arm

Trial the Arm HPC tools

Version 1.0

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Release information

Document history

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Contents

1. Overview

Arm tools are used by 70% of the top 20 supercomputer users worldwide to quickly understand application performance and achieve faster results from their debug, profiling, and optimization efforts.

Arm architecture users

Figure 1-1: Arm Allinea Studio

Arm Allinea Studio is our solution to HPC on Arm. It contains:

- Arm Compiler for Linux:
  - Arm C/C++ Compiler
  - Arm Fortran Compiler
  - Arm Performance Libraries
- Arm Forge

Arm Compiler for Linux enables you to generate code for Arm platforms, and Arm Forge enables you to debug, profile, and analyze this code.

Cross-platform users

Figure 1-2: Arm Forge

Use Arm Forge to performance engineer for any server.

Arm Forge combines:

- A parallel debugger (Arm DDT)
- A profiler (Arm MAP)
- A reporting tool (Performance Reports) for developing and optimizing code.

It also enables you to analyze I/O, CPU, Lustre, energy, and regionally profile with Caliper.

2. Step 1: Complete the license request form

To get a free seven day trial of any of Arm's market leading HPC software tools, request a license.

Figure 2-1: Preview of the evaluation license request form

3. Step 2: Download and install the tools

Follow the links below to download the tools suitable for your platform.

Note

You do not need to download and install the Arm Licence Server to use your trial license with the tools.

Figure 3-1: Download

HPC on Arm

Download Arm Allinea Studio (includes the latest supported version of Arm Forge)

HPC on other platforms

Download Arm Forge

4. Step 3: Set up your trials license

Arm Forge searches for a license in the installation directory.

If you choose to put the license file in a different location, you must set the `ALLINEA_LICENSE_DIR` environment variable to point to it:

```
export ALLINEA_LICENSE_DIR=/path/to/licenses-directory
```

Arm Compiler for Linux (Arm Allinea Studio users) searches for a license in the `/opt/arm/licenses` `directory`. You must create the `licenses` directory in `/opt/arm` and place your license in it.

If you choose to put the license file in a different location, you must set the `ARM_LICENSE_DIR` environment variable to point to it:

```
export ARM_LICENSE_DIR=/path/to/license-directory
```

Figure 4-1: Applications

For more information about about licensing, see:

- Arm Allinea Studio licensing
- Arm Forge licensing

5. Step 4: Download the trials package

The package listed below contains an example program in C, Fortran, and Python formats:
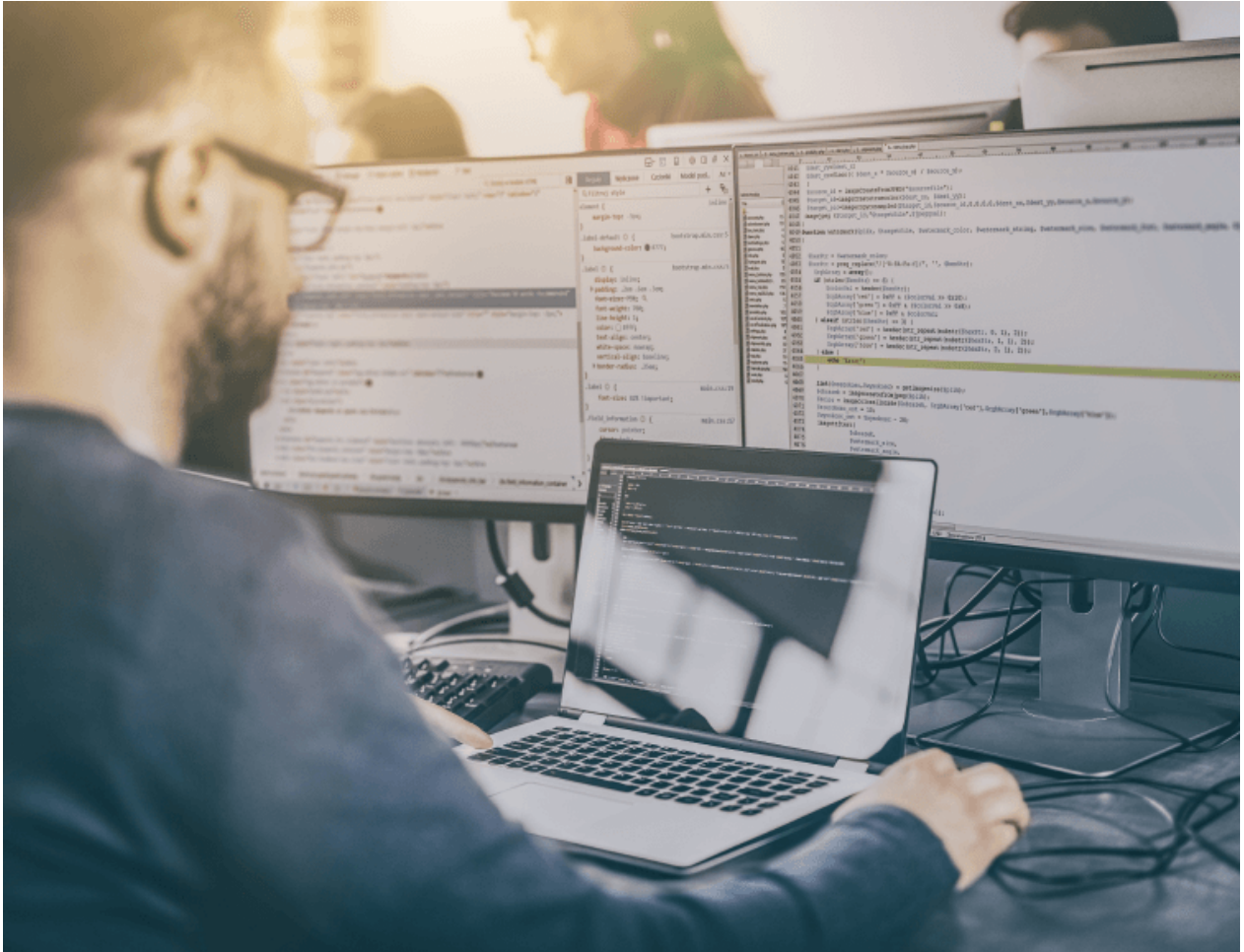
`arm_hpc_tools_trial.tar.gz`

With the trials package and a trials license you can:

- Compile the examples with the Arm Compiler for Linux (Arm platform users only), or compile with another compiler of your choice.

- Analyze their performance with Arm Performance Reports.

- Debug and profile the codes with Arm Forge.

The package contains a tutorial that describes how to use the example codes with the Arm tools.

6. Step 5: Use the tools with your own workloads

Go further with your trials license and try running the tools with your own application codes.

For product documentation, videos, demos, and porting information, see our Help and tutorials page.

For further support during your tools trial, contact Arm Support.