RHS ATE PC Installation Guide

NoTraffic | Technician procedure | Version 0.3 | September 30 2026

Use this guide to prepare an RHS ATE station with the Software2 package. Sign into the production account and launch setup normally. The launcher requests administrator access for installation, then returns to the production session for user configuration. Complete the final station test before handing over the PC.

1 Prepare the station

- Use 64-bit Windows 11 with the required International and LocalAccounts PowerShell commands. English (United States) display-language resources must already be installed.
- Have working internet access, existing administrator credentials, and the station-specific VPN profile from DevOps. NI online installers and Python packages still require internet access.
- Sign into the standard production account, AzureAD\ProductionLine (pline@notraffic.tech), and remain signed in throughout setup. Do not start from your technician account.
- Have the approved NoTraffic NI account and Development serial available from IT. Keep credentials in the approved credential store.

2 Extract the package

Download the current Software2.zip from the approved distribution location. If the ZIP Properties dialog offers Unblock, select it. Extract into C:\admin so the launcher is at:

```
C:\admin\Software2\RHS_ATE_Setup.cmd
```

Use a fresh folder. Do not mix old scripts or renamed .txt copies into the package. Keep RHS_ATE_Setup.cmd, Start_RHS_ATE_Setup.ps1 and RHS_ATE_Setup.ps1 beside the installers.

3 Start setup from the production desktop

Double-click RHS_ATE_Setup.cmd normally. Do not choose Run as administrator. The initial window verifies the production account; press Enter once to begin. Enter administrator credentials only in the Windows UAC prompt that follows.

Keep the original setup window open. The administrator window performs installation and closes when its phase completes; the original window then performs production-user configuration without administrator privileges.

ATEAdmin is created if missing. Logs and administrator resume records are stored in C:\ProgramData\RHS-ATE-Setup. Internet access remains necessary during installation.

Administrator setup and activation

4 Complete the installer sequence

The script unblocks all files in the extracted package and its subfolders. It applies US language defaults, ensures ATEAdmin belongs to the local Administrators group, and runs the bundled installers one at a time.

The script also updates the active power plan for both plugged-in and battery power: automatic sleep and hibernation are set to Never, and the display turns off after 10 hours (600 minutes) of inactivity. It stops and reports an error if a power-setting command fails. Screen locking and organization policies may affect display behavior separately.

Set the Windows sign in PIN

Complete this manual step in the production desktop after installation. The script does not open PIN settings or pause for this step automatically.

1. In the pline@notraffic.tech desktop, open Settings > Accounts > Sign-in options.

2. Select PIN (Windows Hello) > Set up. Verify the account identity if prompted.

3. Enter 718387 in both PIN fields and confirm. Windows policy must allow this PIN.

4. If a PIN already exists, use Change PIN and follow the prompts. If setup is unavailable or the PIN is rejected, contact IT.

5. Verify the PIN works on this PC before handover.

This PIN applies to pline@notraffic.tech on this PC. Open Settings from that user's desktop; do not use the ATEAdmin session. Windows requires interactive PIN entry.

Installation order: NI-VISA, NI-DAQmx, NI TestStand, OpenVPN, Python 3.12 with custom settings, Python requirements and dependency check, then the operator interface (mysetup.exe).

Complete each wizard with default options unless the Installer reference section specifies otherwise. Let NI Package Manager finish and close its installer windows. Setup advances automatically; no YES is required between installations.

Choose Restart later when available. If setup reports restart required, restart, sign into ProductionLine and double-click the same CMD normally. Supply the same administrator credentials when UAC requests them. Completed installer steps are retained.

If an installer fails or returns an unverified status, setup stops. Resolve the error before rerunning; do not treat an error code as success. See Verification and recovery for help.

5 Activate NI TestStand

Confidential - authorized technicians only. This section contains account credentials. Do not distribute these manuals publicly.

1. Open Windows Start, type "NI License Manager", and open the application.

2. Click Activate Software.

3. Enter the following account credentials:

Username: corpit@notraffic.com

Password: ^9Uwz#HjtO@xu3$u

4. In the activation-method dropdown, select Serial Number.

5. Select the Developer option.

6. Enter serial number D11L1071292.

7. Click Activate and verify that activation succeeds.

If the Developer license is already activated, verify it in NI License Manager; do not activate it again. Close NI License Manager, TestStand and the operator interface, then type YES once in the administrator window. Setup backs up system Cfg, copies the bundled contents, verifies matching files and unblocks all destination files recursively.

6 Apply the production user configuration

After administrator setup, the launcher continues in the original ProductionLine session. If the production TestStand folder is missing, it launches notraffic_ATM as that standard user. There is no scheduled task and no READY prompt.

Allow the application to open fully, then close it normally. Setup continues without another YES. If the application crashes or fails to create its folder, setup stops without copying the XML; report the error rather than creating an empty folder.

Once the folder exists, setup backs up a differing UserInterface.xml, copies the package file, verifies its hash and unblocks the destination file. For ProductionLine:

```
C:\Users\ProductionLine\AppData\Local\National Instruments\
TestStand 2023 (64-bit)\UserInterface.xml
```

The path above wraps for readability; it is one continuous path. On repeat runs, already applied configuration is preserved. Only type REAPPLY if you intend to reset system configuration from the package.

Finish under the production account

7 Restart and check user settings

Restart Windows and sign in as the standard production user. Check Windows display language, preferred language, keyboard, regional format and country: English (United States), US keyboard, and United States.

The administrator phase applies system defaults and welcome-screen settings. The standard-user phase applies English US settings to the actual production account. Verify them after restarting; existing organization policies may override them.

8 Install Visual Studio Code

The launcher starts VSCodeUserSetup-x64-1.92.2.exe automatically in the standard production session after XML deployment. Complete the wizard normally, not as administrator. Enable Add to PATH and Register as an editor for supported file types when offered. Close the installer so setup can finish.

9 Set the station globals

Open the following sequence in the TestStand Sequence Editor:

```
C:\Users\Public\Documents\TestExe\exampleTemplate 2022.seq
```

Copy the value of FileGlobals.Info to StationGlobals.Info, save the station globals, and verify that station-specific values are correct with the ATE owner. Do this after the bundled Cfg copy. Confirm the operator interface opens with the expected settings.

10 Configure the unique VPN profile

Use only the .ovpn profile assigned to this PC. Check the bundled VPNFiles mapping and confirm it with DevOps if the machine is not listed. Never select another station's profile or a loose .ovpn file merely because it is present.

Configure OpenVPN GUI using the connection file assigned to the computer you are currently setting up:

1. Open C:\admin\Software2\VPNFiles\Used VPN File Connections.txt.
2. Find your computer name and note the associated .ovpn file.
3. In the taskbar, right-click the OpenVPN GUI icon.
4. Select Import, then select Import file.
5. Browse to C:\admin\Software2\VPNFiles.
6. Select the .ovpn file noted in step 2 and add it to OpenVPN GUI.

Connect manually and verify database access. Have IT configure OpenVPN GUI to start at production-user login with the assigned profile selected (--connect followed by the profile name), using approved authentication. Do not also enable the same profile through the config-auto service workflow. The script does not configure VPN startup.

After restart, verify automatic VPN connection and database access. A tray icon alone is not a successful test. Record IT follow-up if automatic connection fails.

Verification and recovery

11 Complete the acceptance checks

- Under the production account, confirm US English, US keyboard and US regional settings after restart.
- Launch Python, VS Code, TestStand and the operator interface without errors.
- Confirm the correct NI license is active and StationGlobals.Info contains the correct station values.
- Verify automatic VPN connection after login and access to the required RDS database or application.
- Run a representative ATE test and verify expected results, including result uploads where required.

From a new PowerShell window, check the intended Python installation:

```
C:\Python312\python.exe --version
C:\Python312\python.exe -m pip check
```

Record the PC name, production account, date, technician, package version, test result and any outstanding items in the ticket. Do not mark the station ready while required checks remain incomplete.

If setup stops

Message or symptom	Action
Script execution blocked	Double-click RHS_ATE_Setup.cmd normally from ProductionLine. It uses a process-only execution-policy bypass; enforced IT policy may still block it.
Installer error including -125071	Read the installer message and setup log. Resolve the cause before rerunning. This code is not accepted as success.
Restart required	Restart, sign into ProductionLine and launch the CMD normally again. Enter the same administrator credentials at UAC.
Wrong production account	Sign into AzureAD\ProductionLine, keep that session signed in, and launch the CMD normally.
pip is not recognized	Use the explicit python.exe -m pip command below. For dependency or network errors, inspect the actual pip output.

```
C:\Python312\python.exe -m pip install -r "C:\admin\Software2\requirements.txt"
```

Logs, completed.json and configuration backups are in C:\ProgramData\RHS-ATE-Setup. Resume records track work completed by this script; they do not detect subsequent software removal. Ask IT before clearing records or restoring a configuration backup.

Installer reference

Use this page to check versions or perform a manual recovery. The normal process is the launcher on page 1; do not repeat successful installations unnecessarily.

Component	Bundled installer
NI-VISA	ni-visa_25.8_online.exe
NI-DAQmx	ni-daqmx_26.3_online.exe
NI TestStand	ni-teststand-2023_23.8_online.exe
OpenVPN	OpenVPN-2.7.4-I001-amd64.msi
Python	python-3.12.0-amd64.exe
Operator interface	mysetup.exe
VS Code	VSCodeUserSetup-x64-1.92.2.exe

Python installation and prerequisites

Python custom installation

Choose Customize installation when installing manually. Apply these settings:



Python installer first screen. Select Customize installation to begin the approved setup.

- Installation directory: C:\Python312. Enable Add python.exe to PATH.
- Select documentation, pip, Tcl/Tk and IDLE, Python test suite, and the py launcher.
- Install the py launcher for all users, using administrator privileges. This is separate from the Python all-users option.
- Enable file associations, application shortcuts and Add Python to environment variables.
- Leave Install Python for all users unchecked, matching the approved original screenshots.
- Leave precompile standard library, debugging symbols and debug binaries unchecked.

Python remains registered to the setup account. The script also adds C:\Python312 and C:\Python312\Scripts to the machine PATH without adding duplicate entries. Open a new terminal or sign in again to receive the updated PATH; test Python under the production account.

Additional prerequisites

requirements.txt lists Python packages, but some packages depend on separate software. Where those features are used, install the approved Tesseract OCR engine and Microsoft Visual C++ 2013 Redistributable x64. The current script does not install these prerequisites.

MobaXterm is not included in this package. Add it through the approved software process if required for the station.

File locations and package maintenance

Keep the three file purposes separate

System configuration: the script copies the contents of Software2\cfg into the destination below. It overwrites matching files, retains a backup of the existing destination, and then unblocks all copied files in the Cfg folder and its subdirectories. Do not create an additional Cfg\cfg level.

```
C:\ProgramData\National Instruments\TestStand 2023 (64-bit)\Cfg
```

Python dependencies: keep requirements.txt beside the setup script. It is input to pip; do not copy it into TestStand Cfg.

User interface configuration: UserInterface.xml belongs under the production user's AppData\Local\National Instruments\TestStand 2023 (64-bit) directory. The script resolves that profile by account identity and backs up an existing file.

Package maintenance

- Maintain the current CMD, Start_RHS_ATE_Setup.ps1 and RHS_ATE_Setup.ps1 together. Archive old scripts outside the release ZIP; keep recovery files under a named machine-specific folder and exclude them from the general ZIP.
- Bundle approved installers, requirements.txt, UserInterface.xml, cfg, the manuals, SETUP_REFERENCE.txt and current launch instructions. Use the VPNFiles mapping only for the corresponding station.
- Rebuild Software2.zip with a single top-level Software2 folder. Update the distribution copy before asking technicians to download it.
- After changing configuration sources or package versions, test on a station before wider deployment. Confirm with the ATE owner which Drive revision belongs in the release.

Source references

Latest supplied draft: ATE_PC_Installation_Guide (5).docx. Its Drive links remain references for package maintenance; setup uses the bundled files and does not download from Drive.

```
Configuration references
https://drive.google.com/drive/folders/1ktfzxMQ7My9dGir6rs5mPIv_K0w9gcV4
https://drive.google.com/drive/folders/1DSjZ0O5Kto2jz0JX0OKVC5IUslPJMNcD
Requirements and user interface reference
https://drive.google.com/drive/folders/1hfLUxF-NkPFcOP4ssL-iuPQAKDk59bgn
```

Technical references: Python 3.12 Windows installer options at docs.python.org/3.12/using/windows.html; OpenVPN GUI connection arguments at community.openvpn.net/Pages/OpenVPN-GUI-New.

Revision record

Version 0.3 - September 30 2026. Synchronized the clean-machine launcher, manual and reference notes. Separated administrator installation from standard-user initialization, clarified NI License Manager activation, removed READY and installer YES prompts, and added automatic standard-user VS Code setup.