal with the file name and path fields filled in

7. Click the folder icon or **Browse** to choose the destination directory. You can create a new folder if needed.

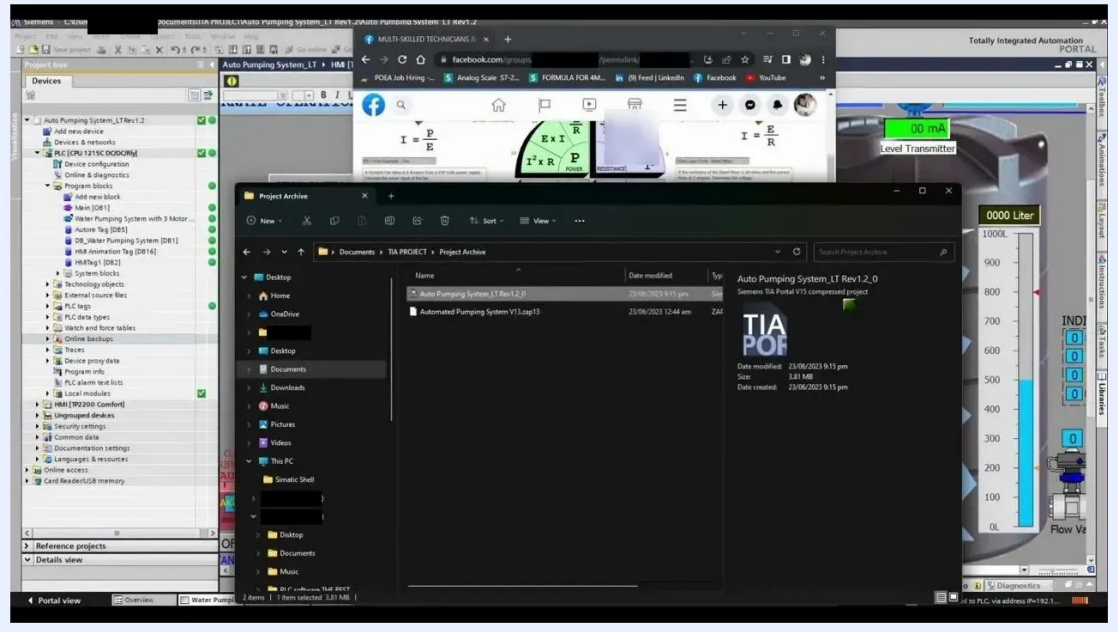


Browse For Folder dialog in TIA Portal for selecting the archive destination

8. Click **Archiving** to start the process.
9. Wait for the process to finish. TIA Portal compresses the project into a single ZAP file in the selected directory.

Step 4: Verify the archived project

Go to the folder where you saved the archive and confirm that the ZAP file is there, for example Auto Pumping System_LT_Rev1.2_0.zap15.



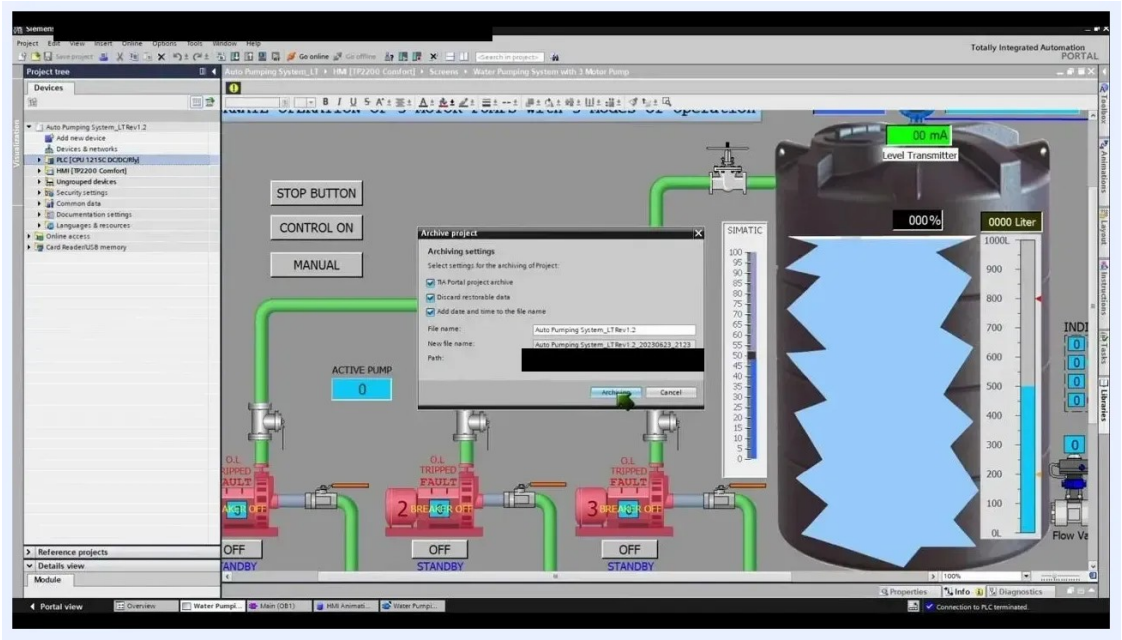
Windows File Explorer showing the archived ZAP files in the Project Archive folder

Step 5: Retrieve a project archive in TIA Portal V15

Use these steps to retrieve a project archive in TIA Portal V15.

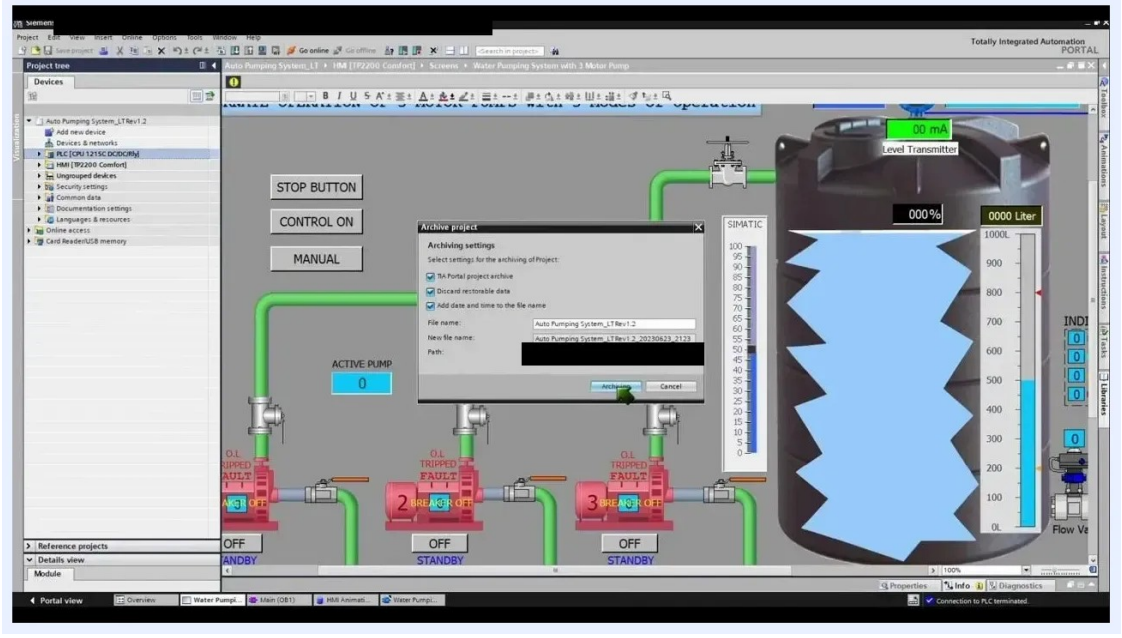
1. Open TIA Portal V15.
2. Go to the **Project** menu and select **Retrieve**.

3. In the file browser dialog, go to the folder that contains your archived ZAP file. In this example, the path is Documents\TIA PROJECT\Test.



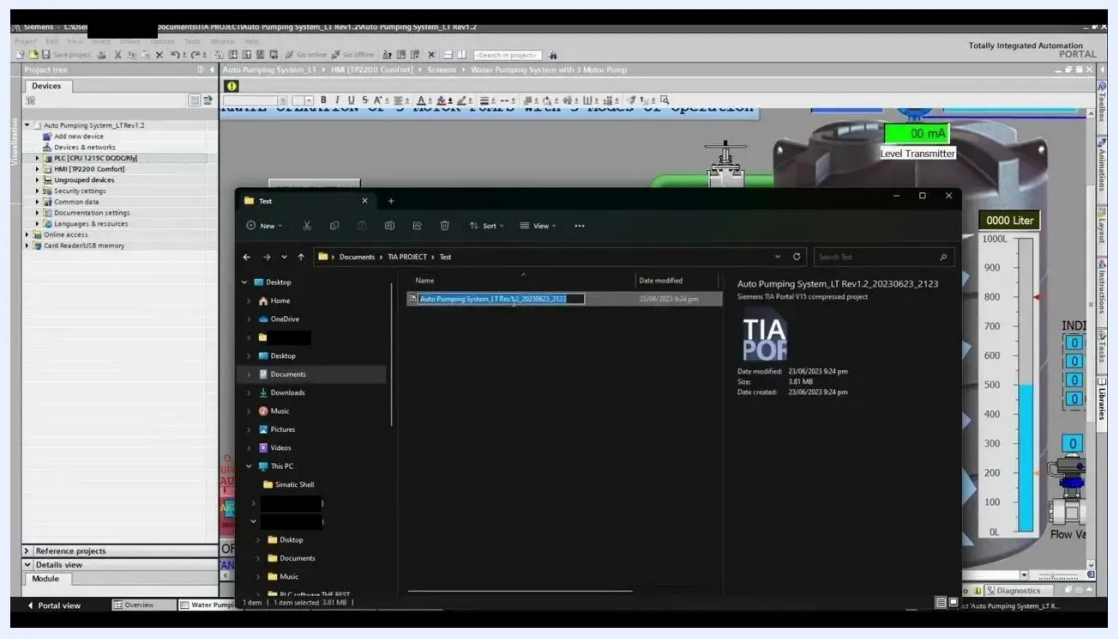
File Explorer dialog in TIA Portal showing the archived ZAP file in the selected folder

4. Select the ZAP file you want, for example Auto Pumping System_LT Rev1.2_20230623_2123.



File Explorer dialog with the ZAP file selected and ready to retrieve

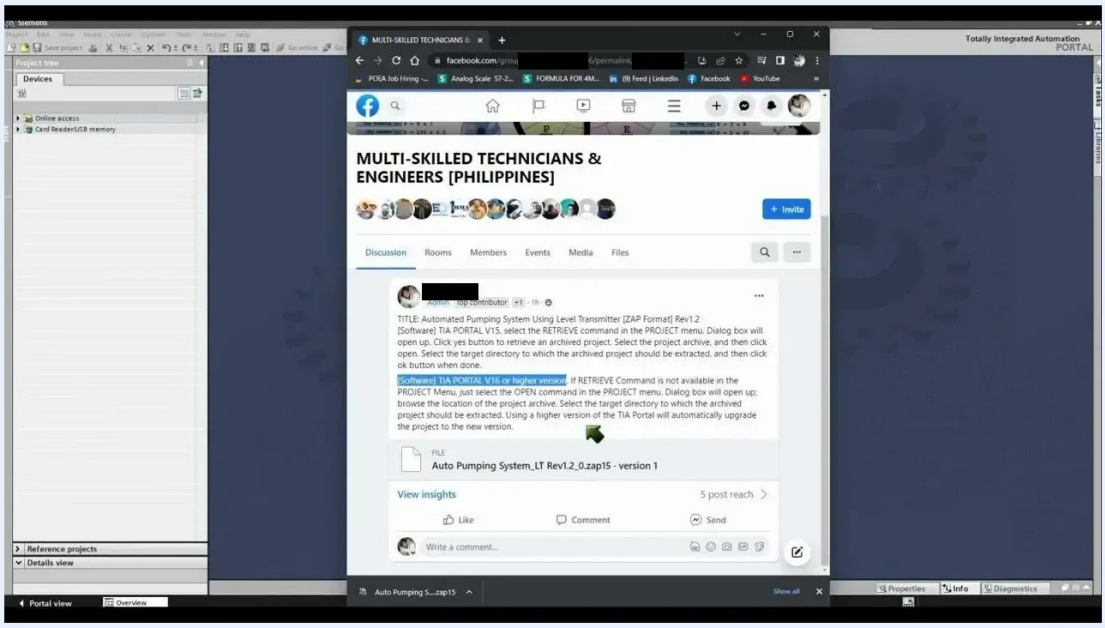
5. Click **Open**.
6. Choose the target directory where you want TIA Portal to extract the project.



Retrieve archived project dialog in TIA Portal showing folder navigation for choosing the target directory

7. Confirm your selection and click **OK** to start the retrieval.

8. Wait for the extraction to finish. The project is now available in the selected directory.



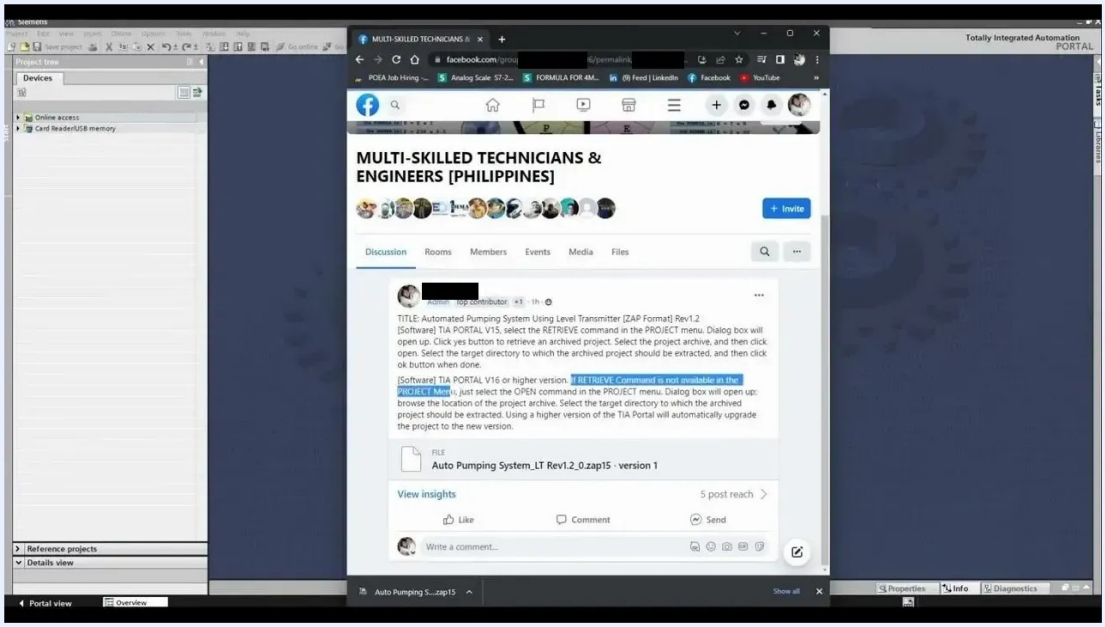
TIA Portal main window after a successful retrieval, with the project tree visible on the left

Step 6: Retrieve a project archive in TIA Portal V16 or higher

In TIA Portal V16 or a newer version, the **Retrieve** command may not be available in the **Project** menu. In that case, use **Open** instead.

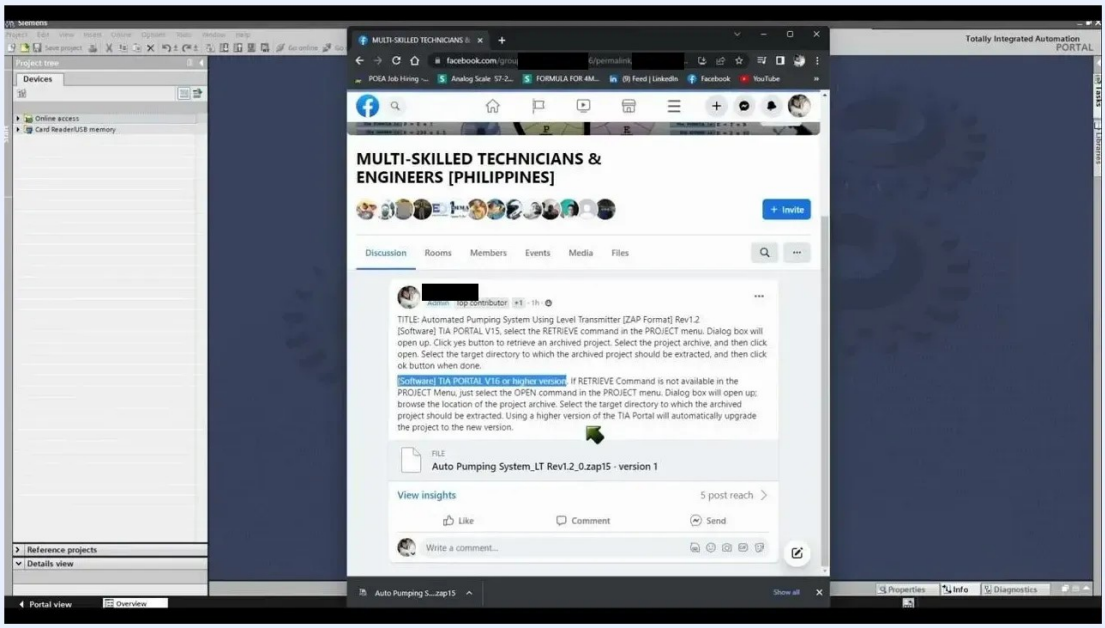
1. Go to the **Project** menu and select **Open**.
2. In the dialog that appears, browse to the location of your archived ZAP file.

3. Select the ZAP file and click **Open**.



Instructions for using the Open command to retrieve an archive in TIA Portal V16 or higher

4. Choose the target directory for extraction and confirm.
5. If necessary, TIA Portal upgrades the project to the new version automatically.

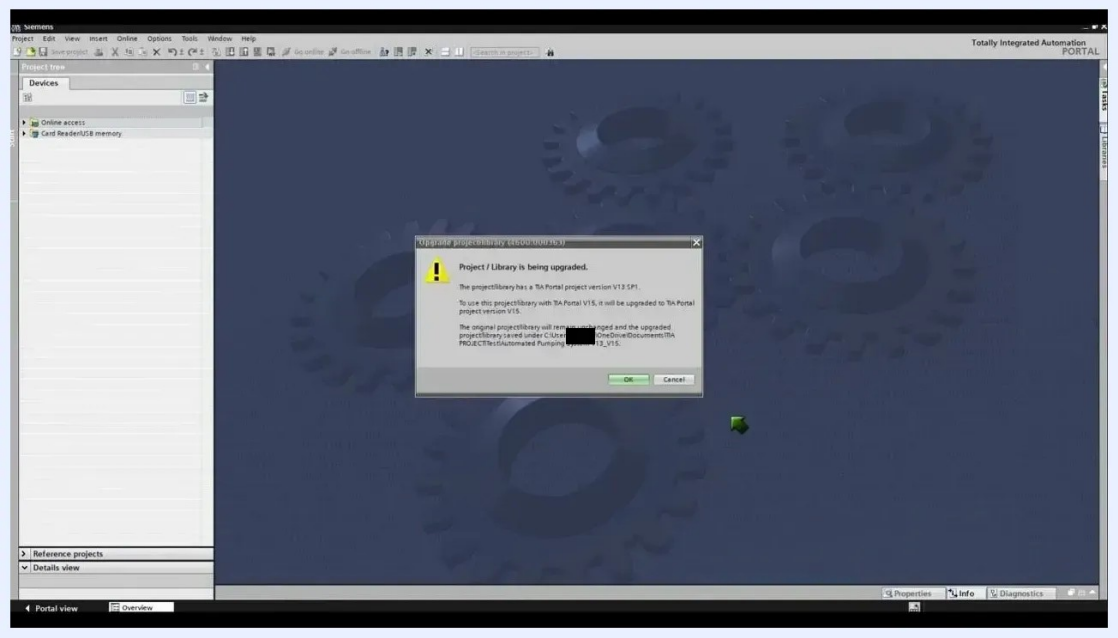


Open project dialog in TIA Portal showing folder navigation in a higher version

Step 7: Upgrade an archived project from a lower version

When you open a project created in a lower version of TIA Portal (for example, V13 SP1) in V16 or higher, the software prompts you to upgrade it.

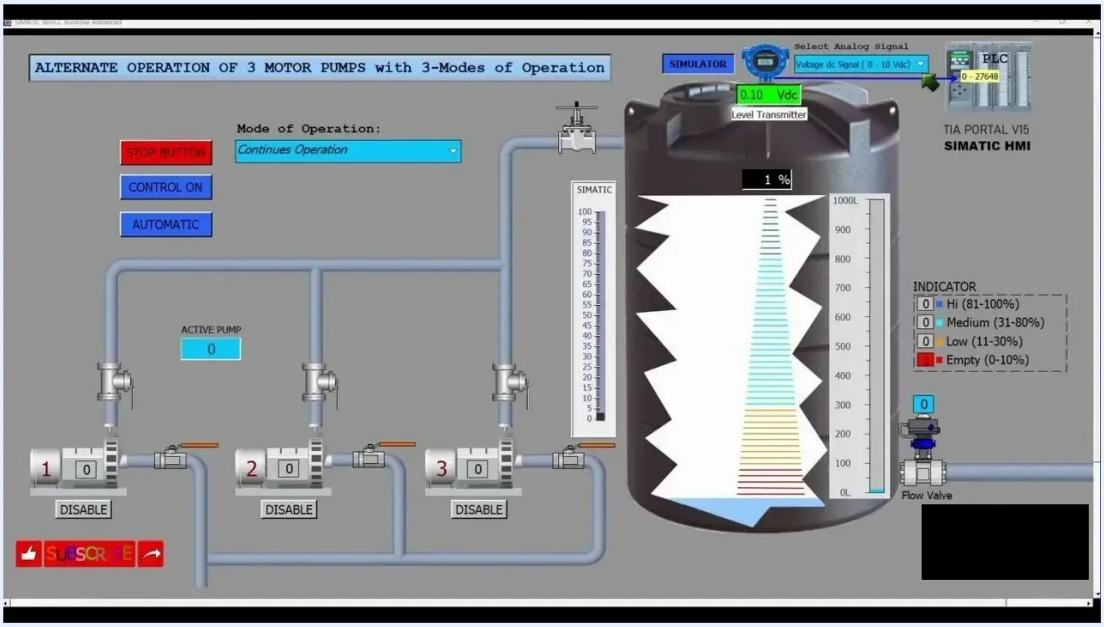
1. Read the **Project / Library is being upgraded** dialog. It warns you that the project will be upgraded to the current version (for example, V15 or higher). It also shows the original version, the new version, and the file path where the upgraded project will be saved.
2. Note that the original project or library remains unchanged. TIA Portal saves the upgraded version as a new project.
3. Click **OK** to proceed.



Project / Library is being upgraded dialog showing details of an upgrade from V13 SP1 to V15, with OK and Cancel buttons

4. Wait while the upgrade runs. The software shows a progress indicator or message.
5. When the upgrade finishes, a **Complete upgrade** dialog appears. It tells you to finish the upgrade by selecting **Edit > Compile** for each device in the project.

6. Click **OK** to close the dialog.



Complete upgrade dialog instructing you to select Edit > Compile for each device

Step 8: Monitor and modify variables during HMI simulation

After you retrieve the project, you can open the HMI simulation screen to watch your project run in real time.

The simulation interface has these main areas:

- **SIM table window** (top left): lists project variables for monitoring and modification. Its columns are Name, Address, Display format, Monitor/Modify value, Bits, Consistent modify, and Comment.
- **Piping and pump system visualization** (center and bottom): shows three pumps labeled 1, 2, and 3, each with an **ENABLE** button. The active pump is highlighted (for example, "ACTIVE PUMP 2"), and animated piping shows the flow path.
- **Tank and level sensor** (right side): shows a large tank graphic with a blue fill for the current water level.

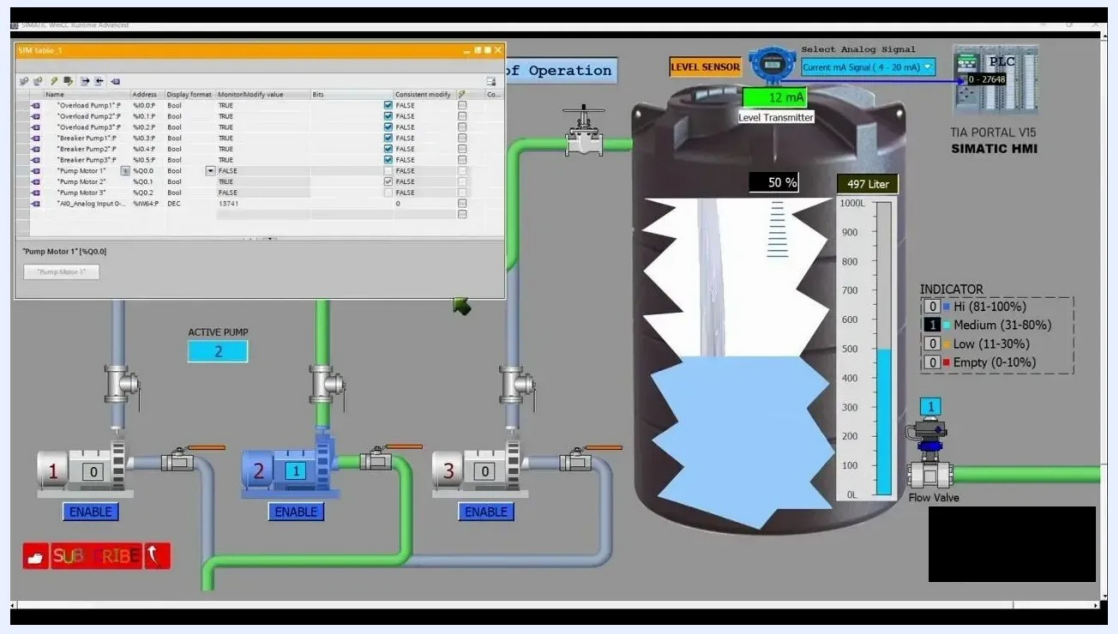
The SIM table in this example lists these variables: Overload Pump1, Overload Pump3, Breaker Pump1, Breaker Pump2, Pump Motor 1, Pump Motor 2, Pump Motor 3, and AI0_Analog Input Output. Boolean variables use TRUE or FALSE values, and the analog input uses a decimal value (for

example, 13741). Use the checkboxes to enable or disable monitoring and modification for each variable.

The tank area shows these details:

- The level transmitter shows "12 mA".
- The tank level reads "50%" and "497 Liter".
- A vertical bar graph shows the fill level from 0 to 1000 liters.
- A legend explains the level states: Hi (81-100%), Medium (31-80%), Low (11-30%), and Empty (0-10%).
- The flow valve status appears at the tank outlet.
- The PLC analog input value appears (for example, 27648).
- A **Select Analog Signal** dropdown lets you choose the current mA signal (for example, 4-20 mA).

Use the SIM table to monitor the real-time status of pumps, overloads, breakers, and analog signals. You can also modify values for testing and troubleshooting by toggling TRUE/FALSE or entering new values. Pump status, tank level, and flow indicators update in real time, and the active pump and tank fill level respond to your changes.



SIMATIC HMI simulation with the SIM table window, pump system visualization, tank level, and real-time variable monitoring

Summary

You can now download a shared TIA Portal project in ZAP format, archive your own project, and retrieve a project archive in TIA Portal V15 with **Retrieve** or in V16 or higher with **Open**. You also know how TIA Portal handles upgrades from lower versions and how to monitor and modify variables during HMI simulation.

What's next

- Compile each device in an upgraded project by selecting **Edit > Compile**.
- Open the HMI simulation to check that all variables and system components operate as intended.
- Archive your project again with a date and time in the file name to keep versions for sharing and backup.