

# TESSY Installation

## Abstract

This application note provides information about the TESSY setup, the command line options for silent installations, a description on how to use a different Java package, and troubleshooting hints.

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## 1 Introduction

The TESSY setups for version v3.0 and later are created using the InstallAware setup software version 9 R2 (refer to <http://www.installaware.com>). InstallAware creates MSI compliant setup packages.

**Please note:** Starting with TESSY v4 it is possible to clone a complete TESSY installation folder into another location on another computer. All you need to do is customize `bin\settings.ini` as described in chapter 2.3.

## 2 Setup command line options

### 2.1 Silent installation

The TESSY setup provides the following command line options for silent installations. Both options are optional and can be omitted resulting in default values being used:

```
tessy_setup /s INSTALL_PATH=<path> TESTAREA=<path>
```

`tessy_setup` means the binary setup file that you can download from the Razorcat web site (e.g. `tessy_5_1_14_setup_full.exe`). The arguments are described within the following table:

Command Line Option	Value
INSTALL_PATH	Installation path of TESSY (default is <code>C:\Program Files\Razorcat</code> )
TESTAREA	Path to the special TESSY_TESTAREA directory for temporary files used by TESSY for test execution (default is <code>C:\tessy</code> )

### 2.2 Logged installation

The TESSY setup provides the following command line option for logged installations:

```
tessy_setup /l=<filename>
```

`filename` may be any valid file name (e.g. `C:\log.txt`). This option may be useful in case of problems during the installation process. Please send the logfile with a description of the problem to [support@razorcat.com](mailto:support@razorcat.com).

## 2.3 Cloning an installation to another computer

Starting with TESSY v4 it is possible to clone the whole installation directory into another location on another computer. A typical TESSY installation has the following base installation directories:

```
C:\Program Files\Razorcat\Shared
C:\Program Files\Razorcat\FLS_9.0
C:\Program Files\Razorcat\TESSY_5.1
```

All necessary path settings are stored within INI files located within the following directories of the TESSY installation:

```
C:\Program Files\Razorcat\FLS_9.0\bin\settings.ini
C:\Program Files\Razorcat\TESSY_5.1\bin\settings.ini
C:\Program Files\Razorcat\TESSY_5.1\bin\TESSY.ini
```

When copying the installation into another directory, you need to adjust the respective paths to the above base directories within each of the INI files. The path to the `Shared` and `FLS` base directories needs to be adjusted as described within the following chapter.

### 2.3.1 Path adjustments

The following tables show all locations within the settings files that need to be updated. Let us assume the parent directory name is called `C:\TOOLS\TESSY`:

File	Content
C:\TOOLS\TESSY\TESSY_5.1\bin\settings.ini	[Shared] Path=C:\TOOLS\TESSY\Shared\1.4  [TESSY] Testarea=
C:\TOOLS\TESSY\TESSY_5.1\bin\TESSY.ini	-vm plugins/org.eclipse.justj.openjdk.hotspot.jre.minimal.striped.win32.x86_64_17.0.2.v20220201-1208/jre/bin

### 2.3.2 TESSY\_TESTAREA directory

The entry `Testarea` which denotes a value for the `TESSY_TESTAREA` can be left empty: In this case a temporary directory will be created and used for all test activities within the `Windows-%TEMP%` directory.

**Please note:** A fixed location for the `TESSY_TESTAREA` is required when using certain compilers/targets which communicate via files being written into the test area. The location of the `TESSY_TESTAREA` is hard coded within e.g. project files of some target debuggers.

### 2.3.3 Name and port of the license server

The name and optionally the port number of the license server to be used for TESSY can be specified within the `[FLS]` section of the `fls.conf` file within the `FLS` config directory.

```
[FLS]
Server=<license server name>
Port=10000
LicenseFile=
```

Upon startup of TESSY, these settings will be used and written into the following file:

```
%APPDATA%\Razorcat\FLS_9.0\config\fls.conf
```

## 3 Choosing a different Java package

Since TESSY 5.1, Razorcat delivers an OpenJDK Java runtime from the eclipse JustJ project which adapts an Eclipse Adoptium Java.

### 3.1 Regarding security issues

The OpenJDK Java package which is redistributed with TESSY's setup installer is setup to be utilized by TESSY only. No Java path is added to the Windows `PATH` environment variable nor is a Java registry entry added to the Windows registry. So, third party software will not recognize TESSY's redistributed Java package accidentally.

### 3.2 Adapting the Java virtual machine path

The currently used path to the Java virtual machine is found in file `bin\TESSY.ini`. At the time of writing this document, it looks like this

```
-vm
plugins/org.eclipse.justj.openjdk.hotspot.jre.minimal.stripped.win32.
x86_64_17.0.11.v20240426-1830/jre/bin
```

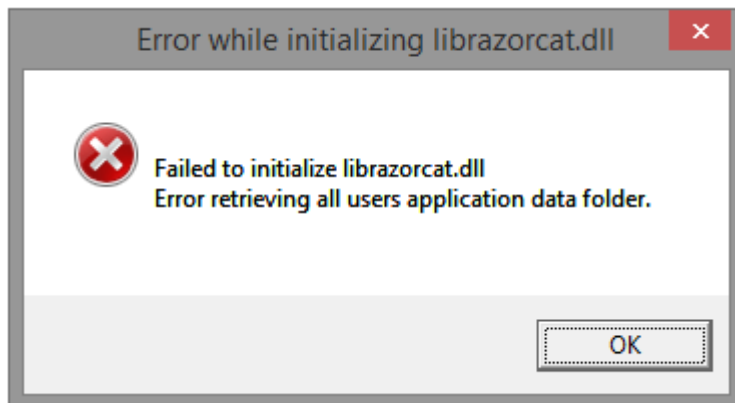
The second line in this example is the one, that has to be adapted accordingly in order to utilize a different Java package. If you choose a different OpenJDK vendor's Java package, make sure that it provides a TCK certified runtime.

**Please note:** TESSY was certified with the delivered OpenJDK Java package only. If you plan to use a different Java package, please ask your certification authorities if TESSY has to be recertified for the specific Java package you plan to use. Razorcat provides the TESSY Qualification Package which may help with the certification process. It can be ordered at [sales@razorcat.com](mailto:sales@razorcat.com).

## 4 Troubleshooting

### 4.1 Application data folders

The installation may fail on computers that do not have an application data folder assigned for the user account that is used for the installation. In this case the following error message will be shown:



The Razorcat library will be invoked at the end of the setup phase and it checks the following registry entries

```
"Software\\Microsoft\\Windows\\CurrentVersion\\Explorer\\Shell Folders", "AppData"
```

```
"Software\\Microsoft\\Windows\\CurrentVersion\\Explorer\\Shell Folders", "Common AppData"
```

Both registry entries are required and must contain valid existing path names. Please make sure that the paths exist and that they can be accessed by the user account used for the TESSY installation.

If the registry entries are not available or if they are pointing to missing directories, you can provide alternate directories for the setup using the following environment variables:

```
TESSYEX_USE_ENVIRONMENT=1
```

```
APPDATA=<any existing path>
```

```
ALLUSERSPROFILE=< any existing path>
```

### 4.2 Short path names on Windows 8.1 and later

Since Windows 8.1, the short path name support is by default only available on drive C: so that either both the TESSY installation and projects must be located on drive C: or path names containing blanks must not be used. Alternatively, you may enable

the short path support in general for all drives. Ask the administrator if this is allowed on the computer. To enable short path support for all drives, start a command line shell with administrator privileges and check if the support is disabled. Enter the following command line to get the current state.

```
fsutil 8dot3name query
```

If the short path support is not enabled for all drives, you may utilize the following command to enable it.

```
fsutil behavior set disable8dot3 0
```

As a workaround, symbolic links to directories containing blanks can be established using the Windows utility `mklink`. The workflow would be like follows:

Suppose you have a root directory of your projects on drive D: containing blanks in the path name (e.g. `D:\new projects\source`). Using `mklink` you can create a symbolic link to this directory:

<b>Please note:</b> You need administrative privileges to create the link!
--

1. Start `cmd.exe` with administrator privileges.
2. Change to drive D:
3. Enter the following line at the prompt:

```
mklink /D projects "D:\new projects"
```

The resulting new path `D:\projects` can be used without limitations now.