

## **Trial the Arm HPC tools**

Version 1.0

Non-Confidential

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#### Trial the Arm HPC tools

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### Release information

#### **Document history**

Issue	Date	Confidentiality	Change
0100-01	1 January 2021	Non-Confidential	First release

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# **Contents**

1. Overview	6
2. Step 1: Complete the license request form	8
3. Step 2: Download and install the tools	9
4. Step 3: Set up your trials license	10
5. Step 4: Download the trials package	11
6. Step 5: Use the tools with your own workloads	12

## 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.

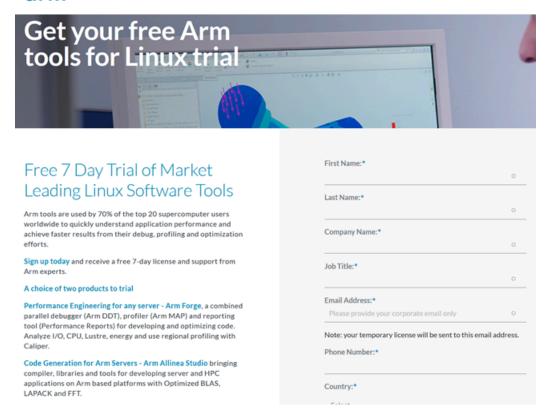
It also enables you to analyze I/O, CPU, Lustre, energy, and regionally profile with Caliper.

# 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

#### arm



# 3. Step 2: Download and install the tools

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



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 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

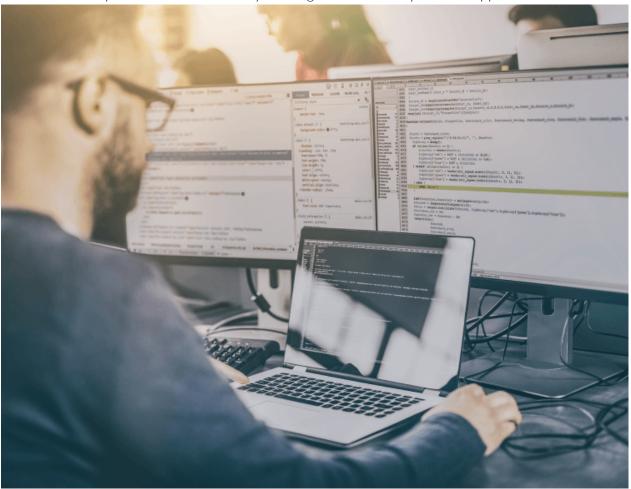
With the trials package and a trials license you can:

- 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.