

BlastPlan Installer Setup Guide

Drone Photogrammetry Support — Installation Steps

Overview

This document describes the step-by-step process for installing BlastPlan 3 with Drone Photogrammetry support. The installer automatically sets up the following components required for drone image processing:

- Windows Subsystem for Linux (WSL2)
- Ubuntu Linux distribution (inside WSL2)
- Docker Engine CE (inside Ubuntu)
- NodeODM photogrammetry engine (Docker image)

⚠ Important: The installation requires a system restart and an active internet connection throughout the process.

Prerequisites

- Windows 10 version 2004 (Build 19041) or later, or Windows 11
- Administrator privileges on the machine
- Active and stable internet connection
- At least 10 GB of free disk space (for Ubuntu, Docker, and NodeODM)
- Virtualization (VT-x / AMD-V) enabled in BIOS/UEFI

Step 1: Uninstall the Previous BlastPlan Version

If you have an existing BlastPlan installation, you must uninstall it first before proceeding with the new installer.

- Open "Control Panel" → "Programs and Features" (or "Apps & Features" on Windows 11).
- Locate "BLASTPLAN 3" in the list and click "Uninstall".
- Follow the on-screen prompts to complete the removal.
- Restart your computer if prompted.

Step 2: Run the BlastPlan 3 Installer

Download and run the BLASTPlan3Setup.msi installer provided via the download link. The installer wizard will guide you through the standard installation steps.

- Double-click BLASTPlan3Setup.msi to launch the installer.
- Click "Next" through the initial screens (license agreement, install location, etc.).

Step 3: Enable Drone Photogrammetry Support

During the installation, you will see the Drone Photogrammetry dialog shown below. This screen asks whether you want to install the prerequisite components for drone image processing (WSL2 and Docker).

⚠ Important: Make sure the "Enable Drone Photogrammetry Support" checkbox is CHECKED, then click "Next" to continue.

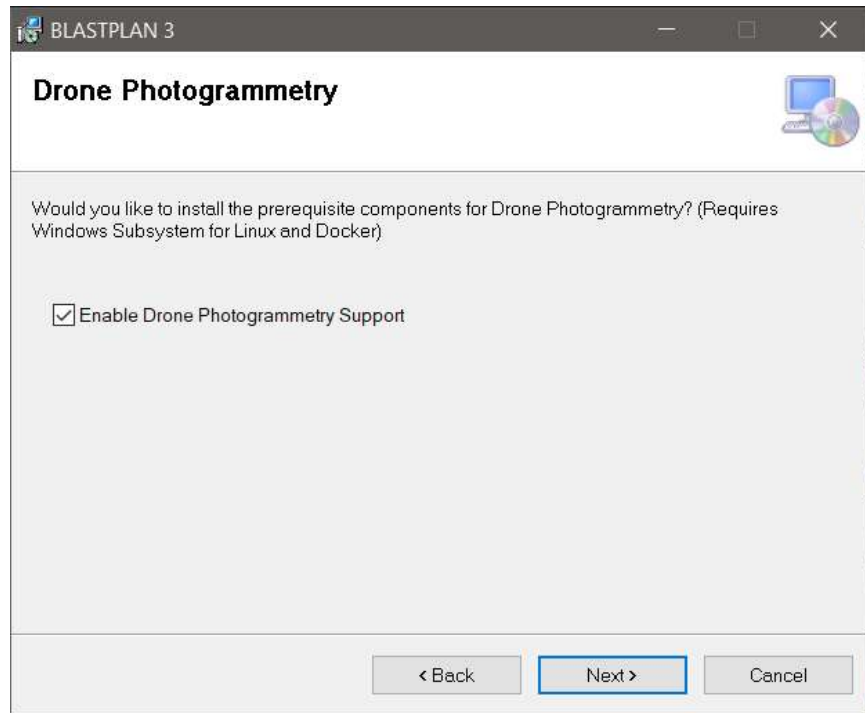


Figure 1: Drone Photogrammetry — Enable the checkbox and click Next

Step 4: Confirm WSL2 Installation

After proceeding past the Drone Photogrammetry screen, a confirmation dialog will appear informing you that the Windows Subsystem for Linux (WSL2) needs to be enabled, and that a system restart will be required.

Click "OK" to enable WSL2. If you click "Cancel", the Drone Photogrammetry components will not be installed (BlastPlan itself will still install normally).

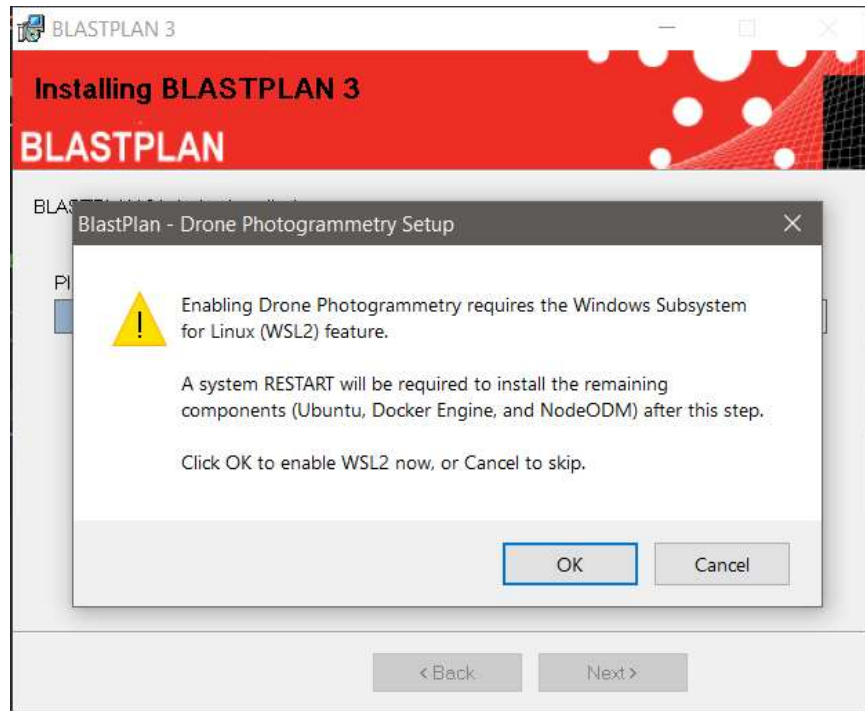


Figure 2: WSL2 Confirmation — Click OK to proceed

Step 5: Phase 1 — Enabling WSL2 Features

After clicking OK, a Command Prompt window will open showing the progress of enabling the required Windows features:

- [1/3] Enabling Windows Subsystem for Linux feature
- [2/3] Enabling Virtual Machine Platform feature
- [3/3] Setting WSL 2 as the default version

This process runs automatically — you do not need to type anything. Wait for it to complete. The progress bars will advance from 0% to 100%.

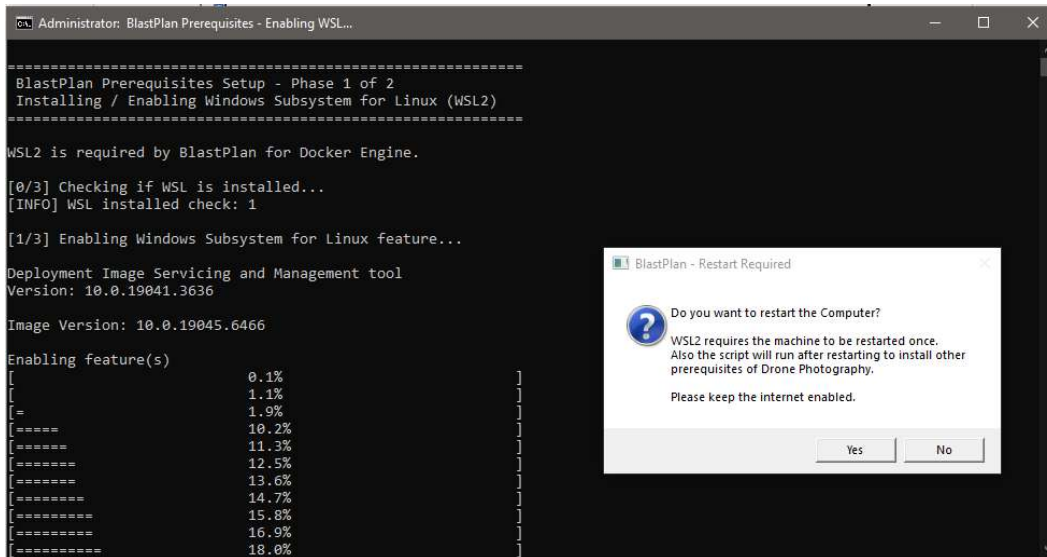


Figure 3: Phase 1 in progress — WSL features being enabled

Step 6: Restart the Computer

Once Phase 1 completes, a dialog will pop up asking you to restart the computer. The command prompt will show "Phase 1 Complete." as shown below.

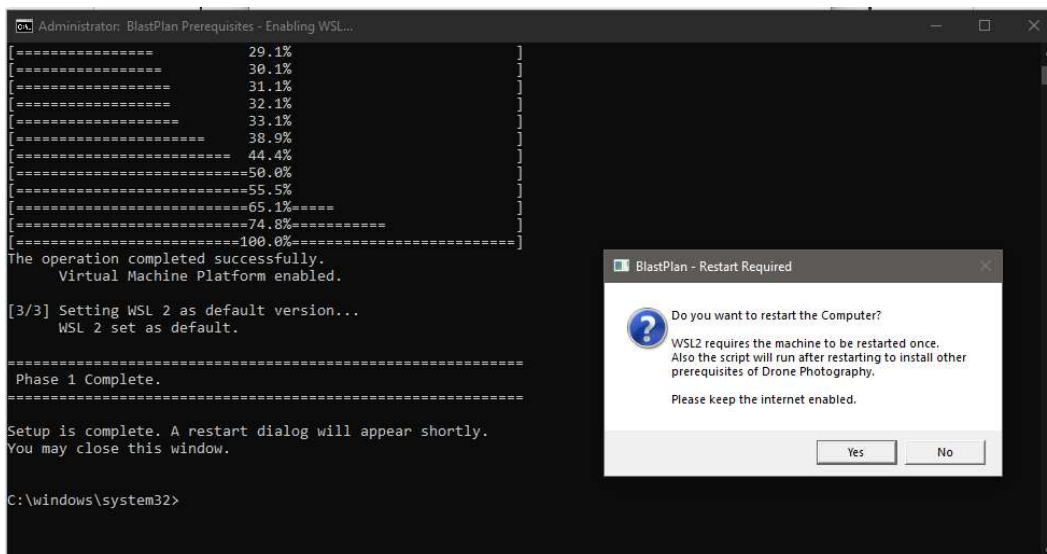


Figure 4: Phase 1 complete — Restart dialog appears

⚠ Important: Click "Yes" to restart the computer immediately.

If you click "No", please remember to restart your computer manually as soon as possible. The remaining installation steps will not proceed until the machine has been restarted.

⚠ Note: Make sure your internet connection remains active before and after the restart.

Step 7: Phase 2 — Automatic Installation After Restart

After the computer restarts and you log in, a UAC (User Account Control) prompt will pop up asking for permission to open a Command Prompt as Administrator.

⚠ Important: Click Yes when the UAC prompt appears. This is required for the installation to continue. Also sometimes it takes 2-3 minutes to show the UAC prompt after restart.

A new Command Prompt window will open automatically and perform the following steps:

Step 7a: Install Ubuntu (Step 1 of 4)

The installer downloads and installs the Ubuntu Linux distribution inside WSL2. This step takes a few minutes depending on your internet speed. You will see progress dots being printed in the console.

Step 7b: Configure Ubuntu (Step 2 of 4)

Ubuntu is configured with a root user account. This is done automatically and requires no user interaction.

Step 7c: Install Docker Engine (Step 3 of 4)

Docker Engine CE (Community Edition) is installed inside the Ubuntu environment. This downloads and installs the official Docker packages from Docker's repository. This step may take several minutes.

Step 7d: Pull NodeODM Image (Step 4 of 4)

The NodeODM photogrammetry engine Docker image (opendronemap/nodeodm) is pulled. This is a large download (~2–3 GB) and can take 5–20 minutes depending on your internet connection speed.

⚠ Note: Do not close the Command Prompt window during this process. Let it run to completion.

Step 8: Installation Complete

When all four steps are finished, the Command Prompt will display the following completion message:

```
=====
All Done! BlastPlan prerequisites are ready.
Docker Engine and NodeODM are installed inside Ubuntu.
=====

You may now close this window.
Press any key to continue . . .
```

Press any key to close the Command Prompt window, then open BlastPlan 3.

⚠ Important: In case the Drone Process is not working please open the Ubuntu and check if it requires the username and password you have set previously. And then try again

Troubleshooting

Internet Connection Required

An active internet connection is required throughout the entire installation process (both Phase 1 and Phase 2). If the installer detects no internet, it will display an error message and pause.

Reconnect to the internet and re-run the phase script from:

```
%ProgramData%\BLASTPLAN Pty Ltd\DronePhotogrammetry\blastplan_phase2.bat
```

UAC Prompt Not Appearing After Restart

If the automatic Phase 2 does not start after restarting, you can manually trigger it by running the following batch file as Administrator:

```
%ProgramData%\BLASTPLAN Pty Ltd\DronePhotogrammetry\blastplan_phase2.bat
```

Phase 1 or Phase 2 Errors

If errors occur during installation, the Command Prompt will display the error details and pause. Please:

- Copy (or screenshot) the error message from the Command Prompt window.
- Check the log file at: %ProgramData%\BLASTPLAN Pty Ltd\DronePhotogrammetry\docker_install_log.txt
- Send the error details and log file.

Virtualization Not Enabled

WSL2 requires hardware virtualization (VT-x / AMD-V) to be enabled in your computer's BIOS/UEFI settings. If the installer fails with virtualization-related errors, restart your computer, enter BIOS settings, and enable virtualization.

Windows Version Too Old

WSL2 requires Windows 10 version 2004 (Build 19041) or later. If you are running an older version of Windows, please update Windows first before running the installer.