

Hardware requirements for v5.7.0+

You can install a self-hosted WebSpellChecker Server on:

- A dedicated server
- Virtual machine (you can enable VMWare virtualization when installing WebSpellChecker)*
- Docker container



*AI-based engine is not supported under VM VirtualBox.

Or using one of the cloud computing platforms such as:

- [Amazon Web Services](#)
- [Google Cloud](#)
- [Microsoft Azure](#)

Here are the minimum hardware requirements for WebSpellChecker Server with AI-based engine:

It e ms	Minim um value	Comments
H DD	1.1 GB (Windows) 1.2 GB (Linux) 2.59 GB (Docker)	Minimum 1.2 GB of disk space is required for WebSpellChecker installation package, including AppServer, Engines, and web components. Around 2.59 GB of disk space should be allocated to a Docker image with an AI engine. Additional space can be required for the following components: • Up to 2 MB for all personal user dictionaries in .../UserDictionaries and up to 10 MB for global custom dictionaries in .../CustomDictionaries directory. • Up to 15 MB for the AppServer log files to be saved in the AppServer/Logs directory. Once a log file size reaches 10 MB, a new log file will be created. • Web Server logs, for example, access logs of Apache HTTP Server. Such logs can require a significant amount of disk space as it keeps the records of all served requests. It is your responsibility to monitor and control space consumption by access logs. • Up to 90 MB of memory if you decide to enable detailed logging of one of the WebSpellChecker components (namely, for the SSRV FastCGI component). However, this type of logging is turned off by default. • Additional space for usage statistics logs if you enable them. For details, refer to the Enabling collection of usage statistics in logs guide. Sometimes you may need to allocate even more space depending on WebSpellChecker Server environment needs, for example, if the number of your language dictionaries includes 100+ languages.  Make sure you regularly verify the amount of disk space consumed by your logs and allocate more space if necessary.
R AM	2 GB	At least 2 GB of memory is required for spell check, grammar check engines, and cache functioning, if you are referring to WebSpellChecker Application Server (AppServer).  The AI engine itself and its required libraries consume around 1.5 GB. If only AI-based engine for English is needed and used, it will consume around 1.5 GB of memory initially on launch and then drop to around 700 MB. Also, consider the following RAM requirements: • 50 MB for a spelling check engine including 16 default languages (English language dictionary is actively used). • 128 MB for the English grammar check engine, plus 512 MB if other languages (from the list of 14 default ones) support is enabled. You also need to consider memory usage for grammar checking if you are using all default languages where grammar checking is supported. • 10 MB for cache enabled on Server (for 10 000 suggestions). The rough calculation here is 1 misspelling and its suggestions equals 100 bytes. The more misspellings and suggestions to be added to the cache the more RAM will be needed.  The numbers in the list above may change depending on your custom environment setup and usage.

C PU	2 CPU cores	CPU with AVX2/AVX512* instructions support
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 *AVX stands for Advanced Vector Extensions. Read [more](#).



Please note that these are minimum installation requirements which change and vary depending on:

- Number of end-users who will be using WebSpellChecker features or proofreading;
- Amount of text they need to be proofread;
- Type of language as well as the size of its language;
- Percent of text errors.

Our experience

If you want to use AWS EC2 instance, you can choose a smaller instance such as [t3.medium](#) or [t3a.medium](#) with 2 CPUs supporting AVX2/AVX512 instructions, 4 GB of memory or a server with similar characteristics. We host and maintain our WebSpellChecker Cloud version on Amazon Web Services (AWS) and use a set of [c5.xlarge EC2](#) instances under the load balancer for our application's workload which is up to 70,000 requests per minute.



If you don't have a dedicated hardware, you can try using [WebSpellChecker Cloud](#) version. No software installation and configuration is required and you can migrate to your own server any time later.