Licensing on Cloud Platforms

User Guide

MATLAB&SIMULINK®

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Licensing on Cloud Platforms User Guide

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Configure MATLAB Licensing for Cloud Platforms

Before You Begin

Use this topic for implementing licensing when using R2018a or later with the MATLAB installation provided as part of the reference architecture (Azure or AWS).

Eligibility

For your license to be eligible to use MATLAB running on the cloud:

- Individual license holders must have a MathWorks Account.
- End Users for Individual licenses and License Administrators for all licenses covered in this document must have the ability to activate MATLAB R2018a or later. The license you are using must be current on Software Maintenance Service. Learn more

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Note

- Individual license holders and end users with a Campus-Wide License do not need to configure their license. You can skip this step.
- If you previously followed these instructions to configure your license, you are all set. You do not have to follow this procedure every time you connect to MATLAB running on the cloud.

See Also

Related Examples
- "Select License Configuration Option" on page 1-3

Select License Configuration Option

There are separate procedures for end users and for administrators. From the following tables, select a procedure for setting up MATLAB cloud licensing based on your current license and your role. If you are not sure what license type you have or what your role is, visit your MathWorks Account to see the licenses linked to your account. If you do not have a MathWorks license, you can obtain a trial.

End Users

License Type	Procedure
Individual (a license that only you use that is in your name; not a Home or Student license)	Your license is already configured for use with MATLAB running on the cloud.
Campus-Wide License (a license that you use that belongs to your academic institution)	Your license is already configured for use with MATLAB running on the cloud.
Home and Student (that only you use and is in your name)	These license types are not eligible to use the MATLAB running on the cloud. However, you can use MATLAB Online.
All other license types, including Concurrent and Network Named User	Contact your license administrator. *
*Not sure who the license administrator is? Sign in to your MathWorks Account, click the license you are using, then click the tab marked "Contact Administrators". If your administrator has questions, have them Contact Support.	

Administrators

Note Your license option may be eligible for online licensing, which greatly simplifies enabling cloud usage. To learn more, and to see if your license option is eligible, Contact Support..

Scenario	License Type	Procedure
You want your end users to use online licensing.	Campus-Wide	Your license is already configured for cloud use. Make sure your account is linked to the Campus-Wide License.
You plan to run the network license manager on the same machine as MATLAB (primarily for testing purposes).	Campus-Wide, Concurrent, or Network Named User	Follow the instructions at: "Configure License Manager on Same Machine as MATLAB" on page 1-5
You plan to run the network license manager on a separate virtual machine than MATLAB.	Campus-Wide, Concurrent, or Network Named User	Follow the instructions at: "Configure License Manager on Separate Virtual Machine" on page 1-7

Scenario	License Type	Procedure
You want to connect MATLAB running on the cloud to an existing on-premises network license manager.	Campus-Wide, Concurrent, or Network Named User	Follow the instructions at: "Use Existing On-Premises License Manager With MATLAB Running on the Cloud" on page 1-9
You want to connect MATLAB running on the cloud to a network license manager that is also running on the cloud.	Campus-Wide, Concurrent, or Network Named User	Select one of: • Network License Manager for MATLAB on AWS • Network License Manager for MATLAB on Azure
If you do not see a procedure for what you want to do for your license type, Contact Support..		

See Also

Related Examples

- "Configure License Manager on Same Machine as MATLAB" on page 1-5
- "Configure License Manager on Separate Virtual Machine" on page 1-7
- "Use Existing On-Premises License Manager With MATLAB Running on the Cloud" on page 1-9

Configure License Manager on Same Machine as MATLAB

This procedure consists of setting up the license server and setting up MATLAB.

Step 1: Set Up License Server

1 Obtain a fixed MAC address.

To host the license manager in the cloud, you must have a fixed address:

- **Azure**: When you create a virtual network, the virtual network MAC address is retained even when the virtual machine is in the deallocated state. See Azure Virtual Network FAQ.

- **AWS**: Use an Elastic Network Interface (ENI), which contains a static MAC address attribute. See Elastic Network Interfaces.

When you delete cloud resources, you also delete the fixed MAC address. Changing the fixed MAC address in MathWorks License Center is limited to four times per year.

2 Deactivate and activate license.

    a Deactivate license: If this license has been activated previously, you must deactivate the license first. Otherwise, you can go directly to activate license (next step).

        i Go to License Center and click the license that you want to deactivate.

        ii Go to the **Install and Activate** tab.

        iii Click the Activation Label.

        iv Click **Deactivate**.

        v Shut down the existing network license manager, if applicable. See Manage the License Manager for instructions.

    b Activate license using the fixed MAC address.

        i Click on the license to activate.

        ii Go to the **Install and Activate** tab.

        iii Click **Activate to Retrieve License File**.

        iv Under Host ID, enter fixed MAC address.

        v Click **Continue** when you have completed all fields.

3 Download the license file you received in the previous step (with activation) onto the server machine in folder $MATLAB/`licenses`, where $MATLAB is your MATLAB root.

4 Start the network license manager. See Start the Network License Manager in Installation and Licensing documentation for instructions.

Step 2: Set Up Machine Running MATLAB

1 Disable online licensing.

    a Find license_info.xml and rename it to something else. This file is generally located in $MATLAB/`licenses`, where $MATLAB is the MATLAB root.

    b In License Center, change license manager type to **Network license manager**.

2   Create a license file that points to the server.

    a   Open the network license file (`license.dat`) on the server.

    b   Copy the SERVER line into a new text file.

    c   Beneath it, add USE_SERVER. The file should now look something like this:

```
SERVER Server1 0123abcd0123 12345
USE_SERVER
```

      Where "12345" is an example of a port number. Use the correct port number for your server.

    d   Save the new text file as `network.lic` in folder `$MATLAB/licenses`, where `$MATLAB` is your MATLAB root.

3   Verify that the license is pointing to the server correctly by running MATLAB.

You have completed this procedure. Contact Support. if you require additional assistance.

See Also

Related Examples

Configure License Manager on Separate Virtual Machine

This procedure consists of setting up the license server and setting up the machine running MATLAB.

Step 1: Set Up License Server

A security group must be added or changed to open the license manager ports inbound.

- Learn more about AWS Network Security Group
- Learn more about Azure Network Security Group

For AWS, the license manager must be in the same Virtual Private Cloud (VPC) as MATLAB. For Azure, the license manager must be in the same Virtual Network (VNET).

1   Obtain a fixed MAC address.

To host the license manager in the cloud, you must have a fixed address:

- **Azure**: When you create a virtual network, the virtual network MAC address is retained even when the virtual machine is in the deallocated state. See Azure Virtual Network FAQ.
- **AWS**: Use an Elastic Network Interface (ENI), which contains a static MAC address attribute. See Elastic Network Interfaces.

    When you delete cloud resources, you also delete the fixed MAC address. Changing the fixed MAC address in MathWorks License Center is limited to four times per year.

2   Deactivate and activate license.

  a   Deactivate license: If this license has been activated previously, you must deactivate the license first. Otherwise, you can skip this step.

   i   Go to License Center and click the license that you want to deactivate.

   ii   Go to the **Install and Activate** tab.

   iii   Click the Activation Label.

   iv   Click **Deactivate**.

  b   Activate license using the fixed MAC address.

   i   Click on the license to activate

   ii   Go to the **Install and Activate** tab.

   iii   Click **Activate to Retrieve License File**.

   iv   Under Host ID, enter fixed MAC address.

   v   Click **Continue** when you have completed all fields.

3   Download the license file provided with activation onto the server machine in folder $MATLAB/licenses, where $MATLAB is your MATLAB root.

4   Install the network license manager following the instructions in Install License Manager Using a MathWorks Account.

5   Start the network license manager. See Start the Network License Manager in Installation and Licensing documentation for instructions.

Step 2: Set Up Machine Running MATLAB

1 Disable online licensing.

On the client machine, find `license_info.xml` and rename it to something else. License files are generally located in $MATLAB/`licenses`, where $MATLAB is the MATLAB root.

2 Create license file that points to the server.

a Open the network license file (`license.dat`) on the server.

b Copy the SERVER line into a new text file.

c Beneath it, add USE_SERVER. The file should now look something like this:

```
SERVER Server1 0123abcd0123 12345
USE_SERVER
```

d Save the new text file as `network.lic` in folder $MATLAB/`licenses`, where $MATLAB is your MATLAB root.

3 Verify that the license is pointing to the server correctly by running MATLAB.

You have completed this procedure. Contact Support. if you require additional assistance.

See Also

Related Examples

Use Existing On-Premises License Manager With MATLAB Running on the Cloud

This procedure consists of setting up the license server and setting up MATLAB.

Set Up License Server

Make the server modifications.

1 On the on-premises license server, you must have a secure connection enabled so that the cloud machine with MATLAB can communicate with the on-premises server. Use a VPN or direct connect and make sure that the server port is open. The license manager may be running on any port between 27000-27009, or on a specific port that is specified on the `SERVER` line in the `network.lic` file.

2 In the `network.lic` file, edit the `DAEMON` line to include a port number. Make sure that port is also opened.

Contact Support. if you require additional assistance. Otherwise, go on to the next step.

Set Up Machine Running MATLAB

1 Disable online licensing.

On the client machine, find `license_info.xml` and rename it to something else. License files are generally located in $MATLAB/`licenses`, where $MATLAB is the MATLAB root.

2 Create license file that points to the server.

    a Open the network license file (`license.dat`) on the server.

    b Copy the `SERVER` line into a new text file.

    c Beneath it, add `USE_SERVER`. The file should now look something like this:

```
SERVER Server1 0123abcd0123 12345
USE_SERVER
```

    d Save the new text file as `network.lic` in folder $MATLAB/`licenses`, where $MATLAB is your MATLAB root.

3 Verify that the license is pointing to the server correctly by running MATLAB.

You have completed this procedure. Contact Support. if you require additional assistance.

See Also

Related Examples
- "Before You Begin" on page 1-2
- "Select License Configuration Option" on page 1-3

Configure MathWorks Licensing in Containers

Overview

To run MathWorks products in your container, including MathWorks containers, you must also implement online or network licensing to use these products.

MathWorks licensing and products are supported only on Docker containers (MathWorks containers are Docker containers).

Individual Licenses

For individual licenses, you must have a graphical user interface (GUI) available in your container. This is because individual licenses use Login Named User licensing when running in a container, and Login Named User authentication only works in a desktop environment.

For more information, see What is Login Named User and how can I use it?

If you are using a container built by MathWorks and obtained from NGC or Docker Hub, command-line LNU authentication is available. Refer to "Network License Manager" (MathWorks Cloud Center) in the Cloud Center documentation for more information.

You cannot use a license file with containers. With an individual license, containers must use MathWorks online licensing only.

Network Licenses

Step 1. Install Network License Manager

To use a network license (Network Named Users or Concurrent) in your container, you must be running a network license manager on a license server. The license manager can be in a container, on a virtual machine, or on a physical machine.

License Server	Procedure
Container	To install the license manager in a container, see Create a MATLAB Container Image.
Virtual Machine	To install the license manager on a separate virtual machine, see "Configure License Man Virtual Machine" on page 1-7.
Physical Machine	To install the license manager on a physical machine, set environment variables "LM_LICE "MLM_LICENSE_FILE." For details, see method 2 in the MATLAB Answer How can I chan server used by MATLAB clients?

Step 2. Set Up Network Licenses

- If you are an administrator on a Network Named User License, you must define the users who can access the license. See "Define Users on a Network Named License" on page 1-10.
- If you are an administrator on a Concurrent License, users are not named but instead check out keys to access the license. See "Concurrent License Keys" on page 1-11.

Define Users on a Network Named License

The default user is root, but in order to ensure accurate counting of seats, you must run each container with a specific user name. Users cannot be added to containers after the container is built,

so be sure to build any user name you will potentially need to use into the Dockerfile before you build the container.

To define users for the container, add users in the Dockerfile and then run the container as a specified user. The following Dockerfile command adds the specified user to the container:

```
RUN useradd -ms /bin/bash <USERNAME>
```

This next Dockerfile command sets the container to run as the specified user:

```
USER <USERNAME>
```

The `-u` runtime flag overrides any `USER` command that was built into the container. You can use this to change the user of the container at runtime. For more information, see the Docker documentation.

Concurrent License Keys

A Concurrent license enables you to make MathWorks products available to anyone with access to your network. Access is not limited to specific named users, as it is with a Network Named User license. Rather, Concurrent licenses use license keys to control access. Users check out a license key when they start MATLAB or use functions in other products. When all the keys for a particular product are checked out, the network license manager denies further requests.

There is one important concept about implementing a concurrent license in a container: unlike running multiple instances of MATLAB on bare metal on the same host, each container appears as a distinct host. There are some rare exceptions, but in general, you can expect this to be the case.

See Also

External Websites

- Create a MATLAB Container Image
- MATLAB on NVIDIA.NGC

Configure MATLAB Parallel Server Licensing for Cloud Platforms

Before You Begin

This document shows administrators how to set up a license for use with the MATLAB Parallel Server cloud reference architecture. If you are an end user, contact your administrator.

To use the default MATLAB Parallel Server installation provided as part of MathWorks reference architecture (Azure or AWS), you must be using R2018a or later. The installation is configured to use online licensing by default. This license manager may be different than your current license configuration. Follow these instructions for setting up your license to use this installation.

If you have questions about any part of this license configuration process, contact MathWorks Cloud Support.

License Configuration Requirements

To set up your license to use MATLAB Parallel Server running on the cloud:

- You must be an administrator of a MATLAB Parallel Server license. If you do not have a server license, you can request a free trial or contact your MathWorks sales representative. If you are not sure that you are an administrator, or if you are not sure if you are associated to a MATLAB Parallel Server license, sign in to your MathWorks Account. Click on the MATLAB Parallel Server license. If you see a "Manage Users" tab, you are an administrator.
- The MATLAB Parallel Server license you are using must be current on Software Maintenance Service. Learn more
- All licensed end users must be associated to the server license. (Instructions are included in this procedure.)
- The end user's MATLAB license must include Parallel Computing Toolbox . The toolbox is required so that jobs can be submitted to the cluster running the server. End users must be using the same release as the cluster.

See Also

Related Examples

Select Licensing Configuration Option

From the following scenarios, select a procedure for setting up the license manager with online licensing. Not all procedures are required for all scenarios.

If you have a license setup scenario that is not listed here, Contact Support..

Scenario	Procedure
• You have a license for MATLAB Parallel Server, and • The license is already configured for online licensing.	"Add End Users to License" on page 2-6
You want to get a new on-demand license for MATLAB Parallel Server.	**1** Get an On-Demand License for MATLAB Parallel Server **2** "Add End Users to License" on page 2-6
• You just received a trial or an annual or perpetual license for MATLAB Parallel Server that has not yet been activated, and • The license or trial is configured for the network license manager.	**1** "Change License Manager Type" on page 2-5 **2** "Add End Users to License" on page 2-6
• You have an active annual or perpetual license for MATLAB Parallel Server, and • The license is configured for the network license manager, and • You are currently actively using that license in a cluster, and • You want to use online licensing	**1** "Change License Manager Type" on page 2-5 **2** "Add End Users to License" on page 2-6 **3** "Disable Network License Manager for MATLAB Parallel Server" on page 2-7

• You have an active annual or perpetual license for MATLAB Parallel Server, and
• The license is configured for the network license manager, and
• You are currently actively using that license in a cluster, and
• You want to use the network license manager running on the cloud.
	1 Select one of:
	  • Network License Manager for MATLAB on AWS
	  • Network License Manager for MATLAB on Azure
	2 "Add End Users to License" on page 2-6

• You are currently using the network license manager, and • You want to switch to the network license manager running on the cloud.	Select one of: • Network License Manager for MATLAB on AWS • Network License Manager for MATLAB on Azure

See Also

Related Examples

- "Before You Begin" on page 2-2
- "Change License Manager Type" on page 2-5
- "Add End Users to License" on page 2-6
- "Disable Network License Manager for MATLAB Parallel Server" on page 2-7

Change License Manager Type

1 Sign in to your MathWorks Account.

2 In your MathWorks Account, click the MATLAB Parallel Server license that you plan to use in the cloud.

3 Go to **Install and Activate**.

4 Under **Related Tasks**, click **Change License Management Type**.

5 In the drop-down list, select **Online licensing**.

See Also

Related Examples

- "Add End Users to License" on page 2-6
- "Disable Network License Manager for MATLAB Parallel Server" on page 2-7

Add End Users to License

For online licensing to know which users have permission to check out a license, you must define a list of allowed users for that license. Allowed users must have a MathWorks Account associated with the on-demand license.

You can associate end users yourself or you can generate emails so that end users can associate themselves. Both actions are performed in License Center.

1   Sign in to the MathWorks Account that is associated with the license you want to use.

2   In your MathWorks Account, click on the MATLAB Parallel Server license.

3   Go to **Manage Users**.

- Associate end users manually:

  a   Click **Add User**.

  b   Add an end user. Repeat this step for as many end users as you need to associate.

- Invite end users to associate themselves:

  a   Click **Invite End Users to Add Themselves**.

  b   Enter email addresses in the template.

When you have finished, go to "Disable Network License Manager for MATLAB Parallel Server" on page 2-7.

See Also

Related Examples
- "Change License Manager Type" on page 2-5
- "Disable Network License Manager for MATLAB Parallel Server" on page 2-7

Disable Network License Manager for MATLAB Parallel Server

To change your installed network license manager to online licensing, you must shut down the service and either delete the license (if the license manager was only for MATLAB Parallel Server) or modify the license (if license manager is managing other products in addition to the server).

If Network License Manager Manages Only MATLAB Parallel Server Cluster

Disable the network license manager, and delete license.

Platform	Procedure
Windows®	1 Start your current `LMtools.exe`. 2 Navigate to the **Start/Stop/Reread** tab and choose **Stop Server**. 3 Navigate to the **Config Services** tab and choose **Remove Service**. 4 Close out of the current `LMtools.exe`.
Linux®	1 Run `lmdown`. 2 Delete the existing network license manager by deleting the entire folder where you previously placed the license manager binaries.

If Network License Manager Manages Multiple Products

Modify the license to remove MATLAB Parallel Server.

1 Shut down the network license manager.

Platform	Procedure
Windows	In your current LMtools.exe, navigate to the **Start/Stop/Reread** tab and choose **Stop Server**.
Linux	Run `lmdown`.

2 Open the MathWorks license file for editing:

`matlabroot/etc/license.dat`

The exact name of your license file and its location might vary. If you have trouble finding the license file, see Article Where are the license files for MATLAB located?

3 In the license file, locate and remove the entry that begins with the text:

`INCREMENT MATLAB_Distrib_Comp_Engine ...`

The entry might span more than one line in the file. Remove the entire entry and save the file.

4 Restart the network license manager for the license file change to take effect.

Network license manager utilities – such as `lmstat` – can verify that only the proper products are licensed. To use the `lmstat` function, open Terminal and run the following commands:

```
cd $MATLABROOT/etc/glnxa64
./lmutil lmstat -a
```

See Also

Related Examples

- "Change License Manager Type" on page 2-5
- "Add End Users to License" on page 2-6

Configure MATLAB Production Server Licensing for Cloud Platforms

Before You Begin

This document shows administrators how to set up a MATLAB Production Server license for use with the MATLAB Production Server cloud reference architecture and MATLAB Production Server (BYOL) on Azure. If you are an end user, contact your administrator.

To use the reference architecture, you must have R2018a or later. To use MATLAB Production Server (BYOL) on Azure, you must have R2019b or later. The cloud deployment is configured to use the network license manager by default. Follow these instructions for activating the license.

If you have questions about any part of this licensing configuration process, contact MathWorks Cloud Support.

License Configuration Requirements

To activate your license for MATLAB Production Server running on the cloud:

- You must be an administrator of a MATLAB Production Server license. If you do not have a MATLAB Production Server, you can request a trial by contacting your MathWorks sales representative. If you are not sure that you are an administrator, sign in to your MathWorks Account to check which licenses you are associated to as an administrator.
- The MATLAB Production Server license you are using must be current on Software Maintenance Service. Learn more.

See Also

Related Examples

Choose an Option to Activate Your License

The MATLAB Production Server reference architecture and MATLAB Production Server (BYOL) is configured to use the network license manager by default. The license manager is automatically installed on a virtual machine in the cloud. From the following scenarios, select a procedure for activating your license:

Scenario	Procedure
You need to activate a license or trial that has never been activated before.	"Activate a License for the First Time" on page 3-3
Your MATLAB Production Server license has been previously activated in another location, on-premise, or in the cloud.	"Move a License That Has Been Previously Activated" on page 3-4

If you have an activation scenario that is not listed here, contact MathWorks Cloud Support.

Activate a License for the First Time

Follow this procedure to activate a license or trial that has never been activated before.

Deploy MATLAB Production Server in the Cloud

Deploy MATLAB Production Server in the cloud using the reference architectures or the MATLAB Production Server (BYOL) offering on Azure marketplace. To use the license manager in the cloud, you must provide a fixed MAC address when you activate the license. You can get a MAC address to the virtual machine hosting the license server only after the deployment is complete.

- MATLAB Production Server Reference Architecture on AWS
- MATLAB Production Server Reference Architecture on Azure
- MATLAB Production Server (BYOL) on Azure

Activate License

1 Sign in to your MathWorks Account, and select the MATLAB Production Server license.
2 Go to **Install** and **Activate**.
3 Click **Activate to Retrieve License File**.
4 In the **Host ID field**, enter the fixed MAC address of the network license manager.

   For R2019b and earlier releases, you can get the MAC address from the MATLAB Production Server cloud console. In the cloud console, click **Administration** > **License**.

   Starting in R2020a, you can get the MAC address of the network license manager from the Network License Manager for MATLAB dashboard. In the dashboard, click **Administration** > **Manage License**.

   Note When you delete the cloud resources, you also delete the fixed MAC address. For hosting the license manager in the cloud, you must have a fixed address:

   - Azure: When you create a virtual network, the virtual network MAC address is retained even when the virtual machine is in the deallocated state.

> • AWS: Use an Elastic Network Interface (ENI), which contains a (non-changeable) static MAC address attribute.
>
> Changing the fixed MAC address in MathWorks License Center is limited to 4 times per year.

5 Finish all fields, and click **Continue to finish activation**.

Upload License

For R2019b and earlier, you need to upload the license file you get from the activation process to the MATLAB Production Server cloud console. To upload a license file through the cloud console:

1 From the cloud console menu, select **Administration > License**.

2 Click **Browse License File** and select a file.

3 Click **Upload**.

Starting in R2020a, you need to upload the license file you get from the activation process to the Network License Manager for MATLAB dashboard. To upload a license file through the dashboard:

1 On the dashboard menu, select **Administration > Manage License**.

2 Click **Browse License File** and select a file.

3 Click **Upload**.

Move a License That Has Been Previously Activated

Follow this procedure to activate a license that has been previously activated in another location.

Shut Down the Current License Server

Platform	Procedure
Windows	**1** In your current `LMtools.exe`, navigate to the **Start/Stop/Reread** tab and choose **Stop Server**. **2** Navigate to the **Config Services** tab and choose **Remove Service**. **3** Close out of the current `LMtools.exe`.
Linux	**1** Run `lmdown`. **2** Delete the existing network license manager by deleting the entire folder where you previously placed the license manager binaries.

Deactivate Existing License

1 Sign in to your MathWorks Account, and select the existing MATLAB Production Server license.

2 Go to **Install** and **Activate**.

3 Find your activated license, and click to deactivate your license.

4 Click **Deactivate** on the next screen to complete the process.

Activate License

Activate the license as described in "Activate a License for the First Time" on page 3-3.

See Also

Related Examples

- "Before You Begin" on page 3-2
- "Choose an Option to Activate Your License" on page 3-3

MATLAB Deep Learning Container on NVIDIA GPU Cloud

Configure License for MATLAB Deep Learning Container on NVIDIA GPU Cloud

To perform deep learning using GPUs in the MATLAB Deep Learning Container, you must have valid licenses for MATLAB, Deep Learning Toolbox™, and Parallel Computing Toolbox. Valid licenses for the other products in the container (see "Additional Information" on page 4-3) are required to access the full functionality of the container.

To check the products you are licensed for, visit your MathWorks Account. Click your license number and then select the tab Manage Products to view a list of licensed products.

You can obtain a trial license for products in the MATLAB Deep Learning Container at MATLAB Trial for Deep Learning on the Cloud.

The license configuration process depends on whether your license is administered via MathWorks online licensing or via a network license manager. Contact your license administrator to find out your licensing method. Sign in to your MathWorks Account, click the license you are using, then click the tab marked "Contact Administrators".

Online Licensing

To use online licensing with the container, you must have a license for MATLAB and the other products in the container associated to your MathWorks Account. Your license must be current on MathWorks Software Maintenance Service.

From the following table, select an option for setting up your license for the MATLAB Deep Learning Container based on your license type. If you are not sure what license type you have, visit your MathWorks Account to see the licenses that you are associated to.

License Type	Configuration
Individual (a license that only you use that is in your name; not a Home or Student license)	Your license is already configured for use with the MATLAB Deep Learning Container.
Total Academic Headcount (a license that you use that belongs to your academic institution)	Your license is already configured for use with the MATLAB Deep Learning Container.
Home and Student (that only you use and is in your name)	These license types are not eligible to use the MATLAB Deep Learning Container.
All other license types	Contact your license administrator.*
*Not sure who the license administrator is? Sign in to your MathWorks Account, click the license you are using, then click the tab marked "Contact Administrators".	
If your administrator has questions, have them contact MathWorks Cloud Support.	

When you start MATLAB in the MATLAB Deep Learning Container, you are prompted to log in to your MathWorks account. Your license is automatically recognized from your MathWorks account.

Network License Manager

If you have a license administrated via a network license manager, you can use this license with the MATLAB Deep Learning Container. This procedure applies to the following license types.

- Concurrent
- Network Named User

For all other license types, contact your license administrator.

You might need to contact your license administrator to ensure that your license is configured for cloud use. To find out who your license administrator is, sign in to your MathWorks Account, click the license you are using, then click the tab marked "Contact Administrators". If your administrator has questions, have them contact MathWorks Cloud Support.

To use your network license with the MATLAB Deep Learning Container, supply the location of the network license manager when you run the container. Add an option of the following form to the `docker run` command you use to start the container. Replace the license server address `27000@MyLicenseServer` with the correct port number and DNS address for your network license manager.

```
-e MLM_LICENSE_FILE=27000@MyLicenseServer
```

Additional Information

The MATLAB Deep Learning Container contains MATLAB and several other toolboxes that are useful in deep learning applications.

- Computer Vision Toolbox™
- GPU Coder™
- Image Processing Toolbox™
- MATLAB Coder™
- Deep Learning Toolbox
- Parallel Computing Toolbox
- Signal Processing Toolbox™
- Statistics and Machine Learning Toolbox™
- Text Analytics Toolbox™

Valid licenses for these products are required to access the full functionality of the MATLAB Deep Learning Container. When you open MATLAB in the container:

- If you do not have a valid license for Deep Learning Toolbox or Parallel Computing Toolbox, MATLAB displays a warning on startup indicating that you cannot use these products.
- If you do not have a valid license for other products in the MATLAB Deep Learning Container, MATLAB displays a message on startup indicating that you cannot use these products.

See Also

More About

- "MATLAB Deep Learning Container on NVIDIA GPU Cloud for Amazon Web Services" (MathWorks Cloud Center)
- "MATLAB Deep Learning Container on NVIDIA GPU Cloud for NVIDIA DGX" (MathWorks Cloud Center)