KNIME

KNIME Analytics Platform Installation Guide

KNIME AG, Zurich, Switzerland
Version 5.4 (last updated on)

Table of Contents

Installing KNIME Analytics Platform

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. KNIME Analytics Platform can be installed on Windows, Linux, or macOS.

   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.
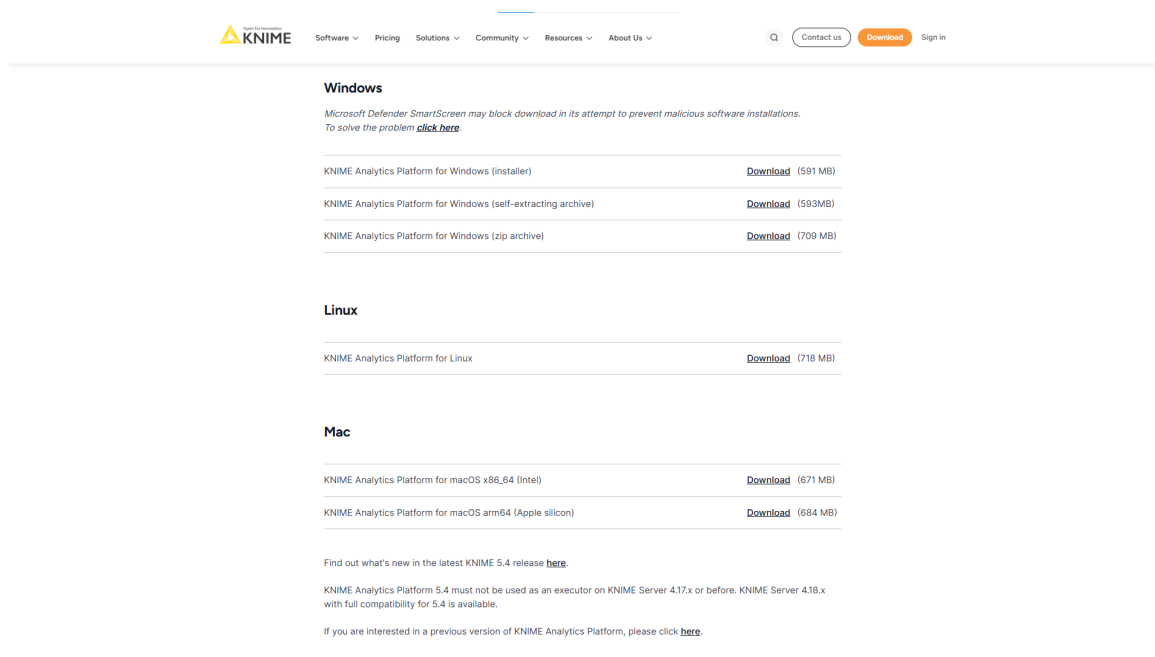

Figure 1. KNIME Analytics Platform available installers

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.

   > **i** With KNIME Analytics Platform version 5.3 you have the possibility to start KNIME Analytics Platform in high-resolution mode. To do so, go to the installation folder and run `knime-hidpi.bat`. Please notice that the batch file to start the KNIME Analytics Platform in the high-resolution mode is an experimental feature designed exclusively for Modern UI. This feature aims to enhance visual fidelity but is not yet fully supported across the classic user interface and the Modern UI. So, users should be aware of potential limitations and compatibility issues when switching between Modern UI and Classic UI contexts.

   ◦ *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.

The following operating systems versions are supported:

- Windows
    - Windows 10, 11
    - Windows Server - 2016, 2019, 2022,
- Ubuntu 20.04 LTS and 22.04 LTS and derivatives
- RHEL/CentOS/Rocky Linux 8, 9
- macOS (12 and above - macOS x86_64 Intel) and M1 (macOS arm64 - Apple silicon) (only the last two major versions are supported)
    - macOS 12: Monterey
    - macOS 13: Ventura

> **i** Also check the KNIME Getting Started Guide and the KNIME Analytics Platform User 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.

> **i** **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` → `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 from:

- KNIME Hub:

  ◦ Search for the Extension or Integration you want to install in the search bar

  ◦ Click Extensions on the results page

  ◦ Click the extension you want to install, and from the extension page and drag and drop the squared yellow icon, shown in Figure 2, to the KNIME Analytics Platform. A window will open asking if you want to search and install the extension or integration. Click *Yes* and follow the instructions.
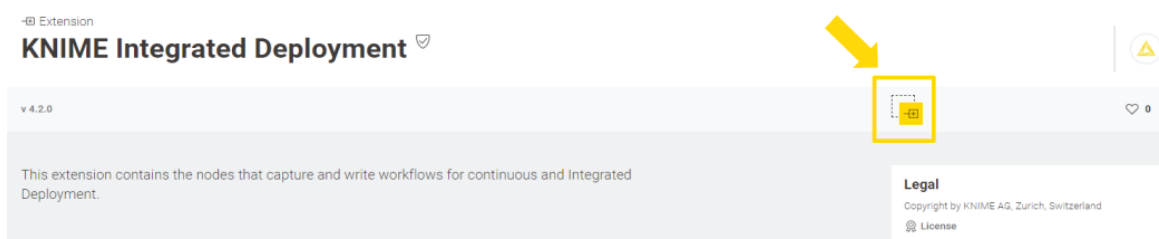
Figure 2. Install the KNIME Integrated Deployment Extension from KNIME Hub

  ◦ Restart KNIME Analytics Platform.

- KNIME Analytics Platform:

  ◦ Go to the *Menu* in the top right corner of the KNIME Analytics Platform.

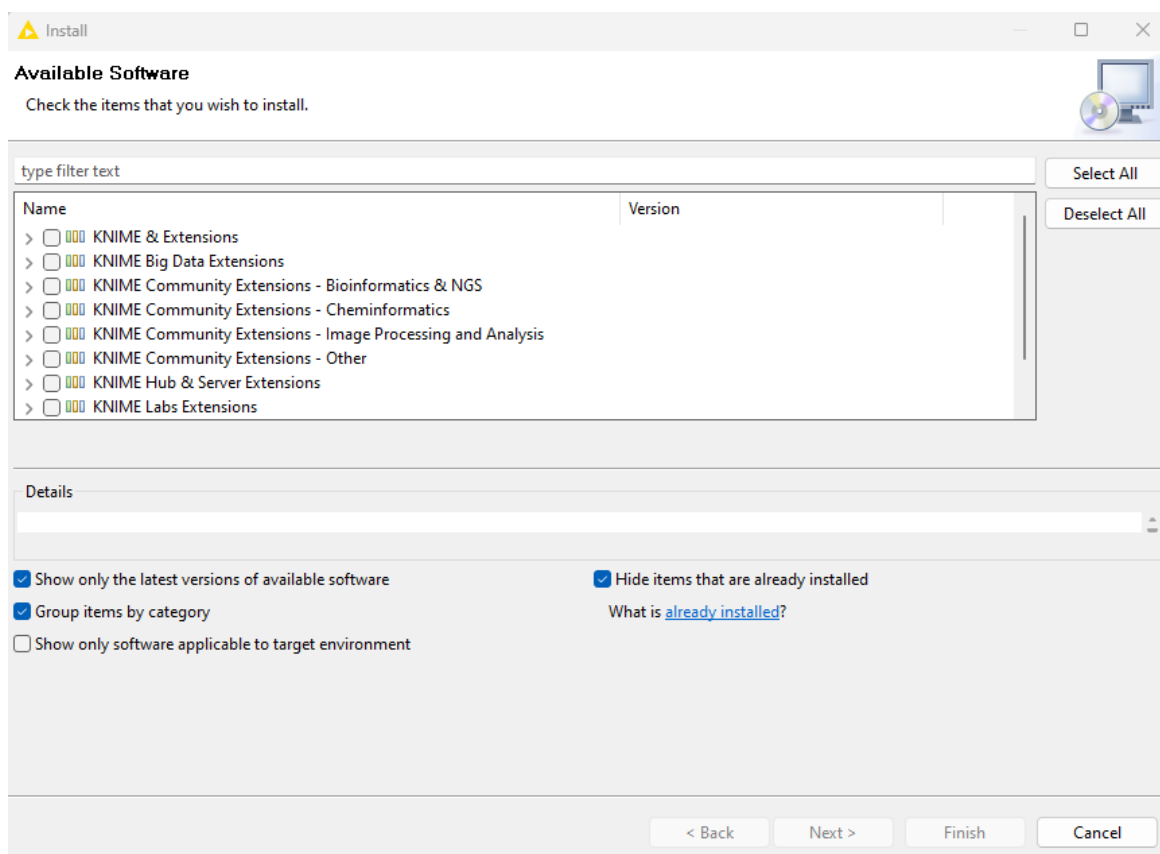 ◦ Select *Install Extensions*. The dialog shown in Figure 3 opens.

Figure 3. Installing Extensions and Integrations from KNIME Analytics Platform

- Select the extensions you want to install

- Click *Next* and follow the instructions

- Restart KNIME Analytics Platform.

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

> **i** If you encounter issues during the installation of Python based extensions, these might be related to challenges specific to this type of extensions. Find here information about how to troubleshoot these issues.

To uninstall an extension, go to the *Help* menu in the top right corner of the user interface and select the *About KNIME Analytics Platform*. In the window that opens click *Installation Details*. A dialog shown in Figure 4 opens. Now, select the extension that you want to uninstall, and click *Uninstall….*.
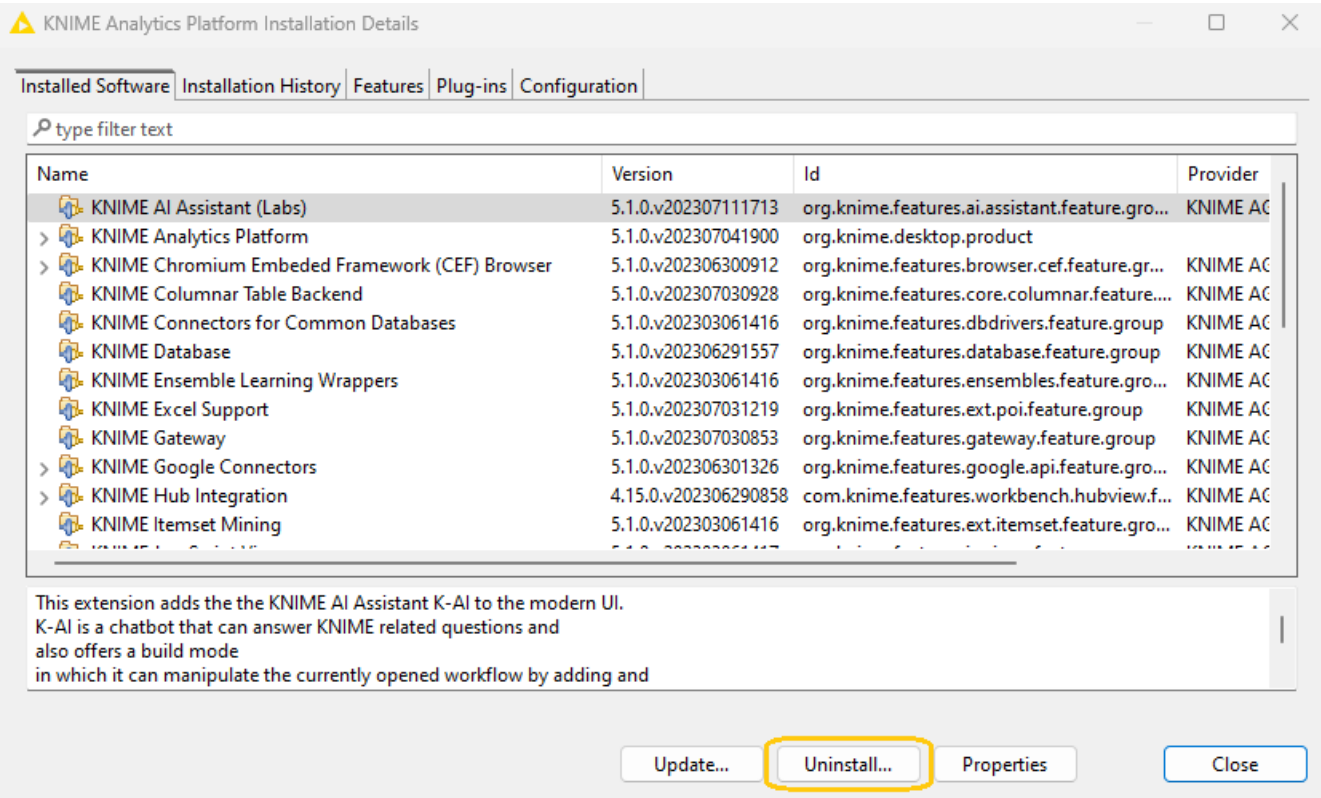
Figure 4. Uninstalling Extensions and Integrations

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.

To do so:

1. Go to the *Menu* in the top right corner of the KNIME Analytics Platform.

2. Select *Check for updates*. In the dialog that opens, select the available updates you want to install and then click *Next*.

3. 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, click *Preferences* in the top right corner of the user interface. This opens the *Preferences* dialog. Select *Install/Update →
Available Software Sites*.

Default Update Sites

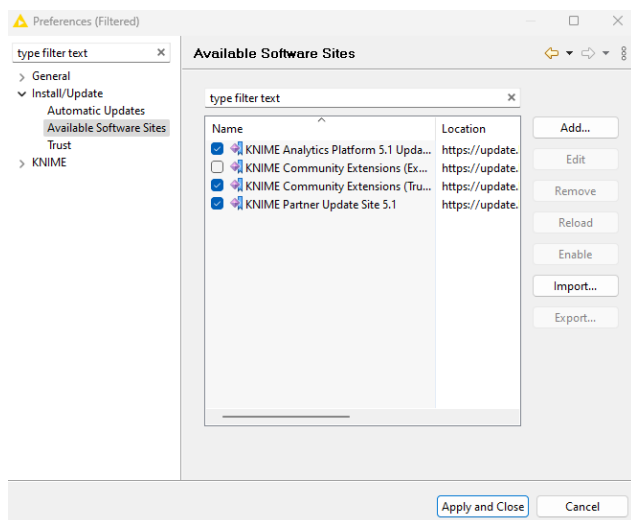These four updates sites are provided by KNIME and are always available:

Figure 5. Available Update Sites

KNIME Analytics Platform 5.4 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 (Experimental): Provides additional extensions created by the KNIME community. **Note: this update site is not enabled by default.**

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 Update Site 5.4: Provides extensions created by KNIME partners.

KNIME Analytics Platform 5.4 Update Site, *KNIME Community Extensions (Trusted)*, and *KNIME Partner Update Site 5.4* 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 6.
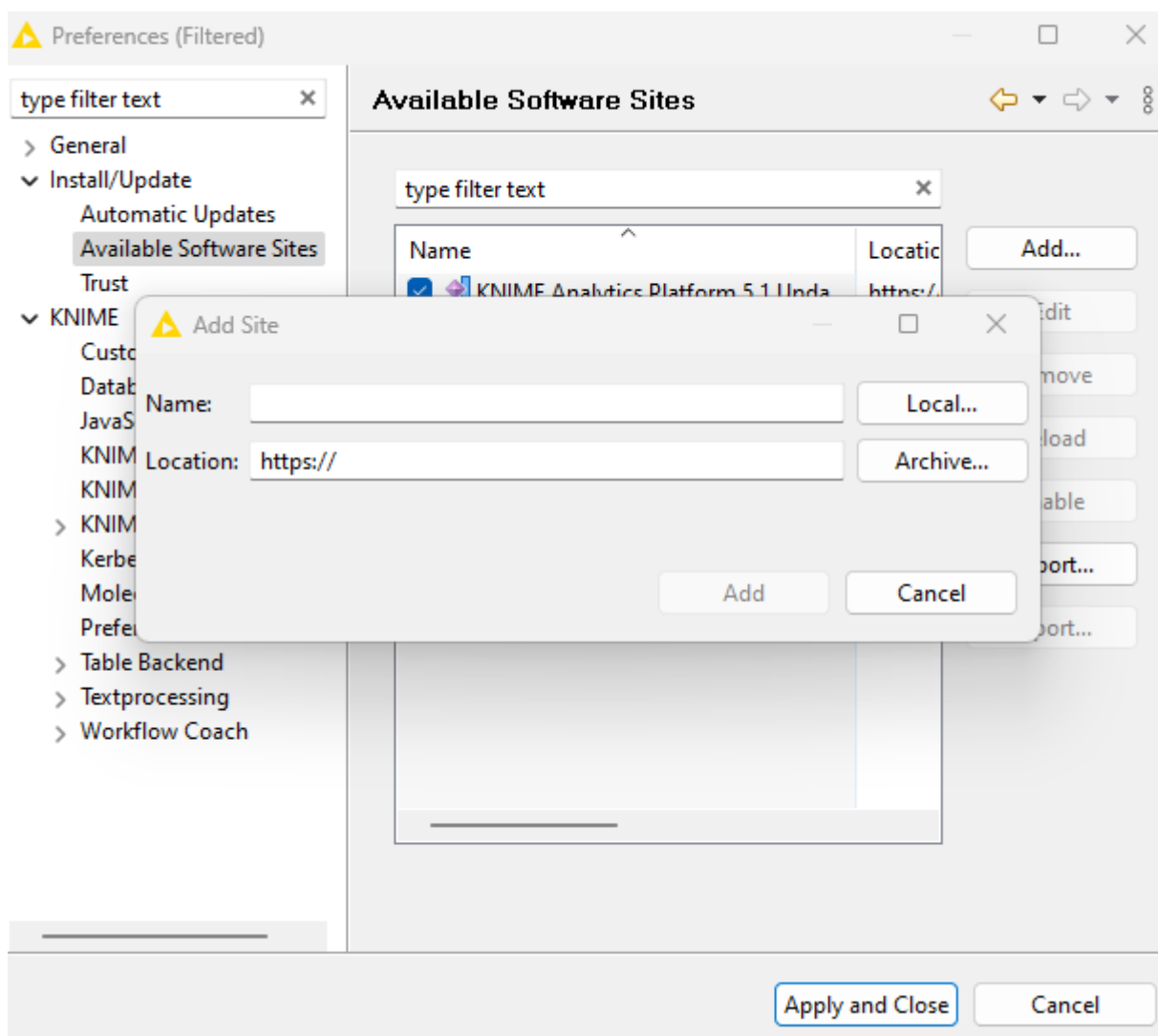
Figure 6. Add Update Sites

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.

1. Download KNIME update sites as zip files at the following links:

    ◦ KNIME Analytics Platform Update Site

    ◦ KNIME Community Extensions

    ◦ KNIME Partner Update Site 5.4

2. Save the zip file containing the extensions to your local system

3. Click *Preferences* in the top right corner of the user interface. This opens the *Preferences* dialog. Select *Install/Update → Available Software Sites* and enter the path to the zip file by clicking *Add → Archive…* as shown in Figure 7.
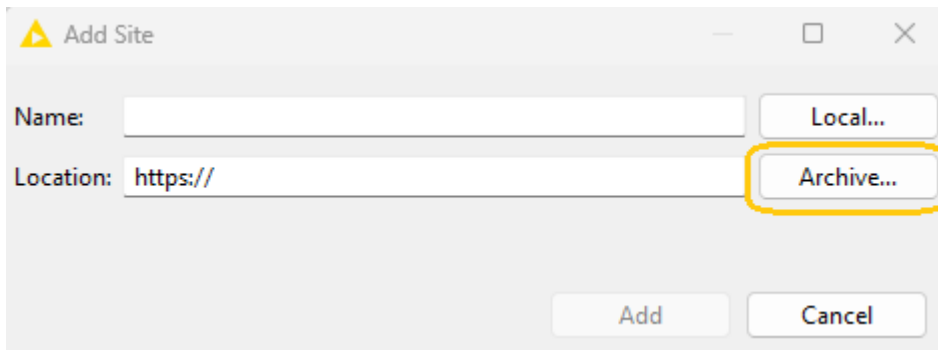
Figure 7. Adding Update Sites from Zip Archive

> **i** If the same extensions are provided by a URL, you will first have to disable the update site by disabling it in the list.

4. Now click *Apply and Close*

> **i** 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, *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.

Release notes and changelogs (KNIME Analytics Platform 5.4)

Release notes and detailed changelog for v5.4.x releases

KNIME Analytics Platform 5.4.5

Release date: July 23, 2025

Changelog (KNIME Analytics Platform 5.4.5)

Enhancements

- AP-24427: Tableau Writer to be streamable (performance enhancements)

Bug Fixes

- AP-24482: DB Loader fails when connected to Google BigQuey with No FileSystem for scheme "file" (kudos to @JaimeAlzx, @lmmr, @Jason_Kish for reporting 1, 2, 3)
- AP-24512: Chemistry type value factories do not adhere to KNIME type system contract (kudos to @richards99 for reporting 1)
- UIEXT-2023: Parallel Coordinates Plot: Selection not working in component with other views (kudos to @rsherhod for reporting 1)
- UIEXT-2761: ColumnFilter overwritten by flow variable behavior changed (kudos to @umutcankurt for reporting 1)
- AP-24382: Port view factory and port spec view factory are flipped for CredentialPortObject
- AP-24316: Excel Reader throws `IllegalStateException` when reading XLSB and parsing is canceled quickly (e.g. in loop)
- AP-24481: Repeated 'Attempted to append to closed appender' errors in log
- AP-24394: String flow variables with the value null cause Expressions to fail with `NullPointerException`
- AP-24025: Expression If function returns wrong values for large INTEGER values
- AP-23951: Framework sets NO_PROXY environment variable incorrectly

- NXT-3735: "Save as" action may lose changes

KNIME Analytics Platform 5.4.4

Release date: May 9, 2025

Changelog (KNIME Analytics Platform 5.4.4)

Enhancements

- AP-24287: Edit images with OpenAI Image Generator
- AP-24286: Rename OpenAI DALL-E View to OpenAI Image Generator
- AP-24278: Support GPT Image 1 in OpenAI Image Generator
- AP-24257: Prevent Python Processes from starting when NodeSpecCache is initialized
- AP-24204: Respect Reset-Before-Upload Flags from Hub/Server in Modern UI
- AP-24104: Update Snowflake driver to version 3.23.1
- AP-24102: Use KNIME user-agent for requests to Databricks GenAI models
- AP-23914: Bundling path erroneously changed from bundling/root to bundling/envs/root
- AP-23906: Add Executor internal thread pool load to executor /metrics endpoint
- AP-23895: KNIME Executor to reject new job requests if thread pool load is above limit (additional restriction to CPU and RAM limits)
- NXT-3351: Add Banner in Home screen to point to team execution
- BD-1344: (Big Data Extensions): Update parquet library to 1.15.1
- NXT-3642: Update Equo Chromium 116.0.27

Bug Fixes

- AP-23963: K-AI code generation times out for larger code (kudos to @ajackson for reporting [1])
- AP-24222: Code Assistant K-AI shows NullPointerException if no K-AI backend is configured (kudos to @KNIMEuser23421 for reporting [1])
- NXT-3418: Application shifts to the left and has empty space on the right (kudos to @ajackson @JairAlvarado for reporting [1] [2])

- UIEXT-2609: Reference Row filter configuration resets to default from legacy to webUI dialog (kudos to @zedleb for reporting 1)

- UIEXT-2664: Text View fails (or has wrong output) if flow variable used in view contains "$" (or "\") (kudos to @roberting for reporting 1)

- AP-24221: Workflow execution increases workflow download count

- AP-24154: AP Explorer not working after some time with KNIME Server Small

- AP-24150: Executor deadlock between OSGi state change lock and `PortTypeRegistry` when loading workflows

- AP-24146: Google Nodes (using Apache HTTP client) do not find Eclipse proxies

- AP-24117: Partial AP update to 5.4.3 can lead to workflow save problem

- AP-23879: Possible "ConcurrentModificationException" when executing many nodes in parallel

- AP-24284: SAP Reader (Theobald) throws NullPointerException when fetching parameters

- AP-24216: NodeLogger sets up workflow log appenders too eagerly

- AP-24196: Chat Model and LLM Prompter nodes fail with Databricks Chat models

- AP-24189: OpenAI Model Connector dialog crashes if model list contains None id

- AP-24140: Expressions: parse_float, parse_int, and ceil do not handle large integers correctly

- AP-24126: SAP HANA: DB Table Selector fails if table has quote characters in pretty column names

- AP-24125: SAP HANA: DB Table Selector fails for tables with duplicate pretty column names

- AP-24121: Azure OpenAI Chat Models can't be created if output mode is JSON

- AP-24108: Missing Values (Apply) does not work with Unicode codepoints above 0xFFFF

- AP-24085: Windows path () not properly handled in create_env.bat

- AP-24061: Temp-copy editor in Classic UI displays NPE when trying to save back to a logged-out mountpoint

- AP-23872: Executor might load more jobs than maxLoadedJobsPerExecutor

- NXT-3671: Can't upload non-reset workflows from MUI if KNIME Server has both forceResetOnUpload and enableResetOnUploadCheckbox set to true

- NXT-3467: Overwriting a workflow group with group of identical name deletes both workflow groups

- NXT-2977: Nodes can become unresettable waiting on downstream executions on the same nesting level

- UIEXT-2375: Overwriting excluded manually selected in dialog Twinlist does not work

KNIME Analytics Platform 5.4.3

Release date: March 12, 2025

Changelog (KNIME Analytics Platform 5.4.3)

Enhancements

- AP-23801: Allow to define model context size in GPT4All Connectors (kudos to @havarde for reporting 1)

- AP-24042: Extract Context Properties node to emit only "old" properties if system property is set (
  `-Dorg.knime.base.extractcontextproperties.compatibilitymode=true`)

- AP-24009: Add garbage collection to executor metrics

- AP-23931: Make KNIME Explorer synchronization less resource intensive on remote end

- AP-23873: Tool calling in Chat Model Prompter

- AP-23836: Make Google Sheets nodes more robust by retrying failing requests

Bug Fixes

- AP-23905: Google Sheets Reader cannot read sheets with + in sheet name (kudos to @Lee_F for reporting 1)

- AP-23909: Expression "like" Function Fails with Consecutive Wildcards (%) and Multiple Underscores (_) in Patterns (kudos to @cmora for reporting 1)

- AP-23979: String Manipulation (Multi Column): Flow Variables present upon configuration but gone upon execution (kudos to @mwiegand for reporting 1)

- NXT-3229: Some community nodes are not categorized in node repository's tree view (kudos to @sw1336 for reporting 1)

- AP-23976: KNIME URI resolution fails if no Workbench is running and URL is not accessible

- NXT-3266: The output Email Session port view of the Email Connector fails to load and prompts to download an empty index.html file

- UIEXT-2314: Nominal Row Filter Widget: No value selected upon first re-execution

- UIEXT-2301: Nominal Row Filter Widget can cause validation errors in re-execution

- AP-24055: E-Mail port spec view not (always) available

- AP-24049: DB nodes get stuck in execution if database connection has been closed by database server during execution of parallel DB node that shares the same connection

- AP-24038: Ordering of two INTEGERS that evaluate to MISSING is wrong

- AP-24014: Loading executed workflow: Table file extraction happening in non-annotated thread, causing files to be place in temp root (instead of workflow temp)

- AP-23995: SharePoint Online Connector does not allow to select group sites if using a Microsoft secret from the Secrets Retriever node

- AP-23974: Google Sheets nodes: If a sheet name is a valid range (like A4:D20), the nodes use that range in the first sheet instead of a sheet with the name "A4:D20 "

- AP-23973: Google Sheets Updater node ignores "Select First Sheet" option

- AP-23972: Google Sheets nodes overwrite existing flow variables with name, sheet name and sheet id and instead of creating new variables

- NXT-3416: Component drag'n'drop with a file extension adds node instead of component

- NXT-3361: User profile (settings, onboarding hints) not reliably saved on shutdown

Known issue

Updating KNIME installations older than 5.4.0 might trigger a *Trust Certificates* confirmation due to an expired certificate from *Equo Tech, Inc.* This extension is safe to install, and a new certificate will be included in the 5.4.4 bugfix release.

KNIME Analytics Platform 5.4.2

Release date: February 14, 2025

Changelog (KNIME Analytics Platform 5.4.2)

Enhancements

- AP-23677: Reduce error logging in Tableau Reader node

Bug Fixes

- AP-23957: Secrets Retriever node fails with unknown secret types on freshly started Hub Executors

- AP-23950: Can't log into KNIME Server if OAuth token is opaque (depends on identity provider in use)

- AP-23715: Installed Python extensions break after moving an AP installation

KNIME Analytics Platform 5.4.1

Release date: February 6, 2025

Changelog (KNIME Analytics Platform 5.4.1)

New nodes

- AP-23896: DeepSeek Chat Model Connector

Enhancements

- AP-22348: Support meta data filters in Vector Store Retriever (kudos to @TosinLitics for reporting 1)

- AP-23605: Change node categories of Expression nodes (kudos to @mwiegand for reporting 1)

- AP-23881: AWS Translate nodes: Update available languages

- AP-23880: Snowflake Connector node with support for generic OAuth2 access token (e.g. Snowflake OAuth)

- AP-23877: Improve node error message when Conda is cancelled due to the Watchdog

- AP-23865: Enable Hub execution for Tableau Reader

- AP-23843: Make watchdog consider current memory usage instead of theoretical max mem usage

- AP-23790: Ability to update (legacy) shared metanodes to components

- AP-23782: Give users a direct way to login to K-AI's backend Hub after session timeout

- AP-23764: MySQL Connector node with new default JDBC parameter to enable cursor-based streaming to avoid memory problems when reading large results

- AP-23733: Handle failing redirects (e.g. firewall) during Hub downloads

- AP-23009: Support JSON mode for OpenAI chat models in prompters

- AP-22968: Check container memory usage for job acceptance thresholds as well

- AP-22954: Prevent Conda Env Prop Nodes from executing in parallel

- AP-22931: Add container metrics to executor metrics endpoint

- AP-22777: Add /metrics endpoint to Executors

- AP-18631: Integrated Deployment / Workflow Executor: Always execute entire workflow (not just output node)

- NXT-3078: Hide single group and space in server providers

- NXT-3047: New customization in AP to define custom "tile data" on Home screen (served from KNIME Business Hub)

Bug Fixes

- AP-23656: OpenAI nodes don't work for the o-series reasoning models (kudos to @TosinLitics for reporting [1])

- AP-23781: Python Views do not display non-ASCII unicode characters correctly on Windows (kudos to @guanlantang for reporting [1])

- AP-23850: Query flattener creates invalid statement for SAP Hana if no aggregation column is used in the GroupBy node (kudos to @tescnovonesis for reporting [1])

- NXT-3202: Port View not shown for Data Table Output Ports (kudos to @rfeigel, @VAGR_ISK for reporting [1], [2])

- NXT-3229: Some community nodes are not categorized in node repository's tree view (kudos to @sw1336 for reporting [1])

- NXT-3327: Memory leak in Modern UI when rendering workflows (kudos to @mwiegand for reporting [1])

- AP-23901: Remote shared component cannot be dropped to workflow immediately after renaming or moving it

- AP-23810: Selection events do not work after the Concatenate node

- AP-23773: Hub authentication token can expire if not interacting with Hub for some

time (only Modern UI)

- AP-23743: Support disabling K-AI via a flag in knime.ini

- NXT-3289: Cannot delete local workflow from Sidebar Space Explorer

- UIEXT-2403: Lengthy strings (>10k characters) are cut too short in table view (to 1k, should remain at 10k)

- AP-23888: Character 📊 breaks the creation of workflow.svg

- AP-23823: Google Ads Extension cannot be loaded in January

- AP-23814: Watchdog cannot be disabled on hub executors

- AP-23766: Nested parameter groups are not getting rendered in configuration dialogs

- AP-23714: Conda package caches are not cleared after installation - bundling/root folder is huge

- AP-23692: SSH Command Executor should be cancelable

- AP-23627: Python Legacy integration does not work with numpy 2

- AP-23601: GET Request node: ArrayIndexOutOfBoundsException in component with simple streaming job manager

- AP-23482: KNIME Hub Authenticator should ignore credential settings if other KNIME Hub option is not used

- AP-22088: Unconnected Google Analytics Connector throws NPE when opening dialog

- NXT-3231: UI health checker continues to run while 'UI not responding' dialog is open

- NXT-2982: Local storage state (onboarding hints) not retained across AP restarts

KNIME Analytics Platform 5.4.0

Release date: December 6, 2024

Release notes

Updates and compatibility

- Node API: Plug-in org.knime.core and org.knime.core.util no longer re-export the java package org.apache.commons.io*, 3rd party extensions might need to declare an explicit plug-in dependency in their MANIFEST.MF

- Node API: The (deprecated) method NodeFactory#addLoadedFactories has been filled in empty. 3rd party must register nodes via extension points. (Method was deprecated since version 4.2.)

- Authentication popups provided by the Eclipse platform are suppressed globally. If an extension needs the popup to provide username and password authentication, set the Java system property knime.auth.popups.allowed to true.

- Perspective in Modern UI: All nodes are shown in the node repository (vs "Starter Nodes" only, as previously done in 5.3.x and before). This can be changed via preference setting.

- Twitter: The extension is now declared "legacy", due to various API changes. It can still be installed, but it is no longer listed by default (i.e. uncategorized)

Changelog (KNIME Analytics Platform 5.4.0)

New nodes

- AP-17293: HEAD Request (kudos to @tbtt, @mwiegand, @tiaandp for reporting 1, 2, 3)

- AP-23439: Databricks Embedding Connector

- AP-23396: Tableau Reader (Labs)

- AP-23251: Databricks Chat Model Connector

- AP-23066: Variable Expression

- AP-22958: Expression Row Filter

- UIEXT-2349: Multiple File Upload Widget (kudos to @r_jainm, @Anjo, @Karlygash, @dnaki, @tiaandp, @nbrooijmans, @lsandinop for reporting 1, 2, https://forum.knime.com/t/ multiple-file-upload-file-upload-widget-and-file-chooser-widget/47653[3], 4, https://forum.knime.com/t/ request-select-multiple-files-or-directories-from-file-upload-widget/33601[5], 6, https://forum.knime.com/t/ uploading-multiple-files-from-same-directory-for-processing/12974[7], 8)

- BD-1258: (Big Data Extensions): Databricks SQL Warehouse Connector

Enhancements

- AP-17683: Timer Info node: Add node annotation column to output (kudos to @Artem for reporting 1)

- AP-19772: SSH Command Executor (replaces External SSH Tool node) (kudos to @RNovak for reporting 1, 2)

- AP-20257: Add Bearer token authentication in REST Client Nodes (kudos to @JanDuo for reporting 1)

- AP-20920: Provide API to create parameter arrays in Python node dialogs (kudos to @Vits for reporting 1)

- AP-21273: Disable "Eclipse-based" auto-update check within KNIME AP (kudos to @ManiAthreyaS for reporting 1)

- AP-23110: Snowflake Connector with configurable account domain (kudos to @Rock for reporting 1)

- AP-23350: K-AI QA: display code nicer (kudos to @kowisoft for reporting 1)

- AP-23623: Do not show initial syntax error for empty expressions (kudos to @MartinDDDD for reporting 1)

- NXT-2193: Add "Copy to…" function for Space explorer items (kudos to @HaveF for reporting 1)

- NXT-2550: Reveal active hub space project in space explorer (kudos to @rrousselot for reporting 1)

- NXT-2818: Open Quick-node-adding via double-click on canvas (kudos to @mwiegand for reporting 1)

- NXT-2842: Modern Destination Picker for Upload, Download, Save, Move, Copy (kudos to @bobpeers for reporting 1)

- NXT-2889: Export workflow via Save-As dropdown (kudos to @iCFO for reporting 1)

- UIEXT-1163: SVG support in Views (kudos to @mwiegand for reporting 1)

- UIEXT-1207: Add UI to create links in text view (kudos to @michazeidan for reporting 1)

- UIEXT-1855: Enable flow variable handling for complex settings (kudos to @ArjenEX for reporting 1)

- AP-23603: Twitter (X) extension removed from update site

- AP-23546: Improve documentation for durations/periods in Column Expressions (legacy)

- AP-23516: Deprecate Snowflake database driver version 3.13.24

- AP-23511: Support OpenSSL V3 private keys in Snowflake Connector node by adding the Bouncy Castle JVM argument to knime.ini file

- AP-23540: Upgrade avro in TP from 1.11.3 to 1.11.4 (CVE-2024-47561)

- AP-23506: Use current Azure libraries in Azure Blob Storage Connection (Legacy)

- AP-23497: Fetch disclaimer of K-AI scripting assistant from the ai-service

- AP-23489: Update OkHttp, okio and Kotlin (CVE-2023-3635)

- AP-23407: Mention missing-coalescing operator in error message if a non-missing type was expected but an optional was given

- AP-23406: let if function treat MISSING as FALSE

- AP-23374: LLM Prompter: Provide system prompt column for chat models

- AP-23373: LLM Prompter: Allow to overwrite system prompt of chat models

- AP-23363: Make sure Conda Environment Propagation Node doesn't block in configure

- AP-23359: Include K-AI in the default installation of AP

- AP-23343: Include error details in node monitor and Catch-node

- AP-23222: Include packages in Python-extension JARs but delete after use

- AP-23191: Enable drag and drop of KNIME Hub short-links

- AP-23173: Remove console from expression node (but leave it in for Python and ECharts)

- AP-23163: Numeric Outlier Node: Change default quartile calculation value from R_4 to R_6

- AP-23114: Update Snowflake driver to version 3.20

- AP-23098: Support DB tables with no columns

- AP-23083: New "Use latest driver version available" option in all DB connector node dialogs

- AP-23045: Deprecate legacy Google Analytics Connector and Query nodes due to Google API shutdown

- AP-22968: Check container memory usage for job acceptance thresholds as well

- AP-22955: Use latest miniforge instead of micromamba+conda in executors

- AP-22891: DB framework: Change default of retrieve metadata in configure of all DB connector nodes to disable to prevent UI freezes in very large workflows

- AP-22816: Tableau Extension: Native support for Apple Silicon and update Hyper API to 0.0.20027

- AP-22715: Allow and implement warnings in aggregations

- AP-22655: Internal API: Remove commons.io package re-exports from `org.knime.core.util`

- AP-22590: Support PKCE in OAuth2 Authenticator

- AP-22371: Improve Expression Syntax Error messages

- AP-22259: Allow to work with multiple expressions with support for reordering and focussing

- AP-22184: Provide descriptive error message for not installed deprecated JDBC drivers

- AP-22174: Update Azure storage client libraries

- AP-21668: Preference for hiding K-AI

- AP-21631: Timer Info node: Report nodes in (nested) components

- AP-21071: Add shortcut to run Python script

- AP-20919: Allow to lay out Python node dialog elements horizontally

- AP-20333: "Generate new RowIDs" option as new default in Concatenate node

- AP-19947: Cache nodes from extension on first load if it is an installed extension

- AP-19942: Extension point for Python-compatible PortObjects

- AP-19595: Allow to check if column is contained in schema

- BD-1328: (Big Data Extensions): Upgrade local Spark from 3.5.1 to 3.5.3

- BD-1324: (Big Data Extensions): Upgrade avro in local Spark from 1.11.3 to 1.11.4 (CVE-2024-47561)

- BD-1322: (Big Data Extensions): Support Databricks Workspace Connector port as input to Create Databricks Environment and Databricks File System Connector node

- BD-1302: (Big Data Extensions): Remove concept of a default Spark Context

- NXT-3049: Add Hub link to help menu

- NXT-2985: Context-based home page tiles

- NXT-2951: Add preference to enable/disable embedded dialogs

- NXT-2863: Always ask for confirmation to close all workflows when switching perspectives

- NXT-2682: Apply space renaming on clickaway

- NXT-2672: CTRL + Shift + f to search in space view

- NXT-2610: Quick-node insertion for backwards connections

- NXT-1580: Delay workflow loading until AP in a ready state

- UIEXT-2287: Flow variable errors throw very technical stacktrace

- UIEXT-2165: Introduce new 'cell renderer' for port view

- UIEXT-2091: Improve missing value handling in view nodes

- UIEXT-2050: Double click on legend in view nodes filter for this item

- UIEXT-2034: Small task polishing of views

- UIEXT-1868: Include Breadcrumbs in file chooser

- UIEXT-1867: Enable Embedded data tab for file chooser in new dialogs

- UIEXT-1806: Web UI for Table Reader

- UIEXT-49: WebUI dialogs to work in remote workflow editor

Bug Fixes

- AP-17326: JSON Path node slow/freezes (kudos to @HaveF, @Page0727, @Gonzo for reporting 1, 2, 3)

- AP-23573: Excel Reader cannot read XLSX file from remote mountpoint if filename has less than 3 characters (kudos to @mychoi for reporting 1)

- AP-23587: Add (legacy) suffix to Column/Variable Expressions to resolve node name collisions with new Expression nodes (kudos to @mwiegand for reporting 1)

- AP-23629: Export workflow summary/SVG is missing in classic UI (kudos to @rfeigel for reporting 1)

- AP-7071: Streaming executor causing thread pool errors. (kudos to @izaychik63 for reporting 1)

- UIEXT-2143: Error Message on Column Resorter when moving columns up and down (kudos to @richards99 for reporting 1)

- UIEXT-2248: File download widget opens images inside the view instead of downloading them (kudos to @TakuShikanaiJIS for reporting 1)

- UIEXT-941: Date&Time widget always displays browser timezone (kudos to @roherm for reporting 1)

- AP-23513: Base DB nodes are missing in the macOS standard build

- AP-19503: Copy and Paste of Component with Missing Node Breaks Workflow Editor

- AP-23696: Windows: Workflow download from Hub sometimes fails due to `AccessDeniedException` during import operation

- AP-23625: Memory leak in XPath dialog XML cell preview

- AP-23609: Copying and pasting a nested component inside itself leads to recursion

- AP-23591: Confusing error in dialog if incompatible port is connected

- AP-23584: Unpivot: Preformatted text (pre) in node description may exceed its containing box

- AP-23534: Generic ECharts box plot template shows wrong min/max

- AP-23528: Shared component cannot be used in Linux (name conflict in folder name)

- AP-23517: knime-python-base doesn't depend on PILLOW even though we need it when working with images

- AP-23480: Container Input (Raw HTTP) shows only first couple of header/parameter entries

- AP-23467: ClassicUI: AP shutdown doesn't wait for workflow uploads to Hub to finish (e.g. on save of a hub workflow)

- AP-23419: Download workflow from Hub to overwrite local workflow instance may not clear workflow directory properly

- AP-23404: Azure OpenAI Connector: Handling for incorrect URLs

- AP-23369: Credentials Cache (e.g. used in Salesforce Connector) might cause memory leak for long running KNIME instances

- AP-23324: K-AI does not suggest latest nodes (e.g. Row Filter) in Q&A mode

- AP-23288: Expression node cannot be configured if images in input table

- AP-23205: K-AI uses deprecated Row Filter in build mode

- AP-23113: Webpage Retriever returns broken XML for websites with invalid XML characters

- AP-23047: NumberFormatException for "_" in column access offset

- AP-22983: CXF-based non-redirecting requests do not find proxy authorization

- AP-22972: Joiner node resets progress during execute

- AP-22899: Giskard Scanner: Error in inference workflow obscured

- AP-22884: Improve error message of Decompress Files node when decompressing a workflow export

- AP-22860: Parallel Chunk Loop node: NullPointerException due to pcc is null

- AP-22841: Workflow Reader: Can't read Workflow with only Annotation

- AP-22691: Error on empty choices in Python based nodes

- AP-22378: Schedule dialog complains about duplicate email addresses for post-execution actions

- AP-22086: Copy-Pasting component containing missing node does not paste any connections (and component without offset)

- AP-17655: Table Manipulator loses sorting when configured

- NXT-3111: "Create workflow" button is overlapped by long folder name

- NXT-2899: Large data in flow variable freezes application

- NXT-2815: Component tags lost on copy/paste

- NXT-2371: Undoing an annotation deletion does not set dirty flag

• UIEXT-2300: Scatter Plot Matrix with nominal color scale may plot incorrect data

Nodes changing in KNIME Analytics Platform 5.4.0

New nodes:

- Variable Expression
- Expression Row Filter
- SSH Command Executor
- Databricks SQL Warehouse Connector
- Tableau Reader (Labs)
- Multiple File Upload Widget (Labs)
- HEAD Request
- Databricks Chat Model Connector
- Databricks Embedding Connector
- String Comparison
- GDELT Global Knowledge Graph
- Open Sky Network Data
- TomTom Isochrone Map
- Directed Bezier Curve
- Create H3 Grid
- Point to H3
- FIFO / LIFO Resolver
- SiriusExport
- IonMobilityBinning
- SageAdapter
- AssayGeneratorMetaboSirius
- ChemDraw Widget

Nodes replaced, old nodes deprecated:

- External SSH Tool (deprecated)
- Google Analytics Connector (deprecated)

- Google Analytics Query (deprecated)

- ChemSpider (deprecated)

Nodes declared legacy:

- Column Expressions (legacy)

- Variable Expressions (legacy)

- Twitter Retweet Search (legacy)

- Twitter Timeline (legacy)

- Twitter API Connector (legacy)

- Twitter Streaming (deprecated) (legacy)

- Twitter Followers Search (legacy)

- Twitter Users (legacy)

- Twitter Post Tweet (legacy)

- Twitter Search (legacy)

Nodes renamed:

- Geometry to Lat/Long → Geometry to Lat/Lon

Extensions changing in KNIME Analytics Platform 5.4.0

New extensions:

- KNIME Chemdraw feature

- FMI KNIME Plugins

Extensions renamed:

- KNIME Column Expressions (Labs) → KNIME Column Expressions (legacy)

- KNIME Twitter Connectors → KNIME Twitter Connectors (legacy)

- KNIME Extension for Apache Spark → KNIME Extension for Apache Spark (legacy)

Extensions moved:

- KNIME Hub Additional Connectivity (Labs) → KNIME Hub Additional Connectivity

- KNIME-CDK - Moved from trusted to experimental

Community Extensions

Partner Extensions

Extension	Contributor	Changes
ChemAxon/Infocom JChem Extensions Feature	INFOCOM CORPORATION	**Available**
ChemAxon/Infocom Marvin Extensions Feature	INFOCOM CORPORATION	**Available**
Schrödinger Extensions for KNIME	Schrödinger LLC	Available soon
LigandScout Extensions for the KNIME Workbench	Inte:Ligand GmbH	Available soon
MOE Extensions for KNIME	Chemical Computing Group ULC	**Available**
Pharmacelera extensions	Pharmacelera S.L.	**Available**
Spotfire File Nodes	TIBCO Spotfire	**Available**
Symanto Brain	Symanto	**Available**
Market Simulation nodes	Decision Ready, LLC	**Available**
Metadata-Hub Extension	GRAU DATA GmbH	**Available**
KNIME Connector for SAP(KCS) Nodes	De Villiers Walton Ltd.	Available soon
exorbyte extension	exorbyte GmbH	Available soon
KNIME H2O Driverless AI Integration	H2O.ai	Not available anymore since 5.x

Trusted Community Extensions

Extension	Status
RDKit Nodes Feature	**Available**

Extension	Status
Vernalis KNIME Nodes	**Available**
Generic Workflow Nodes for KNIME	**Available**
Lhasa	**Available**
Slack Integration	**Available**
AF Utility Nodes	**Available**
KNIME Groovy Scripting extension	**Available**
KNIME HCS Tools	**Available**
KNIME Python Scripting extension	**Available**
KNIME R Scripting extension	**Available**
KNIME Matlab Scripting extension	**Available**
Continental Nodes for KNIME	**Available**
Genentech	**Available**
Geospatial Analytics Extension	**Available**
Neo4J	**Available**
KNIME Image Processing	**Available**
OpenMS	**Available**
Redfield NLP Nodes	**Available**
Redfield Privacy Nodes	**Available**
Redfield Conformal Prediction Nodes	**Available**

Experimental Community Extensions

Extension	Changes
CIR KNIME Integration	**Available**

Extension	Changes
Process Mining Extension	**Available**
Apprise Nodes	**Available**
Erlwood KNIME Open Source	**Available**
KNIME Shapefile Support	**Available**
Indigo KNIME integration	**Available** - Not working on macOS because of a bug in Indigo
AI.Associates Signal Processing	**Available**
Enalos Nodes for KNIME	**Available**
3D-e-Chem KNIME nodes	Available soon
FSK-Lab	**Available**
Word2Vec	Available soon
PIA	**Available**
Redfield BERT Nodes	**Available**
AIA Insights Bioactivity Predictor	Available soon - New since 2023
Visualization for supply chains	**Available** - New since 2023
BIM - Building Information Modelling Extension for KNIME (IFC)	**Available** - New since 2023
Smartsheet extension	**Available** - New since 2024
Redfield PST Nodes	**Available** - New since 2024
Chem AI Extension	**Available** - New since 2024
Salesforce Extension	**Available** - New since 2024
SATELLiTES Extension	**Available** - New since 2024
FMI KNIME Plugins	**Available** - Revived in 2024

Extension	Changes
MMI Data Analytics Nodes	Not available anymore since 5.2
OrientDB	Not available anymore since 5.1
KNIME-CDK	**Available** - Moved to Experimental 2024 - ChemSpider node deprecated due to API change