

KNIME Analytics Platform Installation Guide

KNIME AG, Zurich, Switzerland Version 4.2 (last updated on 2020-08-11)

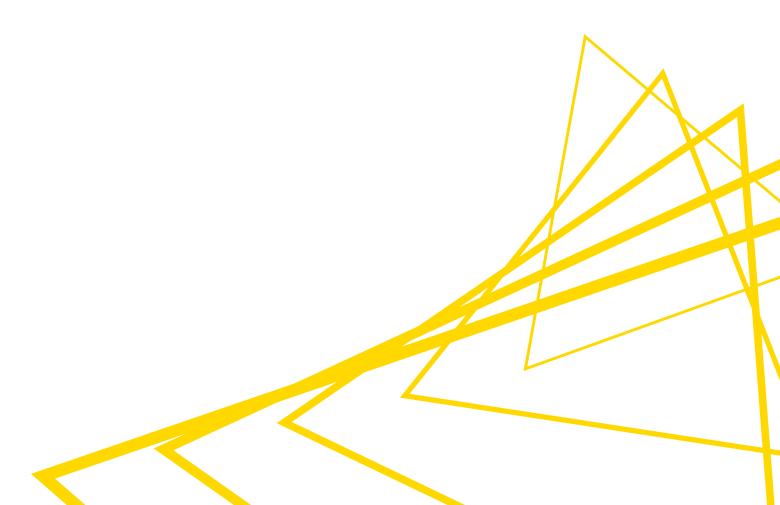


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Installing KNIME Analytics Platform

- For step-by-step **videos** on how to install KNIME Analytics Platform, please take a look at our KNIMETV YouTube channel.
- 1. Go to the download page on the KNIME.com website to start installing KNIME Analytics Platform.
- 2. The download page shows three tabs which can be opened individually:
 - Register for Help and Updates: here you can optionally provide some personal information and sign up to our mailing list to receive the latest KNIME news
 - Download KNIME: this is where you can download the software
 - Getting Started: this tab gives you information and links about what you can do after you have installed KNIME Analytics Platform
- 3. Now open the *Download KNIME* tab and click the installation option that fits your operating system.

Notes on the different options for Windows:

- The Windows installer extracts the compressed installation folder, adds an icon to your desktop, and suggests suitable memory settings.
- The self-extracting archive simply creates a folder containing the KNIME installation files. You don't need any software to manage archiving.
- The zip archive can be downloaded, saved, and extracted in your preferred location on a system to which you have full access rights.

Windows		
KNIME Analytics Platform for Windows (installer) The installer adds an icon to the desktop and suggests suitable memory settings	64 Bit 32 Bit	(441.03 MB) (437.42 MB)
KNIME Analytics Platform for Windows (self-extracting archive) The self-extracting archive only creates a folder holding the KNIME installation	64 Bit 32 Bit	(444.58 MB) (441.15 MB)
KNIME Analytics Platform for Windows (zip archive)	64 Bit 32 Bit	(529.54 MB) (525.59 MB)

	Linux		
KNIME Analytics Platform for Linux		64 Bit	(554.2 MB)

N	Mac	
KNIME Analytics Platform for Mac OSX (10.11 and above)	64 Bit	(522.98 MB)

Figure 1. KNIME Analytics Platform versions

- 4. Read and accept the privacy policy and terms and conditions. Then click Download.
- 5. Once downloaded, proceed with installing KNIME Analytics Platform:
 - Windows: Run the downloaded installer or self-extracting archive. If you have chosen to download the zip archive instead, unpack it to a location of your choice.
 Run knime.exe to start KNIME Analytics Platform.
 - Linux: Extract the downloaded tarball to a location of your choice. Run the knime executable to start KNIME Analytics Platform.
 - Mac: Double click the downloaded dmg file and wait for the verification to finish.
 Then move the KNIME icon to Applications. Double click the KNIME icon in the list of applications to launch KNIME Analytics Platform.
- Also check the KNIME Quickstart Guide and the KNIME Workbench Guide.

Configuration settings and knime.ini file

When installing KNIME Analytics Platform, configuration settings are set to their defaults, and they can later be changed in the *knime.ini* file. The configuration settings, i.e. options used by the Java Virtual Machine when KNIME Analytics Platform is launched, range from memory settings to system properties required by some extensions.

You can find knime.ini in the installation folder of KNIME Analytics Platform.

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On MacOS: To locate knime.ini on MacOS, open Finder and navigate to your installed Applications. Next, right click the KNIME application, select *Show Package Contents* in the menu, and navigate to Contents \rightarrow Eclipse.

The knime.ini file can be edited with any plaintext editor, such as Notepad (Windows), TextEdit (MacOS) or gedit (Linux).

Allocating memory in knime.ini file

The entry -Xmx1024m in the knime.ini file specifies how much memory KNIME Analytics Platform is allowed to use. The setting for this value will depend on how much memory is available in your machine. KNIME recommends setting it to approximately one half of your available memory, but you can modify the value based on your needs. For example, if your computer has 16 GB of memory, you might set the entry to -Xmx8192m.

Installing Extensions and Integrations

If you want to add capabilities to KNIME Analytics Platform, you can install extensions and integrations. The available extensions range from free open source extensions and integrations provided by KNIME to free extensions contributed by the community and commercial extensions including novel technology nodes provided by our partners.

The KNIME extensions and integrations developed and maintained by KNIME contain deep learning algorithms provided by Keras, high performance machine learning provided by H2O, big data processing provided by Apache Spark, and scripting provided by Python and R, just to mention a few.

Install extensions by:

- Clicking *File* on the menu bar and then *Install KNIME Extensions...*. The dialog shown in Figure 2 opens.
- Selecting the extensions you want to install
- Clicking Next and following the instructions
- Restarting KNIME Analytics Platform

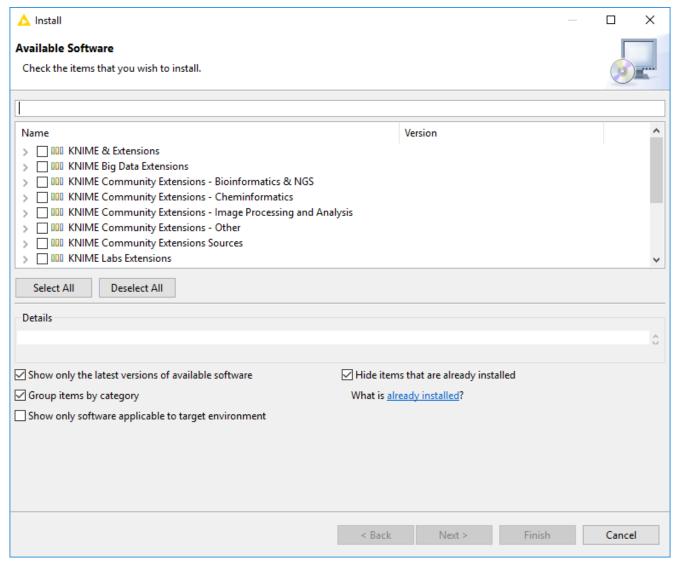


Figure 2. Installing Extensions and Integrations

The *Install KNIME Extensions* menu provides the extensions that are available via the update sites you have enabled.

For more information, take a look at our video on How to Install Extensions in KNIME Analytics Platform. Also see the Extensions and Integrations Guide.

To uninstall an extension, click *Help*, *About KNIME Analytics Platform*, and then *Installation Details*. A dialog shown in Figure 3 opens. Now, select the extension that you want to uninstall, and click *Uninstall*....

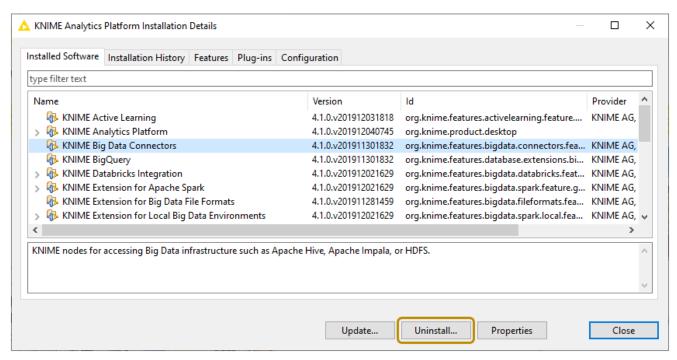


Figure 3. Uninstalling Extensions and Integrations

Updating KNIME Analytics Platform and Extensions

It is good to make sure that you always use the latest version of KNIME Analytics Platform and its extensions.

Do this by:

- 1. Clicking *File* → *Update KNIME...*. In the dialog that opens, select the available updates you want to install and then click *Next*.
- 2. Proceed by following the instructions. KNIME Analytics Platform has to be restarted in order to apply the updates.

Update Sites

The Update Sites are where KNIME retrieves additional software in the form of extensions as well as updates. To see or edit the available update sites, select $File \rightarrow Preferences \rightarrow Install/Update \rightarrow Available Software Sites.$

Default Update Sites

These four updates sites are provided by KNIME and are always available:

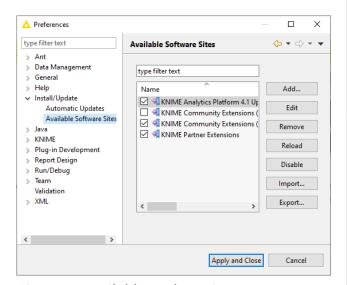


Figure 4. Available Update Sites

KNIME Analytics Platform 4.2 Update

Site: Provides all extensions and integrations maintained by KNIME: R, Python, H2O Machine Learning, Apache Spark for big data, and many more. Contains KNIME Labs Extensions, which are extensions that are not yet part of the set of stable KNIME extensions because their functionality may not yet be finalized.

KNIME Community Extensions (Trusted):

Provides trusted community extensions, i.e. extensions created by the KNIME community, which have been tested for backward compatibility and compliance with KNIME quality standards.

KNIME Partner Extensions: Provides extensions created by KNIME partners.

Community Extensions (Experimental):

Provides additional extensions created by the KNIME community.

KNIME Analytics Platform 4.2 Update Site and KNIME Community Extensions (Trusted) are enabled by default.

Adding External Update Sites

To install extensions that are not part of the above update sites, click *Add* to manually add the relevant update site, inserting the Name and Location as shown in Figure 5.

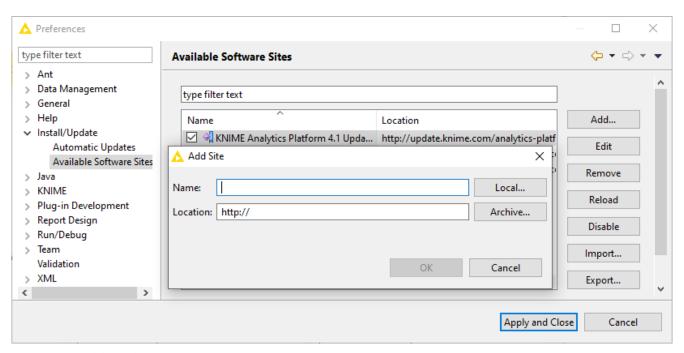


Figure 5. Add Update Sites

After adding a new update site you will see it listed in the *Available Software Sites*. You must now enable it by selecting it from the list.

Adding Local Update Sites

If your working environment has limited internet access or you receive an error message "Proxy Authentication Required" when connecting to a remote update site (provided by a URL), you can install extensions from a local zip file. You can download KNIME update sites as zip files here.

- Save the zip file containing the extensions to your local system
- Select File → Preferences → Install/Update → Available Software Sites and enter the path to the zip file by clicking Add → Archive... as shown in Figure 6.

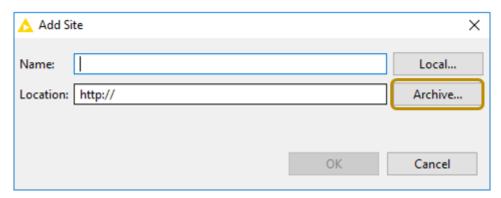


Figure 6. Adding Update Sites from Zip Archive

- If the same extensions are provided by a URL, you will first have to disable the update site by disabling it in the list.
- Now click Apply and Close
- If the same extensions are also provided by a remote update site, you will first have to disable that update site by deselecting its entry in the *Available Software Sites* dialog and confirming via *Apply and Close*.

Working with the Nightly Builds

Once a night, a new version of KNIME Analytics Platform is created directly from our development branch. The Nightly Build versions available here provide insight into what's coming up in the next regular release. However, for real work, always use a version of a standard KNIME release. Also read the following disclaimer before proceeding:

Really, really important disclaimer

This is most definitely not production quality code. These nightly builds are what we use internally to validate and test recent developments, so they are not tested as thoroughly as standard KNIME releases. Furthermore new nodes or functionality may change substantially (or disappear entirely) from one build to the next. It's even possible that workflows you edit or create with nightly builds stop being readable by future (or past) versions...

These nightlies are a great way to get a sneak peek at what may be coming in the next version of KNIME and provide feedback and suggestions. They are not a particularly safe way to do real work.





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