

Trace Debug Tools Version 1.2

Installation Guide

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1 Directory Structure of the CD-ROM

The CD-ROM contains all the files needed to install the *Trace Debug Tools™* (TDT™ Version 1.2) onto a PC workstation. The CD-ROM conforms to Microsoft Joliet format. It contains the following directories, files, and documentation:

Windows installation files

The root directory (\) contains the PC hosting of TDT for Windows 95, Windows 98, Windows Me, Windows NT 4, and Windows 2000.

Documentation

The \pdf directory contains the TDT documentation in Adobe *Portable Document Format* (PDF) format. See *Accessing the Documentation* on page 9.

2 Installing TDT Version 1.2

This section describes how to install TDT Version 1.2 in a Windows environment.

2.1 Hardware requirements

The following are the minimum hardware requirements for installing and running TDT:

- Pentium or higher IBM-compatible PC

Note

It is recommended that you use a 400MHz or higher Pentium II PC to run TDT.

- 32MB RAM
- CD-ROM drive (this can be a networked CD-ROM drive).

If you are using an ARM ETM, you also require the following to perform hardware tracing:

- Target board containing an ARM7-family or ARM9-family processor. The board must also contain an ETM.
- Trace capture hardware.
- JTAG interface unit.

If you are using an XScale™ target, you also require the following to perform hardware tracing:

- Target board containing an XScale processor.
- JTAG interface unit.

For a description of these components, and setup instructions, refer to the *Trace Debug Tools Version 1.2 User Guide*.

2.2 Software requirements

You must have one of the following operating systems to install and run TDT:

- Windows 95
- Windows 98
- Windows Me
- Windows NT version 4.0 or higher (Intel x86)
- Windows 2000
- Windows XP.

You must also have the *ARM Developer Suite™* (ADS™) 1.2 installed. If you are running ADS v1.0, v1.0.1 or v1.1, contact ARM for details on obtaining an upgrade.

If you are using Multi-ICE™ as your JTAG interface unit, then for ETM tracing you must have Multi-ICE Version 2.0 or higher installed. For XScale tracing, you must have Multi-ICE Version 2.1 or higher installed. When you install TDT 1.2, Multi-ICE version 2.x will be automatically upgraded to version 2.x.1 when you next run AXD and connect to Multi-ICE.

If you want to view the PDF version of the *ARM Trace Debug Tools Version 1.2 User Guide*, you must have Adobe Acrobat Reader v4.0 or higher installed. Acrobat Reader is provided with ADS. The *ARM Trace Debug Tools Version 1.2 User Guide* is also viewable in DynaText as part of the ADS manual suite. (The DynaText viewer is installed during ADS installation.)

2.3 Installation procedure

You must remove any previous version of TDT, and you must have an installation of ADS v1.2, before installing TDT. Failure to do this could lead to unpredictable results.

To install TDT:

1. Insert the CD into the CD-ROM drive. The setup program starts and the Welcome window is displayed. (If the setup program does not start, run `setup.exe` in the top-level directory of the CD-ROM.)
2. Click **Next**. The License Agreement dialog page is displayed. To install TDT you must accept the terms of the ARM License Agreement.
3. Read the agreement, and:
 - Click **Yes** if you accept the terms of the ARM license and want to install the software.
 - Click **No** if you do not accept the terms of the ARM license. If you do not accept the terms of the ARM license, you must not use TDT. You can return the software to the supplier for a refund.

The Setup Type selection dialog page is displayed.

4. Select your setup type:

- | | |
|----------------|---|
| Full | Install all components. |
| Compact | Install only the main executables, the setup program, and the TDT online help file. |
| Custom | You are offered a choice of product components to install. |
1. Check (select) or uncheck (deselect) the components you want to install.

Note

Certain files are required for the installation of TDT. You cannot deselect these files.

2. Click **Next**.

3. The installer lists the settings chosen for this installation. Click **Next** to begin the installation.
4. Click **Back** if you want to change any of the installation options. Otherwise, click **Next**.
5. As TDT is installed, the Setup Status progress dialog page is displayed. When complete, the InstallShield Wizard Complete dialog page is displayed.

Click **Finish**. The ARM Licensing dialog is displayed. Complete this dialog as described in *Licensing your Software* on page 6. You can find additional information about the ARM licensing software in the *ADS Installation and License Management Guide*.

At the end of the installation process, the installer offers a reboot option if this is necessary.

You can view the online documentation in PDF or DynaText form. See *Accessing the Documentation* on page 9.

Note

Additional information about TDT is available in the file `Readme.txt`, located in the root directory (\) of the CD-ROM.

2.4 Modifying, repairing, or removing TDT

You can use the Windows installer to add or remove selected components, reinstall all components, or remove all components of TDT. After you have successfully installed TDT, insert the CD into the CD-ROM drive. The setup program starts. (If the setup program does not start, execute the `setup.exe` program in the root directory of the CD-ROM). A window is displayed in which you have the option to:

- Select **Modify** to add or remove optional components to your existing installation:
 1. Click **Next**. The Select Components dialog page is displayed. You have the option to select (check) or deselect (uncheck) the following components for adding or removing:
 - PDF documentation
 - Online Books
 - Examples
 - Multi-ICE updates.
 2. Click **Next**. A progress dialog page is displayed. When complete, the Maintenance Complete dialog page is displayed.
 3. Click **Finish**.
- Select **Repair** to reinstall all files again, for example if one or more files have been damaged:
 1. Click **Next**. A progress dialog page is displayed. When complete, the Maintenance Complete dialog page is displayed.

2. Click **Finish**.
- Select **Remove** to remove the existing TDT installation:
 1. Click **Next**. You are prompted to confirm the removal of the TDT product.
 2. Click **OK** to confirm removal, or **Cancel** to return to the previous screen. A progress dialog page is displayed. When complete, the Maintenance Complete dialog page is displayed.
 3. Click **Finish**.

Note

Extra components that have been added to the installation with the **Modify** option are deleted when you **Remove** the product. However, if you have added extra files manually, these are not uninstalled, and you must remove them manually.

If you click **Cancel** in this dialog box, or at any time while the progress dialog page is displayed, a warning message is given. Any add or remove operations you have selected do not occur (or are undone) if you confirm the cancellation.

3 Licensing your Software

TDT 1.2 is license-managed using the FLEXlm license management software supplied with ADS. The TDT installation procedure prompts you to enter the license management number printed on a label on the TDT box. The procedure creates a temporary license file, enabling you to use TDT for a limited period during which you can obtain a permanent license file from ARM Limited.

When you install TDT 1.2, a License Installation Wizard is displayed towards the end of the installation. This Wizard helps you to:

- install a temporary license (see *Installing a temporary license* on page 6)
- apply for a permanent license (see *Requesting a permanent license* on page 7)
- install your permanent (node-locked or floating) license when you receive it (see *Installing a permanent license* on page 8).

The following instructions outline the main steps you must follow to install and request your license. For detailed information on installing and managing licenses, see the *ADS Installation and License Management Guide* in the ADS documentation suite.

3.1 Installing a temporary license

To install a temporary license:

1. Select **Start** → **Program files** → **ARM Developer Suite v1.2** → **License Installation Wizard** to start the License installation wizard.
2. Click on the **Next** button to continue.
3. Select the **Install License** radio button.
4. Click on the **Next** button.
5. Enter the temporary license number, given on a label on the TDT box, in the form `armlmd-trace-xxxxx-xxxxx-xxxxx-xxxxx-xxxxx-xxxxx-xxxxx-xxxxx-xxxxx`, where each `x` represents a numeric digit. The first few characters are entered for you. Do not add any extra spaces, and remember to include the minus (-) characters. Leave the **License file to be installed** field blank.
6. Click on the **Next** button.
You are asked if you want to update your license.
Click on the **Next** button.
Click on the **Finish** button.
7. The temporary licence lasts for a maximum of 45 days. The final important step is to apply for a permanent license (see *Requesting a permanent license* on page 7) to continue using TDT after the temporary license expires.

3.2 Requesting a permanent license

To use TDT 1.2 without interruption you must obtain and install a permanent license before the temporary license expires.

There are two types of permanent license:

- floating, also sometimes known as counted
- node-locked.

These are described in the *ADS Installation and License Management Guide*.

To request a permanent license:

1. Select **Start** → **Program files** → **ARM Developer Suite v1.2** → **License Installation Wizard** to start the License Installation Wizard.
2. Click on the **Next** button to continue.
3. Select the **Create License Request Form** radio button.
4. Fill in your name and company details (see the *ADS Installation and License Management Guide* for details) and click the **Next** button.
5. Fill in your address details (see the *ADS Installation and License Management Guide* for details) and click the **Next** button.
6. Enter the serial number, product name, and version. This information is printed on the TDT box. Do not confuse the TDT serial number with the temporary license key number, which begins with `armld-tdt-` and also appears on the box.
Select the type of license required (floating or node-locked).
Click the **Next** button.
7. If you are requesting a floating license, enter the hostids and hostnames of the machine(s) that you wish to use as your license server. If you are requesting a node-locked license, enter the hostid of your computer.
Click the **Next** button.
8. Check that the name and location of the license request file that the wizard is about to create is acceptable. If not, click **Browse** to select an alternative name.

Note

The default location is within the ADS installation tree. If your installation tree has restricted access rights, as is common with Windows 2000, you might have to select an alternate location, for example, `C:\temp\license_request.txt`.

Click the **Next** button.

- The last page of the wizard shows the location of the license file you have created. Insert the contents of the file into a new email message and mail it to one of the addresses at the top of the created file. You might find it useful to select and copy the filename from the license wizard dialog page.

Click **Finish**.

3.3 Installing a permanent license

Instructions for installing a permanent license depend on whether you are installing a node-locked or a floating license. See:

- Installing a permanent node-locked license* on page 8
- Installing a permanent floating license* on page 8.

Installing a permanent node-locked license

- Select **Start** → **Program files** → **ARM Developer Suite v1.2** → **License Installation Wizard** to start the License Installation Wizard.
- Click on the **Next** button to continue.
- Select the **Install License** radio button.
- Click on the **Next** button.
- Use the Browse button to locate and select the permanent license file you have received, and click the **Next** button.
- Select the `...ADSV1_2 \licenses \license.dat` entry from the License File List (where `...ADSV1_2` is your ADS installation directory), and click the **Next** button.
- Click **Finish**.

Installing a permanent floating license

You can now use your license-managed ADS tools permanently. You must install a permanent floating license file on each ADS workstation and on each license server. Instructions for doing this are available in the *ADS Installation and License Management Guide* in the ADS documentation suite.

4 Accessing the Documentation

This section describes how to access the following documentation provided with TDT:

- the Online Help, as WinHelp 4.0 files
- the User Guide, as Adobe PDF and DynaText.

4.1 Accessing the online help

You can access the TDT help files in either of the following ways:

Item-sensitive help

To invoke item-sensitive help while TDT is running, click on the ? in the trace dialog box, then click on the field or button for which you want help.

Alternatively, position the cursor on any field or button for which you want help and press <SHIFT><F1>. If relevant online help is available, it is displayed.

Viewing the online help file

You can also display the TDT help file by selecting **TDT Help** in the ADS program group. For details on how to navigate through the online help file, see the *Using Help* topic of the online help.

4.2 Accessing the DynaText User Guide

The DynaText version of the *ARM Trace Debug Tools Version 1.2 User Guide* is an optional component of TDT that can be installed into the ADS DynaText manual set. The DynaText reader software is installed with a Typical or Full installation of ADS.

To display the online documentation, select **Online Books** from the ADS program group.

For more information on using DynaText, select **Online Books** from the ADS program group and choose **Reader Guide** from the DynaText **Help** menu.

4.3 Accessing the PDF using Adobe Acrobat Reader

The PDF version of the *ARM Trace Debug Tools Version 1.2 User Guide* is an optional component of TDT. You must have a copy of Adobe Acrobat Reader v4.0 or higher installed before you can view it.

To display the user guide, open the file `TDT_manual.pdf`. This can be found in the following places:

- in the `pdf` folder of the ADS installation directory
- in the `pdf` directory on the installation CD.

For more information on using Adobe Acrobat Reader, choose **Reader Guide** from the Adobe Acrobat Reader **Help** menu.

5 Feedback

This section describes how to report problems and comments on TDT and its documentation.

5.1 TDT Version 1.2

If you have feedback on TDT, please contact your supplier. To help provide a rapid and useful response, please give:

- details of the release you are using
- details of the platform you are running on, such as the hardware platform, operating system type and version
- details of the Trace Port Analyzer or Logic Analyzer you are using to collect trace data
- a small stand-alone sample of code that reproduces the problem
- a clear explanation of what you expected to happen, and what actually happened
- the commands you used, including any command-line options
- sample output illustrating the problem
- the version string of the tool, including the version number and date
- details of the JTAG and ETM interface units you are using.

5.2 Feedback on this book

If you have any problem with these instructions, please send an email to errata@arm.com giving:

- the document title
- the document number
- the page number(s) to which your comments apply
- a concise explanation of the problem.

General suggestions for additions and improvements are also welcome.

