

MATLAB Web App Server

Quick Start Guide

Overview

MATLAB Web App Server[™] lets you host MATLAB® apps and Simulink® simulations as interactive web apps. You can create apps using App Designer, package them using MATLAB Compiler™, and host them using MATLAB Web App Server. Your end users can access and run the web apps using a browser without installing additional software.

Preparing for Product Installation

You can install MATLAB Web App Server on Windows*, Linux*, and macOS. *Review the specific supported versions and platforms*. When sizing the server, MathWorks recommends using 1 processor core (or virtual core) per 4 workers and 1GB RAM per worker (end user). For example, provide a 4-core, 16GB RAM machine to serve web apps to 16 end users. MATLAB Web App Server requires a separate network license manager. The license manager needs minimal resources to run. A single-core machine with 2GB of RAM will suffice. Obtain the Mac address of the system running the license manager, as you will need it to generate your license file (use the command **ipconfig /all** on Windows or **ifconfig** on Linux and macOS to determine the Mac address).

Obtain your File Installation Key (FIK) and License File from *MathWorks License Center* and specify the Mac address of the license server in the Host ID field.

Installing MATLAB Web App Server Product

Install MATLAB Web App Server using the installation media or the online installer. On Windows, run **setup.exe**. On Linux, run **./install**. Select **File Installation Key Based Installation** and enter the FIK you obtained from the MathWorks License Center. When asked which products to install, select **MATLAB Web App Server**.

Installing MATLAB Runtimes

You must individually install each version of MATLAB Runtime that you wish to support on your MATLAB Web App Server installation. *Download the appropriate MATLAB Runtime installers* corresponding to your operating system and install them on your MATLAB Web App Server machine.

Installing the Network License Manager

If your organization already has a network license manager running, you can skip this step and add the MATLAB Web App Server license file to your existing license file on the license server. Copy the contents of the new license file into the old one *beneath* the # END------END-END line at the bottom of the license file. Restart the license server to apply those changes.



If you do not have license manager installed, you can install it using MATLAB installer.

- 1. Run MATLAB installer and select the "Log in with a MathWorks Account".
- 2. Accept the Software License Agreement.
- 3. Sign in using your MathWorks Account email address and password.
- 4. Select your MATLAB Web App Server license number from the list of linked licenses.
- 5. Choose the installation folder.
- 6. Select the "License Manager" from the list of products to install.
- 7. When prompted, browse to the "license.lic" file downloaded from the MathWorks License Center.
- 8. To start the license manager to start at boot time, select "Configure the license manager as a service" (Windows only).

For more information, refer to the article, How do I install or update the Network License Manager?

On Windows systems, the license manager starts automatically. For Linux systems, start the license manager using the ./lmstart script in the etc directory, which is within the installation directory you specified during the install process. By default, the license manager will listen for license checkout requests on port 27000. For more information, refer to the license manager installation and management *documentation*.

Setting up MATLAB Web App Server

1. As an administrator, run the **webapps-setup** script from MATLAB Web App Server scripts directory. The default location is:

Windows (administrator)	C:\Program Files\MATLAB\MATLAB Web App Server\R2020a\script
Linux (sudo)	/usr/local/MATLAB/MATLAB_Web_App_Server/R2020a/script
macOS (sudo)	/Applications/MATLAB/MATLAB_Web_App_Server/R2020a/script

- 2. Enter information about the license manager at the prompt. You can specify this information in one of two ways: Port Number@License Server Name, for example: 27000@myLicenseServer Path to the license file, for example: C:\myLicenses\license.lic
- 3. Specify a user account to run the server service and the apps service. To use the default account, press Enter.
- 4. Specify the MATLAB Runtime versions you want to use by typing **y or n** at the prompt. The setup utility automatically finds all MATLAB Runtime installations on your machine as long as they are installed in the default installation location. If you do not have a MATLAB Runtime version installed, you can press **Enter** to continue with the rest of the setup process. After setting up your license manager, run **webapps-runtime** script to specify the server to use with MATLAB Web App Server.
- 5. To start the server, run **webapps-start** script. A message appears to indicate the server is running with a URL for MATLAB Web Apps homepage. **Save the URL**.



Command-Line Scripts for Windows, Linux, and macOS

webapps-setup	Set up MATLAB Web App Server
webapps-config	Configure MATLAB Web App Server
webapps-runtime	Configure MATLAB Runtime for use with MATLAB Web App Server
webapps-uninstall	Uninstall MATLAB Web App Server services
webapps-start	Start MATLAB Web App Server service
webapps-stop	Stop MATLAB Web App Server service
webapps-status	Get status of MATLAB Web App Server

Create, Deploy, and Run Web App (Requires MATLAB and MATLAB Compiler Installation)

Create Web App

From the MATLAB desktop, launch the Web App Compiler from the app gallery or type **webAppCompiler** at the MATLAB command prompt. Select the MATLAB app you want to package as a web app, enter the required metadata, and click **Package** to generate a web app archive.

Deploy Web App

You can deploy web apps to the server in one of two ways:

Option 1: Copy the web app archive (.ctf file) generated by Web App Compiler (in MATLAB Compiler) to the apps folder configured by the server. The default location is:

Windows	%ProgramData%\MathWorks\webapps\R2020a\apps
Linux	/local/MathWorks/webapps/R2020a/apps
macOS	/Library/Application Support/MathWorks/webapps/R2020a/apps

Option 2: This option requires that *Authentication and Role-Based Access* are enabled on the server, and you are designated as an author while configuring Role-Based Access. From the MATLAB Web App Server home page:

- 1. Login.
- 2. Click Manage Apps > Upload App.
- 3. Select the file webAppArchiveName.ctf and click **Open** to upload the web app.

Run Web App

Go to MATLAB Web Apps home page and click the web app tile to run it.

Additional Resources

- MATLAB Web App Server System Requirements
- MATLAB Web App Server Documentation
- MATLAB Runtime Installer Download
- MathWorks Installation Support

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