



User-based Licensing

Version 1.2

User Guide

Non-Confidential

Copyright © 2022–2023 Arm Limited (or its affiliates).
All rights reserved.

Issue 04

102516_1.2_04_en



User-based Licensing User Guide

Copyright © 2022–2023 Arm Limited (or its affiliates). All rights reserved.

Release information

Document history

Issue	Date	Confidentiality	Change
1.0-00	10 March 2022	Non-Confidential	New document for v1.0
1.1-00	21 June 2022	Non-Confidential	Document update for v1.1 Beta
1.1-01	22 July 2022	Non-Confidential	Updated document for v1.1
1.1-02	23 September 2022	Non-Confidential	Documentation update 2 for v1.1
1.1-03	28 October 2022	Non-Confidential	Documentation update 3 for v1.1
1.1-04	28 November 2022	Non-Confidential	Documentation update 4 for v1.1
1.1-05	27 January 2023	Non-Confidential	Documentation update 5 for v1.1
1.2-00	24 February 2023	Non-Confidential	Updated document for v1.2
1.2-01	29 March 2023	Non-Confidential	Documentation update 1 for v1.2
1.2-02	28 April 2023	Non-Confidential	Documentation update 2 for v1.2
1.2-03	18 May 2023	Non-Confidential	Documentation update 3 for v1.2
1.2-04	29 June 2023	Non-Confidential	Documentation update 4 for v1.2

Proprietary Notice

This document is protected by copyright and other related rights and the practice or implementation of the information contained in this document may be protected by one or more patents or pending patent applications. No part of this document may be reproduced in any form by any means without the express prior written permission of Arm. No license, express or implied, by estoppel or otherwise to any intellectual property rights is granted by this document unless specifically stated.

Your access to the information in this document is conditional upon your acceptance that you will not use or permit others to use the information for the purposes of determining whether implementations infringe any third party patents.

THIS DOCUMENT IS PROVIDED “AS IS”. ARM PROVIDES NO REPRESENTATIONS AND NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTORY QUALITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE DOCUMENT. For the avoidance of doubt, Arm makes no representation with respect to, and has undertaken no analysis to identify or understand the scope and content of, patents, copyrights, trade secrets, or other rights.

This document may include technical inaccuracies or typographical errors.

TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL ARM BE LIABLE FOR ANY DAMAGES, INCLUDING WITHOUT LIMITATION ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF ANY USE OF THIS DOCUMENT, EVEN IF ARM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This document consists solely of commercial items. You shall be responsible for ensuring that any use, duplication or disclosure of this document complies fully with any relevant export laws and regulations to assure that this document or any portion thereof is not exported, directly or indirectly, in violation of such export laws. Use of the word “partner” in reference to Arm’s customers is not intended to create or refer to any partnership relationship with any other company. Arm may make changes to this document at any time and without notice.

This document may be translated into other languages for convenience, and you agree that if there is any conflict between the English version of this document and any translation, the terms of the English version of the Agreement shall prevail.

The Arm corporate logo and words marked with ® or ™ are registered trademarks or trademarks of Arm Limited (or its affiliates) in the US and/or elsewhere. All rights reserved. Other brands and names mentioned in this document may be the trademarks of their respective owners. Please follow Arm’s trademark usage guidelines at <https://www.arm.com/company/policies/trademarks>.

Copyright © 2022–2023 Arm Limited (or its affiliates). All rights reserved.

Arm Limited. Company 02557590 registered in England.

110 Fulbourn Road, Cambridge, England CB1 9NJ.

(LES-PRE-20349|version 21.0)

Confidentiality Status

This document is Non-Confidential. The right to use, copy and disclose this document may be subject to license restrictions in accordance with the terms of the agreement entered into by Arm and the party that Arm delivered this document to.

Unrestricted Access is an Arm internal classification.

Product Status

The information in this document is Final, that is for a developed product.

Feedback

Arm welcomes feedback on this product and its documentation. To provide feedback on the product, create a ticket on <https://support.developer.arm.com>

To provide feedback on the document, fill the following survey: <https://developer.arm.com/documentation-feedback-survey>.

Inclusive language commitment

Arm values inclusive communities. Arm recognizes that we and our industry have used language that can be offensive. Arm strives to lead the industry and create change.

We believe that this document contains no offensive language. To report offensive language in this document, email terms@arm.com.

Contents

1. Introduction.....	6
1.1 Conventions.....	6
1.2 Useful resources.....	7
1.3 Other information.....	7
2. User-based licensing overview.....	8
2.1 Backwards compatibility.....	8
2.2 Interoperability with previous software licensing implementations.....	8
2.3 License lifecycle for user-based licensing.....	8
2.4 Network requirements for user-based licensing.....	9
2.5 User-based licensing terminology.....	10
3. Activate and deactivate your product license.....	13
3.1 Activate your product using a license server.....	13
3.2 Activate your product using an activation code.....	15
3.3 Activate your product if your device is offline.....	16
3.4 Activate a license on multiple devices.....	17
3.5 Deactivate and reactivate a product license.....	18
4. Diagnose licensing issues.....	20
4.1 100 - No license found.....	20
4.2 101 - Product activation conflict.....	20
4.3 200 - Expired cached license.....	21
4.4 201 - Support and maintenance contract expired.....	21
4.5 202 - Expired license.....	21
4.6 300 - Corrupted license.....	22
4.7 301 - Corrupted local license cache.....	22
4.8 400 - Unauthorized user.....	23
4.9 500 - Unexpected error.....	24
4.10 501 - Library communication error.....	25
4.11 Contact support.....	25
4.12 Create a diagnostic report.....	26

1. Introduction

User-based licensing binds the entitlement to use an Arm product to the user. This binding allows a single user license to be used by that user for the same product on multiple devices.

1.1 Conventions

The following subsections describe conventions used in Arm documents.




Glossary




The Arm Glossary is a list of terms used in Arm documentation, together with definitions for those terms. The Arm Glossary does not contain terms that are industry standard unless the Arm meaning differs from the generally accepted meaning.

See the Arm Glossary for more information: developer.arm.com/glossary.

Typographic conventions

Arm documentation uses typographical conventions to convey specific meaning.

Convention	Use
<i>italic</i>	Citations.
bold	Interface elements, such as menu names. Terms in descriptive lists, where appropriate.
monospace	Text that you can enter at the keyboard, such as commands, file and program names, and source code.
monospace <u>underline</u>	A permitted abbreviation for a command or option. You can enter the underlined text instead of the full command or option name.
<and>	Encloses replaceable terms for assembler syntax where they appear in code or code fragments. For example: <pre>MRC p15, 0, <Rd>, <CRn>, <CRm>, <Opcode_2></pre>
SMALL CAPITALS	Terms that have specific technical meanings as defined in the <i>Arm® Glossary</i> . For example, IMPLEMENTATION DEFINED , IMPLEMENTATION SPECIFIC , UNKNOWN , and UNPREDICTABLE .
 Caution	Recommendations. Not following these recommendations might lead to system failure or damage.
 Warning	Requirements for the system. Not following these requirements might result in system failure or damage.
 Danger	Requirements for the system. Not following these requirements will result in system failure or damage.

Convention	Use
 Note	An important piece of information that needs your attention.
 Tip	A useful tip that might make it easier, better or faster to perform a task.
 Remember	A reminder of something important that relates to the information you are reading.

1.2 Useful resources

This document contains information that is specific to this product. See the following resources for other useful information.

Access to Arm documents depends on their confidentiality:

- Non-Confidential documents are available at developer.arm.com/documentation. Each document link in the following tables goes to the online version of the document.
- Confidential documents are available to licensees only through the product package.

Arm product resources	Document ID	Confidentiality
User-based Licensing License Server Administration Guide	107573	Non-Confidential

1.3 Other information

See the Arm website for other relevant information.

- [Arm® Developer](#).
- [Arm® Documentation](#).
- [Technical Support](#).
- [Arm® Glossary](#).

2. User-based licensing overview

User-based licensing binds the entitlement to use an Arm product to the user. A user is entitled to use an Arm product license with no limits on concurrent usage, including using the same product on multiple devices. For example, you could use a single license with a service account to automatically build and test your products with Arm development tool on any number of devices.

You can get a license using one of the following methods:

- Entering an activation code
- Accessing a license server managed by a local administrator



This approach is different from the previous Arm licensing models; node-locked and floating licensing.

2.1 Backwards compatibility

User-based licensing does not apply to Arm development tools released before 2022.

User-based licensing is to be gradually adopted in releases from 2022. This is in addition to existing node-locked and floating licensing implementations.

2.2 Interoperability with previous software licensing implementations

You can use a combination of Arm development tools with user-based and other pre-existing licensing implementations, on the same device or the same network.

Arm development tools that implement user-based licensing automatically choose user-based licensing over other technologies, as long as a valid user-based license is found. Otherwise, Arm development tools use pre-existing licensing implementations.

2.3 License lifecycle for user-based licensing

Configuring and using Arm development tools that implement user-based licensing are split into the activation, use, and deactivation phases.

The details of these phases are:

Activation phase

Configures licensing for a specific Arm product and user, on a device. Activating a product creates a license in the local license cache for the device. This cached license is valid for seven days. For more details see:

- [Activate your product using a license server](#)
- [Activate your product using an activation code](#)
- [Activate a license on multiple devices](#)
- [Activate your product if your device is offline](#)

Usage phase

When your Arm development tool runs, it checks the cached license in the device local license cache to make sure you are entitled to use the product.

Each day your development tool runs, the development tool automatically makes one attempt to renew the cached license for another seven days by connecting to the license server or activation code URL. If the cached license cannot be renewed for seven days, it becomes invalid. Unmet network requirements are only reported if the cached license becomes invalid.

Deactivation phase

Removes the entitlement of a user to use an Arm product on a device. For more details, see [Deactivate and reactivate a product license](#).

2.4 Network requirements for user-based licensing

Describes the network requirements for Arm user-based licensing.

Two phases of the license [lifecycle](#) require network access:

- Product activation requires network access to enable delivery of a license to the device local license cache
- Product usage requires network access at least once every seven days to renew the license
- Product deactivation does not require network access, as the product is only deactivated locally

The network access required depends on the type of licensing used; activation code or license server.



Users can work completely offline when using user-based licensing. For more details see [Activate your product if your device is offline](#).

Network requirements for license server

Users require access to the user-based licensing license server set up by your local administrator.

Network requirements for activation codes

A user device requires access to the following URLs:

- <https://api.arm.com/p-software-licensing>
- <https://arm.compliance.flexnetoperations.eu/instances>

You can check if you have access to each URL by using one of the following methods:

- Using a web browser on your system, copy and paste these URLs into the address field of your web browser
- Using another tool that can access a URL. For example, `curl` can check a licensing URL as follows:

```
curl -I https://api.arm.com/p-software-licensing
```

The output from this test confirms if the URL is accessible:

- A 404 Not Found error means you can access the URL, as the end-point responded.
- A non-404 error means you cannot access the URL. This type of error includes connection timeout or server unreachable.

If this happens, check to see if a firewall is preventing access to these URLs.

2.5 User-based licensing terminology

Describes the terms used in Arm user-based licensing documentation.

The following terms are used in user-based licensing documentation:

Activation

The act of fulfilling an entitlement for a specific user. When an Arm product is activated in an Arm development tool, a license to use the tool is activated.

Activation code

Sequence of letters and digits, formatted as a Universally Unique Identifier (UUID), which represents a seat of a product entitlement for a specific end-user or service account.



Licenses can also be activated using a license server.

Development tool

An Arm software tool that requires a user license.

Cached license

The license information stored in the local license cache. This license is valid for seven days but is extended when your Arm product successfully connects to the license server or activation code URL.

Device

Generic term for all computing devices capable of running Arm development tools. A device can be a workstation, a virtual machine, a server, or a mobile device such as a phone or a tablet.

End-user

A person interacting with the Arm development tool.

Floating

A license that is held centrally and handed out on-demand, checked out, to clients. The license is checked out for the duration that a license-managed feature is in use, and ends with the license being checked back in. A floating license is locked to a license server that serves the license to clients. This model is referred to as a concurrent licensing model, because it enforces maximum concurrent use. Unless the license is borrowed or cached, the client must maintain a network connection with the license server for the entire duration that the license-managed feature is in use.

License

Output of an activation, representing an entitlement for a user. A license is also referred to as a certificate. A license is typically stored on the local file system of the device used when activating your Arm development tool.

License server

A local server used to activate licenses.



You can also activate a license with an activation code.

Node-locked

A license that is locked to the device where the license-managed development tool runs. This model is referred to as a device-based licensing model.

Product

An Arm product entitlement defining the Arm development tools a user is entitled to use. A product allows the user to use one or many Arm development tools.

Seat

An abstract term for counting the number of licenses that are available or purchased. Under the user-based licensing model, there is exactly one seat for each user, regardless of the number of devices on which your Arm development tool is installed or run.

Service account

The operating system account that coordinates the automated use of development tools.

User

A generic term used to identify the entity interacting with the Arm development tool; can be an end-user or service account.

Username

The name identifying an account on an operating system. The username is associated with the operating system processes running the Arm development tool.

3. Activate and deactivate your product license

To enable your Arm development tools to work with your user-based product entitlement, you must activate your product by connecting to a license server or using an activation code. You can also activate your license on a device that cannot access the Internet. You can deactivate and reactivate your license, for example to investigate license errors.



Note

- You can activate a product on multiple devices using the same username and, if used, the same activation code.
- Your license agreement does not permit the sharing of the same username by more than one user.

3.1 Activate your product using a license server

You can activate your product using a local license server.

Procedure

1. Obtain the license server URL and the Arm product code from your license server administrator.



Note

The server URL must only contain the server base. For example, `http://myserver:5999` is a valid server URL but `http://myserver:5999/api/1.0/instance/~` is not valid.

2. Check access to the license server URL, availability of licenses, and currently used licenses using the following command:

```
armlm inspect --server <license server URL>
```

Use this to check:

- The server address is correct and you can connect to the server from your device.
 - The different product licenses available on the server. If your product license is not available, your license server administrator may need to make more product licenses available.
 - The product licenses you already have on this device.
3. Activate your product using one of the following methods:
 - From the command line:
 - a. Change directory to the directory containing the `armlm` command-line utility. For example, the `bin` directory in the Arm development tool installation location.

- b. Activate your product using the following command:

```
armlm activate --server <server_URL> --product <product_code>
```

Where:

- <server_URL> is the license server URL
- <product_code> is the product code for the required product.
- Use the Arm License Management Utility:
 - a. Open the License Management Utility using the instructions in the development tool documentation.
 - b. Select **License Server**.
 - c. Enter the license server URL and click **Query**.
 - d. Select the product to activate from the drop-down list and then click **Activate**.
 - e. Click **Close** and apply the change in your development tool.
- Set the ARMLM_ONDEMAND_ACTIVATION environment variable to the following:

```
<product_code>@<server_URL>
```

Where <product_code> is the product code and <server_URL> is the URL to access the license server. For example, HWSKT-STD0@http://license.serv.mycom.com:5999.



This method might not be suitable where a large number of parallel processes can make initial license requests, because the license server could time-out some of the requests.

Results

After activation, the product license is bound to the username of the end-user or service account for a maximum of seven days.

Every day you use an Arm development tool that supports user-based licensing on the same device, the software makes one attempt to extend the license for the next seven days by contacting the license server. If your device cannot contact the license server, you can still use the product until the 7-day limit expires.

Related information

[Activate a license on multiple devices](#) on page 17

[Activate your product if your device is offline](#) on page 16

3.2 Activate your product using an activation code

You can activate your product with an activation code.

Procedure

1. Obtain the activation code from Arm or your license administrator. An activation code is a sequence of letters and digits that have the following pattern, where x represents any letter or digit:

xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx



An activation code is not associated with any user or service account until its first use in the product activation process.

2. Activate your product using one of the following methods:
 - From the command line:
 - a. Change directory to the directory containing the `armlm` command-line utility, for example the `bin` directory in the Arm development tool installation location.
 - b. Activate your product using the following command:

```
armlm activate --code <activation_code>
```
 - Use the Arm License Management Utility:
 - a. Open the License Management Utility using the instructions in the development tool documentation.
 - b. Select **Activation Code**.
 - c. Enter the activation code and click **Activate**.
 - d. Click **Close** and apply the change in your development tool.

Results

After activation, the product license is bound to the username of the end-user or service account for a maximum of seven days.

Each day you use an Arm development tool that supports user-based licensing on the same device, the software makes one attempt to extend the license for the next seven days by contacting the activation code URLs (for details see [Network requirements for user-based licensing](#)). If your device cannot contact the activation code URLs, you can still use the product until the 7-day limit expires.



If you accidentally activated the license with an incorrect username, contact your license administrator to revoke the activation code and generate a new one.

Related information

[Activate a license on multiple devices](#) on page 17

[Activate your product if your device is offline](#) on page 16

3.3 Activate your product if your device is offline

Your device might not be able to access the networks required for product activation. In this case, you can use this process to activate a product on an offline device.

Before you begin

- Install your Arm development tool on your local device.
- Install an Arm development tool on another device that has the required networks access.

On this device, update the PATH environment variable to include the directory containing the `arm_lm` command-line utility. For example, this directory could be the `bin` directory in the Arm development tool installation location.

- When activating a product using a user-based licensing license server, the license server administrator must provide the license server URL and the Arm product code.
- When activating a product using a user-based licensing activation code, Arm or your license administrator must provide an activation code for each end-user and service account. An activation code is not associated with any user or service account until its first use in the product activation process.

About this task

- You can activate a product on multiple devices with the same username and, if used, the same activation code.
- Your license agreement does not permit the sharing of the same username by more than one user.

For details of network requirements, see [Network requirements for user-based licensing](#).

Procedure

1. From the command line on the device that meets the network requirements, use one of the following commands to create a file to transfer the license information:

- To create a file using a license server, run the following command:

```
arm_lm activate --server <server_URL> --product <product_code> --as-user  
<user_name> --to-file <transfer_filename>
```

- To create a file using an activation code, run the following command:

```
arm_lm activate --code <activation_code> --as-user <user_name> --to-file  
<transfer_filename>
```

Where:

- `<server_url>` is the license server URL
 - `<product_code>` is the product code for the required product
 - `<user_name>` is the name of the Arm product user on the offline device
 - `<transfer_filename>` is any file name for the transfer file
2. Move the generated transfer file to the target device.
 3. To activate the product, run the `armlm import` command. The `--file` parameter is used to specify the transfer file. For example:

```
C:\<development tool installation directory>\bin\armlm import --file  
<transfer_filename>
```

Next steps

You must repeat this process every seven days or earlier, otherwise the product ceases to function.

3.4 Activate a license on multiple devices

Your license can be used on multiple devices using one of the following methods:

- On a new device, activate the license for an Arm development tool as usual.
- The Arm license details are stored in your local license cache. By default, your local license cache is in your home location under the `.armlm` directory. The following are typical default locations:
 - Windows: `C:\Users\<your username>\.armlm`
 - Linux: `/home/<your username>/.armlm`
 - macOS: `/Users/<your username>/.armlm`

Other devices using Arm development tools can use the cached license by, for example:

- Copying the `.armlm` directory to your home directory on a new device.
- Copying the `.armlm` directory to a network directory. On a new device, set the `ARMLM_CACHED_LICENSES_LOCATION` environment variable to the location of `.armlm` on the network drive.

Related information

[Activate your product using a license server](#) on page 13

[Activate your product using an activation code](#) on page 14

[Activate your product if your device is offline](#) on page 16

3.5 Deactivate and reactivate a product license

Deactivating a product removes the license for your Arm product from a device. From version 1.2 of the Arm License Management Utility, you can easily reactivate recently deactivated licenses.

About this task

There is no need to deactivate your product when using your Arm product on a different device, because the license is associated with the user and not the devices that the license is used on. You may be required to deactivate your product to:

- Activate a different product with overlapping capabilities, for example when upgrading from an evaluation to a full product.
- Investigate license configuration issues.



Deactivating a license is an activity local to your device. It does not affect the reservation of the corresponding license seat on the license server.

Procedure

Deactivate and reactivate your product using one of the following methods:

- Use the Arm License Management Utility:
 1. Open the License Management Utility using the instructions in the development tool documentation.
 2. To deactivate a license:
 - a. In the left-hand side of the License Management Utility, select an active license from the license list.
 - b. Click **Deactivate** and then click **Yes** in the confirmation dialog box.

The **Recently Deactivated** section in the license list displays all recently deactivated licenses.

3. To reactivate a license:
 - From version 1.2 of the Arm License Management Utility, you can reactivate a recently deactivated license:
 - a. In the left-hand side of the License Management Utility, select a deactivated license in the **Recently Deactivated** section in the license list.
 - b. Click **Reactivate** and then click **Yes** in the confirmation dialog box.



You cannot reactivate a deactivated license that clashes with an active license.

- In version 1.1 of the License Management Utility, you need to activate the license again. For details see [Activate your product using a license server](#) or [Activate your product using an activation code](#).
- From the command line:
 1. Change directory to the directory containing the `armlm` command-line utility, for example the `bin` directory in the development tool installation location.
 2. List the active and deactivated licenses, with their product or activation codes, using the following command:

```
armlm inspect
```

3. To deactivate a license, use the following command:

```
armlm deactivate --product <product_code>
```

Alternatively, if using an activation code, you can use the following command to deactivate the license:

```
armlm deactivate --code <activation_code>
```

4. To reactivate the license:

- From version 1.2 of the Arm License Management Utility, you can reactivate a recently deactivated license using the following command:

```
armlm reactivate --product <product_code>
```



Note

You cannot reactivate a deactivated license that clashes with an active license.

-
- In version 1.1 of the License Management Utility, you need to activate the license again. For details see [Activate your product using a license server](#) or [Activate your product using an activation code](#).

4. Diagnose licensing issues

Arm development tools enabled by user-based licensing might report errors. Each error related to user-based licensing has a corresponding unique error code as described in the following topics.

Error codes allow you to troubleshoot a problem with your license. Using the various error codes and their descriptions, you can quickly determine a solution for your licensing problem.

4.1 100 - No license found

A license for your Arm development tool was not found in the local license cache.

To resolve this problem, activate your product using the information that was sent to you by your license administrator.

Related information

[Activate and deactivate your product license](#) on page 13

4.2 101 - Product activation conflict

A product activation conflict was detected during a license renewal. This problem is caused by Arm updating the license definitions and the update causing a conflict with older licenses in your local license cache.

To resolve this problem:

1. Review your currently activated products using one of the following methods:
 - Open the Arm License Management Utility using the instructions in the development tool documentation.
 - Run the following from the command line:

```
armlm inspect
```



If you do not have the complete activation code, contact your license administrator.

2. Deactivate all products you do not currently use.
3. For each of the remaining products:
 - a. Make a note of the activation code or the license server and product code. If you do not have the complete activation code, contact your license administrator.

- b. Deactivate and reactivate the products one at a time.
- c. If a product reactivation fails, there is a conflict between the product you have tried to reactivate and another product. The error message specifies the conflicting product.

Deactivate and reactivate the conflicting product.

If the problem persists, [contact support](#).

Related information

[Activate and deactivate your product license](#) on page 13

4.3 200 - Expired cached license

Your local license cache could not be renewed and has expired. This problem happens when you have no network connection to the license server.

To resolve this problem, make sure that your device meets the network requirements and then restart your Arm development tool. For more information about the network requirements, see [Network requirements for user-based licensing](#).

If your device cannot meet the network requirements, you must activate your product using another networked device. For more details see [Activate your product if your device is offline](#).

4.4 201 - Support and maintenance contract expired

You cannot use this version of the Arm development tool because your support and maintenance entitlement has expired. Support and maintenance allows you to use to the most recent version of the tool within the time period defined in the support and maintenance entitlement.

To resolve this problem, renew your support and maintenance contract through your usual sales channel. Alternatively, you can continue using an earlier version of the tool.

4.5 202 - Expired license

You can no longer use this Arm development tool because the associated license has expired.

To resolve this problem:

1. Renew your product entitlement through your usual sales channel.
2. After the renewal has been processed:
 - If the renewal uses the same product code:

- a. Ensure you meet the network requirements. For more details see [Network requirements for user-based licensing](#).
 - b. Restart your development tool to refresh your local license cache.
- If the renewal uses a different product code, activate the product. For more details see [Activate and deactivate your product license](#).

4.6 300 - Corrupted license

The license for your Arm development tool has been corrupted. This is caused either by hardware failures, or by modifications to the files in the local license cache.

To resolve this problem, reactivate your product:

1. Obtain the activation code or license server and product code for your development tool using one of the following methods:
 - Open the Arm License Management Utility using the instructions in the development tool documentation. Click your product to display the product details.
 - Run the following from the command line:

```
armlm inspect
```



If you do not have the complete activation code, contact your license administrator.

2. Deactivate and reactivate your product. For details see [Deactivate and reactivate a product license](#).

If reactivating your product does not solve the problem, [contact support](#).

Related information

[Activate and deactivate your product license](#) on page 13

4.7 301 - Corrupted local license cache

Your local license cache has been corrupted. This is caused by either hardware failures, or modifications to the files in the local license cache.

To resolve this error:

1. Obtain the activation codes or license server and product codes for all activated products using one of the following methods:

- Open the Arm License Management Utility using the instructions in the development tool documentation. Click on a product to display the product details.
- Run the following from the command line:

```
armlm inspect
```

**Note**

If you do not have the complete activation code, contact your license administrator.

2. Find the location of your local license cache. By default, your local license cache is in the user home location under the `.armlm` directory. The following are typical default locations:
 - Windows: `C:\Users\<your username>\.armlm`
 - Linux: `/home/<your username>/.armlm`
 - macOS: `/Users/<your username>/.armlm`

**Note**

You might have overridden the default location by setting the `ARMLM_CACHED_LICENSES_LOCATION` environment variable.

3. Make a backup copy of the local license cache directory.
4. Delete the local license cache directory.
5. Deactivate and reactivate all Arm products. For details see [Deactivate and reactivate a product license](#).

If reactivating your products does not solve your issue, [contact support](#).

Related information

[Activate and deactivate your product license](#) on page 13

4.8 400 - Unauthorized user

The user identifier associated with the runtime process of your Arm development tool does not match the information in the license.

This mismatch can happen for one of the following reasons:

- If you copied the local license cache from another user
- If you changed the default location of the local license cache to a directory populated with license information for another user

To resolve this error:

1. Obtain the activation codes or license server and product codes for all activated products using one of the following methods:
 - Open the Arm License Management Utility using the instructions in the development tool documentation. Click a product to display the product details.
 - Run the following from the command line:

```
armlm inspect
```

**Note**

If you do not have the complete activation code, contact your license administrator.

2. Find the location of your local license cache. By default, your local license cache is in the user home location under the `.armlm` directory. The following are typical default locations:
 - Windows: `C:\Users\<your username>\.armlm`
 - Linux: `/home/<your username>/.armlm`
 - macOS: `/Users/<your username>/.armlm`

**Note**

You might have overridden the default location by setting the `ARMLM_CACHED_LICENSES_LOCATION` environment variable.

3. Make a backup copy of the local license cache directory.
4. Delete the local license cache directory.
5. Deactivate and reactivate all Arm products. For details see [Deactivate and reactivate a product license](#).

If reactivating your products does not solve your issue, [contact support](#).

4.9 500 - Unexpected error

Your Arm development tool has encountered an unexpected licensing error. Your license administrator or an Arm support representative needs to analyze this error.

You need to [contact support](#).

4.10 501 - Library communication error

Your Arm development tool has encountered an unexpected licensing library communication error.

To resolve this problem, re-install your Arm development tool.

If re-installing your tool does not resolve the problem, [contact support](#).

4.11 Contact support

If you need support with licensing problems, contact your license administrator or contact Arm support. If contacting Arm support, log a support case on <https://services.arm.com/support/s/contactsupport>.

When you contact support, you should include as much information as possible about your license configuration:

- From version 1.2 of the Arm License Management Utility, you can create a diagnostic report zip file. For further information see [Create a diagnostic report](#).
- For version 1.1 of the License Management Utility, include where possible:
 - A zip of your local license cache. By default, your local license cache is in the user home location under the `.armlm` directory. The following are typical default locations:
 - Windows: `C:\Users\<your username>\.armlm`
 - Linux: `/home/<your username>/.armlm`
 - macOS: `/Users/<your username>/.armlm`



You might have overridden the default location by setting the `ARMLM_CACHED_LICENSES_LOCATION` environment variable.

-
- The location of your local license cache.
 - The host name and IP address of your machine and your operating system.
 - Your user name.
 - The license product.
 - License server URL or product code.
 - Arm License Management Utility version.
 - Details of Arm license environment variables (`ARMLM_*`, `ARM_*`, and `LM_*`).

4.12 Create a diagnostic report

When you contacting Arm support, you should include a diagnostic report zip file.

About this task



This functionality is only available in Arm License Management Utility version 1.2 and later.

The diagnostic report zip file contains:


- Your local license cache
- Your license details
- License logs
- Any transient caches
- Relevant environment information including user name, host name, location of the local storage, License Management Utility version, operating system, and user-based licensing environment variables (ARMLM_*)
- Legacy licensing information including the content of `.flexlmrc` and relevant environment variables (ARM_* and LM_*)

Procedure

1. Create log files for your license interactions.
Set the ARMLM_LOG_ENABLED environment variable to any value and then run through the failing license interactions again.
2. You can obtain the diagnostic report zip file using one of the following methods:
 - From the command line:
 - a. Change directory to the directory containing the `armlm` command-line utility, for example the `bin` directory in the Arm development tool installation location.
 - b. Enter the following command:

```
armlm report [--to-file <filepath>]
```

Where `--to-file` can be used to specify the file path and file name for the diagnostic report file. If not used, the report file is saved in the current directory using the `armlm-report-<date and time>` file naming convention.

- In the Arm development tool:
 - a. Open the Arm License Management Utility using the instructions in the development tool documentation.
 - b. Click **Report** .

- c. In the resultant dialog, choose the name and download location for the diagnostic report zip file.
3. Unset the ARMLM_LOG_ENABLED environment variable. This stops large license log files being created when using Arm products.