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ARM Debugger for UNIX (ADU v1.1)
Installation Guide
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Installation Guide

1 Directory Structure of the CD-ROM

The CD-ROM conforms to ISO9660 (High Sierra format). The filenames do not contain ISO9660 version numbers as these are visible as ';1' on the end of filenames on some systems. It contains the following directories and files:

Common files for UNIX
common.tar contains files common to all UNIX platforms.

Host-specific files for UNIX
solaris.tar contains Solaris (2.5.1 and 2.6) binaries
hpux.tar contains HP-UX 10.20 binaries.

License management
flexlm contains license management tools for SunOS 4.1.x, Solaris 2.5.1, and HP-UX (9.x and 10.x), all in TAR format.
2 Installing ARM Debugger for UNIX

This section describes how to install ARM Debugger for UNIX (ADU v1.1), both on a Sun workstation and on an HP workstation.

2.1 Installing on a Sun workstation

This section describes how to install ARM Debugger for UNIX on a Sun Sparc workstation.

Sun hardware requirements

The following are the minimum hardware requirements for installing and running ARM Debugger for UNIX:

- Sun UltraSparc compatible machine
- CD-ROM drive (this can be a networked CD-ROM drive).

Sun software requirements

To install and run ARM Debugger for UNIX you must have Solaris 2.5.1 or 2.6 with the Common Desktop Environment (CDE), and you must have installed the ARM Software Development Toolkit version 2.50.

Installing ARM Debugger for UNIX on Sun

We recommend that you remove any previous versions of ARM Debugger for UNIX before installing this version. Failure to do so could lead to unpredictable results.

To install ARM Debugger for UNIX:

1. Insert the CD into the CD-ROM drive.
2. If you do not have volume management (vold) set up to mount CD-ROMs automatically, you must mount the CD-ROM manually, as follows:
   a) Become super-user by typing:
      
      su
      
      Password: root_password
      
      where root_password is the root password of your machine.
   b) Mount the CD-ROM by typing:
      
      mount -F hsfs -o ro device_name mount_point
      
      where device_name is the name of the CD-ROM device, and mount_point is the place to mount the CD-ROM in the file system.
      
      For example:
      
      mount -F hsfs -o ro /dev/dsk/c0t6d0s2 /cdrom
   c) Exit superuser mode by typing:
      
      exit
b) Run the install script:
   sh install.sh
c) Follow the prompts to install ADU

Sun environment setup
You must set several environment variables to appropriate values to ensure the correct operation of ARM Debugger for UNIX. To help you, a setup script is installed with the product. Change to the top level directory in which you installed ADU and type:

   sh usrssetup.sh

This script displays the environment variables you must set to enable ADU to run. It also allows you to append these settings to your login script. If you choose to append the values to your login script you must remember to rerun the script to activate the changes.

To setup your environment manually, enter the following commands, substituting your own installation pathname where necessary.

If using csh or tcsh:

   setenv ADUHOME install_directory
   setenv WUHOME $(ADUHOME)/windu
   setenv HHHOME $(ADUHOME)/windu/bin/sol2/hyperhelp
   setenv LD_LIBRARY_PATH $(ADUHOME)/solaris/bin:$ADUHOME/windu/lib.sol2:/usr/dt/lib:$LD_LIBRARY_PATH
   set path=($ADUHOME/solaris/bin $path)

   You may wish to add the above commands to your .cshrc file, which you must then remember to rerun in order to activate the changes.

If using sh or ksh:

   export ADUHOME= install_directory
   export WUHOME=$ADUHOME/windu
   export HHHOME=$ADUHOME/windu/bin/sol2/hyperhelp
   export LD_LIBRARY_PATH=$ADUHOME/solaris/bin:$ADUHOME/windu/lib.sol2:/usr/dt/lib:$LD_LIBRARY_PATH
   export PATH=$ADUHOME/solaris/bin:$PATH

   You may wish to add the above commands to your .profile file, which you must then remember to rerun in order to activate the changes.
Sun desktop setup

The file `app-defaults` in your installation directory contains the X resource values that are required to make ARM Debugger for UNIX operate correctly under the Solaris CDE.

Append the contents of `app-defaults` to the file `~/.Xdefaults` that should be in your `$HOME` directory. If `~/.Xdefaults` does not exist, create it using the contents of `app-defaults`.

Setting up Multi-ICE for a Sun workstation

To enable the use of Multi-ICE hardware and software, you must run a program to set up the necessary Multi-ICE environment. Enter the command:

```
setreg 1.3 path
```

where `path` is the path to your ADU binaries.

For example, if you installed ADU in `/opt/arm` you would enter:

```
setreg 1.3 /opt/arm/solaris/bin
```

This command has to be executed by every user who wishes to use Multi-ICE with ADU.

Further information

You have now installed ARM Debugger for UNIX. For information on how to run the debugger, refer to the online documentation.

**NOTE:** Important information about this release is contained in the `relnotes.txt` file that is in the top-level install directory.

2.2 Installing on an HP workstation

This section describes how to install ARM Debugger for UNIX on an HP workstation.

**HP hardware requirements**

The following are the minimum hardware requirements for installing and running ARM Debugger for UNIX:

- HP PA-RISC machine
- CD-ROM drive (this can be a networked CD-ROM drive).

**HP software requirements**

To install and run ARM Debugger for UNIX you must have HP-UX 10.20, and you must have installed the ARM Software Development Toolkit version 2.50.

Installing ARM Debugger for UNIX on HP

We recommend that you remove any previous versions of ARM Debugger for UNIX before installing this version. Failure to do this could lead to unpredictable results.

To install ARM Debugger for UNIX:

1. Insert the CD into the CD-ROM drive
2. Become superuser of your machine by typing:
```
su
```
Password: root_password
where root_password is the root password for your machine.

3. To mount the CD-ROM drive, type the following at the prompt:
```
mount -r -F cdfs -o cdcase cdrom-device /cdrom
```
For example:
```
mount -r -F cdfs -o cdcase /dev/dsk/c1t2d0 /cdrom
```

4. Exit superuser mode by typing:
```
exit
```

5. EITHER
   a) Move to the top level CD-ROM directory:
      ```
cd /cdrom/adu
```
   b) Run the install script:
      ```
sh install.sh
```
   c) Follow the prompts to install ADU
      ```
cd install_directory
```
   OR
   a) Create an install directory:
      ```
mkdir install_directory
```
   b) Move to your install directory:
      ```
cd install_directory
```
   c) Untar the installation from CD-ROM:
      ```
tar xvf /cdrom/adu/common.tar
tar xvf /cdrom/adu/hpux.tar
```

**HP environment setup**

You must set several environment variables to appropriate values to ensure the correct operation of ARM Debugger for UNIX. To help you, a setup script is installed with the product. Change to the top level directory in which you installed ADU and type:
```
sh usrsetup.sh
```
This script displays the environment variables you must set to enable ADU to run. It also allows you to append these settings to your login script. If you choose to append the values to your login script you must remember to rerun the script to activate the changes.

To setup your environment manually, enter the following commands, substituting your own installation pathname where necessary.

If using csh or tcsh:
```
setenv ADBHOME install_directory
setenv WUHOME $(ADBHOME)/windu
setenv HPPATH $(ADBHOME)/windu/bin:
setenv SHLIB_PATH $(ADBHOME)/windu/lib:
set path=$(ADBHOME)/windu/bin %path)
```
You may wish to add the above commands to your .cshrc file, which you must then remember to re-run in order to activate the changes.
If using sh or ksh:

```bash
export ADUHOME=install_directory
export WUHOME=$ADUHOME/windu
export HHHOME=$ADUHOME/windu/bin.hp700mt/hyperhelp
export SHLIB_PATH=$ADUHOME/hpux/bin:$ADUHOME/windu/lib.hp700mt:$SHLIB_PATH
export PATH=$ADUHOME/hpux/bin:$PATH
```

You may wish to add the above commands to your `.profile` file, which you must then remember to re-run in order to activate the changes.

### Setting up Multi-ICE for an HP-UX workstation

To enable the use of Multi-ICE hardware and software, you must run a program to set up the necessary Multi-ICE environment. Enter the command:

```
setreg 1.3 path
```

where `path` is the path to your ADU binaries.

For example, if you installed ADU in `/opt/arm` you would enter:

```
setreg 1.3 /opt/arm/hpux/bin
```

This command must be executed by every user who wishes to use Multi-ICE with ADU.

### Further information

You have now installed ARM Debugger for UNIX. For information on how to run the debugger, refer to the online documentation.

**NOTE:** Important information about this release is contained in the `relnotes.txt` file that is in the top-level install directory.
3 Licensed use
The ARM Debugger for UNIX uses FlexLM license manager software to control its use and distribution. Before you can use ADU, you must request a license file from ARM Limited. ADU cannot run without a license file.

3.1 How to obtain your license
The ADU installation directory contains a file called license_request_form.txt. Please fill in your details on this form and return it to ARM Limited, by either email or fax. A license file is then returned to you.

3.2 Installing your license file
For full information on how to install your license file, and how to run the license manager software, refer to:
• the ARM Software Development Toolkit version 2.50 User Guide, Appendix A
• the disk file flexlm.txt

3.3 Running ARM Debugger for UNIX
To run ARM Debugger for UNIX, type:
adu
4 Online Help

4.1 Viewing online help
Whenever you run ARM Debugger for UNIX the Help menu is available in the menu bar.
Activate this help menu and select the Contents option to see a display of the main help topics available.
You may navigate to a particular page of help in any one of the following ways:

- from the Contents tab of the Help Topics screen:
  a) click on a main topic to select it
  b) click on the Open button
  c) click on a sub-topic.
- from the Contents tab of the Help Topics screen:
  a) double-click on a main topic book to open it
  b) click on a sub-topic.
- from the Index tab of the Help Topics screen:
  a) type the first few characters of a likely index entry
  b) scroll down the displayed list of index entries until the entry you want is visible
  c) click on the required index entry.
- from the Find tab of the Help Topics screen:
  a) select Use Default Settings on the Find Index - Build Options dialog, then click the Continue button to create a full text search index
  b) type and/or select key words that may occur anywhere in the help text
  c) select a topic from the displayed list of topics that contain the specified words.
- from any other page of help that has a hypertext link to the page you want:
  a) click on the highlighted hypertext link.

Most pages of online help contain:
- highlighted hot spots with dashed underlining, on which you can click to see brief explanations in pop-up boxes
- highlighted hot spots with solid underlining, on which you can click to jump to other related pages of help
- browse buttons, which enable you to view related pages of help.

4.2 Context-sensitive help
Context-sensitive help is frequently available. With ARM Debugger for UNIX running, position the cursor on any field or button for which you need help and press the F1 key on the keyboard. If relevant online help is available it is displayed.
5 Feedback

5.1 ARM Debugger for UNIX
If you have feedback on ARM Debugger for UNIX, please contact your supplier. To help us to provide a rapid and useful response, please give:
- details of the release you are using, such as the version number
- details of the platform you are running on, such as your hardware platform, operating system type and version
- 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).

5.2 Documentation
If you have feedback on the documentation, please send email to errata@arm.com giving:
- the document title and number
- the page number(s) to which your comments refer
- a concise explanation of the problem.
General suggestions for additions and improvements are also welcome.